R. Corbould del.

J. Chapman sc.

Geography.

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COMPILED, DIGESTED, AND ARRANGED,

BY JOHN WILKES, OF MILLAND HOUSE, IN THE COUNTY OF SUSSEX, ESQUIRE;

ASSISTED BY EMINENT SCHOLARS OF THE ENGLISH, SCOTCH, AND IRISH, UNIVERSITIES.

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1810.

Non audiendi sunt homines imperiti, qui humano ingenio majorem, vel inutilem, et rebus gerendis adverſam πολυμαθειαν criminantur. Eſt ſcilicet quædam Scientiarum cognatio et conciliatio; unde et Εγκυκλοπαιδειαν *vocant Græci; ut in unâ perfectus dici nequeat, qui cæteras non attigerit.*—Morhofi Polyhistor, l. i. c. i. s. i.

Those inexperienced perſons, who make it a charge of accuſation againſt variety and extenſive learning, that it exceeds the compaſs of human ability, or is uſeleſs, or that it is an impediment to tranſacting buſineſs, deſerve no attention. For there is between the Sciences a degree of natural and cloſe connexion; from which the Greeks uſe the term "Encyclopædia;" so that no one can be perfect in any one Science, who has not attained to ſome knowledge of the reſt.

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Scouce

DESCRIPTION OF THE FRONTISPIECE ILLUSTRATING GEOGRAPHY.

WE HAVE DESCRIBED GEOGRAPHY UNDER THE SEMBLANCE OF THE GODDESS TERRA, WHO, WITH THE FEMALE FIGURE AT HER RIGHT HAND, WITH HER HAIR ORNAMENTED WITH SHELLS, CORAL, AND SEA-WEED, AS TETHYS GODDESS OF THE SEA, ARE SUPPOSED TO BE EMPLOYED IN MARKING OUT UPON A GLOBE THE DIFFERENT COUNTRIES OF THE WORLD, AND DIVIDING THEM INTO THE FOUR QUARTERS, OF EUROPE, ASIA, AFRICA, AND AMERICA.

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FRANCESCHI'NI (Marc Antonio), a painter of eminence, born at Bologna in 1648. He was firſt a pupil of Gio-Maria Galli Bibiena, and afterwards ſtudied under Cignani. He worked at firſt in partnerſhip with Quani, whoſe ſiſter he married, and they were together at Parma, Placentia, Modena, and other places, painting in churches and palaces. One of Franceſchini's capital works was the ceiling of the great council-chamber at Genoa, in which he repreſented ſeveral of the principal actions of the republic, in a very grand ſtyle of compoſition. He painted, at the requeſt of the ſenate of Bologna, ſeveral pieces to be ſent to pope Clement XI. with which his holineſs was ſo well ſatisfied, that he invited him to Rome, and employed him in a grand deſign for a moſaic in one of the cupolas of St. Peter's. He was rewarded by being created a chevalier of the order of Chriſt; but he would not permit his friends to call him by his title, leſt it ſhould inſpire jealouſy in his old maſter Cignani. He carried this delicacy of ſentiment ſo far as to refuſe to undertake a work in rivalry to Cignani's ſon. He declined ſeveral invitations from foreign princes to ſettle in their ſtates, as well through love of freedom and independence, as through unwillingneſs to give uneaſineſs to the painters already eſtabliſhed there. The towns of Italy were the theatres of his labours; and during the courſe of a long and induſtrious life he filled many of them with monuments of his genius. At the age of ſeventy-eight he ſtill painted with the ſpirit and facility of his younger days; and the peculiar elegance of his pencil did not quit him to the laſt. He died in 1729, at the age of eighty-one.

FRAN'CESTOWN, an interior townſhip of the American States, in Hillſborough county, New Hampſhire, on the eaſt ſide of Contecook river, about twenty-one miles to the ſouth-weſt of Concord. It was incorporated in 1772, and in 1790 contained 982 inhabitants.

FRANC'FORT. See FRANKFORT.

FRANCHE-COMTE', before the revolution, a province of France, and anciently a part of the kingdom of Burgundy. Almoſt one half of the country is level, abounding in grain, wine, paſture, hemp, &c. The reſt is mountainous, but breeds excellent cattle, and produces corn and wine. There are mines of copper, iron, lead, and ſilver, and ſome mineral ſprings, with quarries of alabaſter and marble. The principal rivers are the Saône, the Ougnon, and the Doubs. It is now divided into the three departments of Mount Jura, the Doubs, and Upper Saône. This country was formerly the ſcene of the moſt dreadful calamities, reſulting from the ambition and cruelty of contending princes, till the year 1678, when it was ceded to France. The inhabitants then ſtipulated for the preſervation of their ancient privileges, with reſpect to taxation; part of this agreement was afterwards violated by Louis XIV. but ſtill they were leſs oppreſſed than the other provinces of France. The natives are ſaid to be a ſtouter race of men than the French, and ſeem to reſemble the Swiſs in character. Like other mountainous countries, Franche-Comté abounds with mineral productions, and has ſeveral grottoes and caverns that deſerve the attention of the traveller. Among theſe, is a natural ice-cellar, near the abbey of *Grace Dieu*, about twenty miles from Beſançon. Its ſituation is very romantic. On the higheſt part of a mountain, covered with a thick grove of lofty pines, is the opening of the cavern, which cannot be perceived till one is cloſe to it, when, from its depth, which to the bottom is above two hundred and twenty feet, and the ſolemn gloom of the ſurrounding wood, it reſembles what poets have feigned of the deſcent to the infernal regions. The cavern itſelf is ſixty feet in length and height, and forty in breadth: the bottom is covered with ice, of which vaſt pyramids riſe from it, while others appear as it were ſuſpended from the arched roof, with their points oppoſite to thoſe of the former. Within the cave is a hole, or well, which is always full of water, and is never frozen; and, at the entrance, ſome mould, which ſeems to have been thrown there accidentally, is adorned with primroſes and other wild flowers. The ice, which, in the cavern, appears of a beautiful azure, is, when ſeen by day-light, remarkably white. From this natural repoſitory, the ice-houſes in Beſançon are ſupplied, when the winters are too mild to freeze water in the open air.

The grotto of Oſſelles, near Quingey, is ſimilar to Poole's Hole in Derbyſhire: it penetrates for nearly a mile into the mountain: but its height and breadth are different in different parts. In ſome apartments of it, the roof is above a hundred feet high: but the paſſages between theſe are ſo low, that they who go through them muſt creep on hands and feet. The inſide of the cavern is adorned with ſtalactites, and preſents ſcenes like thoſe which are ſo juſtly admired in Poole's Hole, and in Caſtleton, a cavern much ſuperior to Poole's Hole. The ſalt-works at Salins are alſo worthy of attention: one of theſe is at the bottom of a ſquare pit, or ſhaft, about thirty feet in width, in which is a narrow ſtair-caſe: the deſcent to this lower region is rendered awful by the noiſe of the pumps below, which, being reflected by the ſides of the rock, ſounds like the groans of perſons in torment: at the bottom are two fine ſprings of ſalt water.

FRANCHIMO'NT, a town of Germany, in the circle of Weſtphalia, and biſhopric of Liege, with a ſmall country, to which the title of marquis is annexed: thirteen miles ſouth-eaſt of Liege.

FRAN'CHISE, *ſ.* [French.] Exemption from any onerous duty. Privilege; immunity; right granted:

His gracious edict the ſame *franchiſe* yields
To all the wild increaſe of woods and fields. *Dryden.*

Diſtrict; extent of juriſdiction.—There are other privileges granted unto moſt of the corporations, that they ſhall not be travelled forth of their own *franchiſes*. *Spenſer's State of Ireland.*

To FRAN'CHISE, *v. a.* To enfranchiſe; to make free; to keep free:

I loſe no honour
In ſeeking to augment it; but ſtill keep
My boſom *franchis'd*, and allegiance clear. *Shakeſpeare.*

FRAN'CHISEMENT, *ſ.* [*franchiſe*, Fr.] Freedom:

To work Irena's *franchiſement*,
And eke Grantorto's worthy puniſhment. *Spenſer.*

FRAN'CHISES, *ſ.* in law, are a ſpecies of incorporeal hereditaments. *Franchiſe* and *Liberty* are uſed as ſynonymous terms; and their definition is "A royal privilege or branch of the king's prerogative, ſubſiſting in the hands of a ſubject." *Finch, L.* 164. Being therefore derived from the crown, they muſt ariſe from the king's grant; or in ſome caſes may be held by preſcription, which preſuppoſes a grant. The kinds of them are various and almoſt infinite: they may be veſted either in natural perſons or in bodies politic; in one man or many: but the ſame identical franchiſe that has before been granted to one, cannot be beſtowed on another, for that would prejudice the former grant. 2 *Rol. Ab.* 191: *Keilw.* 196.

The principality of Wales is a franchiſe. To be a county-palatine is alſo a franchiſe, veſted in a number of perſons. It is likewiſe a franchiſe for a number of perſons to be incorporated, and ſubſiſt as a body-politic; with a power to maintain perpetual ſucceſſion, and do corporate acts: and each individual member of ſuch corporation is alſo ſaid to have a franchiſe or freedom. Other franchiſes are, to hold a court-leet: to have a manor or lordſhip; or at leaſt to have a lordſhip paramount: to have waifs, wrecks, eſtrays, treaſure trove, royal-fiſh, forfeitures, and deodands: to have a court of one's own, or liberty of holding pleas, and trying cauſes: to have the conuſance of pleas, which is a ſtill greater liberty, being an excluſive right, ſo that no other court ſhall try cauſes ariſing within that juriſdiction: to have a bailiwick, or liberty exempt from the ſheriff of the county, wherein the grantee only and his officers are to execute all proceſs: to have a fair or market, with the right of taking toll, either there or at any other public places, as at bridges, wharfs, or the like; which tolls muſt have a reaſonable cauſe of commencement, (as in conſideration of repairs, &c.) elſe the franchiſe is illegal and void: 2 *Inſt.* 220: or laſtly to have a foreſt, chaſe, park, warren or fiſhery, endowed with privileges of royalty. *F. N. B.* 230.

Uſage may uphold franchiſes, which may be claimed by preſcription, without record either of creation, allowance, or confirmation; and wreck of the ſea, waifs, ſtrays, fairs and markets, and the like, are gained by uſage, and may become due without any matter of record. But goods of felons and outlaws, and ſuch like, grow due by charter, and cannot be claimed by uſage. 2 *Inſt.* 281. 9 *Rep.* 27.

It hath been adjudged, that grants of franchiſes, made before the time of memory, ought to have allowance, within the time of memory, in the king's bench, or before the barons of the exchequer, or by ſome confirmation on record; and it is ſaid they are not records pleadable, if they have not the aid of ſome matter of record within time of memory; and ſuch ancient grants, after ſuch allowance, ſhall be conſtrued as the law was when they were made, and not as it hath been ſince altered: but franchiſes granted within time of memory are pleadable without any allowance or confirmation; and if they have been allowed or confirmed as aforeſaid, the franchiſes may be claimed by force thereof, without ſhewing the charter. 9 *Rep.* 27, 28. 2 *Inſt.* 281. 494.

By *magna charta*, c. 1, and ſeveral ancient ſtatutes, the church ſhall have all her liberties and franchiſes inviolable: and the lords ſpiritual and temporal ſhall enjoy their liberties, &c. and the king may not deprive them of any of them. 14 *Edw.* III. ſt. 2. c. 1. 2 *Hen.* IV. c. 1.

By *magna charta*, c. 37, the franchiſes and liberties of the city of London, and all other cities, &c. are confirmed. By ſtat. 27 Hen. VIII. c. 24, all writs, proceſſes, &c. in franchiſes, are to be made in the king's name; and ſtewards, bailiffs, and other miniſters of liberties, ſhall attend the juſtices of aſſize, and make due execution of proceſs, &c.

Some franchiſes, as York, Briſtol, &c. have return of writs, to whom mandates are directed from the courts above, to execute writs and proceſs: and a mayor or bailiff of a town, may have liberty to keep courts and hold pleas in a certain place, according to the courſe of the common-law; and power to draw cauſes out of the king's courts, by an excluſive juriſdiction: but the cauſes here may be removed to the ſuperior courts. *Co. Lit.* 114. Sheriffs of counties, within which is any franchiſe, the lord whereof is intitled to a return of writs, ſhall, on his requeſt, appoint one or more deputies, to reſide at ſome place near, there to receive all writs in the ſheriff's name, and under his ſeal to iſſue warrants for their due execution; and the lord chancellor is to ſettle the charges to be paid any ſuch deputy, &c. 13 *Geo.* II. c. 18.

A franchiſe hath no relation to the county wherein it lies, as has been generally held; for it is not neceſſary to ſet forth the county when any thing is ſhewn to be done within a liberty or franchiſe. *Trin.* 23 *Car. B. R.* If a franchiſe fails to adminiſter juſtice within the ſame, the franchiſe ſhall not be allowed; but on any ſuch failure, the court of king's bench may compel the owners of the franchiſe, &c. to do juſtice; for that court ought to ſee juſtice equally diſtributed to all perſons. 1 *Lill. Abr.* 635.

Wherever the king is party to a ſuit, as in all informations and indictments, the proceſs ought to be executed by the ſheriff, and not by the bailiff of any franchiſe, whether it have the clauſe *non omittas*, &c. or not; for the king's prerogative ſhall be preferred to any franchiſe. 2 *Hawk. P. C.* A ſheriff upon a *non omittas*, or on a *capias utlagatum*, or *quo minus*, may enter and make arreſts in a franchiſe. 1 *Lill.* 635. An arreſt by the ſheriff within a franchiſe on a common writ, is ſaid to be good, though the officer be ſubject to an action at the ſuit of the lord of the franchiſe.

Franchiſes may be forfeited and ſeized where they are abuſed, for miſ-uſer, or non-uſer; and when there are many points, a miſ-uſer of any one will make a forfeiture of the whole on a *quo warranto* brought. *Kitch.* 65. For contempt of the king's writ, in a county palatine, the liberties may be ſeized, and the offenders fined; and the temporalities of a biſhop have been adjudged to be ſeized until he ſatisfied the king for ſuch a contempt, on information exhibited, &c. *Cro. Car.* 253. The biſhop of Durham pretending he had ſuch a franchiſe, that the king's writ was not to come there, and becauſe one brought it thither he impriſoned him; this being proved upon an information brought againſt him, it was adjudged he ſhould pay a fine to the king, and loſe his liberties. 2 *Shep. Abr.* 250.

Diſturbance of franchiſes happens, when a man has the franchiſe of holding a court-leet, of keeping a fair or market, of free warren, of taking toll, of ſeizing waifs or eſtrays, or, in ſhort, any other ſpecies of franchiſe whatſoever, and he is diſturbed or incommoded in the lawful exerciſe thereof. As if another by diſtreſs, menaces, or perſuaſions, prevail upon the ſuitors not to appear at my court; or obſtruct the paſſage to my fair or market; or hunts in my free warren; or refuſes to pay me the accuſ-

tomed

tomed toll; or hinders me from ſeizing the waif or eſtray, whereby it eſcapes, or is carried out of my liberty: in all caſes of this kind, and which are of a variety too extenſive to be here enumerated, an injury is done to the legal owner of the franchiſe; his property is damnified; and the profits ariſing from ſuch his franchiſe are diminiſhed. To remedy which, as the law has given no other writ, he is therefore entitled to ſue for damages by a ſpecial action on the caſe: or in caſe of toll, may take a diſtreſs, if he pleaſes. 3 *Comm.* 236.

FRAN'CI, the Franks, the Germans who conquered France.

FRAN'CIA, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra: eight miles north-eaſt of Nicotera.

FRAN'CIA (Franceſco), a celebrated Bologneſe painter, born in 1450. He was firſt a jeweller, and afterwards a graver of coins and medals; but applying at laſt to painting, obtained great reputation by his works. He pined to death by deſpairing to equal Raphael; and paid the debt of nature in 1518.

FRANCIGE'NA, *ſ.* In old records, a Frenchman, a foreigner.

FRAN'CIS [ꝼꝛancıꝛe, Sax. *frank*, Teut. free.] A proper name of men.

FRAN'CIS I. the patron of arts and literature; and Francis II. called "the king without vice," were two illuſtrious monarchs of France. See the article FRANCE, p. 697, and 706, of vol. vii.

FRAN'CIS I. emperor of Germany. See the article GERMANY.

FRANCIS OF ASSI'SI, in Italy, a ſaint in the Romiſh calendar, and founder of the celebrated order of FRANCISCANS, or mendicant friars, was born at Aſſiſi, about the year 1181. The name given him at his baptiſm was John; for which that of Francis was afterwards ſubſtituted, either becauſe of his father's commercial connections with France, or from his own facility in ſpeaking the language of that country. As his father was a merchant, Francis was brought up to the ſame profeſſion, which he followed till the year 1206, leading for ſome time a moſt diſſolute life. Upon his recovery from a ſevere fit of ſickneſs, the conſequence of his licentious conduct, he changed his mode of living, reſolved to retire from the world, and to practiſe the moſt auſtere and rigid devotion. He ſecluded himſelf ſo much from ſociety, and mortified himſelf to ſuch a degree, that he contracted a ghaſtly countenance, which led the inhabitants of Aſſiſi to ſuſpect him of being diſtracted. His father now entertained thoughts of obliging him to reſume the buſineſs to which he had been educated; and when perſuaſion and parental commands produced no effect, he adopted the ſevere alternative of throwing him into priſon. When, however, he found that no means could produce any impreſſion on his ſon's mind, he carried him before the biſhop of the place, to make him reſign all claim to his paternal eſtate. Francis readily complied with his father's wiſhes on this point, and ſtripped himſelf of all his clothing, even to his ſhirt, that he might be better able to repeat, he ſaid, "Our Father who art in heaven!" Some time after this, in the year 1208, he happened to be in a church, where he heard this paſſage read from the goſpel of St. Matthew: "Provide neither gold, nor ſilver, nor braſs in your purſes, nor ſcrip for your journey; neither two coats, neither ſhoes, nor yet ſtaves; for the workman is worthy of his meat." "That," he exclaimed, "is the life I wiſh for;" and he threw aſide his ſhoes, his wallet, his ſtaff, and the little money he had, keeping only one poor coat, with a cowl, ſuch as the ſhepherds in Italy then wore, girded about with a knotted cord. He now conſidered a voluntary poverty to be the eſſence of the goſpel, and the ſoul of religion, and reſolved henceforwards ſtrictly to follow it, and to employ himſelf in recommending it to others. From this time he commenced preacher, and, having ſoon attracted a number of followers, he formed the deſign of founding a new order of mendicant friars.

He firſt drew up an inſtitute, or collection of rules for the diſcipline of the propoſed fraternity, according to which the members were not only to take the cuſtomary monaſtic vows of obedience, chaſtity, and poverty, but were to remain entirely deſtitute of all fixed revenues and poſſeſſions; to ſupport themſelves by the free contributions of the faithful; and on no occaſion to receive any money. When he had obtained eleven diſciples who were willing to ſubmit to theſe regulations, he went to Rome, and preſenting himſelf before pope Innocent III. entreated his confirmation of his new inſtitution. That pontiff, after debating on the impracticability of the ſcheme, gave it his ſanction in the year 1210, which was confirmed in the Lateran council held in 1215. Afterwards it was ſolemnly confirmed by pope Honorius III. in 1223, when its progreſs had more than anſwered the moſt flattering expectations of its founder. Francis, out of his great humility, would not ſuffer the monks of his order to be called *fratres*, i. e. brethren or friars, but *fratriculi*, i. e. little brethren, or friars minors, by which denomination they continued afterwards to be diſtinguiſhed. The fame of his ſanctity, and the enthuſiaſm for entering into his order, ſoon produced a multitude of diſciples, from whom colonies were ſent into the different provinces of Italy, Spain, France, and other countries. So rapidly did his inſtitutions increaſe, that in a general chapter of the order held near Aſſiſi in 1219, more than five thouſand monks were preſent. In the year 1214, Francis had projected a voyage into Syria, to convert the Mahometans to the Chriſtian faith, and, after obtaining the pope's permiſſion, had actually embarked for that country; but was driven by a tempeſt into ſome port on the eaſtern coaſts of the Adriatic ſea, whence he returned into Italy. Afterwards he ſet out on a journey through France and Spain, with the intention of paſſing over into Africa, to convert the Moors; but was prevented by illneſs from undertaking the latter expedition. Having returned into Italy, after the meeting of the general chapter of his order already mentioned, he embarked on a voyage to the eaſt, for the purpoſe of viſiting the holy ſepulchre, and propagating the Chriſtian faith among the Saracens. In this ſcheme, as may be imagined, he met with no ſucceſs, and was fortunate to eſcape with his life, after attempting to perſuade the ſultan to embrace Chriſtianity. He offered, it is ſaid, to commit himſelf to the flames, in teſtimony of the truth of that religion for which he pleaded; but the ſultan would not permit him to give ſuch a proof of the ardour of his zeal, though he reſpected him for it, by ſuffering him to be civilly diſmiſſed.

After his return to his native country, he employed himſelf in extending his inſtitutions, and in forming regulations for new branches of his order, comprehending laymen, as well as female devotees. When he had completed his plans, he reſigned the generalſhip of his order to one of his diſciples, and withdrew to indulge in contemplation and religious auſterities, in a ſolitude among the Appennine mountains. By the ſevere diſcipline which he adopted, of which repeated flagellation and faſtings formed no inconſiderable part, he brought on himſelf a complication of diſorders, which put an end to his life at Aſſiſi, in 1226, when only forty-five years of age. He was canoniſed by pope Gregory IX. in 1230. His order roſe to great ſplendor after the founder's death, and materially contributed to ſupport the power and influence of the Roman ſee, by the zeal and activity with which the members employed themſelves in extirpating heretics; the various negociations and embaſſies undertaken by them for the intereſts of the hierarchy; and their inceſſant labours to enforce an implicit obedience to the Roman pontiffs. But the particulars relating to it belong to the province of the eccleſiaſtical hiſtorian. St. Francis was the author of 1. *Epiſtolæ.* 2. *Orationes.* 3. *Regulæ Monachis Præſcriptæ.* 4. *Collectiones.* 5. *Sermones, &c.* which were collected together

gether and publiſhed at Paris in 1641, by John de la Haye, in one volume folio.

FRANCIS DE BOR'GIA, a Romiſh ſaint, born in Spain, about the year 1511. He was the grandſon of pope Alexander VI. and hereditary duke of Candia. He obtained the viceroyſhip of Catalonia, and from his birth and connections might have expected the higheſt honours which the king of Spain had to beſtow; but he grew diſguſted with the world, and determined to embrace the eccleſiaſtical life. One circumſtance that contributed to produce this reſolution was the loſs of his wife, by whom he had a numerous offspring. Relinquiſhing to others the care of their education, he became a member of the ſociety of Jeſus in 1548, and in 1565 was raiſed to the poſt of general of that order. He refuſed ſeveral eccleſiaſtical dignities, as well as the high honour of the cardinalate; and dedicated his whole time to the advancement of the intereſts of the Jeſuits. Pope Pius V. knowing his talents for buſineſs, and entire devotedneſs to the Roman ſee, obliged him to accompany his nephew cardinal Alexandrinus, whom he ſent legate into Spain, and Portugal, and afterwards into France. He died at Rome, in 1572, in the ſixty-ſecond year of his age, and was canonized by pope Clement X. in 1671. He was the author of ſeveral theological and devotional pieces, written in the Spaniſh language. They were tranſlated into Latin by father Alphonſus Deza, a jeſuit, and publiſhed at Bruſſels in 1675, in folio.

FRANCIS DE JESUS-MARI'A, a learned Spaniſh carmelite monk, of the reformed order of St. Thereſa, who flouriſhed in the 17th century, was a native of Burgos, in Old Caſtille. He taught theology with much applauſe in the univerſity of Salamanca, and diſcharged the office of definitor-general of his order with great reputation. He died in 1677. He was the author of *Curſus Theologiæ moralis Salmanticenſis*, publiſhed at Salamanca in 1665, in folio, and afterwards reprinted at Lyons, and Madrid; Commentaries on the Apocalypſe, publiſhed at Lyons in 1648 and 1649, in two volumes folio.

FRANCIS DE PAU'LO, a Romiſh ſaint, founder of the order of *Minims*, born at Paulo, a town of Calabria, in 1416. In conſequence of a vow made by his parents to devote him to a religious life, he entered into the Franciſcan convent at St. Mark's, the epiſcopal town of the province, where he continued for one year. Afterwards he engaged in various pilgrimages, and finally adopted the hermit's life, in a ſolitary ſpot not far from his native town. Finding that in this ſituation he was expoſed to too many viſitors, he retired to a deſert on the ſea-coaſt, where he conſtructed a cell among the rocks. The fame of his ſanctity drew after him diſciples, who built a chapel and a ſmall hermitage adjoining to his cell; but their numbers rapidly increaſing, a monaſtery was built upon the ſame ſpot, of which the original denomination was that of *Hermits of St. Francis*. After his inſtitute had received the approbation of pope Sixtus IV. in 1473, Francis de Paulo was nominated the ſuperior-general. At a ſubſequent period he reviſed and altered his regulations, and obtained pope Alexander VIth's confirmation of them in their new form; on which occaſion the name of the order was changed to that of *Minims*, becauſe that out of his profound humility Francis wiſhed himſelf and followers to be diſtinguiſhed by the diminutive appellation of *Fratres Minimi*. The rules of his order were extremely rigorous, enjoining on the members a perpetual Lent, and great ſeverity of perſonal diſcipline. Francis practiſed to an extreme the abſtinence and mortifications which he preſcribed to his followers; on no occaſion taking any wine, meat, fiſh, or milk; contenting himſelf with bread and water; never taſting food till after ſunſet; going barefoot; ſleeping on the floor of his cell, without any other pillow than a ſtone or a block of wood; and wearing a rough hair-cloth next his ſkin, under a coarſe and mean upper dreſs. So great was the ſuperſtition of the times, that he acquired the higheſt character for piety and virtue by theſe auſterities. His fame ſoon ſpread over Europe, in different parts of which many monaſteries were erected for friars of his order. So high was the opinion entertained of his ſanctity, that when Louis XI. of France was attacked by a dangerous diſtemper, he ſent for Francis out of Calabria, hoping to obtain a cure by virtue of his prayers. This journey he refuſed to undertake, until commanded to do ſo by the pope. He was received by Louis with the greateſt honour, and had apartments aſſigned to him in the palace of Pleſſis-les-Tours, where the king then reſided. After the death of that monarch, his ſucceſſor Charles VIII. built a convent for Francis and his monks in the park belonging to the palace. In this convent Francis died, in 1507, at the advanced age of ninety-one years. He was canonized by pope Leo X. in 1519. In Paris the friars of his order were called *Bons-Hommes*, probably after the name of *Bon-Homme*, given by the kings Louis and Charles to their founder; and in Spain *Fathers of the Victory*, on account of a memorable defeat of the Moors by Ferdinand V. which it is pretended was foretold by St. Francis.

FRANCIS DE SA'LES, another ſaint of the Romiſh calendar, and founder of the religious order of *the Viſitation*. He was deſcended from one of the moſt ancient and noble families in Savoy, and born at the caſtle of Sales, near Geneva, in 1567. In his early years his mind was ſtrongly impreſſed with virtuous and pious principles, and he recommended himſelf to univerſal eſteem by the ſweetneſs of his diſpoſition, and amiableneſs of his manners. His early claſſical education he received at the college of Annecy; whence he was removed to the univerſity of Paris, where he was perfected in the learned languages, and went through his courſe of philoſophy, and alſo part of a theological courſe under the Jeſuits. Among the other profeſſors whoſe lectures he attended was the famous John Maldonat. Afterwards his father ſent him to the univerſity of Padua, to ſtudy juriſprudence under the celebrated Guy Panciroli. Having taken his degree of doctor in law, he returned into Savoy, and was admitted an advocate of the ſenate of Chamberry; but he ſoon renounced his legal profeſſion, and embraced the eccleſiaſtical. After having taken orders, and being made provoſt of Annecy, he ſpeedily acquired great reputation as a preacher; and as he was poſſeſſed of an ardent zeal for the converſion of proſelytes, he was ſent into the valleys of his dioceſe, to endeavour to bring back the diſciples of Zuingle and Calvin into the papal fold. His labours are ſaid to have been attended with wonderful ſucceſs; in conſequence of which he was judged to be the moſt proper perſon to ſucceed to the epiſcopal dignity in that dioceſe. With this view the biſhop of Geneva choſe him for his coadjutor: an appointment which he was deſirous of declining, but was obliged to accept of it by the injunction of pope Clement VIII. and was conſecrated to it under the title of biſhop of Nicopolis. Soon afterwards he had occaſion to take a journey to Paris, where Henry IV. made him conſiderable offers, in order to retain him in his kingdom; but he preferred his humble appointment in Savoy to the ſplendid biſhoprics of which he might have had his choice in France, together with a cardinal's hat, and returned to his native country in 1602. It was in the ſame year that the death of the biſhop of Geneva called him to the full exerciſe of the epiſcopal functions in that dioceſe, when he applied himſelf with great diligence to the reformation of abuſes among the clergy, and the monaſtic inſtitutions, and united to the character of a vigilant eccleſiaſtical ſuperintendant, that of the good paſtor, and beneficent friend of his flock. He viſited the ſick, relieved the poor, and was always ready to afford his aſſiſtance, in temporal as well as ſpiritual matters, to all who applied to him. And he exhibited in his own life, a commendable pattern of piety, purity, candour, and unaffected ſimplicity and urbanity. In 1610 he eſtabliſhed, in conjunction with madame le Chantal, the order of *the Viſitation*, for female devotees, of which the firſt inſtitution

tion was fixed at Annecy. In this order fewer auſterities are enjoined on the profeſſed than in moſt other monaſtic inſtitutions; and it proved ſo popular, that during the life of madame de Chantal, eighty-ſeven houſes, governed by its regulations, were eſtabliſhed in France and Savoy, whence they ſoon ſpread into Italy, Germany, and Poland. In 1622 the biſhop received an order from the duke of Savoy to proceed to Avignon, to be preſent at an interview between that prince and Louis XIII. of France; after which he went to Lyons, where he was cut off by a ſtroke of apoplexy in the fifty-fifth year of his age. He was canonized by pope Alexander VII. in 1665. He was the author of ſeveral works, of which the moſt valuable is entitled An Introduction to a Devout Life, intended to ſhew that devotion ought not to be confined to perſons immured in cloiſters, or the religious by profeſſion, but that its duties are perfectly compatible with the obligations of civil and ſecular life. He was alſo the author of a treatiſe On the Love of God; and of Spiritual Letters, and other practical and devotional pieces. The whole of his works compoſe two volumes in folio.

FRANCIS DE VICTO'RIA, ſo named from a town of Navarre, in which he was born, was a celebrated Spaniſh divine in the 16th century. He purſued his ſtudies in the univerſity of Paris, where he took his degrees, and afterwards returned to his native country. Having entered into the order of dominican preaching friars, he was appointed to the office of profeſſor of theology, and delivered lectures at Salamanca and other Spaniſh univerſities. His merits were held in high eſtimation, and his works have met with a favourable reception in the catholic world. The moſt important of them is a collection of theological and moral lectures, which was publiſhed after the author's death at Lyons, in 1557, under the title of *Theologicæ Prælectiones XIII.* &c. in two volumes, which are analyſed by Dupin. The author died at Salamanca, in 1549.

FRANCIS DE XAVIER', a Romiſh ſaint, called *the Apoſtle of the Indians*, born at the Chateau de Xavier, at the foot of the Pyrennées, in 1506. His inclination early prompted him to embrace a ſtudious life. After having been inſtructed in claſſical learning in his native country, he was ſent to the univerſity of Paris, where he went through a courſe of theology and philoſophy. For ſome time he taught philoſophy in the college of Beauvais, until he became acquainted with the famous Ignatius Loyola, who was purſuing a courſe of theology at Paris. With Loyola he contracted a ſtrict intimacy, and was one of the ſeven companions who entered into a vow in the church of Mont-Martre, in 1534, to conform themſelves to a ſtrict religious diſcipline, and to embark in a new undertaking for promoting the intereſts of the catholic faith, particularly by the converſion of infidels. From this time he renounced all proſpect of any eſtabliſhment in the world, and applied himſelf diligently to the ſtudy of theology. In 1537 he quitted Paris, and went to Venice, where Loyola, who had taken a journey into Spain, met him and the reſt of his companions, who were ten in number. From Venice Francis Xavier and ſome others of the companions went to Rome, where they obtained leave from pope Paul III. to embark on a miſſion to the Holy Land; but they were prevented from undertaking it by the reſtrictions which the grand-ſeignior had laid on the admiſſion of pilgrims and miſſionaries into Paleſtine. Their attention was therefore engaged in increaſing their numbers from among the members of the different Italian univerſities; in preaching, and inſtructing young perſons; and in laying the foundation of the famous Society of the Jeſuits. Soon after the pope had given his ſanction to the eſtabliſhment of that new order, John III. king of Portugal applied to the holy ſee for miſſionaries, to be ſent to propagate the catholic faith in the Eaſt Indies. Francis Xavier was one of the perſons ſelected for this arduous enterpriſe; and he poſſeſſed an undaunted reſolution, together with a degree of genius and ſagacity, of perſeverance, patience, and zeal, that eminently fitted him for the purpoſe. He embarked at Liſbon for the Indies in 1541, and in the following year arrived at the Portugueſe ſettlement of Goa. For ten years he laboured inceſſantly in ſpreading the knowledge of the catholic faith in that city, the ſouthern continent of India, Malacca, the Molucca iſlands, and Japan; and certainly prevailed on vaſt numbers to receive Chriſtianity. In the latter iſland, eſpecially, he with wonderful rapidity laid the foundations of the catholic church, which flouriſhed for many years in that vaſt empire. From Japan, Francis Xavier departed for China, but he fell ſick on his voyage, and died juſt as he came in ſight of that empire, in 1552, in the forty-ſixth year of his age. He was canonized by pope Paul V. in 1619; and by his ſucceſſor pope Gregory XV. in 1622. He was the author of five books of Epiſtles, publiſhed at Paris in 1631, octavo; a Catechiſm; and ſome other ſmall pieces.

FRAN'CIS (Laurence), a French abbé, and various writer, was born at Arinthod in Franche-Comté, in 1698, and died at Paris in 1782. He was the author of ſeveral works, which, though not entitled to much praiſe for their elegance, met, nevertheleſs, with a favourable reception from the public, on account of their utility. One was a treatiſe on Geography, 12mo. known by the name of *Crozat*, becauſe dedicated to a lady ſo called, for whoſe uſe it was compiled. It is commended as a perſpicuous, methodical, and accurate, performance, and has undergone a great number of impreſſions. The moſt important of his other publications are, 2. The Evidences of the Religion of Jeſus Chriſt, 4 vols. 12mo. 3. A Defence of Religion, 4 vols. 12mo. 4. An Examination of the Catechiſm of an Honeſt Man. 5. An Enquiry into the Facts on which the Chriſtian Religion is founded, 3 vols. 12mo. 1767. 6. Obſervations on the Philoſophy of Hiſtory, 8vo.

FRAN'CIUS (Peter), a Greek and Latin poet, born at Amſterdam in 1645. He was taught the rudiments of claſſical learning by Hadrian Junius, rector of the Latin ſchool, who adviſed him to take Ovid as his model. He afterwards purſued his ſtudies at Leyden, under John Frederic Gronovius, with whom he entered into a moſt intimate friendſhip, as well as with his ſon James. In 1669 he made a tour to England, from which he proceeded to France, and while in the latter country, he obtained the degree of doctor of laws at Anjou. After reſiding ſome time at Paris, he continued his travels to Italy. At Florence he was treated with great reſpect by the grand-duke, and at Rome he was much noticed by the principal men of the city. In 1674, the magiſtrates of Amſterdam appointed him profeſſor of hiſtory and rhetoric. In 1692 he was invited to Leyden to be profeſſor of Greek; but the magiſtrates of Amſterdam having raiſed his ſalary, he declined this offer, and continued to diſcharge the duties of his office till the period of his death, which took place in 1704. His works are: 1. *Specimen Eloquentiæ Exterioris, primum & alterum*; the firſt publiſhed in 1697, and the ſecond in 1699. 2. *Poëmata*, 1672, in 12mo. and 1697, 8vo. 3. *Orationes*, 1692, and 1704, 8vo. 4. *Gregorii Nazianzeni Homilia De Amore Paupertatis, ex Græca vernacule verſa & notis illuſtrata*, 1697, 8vo. 5. *Poſtuma*, conſiſting of three orations, viz. *Pro Eloquentia, Pro Poetica, De Uſu Eloquentiæ in Sacris*; and his Latin poems, viz. *Elegiarum, liber quintus*; *Odarum, liber tertius*; *Epigrammatum, liber tertius*; together with *Illuſtrium viorum ad P. Francium Epiſtolæ*.

FRANCIS'CANS, in eccleſiaſtical hiſtory, the order of Minorites or mendicant friars, founded by St. Francis, as deſcribed above, under FRANCIS of ASSISI.

FRAN'CISBOROUGH, a ſettlement of the American States, in York county, diſtrict of Maine.

FRANCKE (Auguſtus Herman), a German Lutheran divine, born at Lubeck, in 1663. In 1679 he was ſent to the univerſity of Erfurt, and afterwards to that of Kiel, in both which places he diſtinguiſhed himſelf by his diligence and improvement. In 1684 he proceeded to Leipſic, where he eſtabliſhed a ſociety for conferences on theological and biblical ſubjects, which is ſaid to exiſt to the preſent time, under the name of *Collegium Philo-Biblicum*.

He was ſo popular a lecturer in Leipſic, that his audience frequently conſiſted of near 300 ſtudents of the univerſity. In 1691 he was elected to the profeſſorſhip of the Oriental and Greek languages in the univerſity of Halle, to which was added the appointment of paſtor to a church in the ſuburbs of that town. Here he projected an eſtabliſhment, to be ſupported by charitable contributions, in which orphans and poor children in general ſhould not only be inſtructed, but entirely ſupported, until qualified to be ſent out into the world. His humane deſign was no ſooner known than it was patroniſed; and in 1698, without any capital adequate to ſo great a work, but truſting that Heaven would diſpoſe the humane and benevolent to enable him to complete it, he began, and in a few years finiſhed, the celebrated houſe for orphans at Halle. This inſtitution has been of eſſential ſervice to the intereſts of humanity and good morals in Germany, and has rendered the projector's memory worthy of being cheriſhed as a true benefactor to his ſpecies. Mr. Francke lived to ſee his pious and benevolent labours ſo well ſeconded, that proviſion was made during his time for the ſupport and education of two thouſand one hundred and ninety-ſix children. He was alſo enabled to eſtabliſh, for the benefit of his inſtitution, a printing-office, furniſhed with types of every ſort, and even of ſuch languages as are leaſt generally known; a muſeum of natural curioſities, and a numerous library. It may not be improper to mention, that the ſchools for orphans at Peterſburgh, and at Potzdam, were founded on the model of this inſtitution. He died in 1727, in the 65th year of his age, regretted by all ranks in Germany, for the noble ſervices which he had rendered to the intereſts of humanity and virtue. Beſides ſermons and devotional treatiſes, he was the author of 1. *Programmata*, 1712. 2. *Prælectiones Hermeneuticæ*, 1712. 3. *Methodus Studii Theologici*, 1723. 4. *Introductio ad Lectionem Prophetarum*, 1724. 5. *Commentatio de Scopo Librorum Veteris & Novi Teſtamenti.* 6. *Manuductio ad Lectionem Scripturæ Sacræ*, 1693. 7. *Obſervationes Biblicæ*, 1695. *Idea Studioſi Theologiæ*, 1712. 8. *Monita Paſtoralia Theologica*, 1717.

FRANCK'EN (Chriſtian), a German unitarian divine of the 16th century, born at Gardleben, in the marche of Brandenburg. His parents were of the Lutheran perſuaſion, in the principles of which he was at firſt educated; but he became early a convert to popery, and entered into the Jeſuits' ſociety in 1568. He was ſent to Rome, to go through his noviciate; where, by his cloſe application to his ſtudies, he greatly injured his health, and was obliged to be ſent to the purer air of Naples, in order to re-eſtabliſh it. After ſpending ſome years in Italy, he was recalled to Germany, where, if we are to credit his biographer, he adopted the Lutheran and Calviniſt creeds. Yet, after a temporary reſidence in different towns in Germany and Bohemia, he joined himſelf to the unitarian communion in Poland, and became a ſtrenuous advocate for the opinions which had drawn the ſeverity of proteſtant perſecution on the head of Francis David. In 1584 he held a diſpute at Chmelnitz, with the celebrated Fauſtus Socinus, in which he maintained the ſame ſentiments with David reſpecting the incarnation of Jeſus Chriſt. At this time Francken was at the head of a ſeminary at Chmelnitz. Afterwards he removed to Tranſylvania, where he taught philoſophy in the unitarian ſeminary at Clauſenburg. In 1591, he accepted ſome overtures made him by Ladiſlaus Popelius, one of the emperor's officers, who was attached, like himſelf, to the ſtudy of philoſophy. With this patron and friend he lived till he had produced his *Analyſis Rixæ Chriſtianæ, quæ Imperium turbat & diminuit Romanum.* From this time we learn no farther particulars concerning him. He was the author of a ſevere ſatire on the Jeſuits, entitled, 2. *Breve Colloquium Jeſuiticum, toti Orbi Chriſtiano, ad recte cognoſcendam hactenus non ſatis perſpectam Jeſuitarum Religionem, utiliſſimum; habitum a Sacræ Theologiæ Doctore & Profeſſore Paulo Florenio cum Chriſtiano Franckeu, &c.* 1578. 3. *Præcipuarum Enumeratio Cauſarum, cur Chriſtiani, cum in multis Religionis Doctrinis ſint mobiles & varii, in Trinitatis tamen Dogmate retinendo ſint conſtantiſſimi.* 4. *De Honore Chriſti, id eſt, utrum Chriſtus, cum ipſa perfectiſſima ratione Deus non ſit, religioſa tamen adoratione colendus ſit.* 5. *Reſponſio ad tres Orationes Warcawicii Jeſuitæ, quibus regem Stephanum (Bathori) & Senatores ad Proteſtantes perſequendos incitat.* 6. *Typus Veritatis Conſcientiarum, &c.*

FRANCK'ENBERG, a town of Germany, in the circle of the Upper Rhine, and principality of Upper Heſſe: ſixteen miles north of Marpurg, and twenty-nine ſouth-weſt of Caſſel.

FRANCK'ENMARK, or FRANKEMARK, a town of Germany, in the archduchy of Auſtria: eight miles ſouth-weſt of Voglabruck.

FRANCK'LIN (Thomas, D. D.), a writer in polite literature, born in London about 1720. His father, a printer, was publiſher of the antiminiſterial paper called the Craftſman, ſupported by Bolingbroke, Pulteney, and other diſtinguiſhed perſons. The ſon, through the intereſt of Pulteney, was brought up to letters, and ſent to Weſtminſter ſchool. He was thence transferred to Trinity-college, Cambridge, where he diſtinguiſhed himſelf, and of which, after paſſing through the uſual degrees, he became a fellow. He was firſt known as an author in 1749, by a tranſlation of The Epiſtles of Phalaris, and of Cicero on the Nature of the Gods. His reputation for learning received a ſanction in 1750 by his election to the Greek profeſſorſhip in the univerſity of Cambridge. In 1753 he publiſhed a poem called Tranſlation, written in eaſy verſe. He was, in 1758, preſented to the livings of Ware and Thundridge in Hertfordſhire. One of his greateſt works, A Tranſlation of all the Plays of Sophocles, 2 vols. quarto, appeared in 1759. He preſented to the public two tragedies, The Earl of Warwick, and Matilda, both taken from the French. He lent his name to a tranſlation of all the works of Voltaire; but it is ſuppoſed that he executed little more than the verſion of his Electra, and Oreſtes, both which were acted. He was the author of ſeveral ſingle ſermons, and of a volume of Diſcourſes on the Relative Duties, publiſhed in 1765, and well received. He was nominated one of the king's chaplains in 1767, and took the degree of D.D. in 1770. He did not, however, diſcontinue his literary employments, and even wrote a farce for the ſtage after this period. He concluded his literary labours by a tranſlation of The Works of Lucian, 2 vols. 4to. 1780; and died in London in 1784.

FRAN'CO (NICHOLAS), a man of letters, born at Benevento in 1510. His father was a ſchoolmaſter, and it was probably under him that he acquired an acquaintance with the learned languages. He had the misfortune in his youth to contract an intimacy with the noted Peter Aretino, from whom he caught the ſpirit of perſonal ſatire, with a total diſregard of moderation or decency. After he had made himſelf many enemies in his own country, he removed to Venice, where Aretino then was. Their union, which from the ſuperior learning of Franco was advantageous to the other, did not long continue. The ſucceſs of Aretino's Letters, publiſhed in 1573, excited the envy of Franco, who publiſhed his *Piſtole Vulgari* in 1539, by way of rivalry; and immediately a fierce war broke out between them, ſuſtained on each ſide with the greateſt rancour and malignity. Franco left Venice with an intention of going to France; but on paſſing through Caſal, he was received with ſo much courteſy by Fanzino, governor of Montferrat, that he took up his abode there for ſome time. There he publiſhed a dialogue, entitled *Delle Belleze*; and alſo a collection of ſonnets againſt Aretino, in conjunction with a *Priapeia Italiana*, likewiſe in ſonnets. He was a principal member of the academy of Argonauti at Montferrat, and in that capacity wrote his *Rime Maritime*, printed at Mantua in 1549. In this latter city he followed the profeſſion of a ſchoolmaſter. Thence he returned to Rome, where he publiſhed his Latin commentaries on the *Priapeia*, attributed

to Virgil, the copies of which were ſuppreſſed and burned by order of pope Paul IV. He continued under Pius IV. to indulge his virulence, but was preſerved from perſonal chaſtiſement by the protection of cardinal Morone. At length, his impudence in writing a Latin epigram againſt Pius V. with other defamatory libels, brought upon him that puniſhment, which it is extraordinary that he ſhould ſo long have eſcaped. He was taken from his ſtudy in his furred robe, and hanged on the common gallows. This cataſtrophe took place in 1569. It is affirmed, that ſome years before his death he had been ordained prieſt. A French writer in the *Année Littéraire*, 1778, has deſcribed Franco as a man of a free ſpirit, moved with virtuous indignation againſt the corruptions he witneſſed, and diſdaining to flatter the great. But the indecency of ſome of his writings will not juſtify ſo favourable an opinion of his moral principles. He poſſeſſed qualities, however, which have procured him praiſe from ſome of his contemporaries; and it is allowed that his talents and learning were conſiderable. Beſides the works already mentioned, he publiſhed *Il Petrarchiſta*, a romance called *Filena*, and ſome poems printed in different collections. He left in manuſcript a tranſlation of Homer's Iliad in *ottava rima*.

FRANCOC'CI, a town of Italy, in the ſtate of the church, and duchy of Spoleto: ſeven miles weſt-north-weſt of Spoleto.

FRANÇOI'SE (La), a town of France, in the department of the Lot, and chief place of a canton, in the diſtrict of Montauban: two leagues and a half north-weſt of Montauban, and ſix and three quarters ſouth-ſouth-weſt of Cahors. Lat. 44. 7. N. lon. 18. 54. E. Ferro.

FRAN'COLI, a river of Spain, which runs into the ſea, near Tarragon, in Catalonia.

FRANCO'NIA, a circle of Germany; bounded on the north by Meiſſen and Thuringia, on the eaſt by Bohemia and the Upper Palatinate, on the ſouth by Bavaria and Suabia, and on the weſt by the Lower Palatinate and the electorate of Mentz. It is ſituated near the centre of Germany, the form inclined to a circle, whoſe diameter is about fifty leagues. In the centre the land is fertile in corn, wine, fruit, &c. but the frontiers are full of foreſts and mountains, and little cultivated. The principal river is the Maine. The inhabitants of many towns are Roman catholics, though the principal part are Lutherans. The Calviniſts have ſome churches, and the Jews ſome ſynagogues. The ſtates which compoſe the circle of Franconia are either eccleſiaſtical or civil. The eccleſiaſtical princes are the biſhops of Bamberg, Wurtzburgh, and Aichſtett, and the grand maſter of the Teutonic order. The ſecular princes are, the prince of Culmbach; the counts of Henneberg, Schwarzenberg; the princes of Lowenſtein-Wertheim, Hohenlohe-Waldenburgh, Hohenlohe-Neuenſtein, Caſtell, Wertheim, Rieneck, Erbach, Limburgh-Geildorf, Limburgh-Speckfeld, Seinſheim, Reigelſburgh, Wiegentheid, Welzheim, and Hauſen; with the imperial towns of Nuremberg, Rothenburg, Windſheim, Schweinfurt, and Weiſſenburg. In the military arrangement of the empire, being in time of peace fixed at 40,000 men, Franconia furniſhes 980 horſe, and 1902 foot; and, at the diviſion of 300,000 florins to the cheſt of the empire, this circle was rated at 22,696 florins 47 kruitzers.

FRANCO'NIA, a townſhip of the American States, in Grafton county, New Hampſhire, fourteen miles north-eaſt of Haverhill (N. H.) on Connecticut river. Incorporated in 1764, firſt called Morriſtown.

FRANCO'NIAN, *adj.* Belonging to Franconia.

FRANCO'NIAN, *ſ.* A native of Franconia.

FRAN'CONVILLE, a town of France: ten miles north of Paris.

FRANCO'SO, a town of Portugal, in the province of Beira: twenty-two miles eaſt of Viſeu.

FRANCOVIL'LA, a town of Italy, an imperial fief, in the ſtate of Genoa: ſix miles ſouth of Novi.

FRAN'CREMONT, a town of Germany, in the circle of Weſtphalia, and biſhopric of Liege: four miles north of Spa.

FRANE, a town of France, in the department of the Doubs, and chief place of a canton, in the diſtrict of Pontarlier: two leagues and a half ſouth-weſt of Pontarlier.

FRAN'EKER, a town of the United Dutch States, in Frieſland, ſituated in the diſtrict of Weſtergoo, in the canton of Franekeradeel, to which it gives name; it is watered by two canals, navigable for barges, and has a caſtle, built in the fifteenth century, where the governors of the country ſometimes reſided. It is ſaid that the city was built in 1191, in the reign of the emperor Henry VI. the ſon of Frederic Barbaroſſa. It has a celebrated univerſity, eſtabliſhed by the States, and William Louis count of Naſſau, in 1585. Adrian Metius, profeſſor of mathematics; Pierius Winſemus, lawyer and hiſtoriographer of Frieſland; George Paſor, profeſſor of the Greek language; Sixtus Amama, &c. have done honour to this univerſity by their learning and writings. It is one of the neateſt towns in Frieſland, and the ordinary reſidence of the nobleſſe of the country: nine miles weſt of Lewarden, and five eaſt of Harlingen. Lat. 53. 11. N. lon. 22. 54. E. Ferro.

FRAN'GIBLE, *adj.* [*frango*, Lat.] Fragile; brittle; eaſily broken.—Though it ſeems the ſolideſt wood, if wrought before it be well ſeaſoned, it will ſhew itſelf very *frangible*. *Boyle*.

FRAN'GULA, *ſ.* See CASSINE and RHAMNUS.

FRA'NION, *ſ.* [derivation uncertain.] A paramour; a boon companion.

Firſt, by her ſide did ſit the bold Sanſloy,
Fit mate for ſuch a mincing minion,
Who in her looſeneſs took exceeding joy.
Might not be found a franker *franion*. *Spenſer*.

FRANK, *adj.* [*franc*, Fr.] Liberal; generous; not niggardly.—'Tis the ordinary practice of the world to be *frank* of civilities that coſt them nothing. *L'Eſtrange*.—Open; ingenuous; ſincere; not reſerved; without conditions; without payment.

Thou haſt it won; for it is of *frank* gift,
And he will care for all the reſt to ſhift. *Hubberd*.

Not reſtrained; licentious. *Not in uſe*.—Might not be found a *franker* franion. *Spenſer*.

FRANK, *ſ.* [*franc*, Fr. an old word for a hog-ſty.] A place to feed hogs in; a ſty.—Where ſups he? Doth the old boar feed in the old *frank*? *Shakeſpeare*.—[From *franc*, Fr. free.] A letter which pays no poſtage.—You'll have immediately, by ſeveral *franks*, my epiſtle to lord Cobham. *Pope*.

To FRANK, *v. a.* To ſhut up in a frank or ſty. *Hanmer*.

In the ſty of this moſt bloody boar,
My ſon George Stanly is *frank'd* up in hold. *Shakſ*.

To feed high; to fat; to cram. *Junius* and *Ainſworth*.—To exempt letters from poſtage.—My lord Orrery writes to you to-morrow; and you ſee I ſend this under his cover, or at leaſt *franked* by him. *Swift*.

Gazettes ſent gratis down, and *frank'd*,
For which thy patron's weekly thank'd. *Pope*.

FRANK, one of the inhabitants of a diſtrict in Germany who invaded the ancient Gaul, conquered a great part of it, and gave it the name of France. See FRANKS.

FRANK, or FRANC, *ſ.* an ancient French coin, either of gold or ſilver, ſtruck and current in France. The value of the gold franc was ſomething more than that of the gold crown; the ſilver franc was a third of the gold one: this coin has been long out of uſe, though the term is ſtill retained as the name of a money of account: in which ſenſe it is equivalent to the livre, or twenty ſols.

FRANK-ALMOI'GN, *ſ.* in law, a tenure by ſpiritual ſervice, where an eccleſiaſtical corporation, ſole or aggregate, holdeth land to them and their ſucceſſors, of ſome

lord and his heirs in free and perpetual alms; and *perpetual* ſuppoſes it to be a fee-ſimple, though it may paſs without the word *ſucceſſors*. *Co. Lit.* 94. A lay perſon cannot hold in free alms: and when a grant is in frank-almoign, no mention is to be made of any manner of ſervice. *Lit.* 137. None can hold in frank-almoign but by preſcription, or by force of ſome grant made before the ſtatute of mortmain. 7 *Edw.* I. ſt. 2. 18 *Edw.* I. c. 3. So that the tenure cannot at this day be created, to hold of a founder and his heirs in free alms; but the king is not reſtrained by the ſtatutes; nor a ſubject licenſed or diſpenſed with by the king, to make ſuch a grant. *Co. Lit.* 98. And if an eccleſiaſtical perſon holds lands by fealty and certain rent, the lord may at this time confirm his eſtate, to hold to him and his ſucceſſors in frank-almoign; for the former ſervices are extinct, and nothing is reſerved but that he ſhould hold of him, which he did before; whereby this change and alteration is not within the ſtat. 18 *Edw.* I. of *quia emptores terrarum*. *Co. Lit.* 99.

Tenure in frank-almoign is incident to the inheritable blood of the donor or founder; except in caſe of the king, who may grant this tenure to hold of him and his ſucceſſors. *Lit.* 135. And the reaſon why a grant in frank-almoign, ſince the ſtat. 18 *Edw.* I. (*quia emptores*) is void, except in the caſe of the king, &c. is becauſe none can hold land by this tenure, but of the donor; whereas the ſtatute injoins, that it be held of the chief lord, by the ſame ſervice by which the feoffor held it; though the king may grant away any eſtate, and reſerve the tenure to himſelf. *Co. Lit.* 223. The ſervice which eccleſiaſtical corporations were bound to render for lands held in frank-almoign was not certainly defined, but only in general, to pray for the ſouls of the donor and his heirs, dead or alive; and therefore they did no fealty (which is incident to all other ſervices but this), becauſe this divine ſervice was of a higher and more exalted nature. *Lit.* 134, 5.

This is the tenure by which almoſt all the ancient monaſteries and religious houſes held their lands; and by which the parochial clergy and very many eccleſiaſtical and eleemoſynary foundations hold them to this day. The nature of the ſervice being, upon the reformation, altered and made conformable to the doctrines of the church of England. It was an old Saxon tenure, and continued under the Norman revolution; from the reſpect then ſhewn to religion and religious men; which is alſo the reaſon that tenants in frank-almoign were diſcharged of all other ſervices, except the *trinoda neceſſitas* of repairing the highways, building caſtles and repelling invaſions. See *Bract.* l. 4. tr. 1. c. 28. *Seld. Jan.* 1. 42.

FRANK-CHA'SE, in law, a liberty of free chaſe; by which all perſons that have lands within the compaſs thereof, are prohibited to cut down any wood, &c. without the view of the foreſter, though it be in their own demeſnes. *Cromp. Jurif.* 187.

FRANK-FEE, in law, freehold lands which are held exempted from all ſervices, but not from homage. That is frank-fee which a man holds at the common law to him and his heirs; and not by ſuch ſervice as is required in ancient demeſne, according to the cuſtom of the manor; and the lands in the hand of king Edward the Confeſſor, at the making of the book of Domeſday, were ancient demeſne, and all the reſt of frank-fee. *Reg. Orig.* 12. *F. N. B.* 161. Theſe lands were exempted from all ſervices, but not from homage. *Bro.* tit. *Demeſne* 32, ſays, that land which is in the hands of the king or lord of any manor, or being ancient demeſne of the crown (viz. the demeſnes), is called *frank-fee*; and that which is in the hands of the tenant, is ancient demeſne only. The author of the Terms of the Law defines a free-fee to be a tenure pleadable at the common law; and not in ancient demeſne. See *Cowel*, *Blount*, and the article ANCIENT DEMESNE, vol. i. p. 675.

FRANK-FE'RM, in law, lands or tenements changed in the nature of the fee by feoffment, &c. out of knight ſervice, for certain yearly ſervices. *Britton*, c. 66. See the article FEE-FARM, vol. vii. p. 287.

FRANK-FOLD, the ſame with FOLDAGE, vol. vii. p. 535.

FRANK-LAW, in the ancient Engliſh juriſprudence, is the benefit of the free and common law of the land. Crompton ſays, "he that for any offence loſeth his frank-law, falls into three miſchiefs, viz. he may never be impannelled upon any jury or aſſize; or be permitted to give any teſtimony: if he hath any thing to do in the king's courts, he muſt not attend them in perſon, but appoint his attorney therein for him; and his lands ſhall be eſtreated, and his body committed to priſon." *Cromp. Jurif.* 156.

FRANK-MAR'RIAGE, in law, a tenure in tail ſpecial, where a man ſeiſed of land in fee-ſimple gives it to another with his daughter, ſiſter, &c. in marriage; to hold to them and their heirs. This tenure groweth from theſe words in the gift, i. e. *Sciant, &c. me* A. B. *dediſſe & conceſſiſſe, &c.* F. B. *filio meo & Annæ uxori ejus, filiæ, &c. in* liberum maritagium, *unum meſſuagium, &c. Litt.* 17. *Weſt. Symb. par.* 1. *lib.* 2. The effect of which words is, That they ſhall have the land to them and the heirs of their bodies; and ſhall do no ſervices to the donor, except fealty, until the fourth degree. *Glanvil* 7. c. 18. And Fleta gives this reaſon why the heirs do no ſervice until the fourth degree: *Ne donatores vel eorum hæredes per homagii receptionem à reverſione repellantur.* And why in the fourth deſcent and downward, they ſhall do ſervices to the donor; *quia in quarto grada vehementer præſumitur, quod terra eſt pro defectu hæredum donatorum reverſura. Fleta*, 3. c. 11. *Bracton*, 2. c. 7.

Bracton alſo divides marriage into *liberum maritagium* and *maritagium ſervitio obligatum*; which laſt was where lands were given in marriage, with a reſervation of the ſervices to the donor, which the donee and his heirs were bound to perform for ever; but neither he, or the next two heirs, were obliged to do homage, which was to be done when it came to the fourth degree, and then, and not before, they were required to be performed both ſervices and homage. *Bract. lib.* 2. A gift of lands by one man to another with a wife in frank-marriage, amounts by implication of law to a gift in tail; which in this caſe may be created without the words *heirs* or *body*. *Lit.* 17. *Wood's Inſt.* 120. A gift in frank-marriage might be made as well after as before marriage: and ſuch a gift was a fee-ſimple before the ſtatute of *Weſtm.* 2. but ſince, it is uſually a fee tail: though this tenure is now grown out of uſe, it is ſtill capable of ſubſiſting in law. It is liable to no ſervice but fealty. See 2 *Comm.* 115. c. 7.

FRA'NK-PLEDGE, in law, a pledge or ſurety for the behaviour of freemen; it being the ancient cuſtom of this kingdom, borrowed from the Lombards, that for the preſervation of the public peace, every free-born man at the age of fourteen (religious perſons, clerks, &c. excepted) ſhould give ſecurity for his truth towards the king and his ſubjects, or be committed to priſon; whereupon a certain number of neighbours, uſually became bound one for another, to ſee each man of their pledge forth-coming at all times, or to anſwer the tranſgreſſion done by any gone away: and whenever any one offended, it was forthwith inquired into what pledge he was, and then thoſe of that pledge either produced the offender within one and thirty days, or made ſatisfaction for his offence. This was called frank-pledge; and this cuſtom was ſo kept, that the ſheriffs at every county-court, from time to time, received the oaths of young perſons as they grew to fourteen years of age, and took care that they were ſettled in one decennary or other; whereby this branch of the ſheriff's authority was called *viſus franci plegii*, or view of frank-pledge. Living under frank-pledge was termed living under law, &c. See the article COURT-LEET, vol. v. p. 301.

FRANK-TEN'EMENT, in law, a poſſeſſion of freehold lands and tenements. See FREEHOLD, in this vol.

FRANKED-

FRANK'ED-LET'TERS. See the articles POST, and POST-OFFICE.

FRANK'ENAU, a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe: twenty-four miles ſouth-weſt of Caſſel, and eighty ſouth-ſouth-weſt of Waldeck.

FRANK'ENBERG, a town of Germany, in the archduchy of Auſtria: ſix miles weſt-north-weſt of Voglabruck.

FRANK'ENBERG, a town of Germany, in the circle of Upper Saxony, and territory of Erzegeburg: nine miles weſt of Freyberg, and ſeven north-north-eaſt of Chemnitz.

FRANK'ENDAL, a town of Germany, in the circle of the Lower Rhine, and Lower Palatinate, ſituated in a fertile plain, on a navigable canal, which communicates with the Rhine. It owes its riſe to two convents, one of men, and the other of women. Some Flemings, who fled from perſecution, ſettled here, and it became a flouriſhing town, when, with the reſt of the palatinate, it felt the miſeries of war, and was deſtroyed by the French; but, by the care of the prince, ſoon after rebuilt in a regular and handſome manner. The inhabitants are engaged in manufactures of porcelain, cloth, ſerges, ſilk-ſtuffs, ſtockings, ſoap, &c. It was taken by the French republican army in 1793, and laid under contribution. The inhabitants of Frankendal, among other privileges, are exempted from the military preſs, which is to ſupply the contingency to the army of the empire. It contains three churches, and a handſome hoſpital: eight miles north-north-weſt of Manheim, and eight ſouth of Worms.

FRANK'ENFELS, a town of Germany, in the archduchy of Auſtria, ſituated on the river Noderſpach: twenty miles weſt-ſouth-weſt of Hainfelden, and thirty-ſix weſt of Vienna.

FRANK'ENHAUSEN, a town of Germany, in the circle of Upper Saxony, and principality of Schwartzburg-Rudolſtadt; divided into Old and New Town, ſituated on a branch of the Wipper. It contains a chateau, three churches, and a ſchool, formerly a Ciſtertian convent; with rich ſalt-works, which are very profitable, and belong to the citizens: ten miles eaſt of Sonderſhauſen, and twenty-ſix north of Erfurt. Lat. 51. 16. N. lon. 28. 43. E. Ferro.

FRANK'ENHAUSEN, a town of Germany, in the circle of Upper Saxony, and territory of Erzgeburg: eight miles north-north-weſt of Zwickau.

FRANKE'NIA, *ſ.* [ſo named in honour of *John Frankenius*, profeſſor of botany at Upſal, who firſt enumerated the plants of Sweden in the Speculum Botanicum.] In botany, a genus of the claſs hexandria, order monogynia, natural order of calycanthemæ, (caryophylleæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, ſubcylindric, ten-cornered, permanent; mouth five-toothed, ſharp, patulous. Corolla: petals five; claws the length of the calyx; border flat, with roundiſh, ſpreading, laminas; nectary with a channelled acuminate claw, inſerted into each claw of the petals. Stamina: filaments ſix, length of the calyx; antheræ roundiſh, twin. Piſtillum: germ oblong, ſuperior; ſtyle ſimple, length of the ſtamens; ſtigmas three, oblong, erect, obtuſe. Pericarpium: capſule oval, one-celled, three-valved. Seeds: very many, ovate, very ſmall.—*Eſſential Character.* Calyx five-cleft, funnel-form; petals five; ſtigma ſix-parted; capſule one-celled, three-valved.

Species. 1. Frankenia lævis, or ſmooth Frankenia or ſea-heath: leaves linear, crowded, ciliate at the baſe. Root perennial. Stems numerous, round, branched, trailing. Leaves in little cluſters, ſmall, fleſhy, rolled back ſo as to appear almoſt cylindrical, with a groove underneath, flatted at the baſe, where they are dilated into a pair of minute membranaceous ciliate ſtipules. Flowers at the ramifications of the ſtem, and in the middle of a bundle of leaves, ſolitary, ſeſſile; calyx with five, ſix, or ſeven, ribs, and as many teeth, but rarely more than five; corolla purple, petals wedge-ſhaped, a little ſcolloped at the end. The flowers are elegant in form and colour, like thoſe of a little red pink or campion. The ſtamens and piſtil much reſemble the lychnis, to which this plant is nearly allied, though ſo different in habit. Grows in ſalt marſhes, near Leghorn. In England, Mr. Goodyer found it, September 3, 1621, at Burſeldon-ferry, Hampſhire; on the coaſts of Eſſex, Suſſex, and Kent, abundantly, as in the iſlands of Shepey and Thanet, Lovingland, juſt over the water at Yarmouth; about Thurrington in Eſſex, between Maldon and Goldhanger; in Selſey iſland, Suſſex; near Portſmouth; Tid Goat near Wiſbeach; near Lynn in Norfolk. It flowers in July and Auguſt.

2. Frankenia hirſuta, or hirſute Frankenia, or ſea-heath: ſtems hirſute; flowers in terminating bundles. Stems procumbent, preſſed as it were cloſe to the ground, panicled, and dichotomous. Leaves like thoſe of thyme, ciliate, eſpecially at the baſe. Flowers violet-coloured. Native of the South of France, Apulia, Crete, Siberia, and the Cape of Good Hope.

3. Frankenia pulverulenta, or duſty Frankenia, or ſea-heath: leaves obovate, retuſe, mealy underneath. Stems lying flat, ſlender, branching, with the knots about a finger's breadth from each other. Leaves four at a joint, with very ſhort hairs underneath, the edges not rolled in; petioles ſhort. Flowers in the axils of the leaves, ſeſſile; calyx tough, rigid, with five angles; teeth upright. Annual. Native of the South of France, Italy, and Spain. Found on the coaſt of Suſſex, by Mr. Brewer; between Bognor and Brighthelmſtone, by Mr. Hudſon. It flowers in July. Gerarde and Ray name it *Valentia knot graſs.* Theſe plants were named *Franca* by Micheli, from Giov. Sebaſt. Franchi, of Lucca, phyſician at Florence to the grand duke Coſmo III. Linnæus changed the name to *Frankenia*, in order to perpetuate the name of a perſon not of much greater celebrity.

FRANK'ENSTEIN, a town of Sileſia, in the principality of Munſterberg, on the river Bautze: nine miles weſt of Munſterberg, and twelve ſouth-ſouth-weſt of Glatz.

FRANK'ENSTEIN, a town of Germany, in the circle of the Upper Rhine: five miles ſouth-eaſt of Darmſtadt.

FRANK'ENSTEIN, a town of Germany, in the circle of the Upper Rhine, and duchy of Deux Ponts: twenty miles ſouth-eaſt of Deux Ponts.

FRANK'FORT, a townſhip of the American States, in Hancock county, diſtrict of Maine, on the weſt ſide of Penobſcot-bay: eight miles weſt of Penobſcot, 123 weſt of Paſſamaquoddy, and 238 north-eaſt of Boſton.

FRANK'FORT, or FRANKFORD, a pleaſant town of the American States, in Philadelphia county, Pennſylvania, ſituated on the north-eaſt ſide of a creek of the ſame name, a mile and a half from Delaware river; with an epiſcopal and a German church; on elevated ground, about five miles north-eaſt of Philadelphia.

FRANK'FORT, a new townſhip of the American States, in Herkemer county, New-York, eaſt of Whiteſtown.

FRANK'FORT, a town of the American States, in Hampſhire county, Virginia, on a creek which empties into Potowmack river. It is thirteen miles north-weſt of Rumney, four miles ſouth of the Potowmack, and ten ſouth-ſouth-eaſt of Fort Cumberland.

FRANK'FORT, the capital of Pendleton county, Virginia, in the American States, ſituated on the weſt ſide of a ſouth branch of Potowmack river. It contains a court-houſe and a gaol: 180 miles north-weſt of Richmond.

FRANK'FORT, the metropolis of Kentucky, in the American States, ſituated in Franklin county, on the north-eaſt bank of Kentucky river, about fifty miles from its confluence with the Ohio. It is a flouriſhing town, regularly laid out, and has a number of handſome houſes. The ſtate-houſe is a ſuperb ſtone building. Here is alſo a tobacco warehouſe: thirty miles north of Harrodſburgh, forty north-by-weſt of Danville, 123 from Louiſville, and 790 weſt-by-ſouth of Philadelphia. Lat. 38. 14. N. lon. 95. 28. W.

FRANK'FORT ON THE MAINE, or FRANCFORT, an

an imperial city of Germany, in the circle of the Upper Rhine, ſituated in a pleaſant, fertile, and healthy, country, on the river Maine, by which it is divided into two parts; that on the north, which is the largeſt, is properly called *Frankfort*, the other on the ſouth ſide of the Maine is called *Saxenhauſen*; the whole divided into fourteen wards, two only of which are ſituated in Saxenhauſen. The kings of the Franks reſided here, as likewiſe the immediate ſucceſſors of Charlemagne: the emperors of Germany are ſtill elected and crowned here. Frankfort is about a league and a half in circumference. The inner wall is lined with towers; beyond are ditches filled with water, ramparts, baſtions, &c. The principal ſtreets are handſome, the others are narrow. The Roman Catholics have three churches, and the Lutherans ſix. The Jews are confined to a narrow ſtreet, where they are ſhut up every night; they have a ſynagogue, a ſeminary, and an hoſpital; but they are excluded from the public walks, ſuffer great indignities, yet ſtill find it their intereſt to reſide here. Among the archives of the town-houſe is kept, in a caſket of gold, the golden bull of the emperor Charles IV. which is a parchment book of forty-three quarto leaves, containing the fundamental inſtitutes of the empire, written in Latin, in capital letters. The magiſtrates are divided into three benches; the firſt is compoſed of fourteen echevins, the ſecond of fourteen counſellors, the third is compoſed chiefly of tradeſmen and artificers. All affairs of importance are decided by the two former, out of whom two burgomaſters are annually choſen; the third bench executes offices relating to the police. Frankfort, like Leipſic, is celebrated for its fairs, which are the grand marts for literature, as well as for articles of commerce. In order to provide a ſufficient ſtock for theſe markets, authors of all kinds are kept in pay by the booksellers, and it is ſuppoſed that the annual publications do not amount to leſs than five thouſand volumes. We are told, in a German review, entitled *Atlgemeine Literatuur Zeitung*, publiſhed at Jena, that above three hundred authors are employed, and that the number of books annually reviewed in it is about eighteen hundred. Frankfort is famed for the *adeliche ſtiftungen*, or "convents for female nobility," deſcended from proteſtant families. Theſe are very numerous, and their luxurious mode of living equals that of the firſt nobility in Germany. The ladies are permitted to marry, and to aſſociate with the moſt noble families in the city. Every new emperor at his coronation, which is, by the law of cuſtom, always ſolemnized in this city, lodges in one of theſe noble convents during his reſidence at Frankfort, which is a month. Theſe edifices are the moſt magnificent that can be imagined, and their apartments are furniſhed in the moſt elegant ſtyle. Every lady, who is introduced and admitted into ſuch convent, muſt produce a lineal genealogy of nobility. They enjoy every happineſs, and are not in the leaſt confined to any irkſome regulations. The greater part of them are well educated; and are extremely affable to their inferiors and ſtrangers. They are generally the daughters of noble and ancient warriors; as dukes, counts, marquiſſes, generals, &c. who at their death have not been able to leave them a fortune ſufficient for the proper ſupport of their rank in life. They have the advantage of being provided with every article both of neceſſity and luxury; and enjoy, likewiſe, an annual income, which is frequently very conſiderable. Many of theſe ladies dreſs in a peculiar ſtyle of elegance, and wear armorial ornaments about their necks, ſhewing the diſtinction and antiquity of their anceſtors. Others have croſſes and relics from the holy land to which their families have been entitled. The ſuperiors have their orders given them by the emperor of the Romans. The territory of Frankfort contains a great number of country houſes, and ſeveral villages. In the year 1759, this city was taken by the French. It was again taken by the French republican army in 1792, but ſoon after ſurrendered by them to the Pruſſians. Twenty miles eaſt of Mentz. Lat. 52. N. lon. 26. 17. E. Ferro.

FRANK'FORT ON THE ODER, a town of Germany, in the circle of Upper Saxony, and Middle Mark of Brandenburg, with an univerſity, founded, in the year 1506, by the elector, Joachim, and his brother, Albert; compoſed of Calviniſt profeſſors. It has beſides a noble academy, a ſociety for the promoting of arts and ſciences, two colleges, two fauxbourgs, and ſeveral churches: twelve miles ſouth-ſouth-weſt of Cuſtrin, and forty-eight eaſt of Berlin. Lat. 52. 24. N. lon. 32. 22. E. Ferro.

FRANK'INCENSE, *ſ.* [ſo called perhaps from its liberal diſtribution of odour.] See the article INCENSE.

Cedar and *frankincenſe*, an od'rous pile,
Flam'd on the hearth, and wide perfum'd the iſle. *Pope.*

FRANK'LAND's I'SLAND, a cluſter of iſlands on the north-eaſt coaſt of New Holland, in the South Pacific Ocean; about two leagues from the land. Lat. 17. 19. S. lon. 146. E. Greenwich.

FRANK'LIN, *ſ.* [from *frank.*] A ſteward; a bailiff of land. It ſignifies originally a little gentleman, and is not improperly Engliſhed a gentleman ſervant. *Not in uſe:*

A ſpacious court they ſee,
Both plain and pleaſant to be walked in,
Where them does meet a *franklin* fair and free. *Spenſer.*

FRANK'LIN (Benjamin), a philoſopher and ſtateſman of great celebrity, born at Boſton, in the American States, in 1706. His family was originally from Ecton, in Northamptonſhire, where his anceſtors for ſeveral generations poſſeſſed a ſmall freehold. His father removed from England to America, in order to avoid the perſecution carried on in the reign of Charles II. againſt nonconformiſts; and he followed the occupation of a ſoap-boiler and tallow-chandler, in Boſton. The mother of Benjamin, his ſecond wife, was a deſcendant of one of the firſt coloniſts in that province. Dr. Franklin has left in print an account of his own life to his twenty-fifth year, which, though terminating while he was yet in an humble ſtation, abounds with incidents and obſervations which render it a moſt valuable leſſon to young perſons. We ſhall extract from it ſome of the moſt remarkable circumſtances.

The indications Benjamin gave from his childhood of a diſpoſition for literature, cauſed his father to deſtine him to the church; but the burthen of a large family prevented him from perſiſting in the education commenced for this purpoſe, and at the age of ten he was taken home to be employed in the lower offices of the family trade. With this change he was ſeverely mortified, and he felt a ſtrong deſire of quitting his ſituation for a maritime life, but this was oppoſed. His father, though in an humble condition, poſſeſſed a variety of knowledge, with great ſolidity of underſtanding, and took pains to form the minds of his children to thoſe principles of good ſenſe and moral rectitude which might give a proper direction to their conduct when left to their own controul. In the ſcanty library of his father, young Franklin met with ſome books which gratified his paſſion for reading, though without ſelection. His own taſte chiefly led him to voyages and travels, and hiſtory; but he alſo went through a courſe of polemical divinity, more, probably, to the advantage of his argumentative powers, than of his practical principles. He mentions a work of Defoe's upon Projects, as giving him impreſſions which influenced the principal events of his future life.

A buſineſs was at length choſen for him, which was much better ſuited to his diſpoſition than that of his father's ſhop. An elder brother having ſet up a printing-office at Boſton, Benjamin, at the age of twelve, was articled to him as an apprentice. He ſoon rendered himſelf a proficient in the mechanical part of the trade, and he eagerly ſeized every opportunity it afforded of procuring new books to read, in which amuſement he frequently

ſpent

ſpent the greater part of the night. It was not long before he began to imitate what he ſo much admired, and his firſt attempts were in verſe. He wrote ballads and printed them; but notwithſtanding their temporary ſucceſs, his father was able to convince him that his talent was not poetry. His efforts to acquire a facility in writing proſe were better directed, and purſued with great aſſiduity; and to their ſucceſs may be chiefly attributed his early ſuperiority to his brethren of the preſs, and his ſubſequent elevation to ſtations of public importance. With a paſſion for reading and writing, he imbibed the kindred one of diſputing. This met with fuel from his familiarity with a youth of a ſimilar turn, and he was for a time a very doughty and dogmatical polemic. The peruſal of a tranſlation of Xenophon's Memorabilia, ſoftened him into a Socratic, and he became very dextrous in the ſubtile mode of confuting or confounding an antagoniſt by a ſeries of queſtions. In ſuch a courſe of mental exerciſe he naturally became a ſceptic with reſpect to the religion in which he had been educated; and with the zeal of a convert, took all opportunities of propagating his unbelief. The unhappy moral effects this produced upon ſome of his companions, at length convinced him that it was unſafe to looſen the ties of religion, without the probability of ſubſtituting others equally efficacious. The doubts which ſubſiſted in his own mind, he appears never to have been able to remove; but he took care ſtrongly to fortify himſelf with ſuch moral principles of conduct, as directed him to the moſt valuable ends by honourable means. He early obtained that dominion over his appetites which is ſo important a ſtep in moral diſcipline. Of this, a remarkable inſtance was the effect produced upon him by reading, in his ſixteenth year, a treatiſe by one Tryon, in recommendation of vegetable diet. He immediately diſcarded animal food; and offering to his brother to maintain himſelf for half the ſum paid for his board, he was able out of that allowance to make ſavings for the purchaſe of books. Though he afterwards relaxed in the auſterity of his diet, the habit of being contented with a little, and diſregarding the gratifications of the palate, remained with him through life, and was highly uſeful on various occaſions.

His brother ſet up a newſpaper, and Benjamin ventured anonymouſly to ſend ſome pieces for inſertion, and had the ſatisfaction of finding them applauded by the beſt judges in the place. His conſcious merit probably made him more impatient under the harſh treatment of his brother, who behaved to him more like a maſter than a relation. At length an arbitrary interdiction from the ſtate to James Franklin, upon a political offence, to continue his paper, cauſed Benjamin's name to be employed as publiſher, and, in conſequence, his indentures to be given up to him. He was obliged, however, to ſign a private agreement for ſerving out his term; but not thinking himſelf bound by it, (which he acknowledges to have been a fault,) he ſecretly departed by ſea to New York, whence he ſoon proceeded to Philadelphia. This event of his life took place in his ſeventeenth year. At that city he engaged in the ſervice of one Keimer, a printer, whoſe affairs he ſoon put into better order. He contracted an acquaintance with ſeveral young men fond of reading, in whoſe ſociety he ſpent his evenings, and improved his literary taſte.

After ſome time he became known to ſir William Keith, the governor of the province, who took much notice of him, and urged him to ſet up for himſelf, with many promiſes of ſupport. At his inſtigation, Franklin paid a viſit to his parents at Boſton, in order to obtain an advance of money for his project; but though he was kindly received, he was unable to gain his point. Upon his return to Philadelphia, the governor offered to take the whole burthen upon himſelf, and propoſed to him to make a voyage to England in order to furniſh himſelf with all the neceſſaries of a new printing-office. Franklin gladly embraced the propoſal, and ſet ſail about the beginning of 1725, accompanied by his intimate companion, Ralph, who afterwards became a political writer in England of ſome note, and is commemorated in the Dunciad. Previous to his departure, he exchanged promiſes of fidelity with miſs Read of Philadelphia, with whoſe father he had lodged. Upon his arrival in London, Franklin found that governor Keith, upon whoſe promiſed letters of credit and recommendation he had relied, had entirely deceived him. He was therefore obliged to have recourſe to the buſineſs in his hands for a ſupport, and engaged himſelf as a workman in the office of Palmer, a printer of note in Bartholomew-cloſe. His friend Ralph, whoſe dependence was upon his head, did not ſo readily obtain employment, and he was long a drain upon Franklin's purſe. The morals of the two friends did not improve from their ſociety: Ralph forgot his wife and child in America, and Franklin forgot his miſs Read. He has candidly marked this as another great error of his life; to which he has added the printing, about this period, of a Diſſertation on Liberty and Neceſſity, Pleaſure and Pain, dedicated to Ralph, and intended as an anſwer to ſome of the arguments of Woolaſton's Religion of Nature, which paſſed through his hands at the preſs. This piece, however, gained him ſome fame, and introduced him to the acquaintance, among others, of Dr. Mandeville, author of the celebrated fable of the Bees. In whatever other virtues Franklin might be defective, he retained in a high degree thoſe of induſtry and temperance, which eventually were the means of ſecuring his morals, as well as of raiſing his fortune. He has given a curious and inſtructive account of his endeavours, in the ſecond printing-office in which he worked, (Watts's, near Lincoln's-inn-fields,) to reform the ſottiſh habits of his fellow-workmen. He attempted to perſuade them that there was more real ſuſtenance in a penny roll than in a pint of porter; and though he was at firſt ſtigmatiſed by the name of the *American aquatic*, he was able in the end to induce ſeveral of them to ſubſtitute gruel and toaſted bread as a breakfaſt, to their uſual morning libation from the tankard. They who are acquainted with the London artificers, will conſider this as no ſmall proof of his perſuaſive powers.

After an abode of eighteen months in London, he returned, in 1726, to Philadelphia, where he had engaged to act in the capacity of clerk to Mr. Denham, a worthy perſon, who opened a warehouſe in that city. He ſoon obtained a conſiderable knowledge of trade, and paſſed his time happily, till the death of Mr. Denham, in 1727, diſſolved the connection. He was again obliged to apply for ſupport to the preſs, and accepted an offer from Keimer to become the ſuperintendant of his office. In this ſituation he acquired general eſteem, and improved his connections, ſo that at length he began to entertain thoughts of ſetting up for himſelf. This he brought to effect by means of a partnerſhip with one Meredith, a fellow-workman, whoſe father was capable of advancing ſome money. They took a houſe in Philadelphia; and Franklin has recorded the extraordinary pleaſure he received from a payment of five ſhillings, the firſt fruits of their earnings. "The recollection of what I felt on this occaſion," ſays he, "has rendered me more diſpoſed, than perhaps I ſhould otherwiſe have been, to encourage young beginners in trade:" an amiable effect, indicating the radical benevolence of his heart. His habitual induſtry was now ſharpened by the conſciouſneſs of working for his own benefit. It obtained the notice of ſome of the leading men of the place, and, joined to his punctuality, gave him increaſing reputation. A club which he inſtituted, under the name of *the Junto*, for the diſcuſſion of political and philoſophical queſtions, proved an excellent ſchool of mutual improvement among the members, and united them in ſupporting each other's intereſts. The queries put to the candidates for admiſſion, by way of teſt, deſerve copying, as indicating the liberal and philanthropical ſpirit of the founder. "Do you ſincerely declare that you love mankind in general, of what profeſſion or religion ſoever?

ſoever? Do you think any perſon ought to be harmed in his body, name, or goods, for mere ſpeculative opinions, or his external way of worſhip? Do you love truth for truth's ſake; and will you endeavour impartially to find and receive it yourſelf, and communicate it to others?" Franklin and his partner ventured to ſet up a new public paper, which his efforts both as a writer and a printer cauſed to ſucceed, and they alſo obtained the printing of the votes and laws of the aſſembly. In proceſs of time, Meredith withdrew from the partnerſhip, and Franklin met with friends who enabled him to take the whole concern, and add to it the buſineſs of a ſtationer. A diſcuſſion concerning a new emiſſion of paper-money taking place, he wrote an anonymous pamphlet in favour of the meaſure, which was well received, and contributed to its ſucceſs. This obtained for him farther countenance from perſons in power, and enſured his proſperity. He confeſſes that at this time he was drawn into improper connections with the ſex, owing, probably, to the diſappointment he met with in the object of his firſt attachment, miſs Read, who had been induced by his neglect to marry another perſon. From this man, however, ſhe was ſoon ſeparated, on account of a report that he had a former wife living; and he had removed to the Weſt Indies, where he died. The lovers renewed their intercourſe, and in September, 1730, they ventured to marry, though yet in ſome degree uncertain of her widowhood. She proved a good and faithful companion, and eſſentially contributed to his comfort and proſperity.

Hitherto we have been tracing the hiſtory only of an humble tradeſman, rendered intereſting by the example it affords of gradual advance by means of frugality and induſtry, and of the developement of a ſtrong and ſagacious mind. We are now to view his progreſs in the characters of politician and philoſopher; but it is to be regretted that at the very commencement of this period, we loſe the thread of narration from his own pen, which has hitherto conducted us. His friend, Dr. Stuber, of Philadelphia, has in ſome degree ſupplied this defect; and other ſources of information have not been neglected.

The eſtabliſhment of the public library in Philadelphia, was one of the uſeful projects of Franklin, which he brought to effect in 1731. He had the ſatisfaction of ſeeing and aiding its advance to that flouriſhing ſtate which it has long attained. In 1732 he began to publiſh his Poor Richard's Almanac. This work became remarkable by the number of excellent prudential maxims occaſionally inſerted in it, diſtinguiſhed by a proverbial point and conciſeneſs, and calculated to be indelibly impreſſed upon the memory. They have been collected into a ſingle ſhort piece, entitled, The Way to Health, which has been publiſhed in a variety of forms. His proper political career commenced in 1736, when he was appointed clerk to the general aſſembly of Pennſylvania. To this office he was re-elected for ſeveral years, till he became a repreſentative. In the next year he obtained the valuable office of poſt-maſter to the city of Philadelphia. In 1738 he improved the police of the city with reſpect to the dreadful calamity of fire, by forming a ſociety called the fire-company, to which was afterwards added an inſurance-company againſt loſſes by fire. In the French war of 1744, when it became a queſtion to ſecure the province againſt the inroads of the enemy, a militia-bill was recommended by the governor to the aſſembly, which a diſpute between the proprietary intereſt and that of the citizens at large prevented from being carried. Franklin at this criſis ſtood forth, and propoſed a plan of voluntary aſſociation for defence, which was immediately ſigned by 1200 perſons; and being circulated through the province, at length obtained 10,000 ſubſcriptions. This may be reckoned a very important ſtep towards acquainting America with her ſtrength, and the means of bringing it into action.

It was about this time that he made a commencement of thoſe electrical experiments which have conferred ſo much celebrity on his name. Peter Collinſon had ſent, in 1745, to the library-ſociety of Philadelphia, an account of the curious facts relative to electricity which then engaged the attention of the European philoſophers, together with a tube for experiments, and directions for its uſe. Franklin, together with ſome of his friends, immediately began to apply to the ſubject. His diſcoveries were communicated in three publications, entitled, New Experiments and Obſervations in Electricity, made at Philadelphia in America, in the form of letters to Mr. Collinſon. Their dates are from 1747 to 1754. Theſe were univerſally read and admired; and Dr. Prieſtley (Hiſtory of Electricity) ſays of them, "It is not eaſy to ſay whether we are moſt pleaſed with the ſimplicity and perſpicuity with which theſe letters are written, the modeſty with which the author propoſes every hypotheſis of his own, or the noble frankneſs with which he relates his miſtakes, when they were corrected by ſubſequent experiments." Referring to the work above quoted for a particular account of our philoſopher's new ideas and diſcoveries, we ſhall only give a ſketch of the moſt important of them. Having been led to think that in the excitation of the electric tube, the fluid was conveyed from the perſon who rubbed it, to him who touched it, he deſignated the ſtate of the latter by the expreſſion of being electrified *poſitively*, or *plus*, as having received more than his original quantity of electric fire; while the former was ſaid to be electrified *negatively*, or *minus*, as having loſt a part of his natural portion of the ſame. This led him to the capital diſcovery with reſpect to the manner of charging the Leyden phial; the theory of which is, that when one ſide of the glaſs is electrified *plus*, the other is electrified *minus*; ſo that in charging it, all that is done is to throw the electric fire from one ſide, and convey it to the other; while diſcharging it is the reſtoration of the equilibrium. This theory he confirmed by a ſet of very ingenious experiments, which have generally been thought deciſive; and accordingly it has made its way againſt all oppoſition. He farther proved that the accumulated electric fire in the charged ſide of the phial reſided not in the coating, but in the pores of the glaſs itſelf.—See the article ELECTRICITY, vol. vi. p. 408–427. The moſt brilliant, however, of his diſcoveries, was that of the identity of the electric fire and that of lightning. Their ſimilarity had been ſuſpected, and ſome experiments, according to his directions, had begun to be made in France towards the verification of the fact; but Franklin completed the demonſtration of it entirely by his own experiments. They were guided by the extraordinary power he had obſerved to be poſſeſſed by pointed bodies in attracting and throwing off the electric fire. The firſt poſitive proof he obtained of his problem was in June, 1752, when, by means of a ſilken kite furniſhed with an iron point, and having a key appended at the termination of its hempen ſtring, he drew down from a paſſing thunder-cloud electric fire enough to yield ſenſible ſparks from the key. He afterwards fixed an inſulated iron rod upon his houſe, which drew down the lightning, and gave him an opportunity of examining whether it was poſitive or negative. As utility was in his mind the great end of philoſophical inveſtigation, he immediately applied this grand diſcovery to the ſecuring of buildings from the effects of lightning, which are particularly alarming on the continent of North America. By means of pointed metallic conductors projecting from the top of the building, he conceived that the paſſing thunder-clouds might be made to diſcharge their fire ſilently and innoxiouſly; and ſuch was the confidence in his opinion, that theſe conductors ſoon came to be generally uſed in America, and were adopted in England and other countries. He gave an inſtance of his application of phyſics to the purpoſes of common life by his invention, in 1745, of the Pennſylvanian fire-places, combining the qualities of an open grate with that of a ſtove.

Politics

Politics continued to be a great object of his attention, as it can ſcarcely fail to be of every public-ſpirited man in a popular government. In 1747 he was elected a repreſentative of the city of Philadelphia to the general aſſembly of the province. At that time a conteſt ſubſiſted between the aſſembly and the proprietaries, chiefly with reſpect to the claim of the latter to have their property exempted from the public burthens. The principles of Franklin in favour of equality of rights led him to take the popular ſide of the queſtion; and he obtained ſuch an influence, that he was regarded as the head of the party in oppoſition to the governors, who were always in the proprietary intereſt. This influence did not ariſe from his eloquence, for he ſpoke ſeldom, and never in the way of harangue. But his ſhrewd obſervations, and plain good ſenſe, often diſconcerted the moſt elaborate ſpeeches on the other ſide, and decided the queſtion.

Senſible of the great importance of liberal education in the members of a free ſtate, he drew up a plan for an academy to be founded in Philadelphia, ſuited to the ſtate of an infant country, yet providing for that future extenſion which might be neceſſary when the country itſelf ſhould have attained that advancement, to which his prophetic eye was always directed. His plan was carried into effect in the beginning of 1750 by means of a ſubſcription, to which the proprietors were afterwards liberal contributors. He himſelf took great intereſt in the riſing inſtitution, and vigilantly watched over its progreſs. He was alſo greatly inſtrumental towards the foundation of the Philadelphia hoſpital. The ability and punctuality he had diſplayed in his office of poſtmaſter cauſed him, in 1753, to be raiſed to the important employ of deputy poſtmaſter-general for the Britiſh colonies; and the revenue ſoon felt the benefit of his attentions. In 1754, when the depredations of the Indians upon the frontiers had excited ſuch an alarm through the colonies, that commiſſioners from a number of them held a meeting at Albany for the purpoſe of a defenſive union, Franklin attended with the plan of a general government in the colonies for this purpoſe, to be adminiſtered by a preſident nominated by the crown; and by a grand council choſen from the repreſentatives of each colony, veſted with extenſive powers. This plan was unanimouſly agreed to by the commiſſioners preſent, and copies of it were tranſmitted to each aſſembly, and to the privy council in England. It was, however, finally rejected, and that upon ſingular grounds. The Engliſh miniſtry thought it gave too much power to the repreſentatives of the people; while each aſſembly objected to it as augmenting the authority of the crown. Theſe contradictory objections were, perhaps, good evidences of the wiſdom and moderation of the plan. When the expedition of general Braddock, 1755, to diſpoſſeſs the French of ſome of their encroachments, was in preparation, a difficulty aroſe from the want of waggons. Franklin ſtept forward to obviate it, and in a ſhort time procured one hundred and fifty. The unfortunate iſſue of this expedition having cauſed their deſtruction, he was in danger of a ruinous loſs on this account, but was relieved from his obligations by the interference of the governor. He was afterwards inſtrumental in forming a militia bill; and he was appointed colonel of the Philadelphia regiment of twelve hundred men, and took a ſhare in providing for the defence of the north-weſtern frontier. The militia was however ſoon diſbanded by orders from England; and Franklin, in 1757, ſailed for London, in the capacity of agent for Pennſylvania, the aſſembly of which was involved in warm diſputes with the proprietary. After ſeveral debates before the privy council, it was agreed that the proprietary lands ſhould take their ſhare in a tax for the public ſervice, provided that Franklin would engage that the aſſeſſment ſhould be fairly proportioned. The meaſure was accordingly carried into effect. He remained at the Britiſh court as agent for his province; and his reputation cauſed him alſo to be entruſted with the like commiſſion from Maſſachuſſets, Maryland, and Georgia. The continual moleſtation received by the Britiſh colonies from the French in Canada induced him to write a forcible pamphlet, pointing out the advantages of a conqueſt of that province by the Engliſh. The ſubſequent expedition againſt it, and its retention under the Britiſh government at the peace, were probably much influenced by his reaſonings. His philoſophical merit was now duly recogniſed in Europe. He was received into the royal ſociety of London, and into other ſcientific ſocieties on the continent; and the degree of doctor of laws was conferred upon him at St. Andrew's, Edinburgh, and Oxford. Amidſt his political avocations, he found time to cultivate experimental philoſophy, and to entertain correſpondences with many perſons of eminence.

In 1762 he returned to America, and was welcomed by the thanks of the aſſembly of Pennſylvania for his ſervices, which alſo received a handſome pecuniary recompence. He reſumed his ſeat in that body, to which he had been annually elected during his abſence, and continued to diſtinguiſh himſelf as a friend to the cauſe of the people. The part he took againſt the proprietary intereſt occaſioned the loſs of his election in 1764; but ſo powerful were his friends in the aſſembly, that he was immediately re-appointed agent for the province, and in conſequence again viſited England. This was at the period when the ſtamp-act excited ſuch commotions in America; and Dr. Franklin was called to the bar of the houſe of commons to give evidence reſpecting the diſpoſition of the people to ſubmit to it. The ſtrength and clearneſs of his repreſentations had a material effect in producing the repeal of that obnoxious meaſure. In 1766 and 1767 he paid viſits to Holland, Germany, and France, in which countries he alſo met with a diſtinguiſhed reception. Soon after the year 1775 he returned to America, and was elected by the legiſlature of Pennſylvania a delegate to congreſs.

On the arrival of lord Howe in America, in 1776, he entered upon a correſpondence with him on the ſubject of reconciliation. One of his letters ſtrongly expreſſes his opinion of the temper of the Britiſh nation, to which, and not to any particular deſigns of the court or miniſtry, he imputed the fatal extremity then reſorted to. He was afterwards appointed with two others to wait upon the Engliſh commiſſioners, and learn the extent of their powers; and as theſe only went to the granting pardon upon ſubmiſſion, he joined his colleagues in conſidering them as inſufficient. When the queſtion of a declaration of independence was agitated, he was decidedly in its favour, and contributed much to bring over the public to the ſame ſentiments. He afterwards ſat as preſident of the convention aſſembled for the purpoſe of eſtabliſhing a new government for the ſtate of Pennſylvania. On this occaſion his idea of the beſt form of a conſtitution ſeemed to be that of a ſingle legiſlative and a plural executive. When it was thought adviſable by the congreſs to open a negociation with France, Dr. Franklin was fixed upon as one of the reſidents at that court. The choice was judicious, both on account of his political abilities, and the high character he ſuſtained as a philoſopher, which ſecured him reſpect in a country where ſcientific reputation always bore a peculiar value. He brought to effect the treaty of alliance offenſive and defenſive in 1778, which produced an immediate war between France and England. He was alſo highly ſerviceable to his country in keeping up its credit by his publications and perſonal influence. He was one of the commiſſioners who, on the part of the United States, ſigned the proviſional articles of peace in 1782, and the definitive treaty in 1783. Before he left Europe, he concluded a treaty with Sweden, and with Pruſſia. In the latter are ſeveral moſt liberal and humane ſtipulations in favour of the freedom of commerce, and the ſecurity of private property during war, conformable to the principles he always maintained on thoſe ſubjects.

He obtained his recal from the buſy ſtation he had ſo well filled, in 1785, and returned to Philadelphia, where he was choſen preſident of the ſupreme executive council. In 1787 he ſat as delegate from the ſtate of Pennſylvania in the convention appointed to frame the federal conſtitution of the union. When the deliberations on this important affair were terminated, he delivered a truly wiſe and patriotic ſpeech, recommending perfect unanimity in adopting the reſolutions of the majority, though not entirely conformable to the opinions of individuals, as was the caſe with reſpect to himſelf. The high regard in which he was held by his fellow-citizens appeared in his being choſen preſident of various ſocieties, among which were thoſe for alleviating the miſeries of public priſons, and for the abolition of ſlavery, objects of benevolence in which he heartily concurred. His increaſing infirmities cauſed him in 1788 to withdraw from all public buſineſs; and on April 17, 1790, he cloſed in ſerenity and reſignation an active and uſeful life, aged eighty-four years and three months.

Dr. Franklin perhaps has ſcarcely been ſurpaſſed by any man in that ſolid practical wiſdom, which conſiſts in purſuing valuable ends by the moſt appropriate means. His cool temper and ſound judgment ſecured him from falſe views and erroneous expectations; he ſaw things in their real light, and predicted conſequences with almoſt prophetic accuracy. In all his ſpeculations and purſuits, ſomething beneficial was ever in contemplation. He juſtly ſays of himſelf, "I have always ſet a greater value on the character of a *doer of good* than any other kind of reputation." Though by no means inattentive to his own intereſt, as his riſe in the world to high ſtations and an opulent fortune ſufficiently proves, yet he never ceaſed zealouſly to promote the good of the ſociety of which he was a member, and of mankind in general. It was impoſſible that the ſcenes of violent party conteſts in which he was engaged, ſhould not have expoſed him to cenſure and obloquy from his antagoniſts; but his general character is ſanctioned by the eſteem and veneration of his country, which ranks him among its beſt and moſt valuable citizens. As a natural philoſopher, his fame is principally founded upon his electrical diſcoveries. He has, however, diſplayed great ingenuity and ſagacity upon other topics, particularly relative to meteorology and mechanics. It was his peculiar talent to draw uſeful leſſons from the commoneſt occurrences, which would have paſſed unnoticed by the generality of obſervers. As a political writer he is characteriſed by force, clearneſs, and ſimplicity. Of his miſcellaneous pieces many are marked with a caſt of humour, which renders them equally entertaining and impreſſive. Beſides his publications already adverted to, there was publiſhed a collection of his Political, Miſcellaneous, and Philoſophical, Pieces, 4to. and 8vo. 1779. Several of his philoſophical papers are alſo contained in the American Philoſophical Tranſactions; and his Eſſays, Humorous, Moral, and Literary, with his Life, written by himſelf, have appeared ſince his death in two ſmall volumes. A complete collection of his works, with biographical memoirs, has long been expected from the hand of a relation.

FRANK'LIN, a county of the American States, the north-weſternmoſt in Vermont, bounded north by Lower Canada, and weſt by lake Champlain. It was lately taken from Chittenden county, and contains twenty townſhips.

FRANK'LIN, a county of the American States, in Pennſylvania, bounded north by Mifflin, north-eaſt by Cumberland, eaſt by York, ſouth by Waſhington county in Maryland, weſt by Bedford county, and north-weſt by Hunterdon. It is computed to contain 800 ſquare miles, equal to 512,000 acres. It lies chiefly between the North and South Mountains, and comprehends the middle part of the beautiful and rich valley of Connegocheague; which is watered by the creek of its name, which falls into Potowmack at William's Port in Maryland. This county exhibits a moſt luxurious landſcape in ſummer, from the top of South Mountain. Iron ore is found here ſufficient already to furniſh work for a furnace and forge. The county is divided into eleven townſhips, which contain 15,655 inhabitants.

FRANK'LIN, a county of the American States, in Kentucky, bounded north by Scott county, north-weſt and weſt by Shelby, ſouth-eaſt by Fayette, and ſouth by Woodford. Chief town, Frankfort.

FRANK'LIN, a county of the American States, in Halifax diſtrict, North Carolina, containing by the cenſus of 1796, 7559 inhabitants. It is bounded north by Grenville, ſouth by Johnſton, north-eaſt by Warren, ſouth-weſt by Wake, and weſt by Orange county. Chief town, Louiſburg.

FRANK'LIN, a ſmall iſland in the American States, at the mouth of St. George's river, in Lincoln county, Maine; four leagues ſouthward of Thomaſton.

FRANK'LIN, a county of the American States, in Virginia, bounded north by Bedford, north-weſt by Botetourt, weſt by Montgomery, ſouth-weſt by Henry, ſouth by Patrick, and eaſt by Campbell county. It is about forty miles long, and twenty-five broad, and contains 6842 inhabitants. A range of the Alleghany mountains paſſes through it on the north-weſt. It is conſequently hilly in general.

FRANK'LIN, a county of the American States, in Georgia, ſituated in the Upper Diſtrict, bounded eaſt and north-eaſt by Tugulo river, which ſeparates it from the ſtate of South Carolina; weſt and north weſt by the country of the Cherokees; ſouth by the head branches of Broad river; and ſouth-eaſt by Elbert county. It contains 1041 inhabitants. The court-houſe is ſeventeen miles from Hatton's Ford on Tugulo river, twenty-five from Elberton, and ſeventy-ſeven from Waſhington.

FRANK'LIN, a townſhip in Norfolk county, Maſſachuſetts; taken from Wrentham, and incorporated in 1778, containing 17,000 acres of land; bounded north by Charles river, which ſeparates it from Medway, and lies thirty miles ſouth of Boſton.

FRANK'LIN, a new townſhip of the American States, in Ducheſs county, New York. By the ſtate cenſus of 1796, there were 210 of its inhabitants qualified to be electors.—Alſo, a new townſhip in Delaware county, of whoſe inhabitants 239 are electors. It lies ſouth-weſt from, and borders on, Harpersfield, and its weſt line runs along the ſouth-eaſtern bank of Suſquehannah river. This town was divided by an act of the legiſlature, 1797.

FRANK'LIN, a townſhip of the American States, in Weſtmoreland county, Pennſylvania.—There are alſo three others in the ſame ſtate, viz. in York county, Fayette county, and in Waſhington county.

FRANK'LIN, a townſhip of the American States, the northernmoſt in New-London county, Connecticut, ſix miles north-weſt of Norwich. It contains above one thouſand inhabitants, who are chiefly wealthy farmers.

FRANK'LIN-COL'LEGE. See LANCASTER, in Pennſylvania.

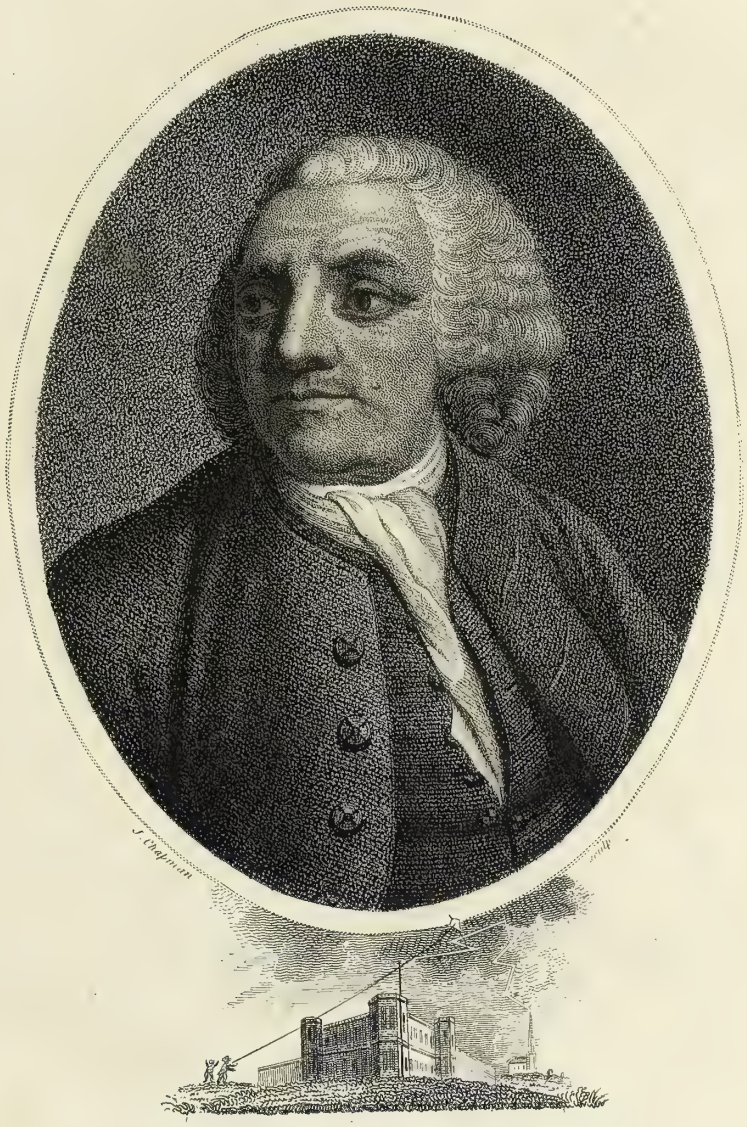
FRANK'LIN-FORT, a fort in Alleghany county, Pennſylvania, near the poſt called Venango, erected in 1787, to defend the frontiers of Pennſylvania from the depredations of the neighbouring Indians. It is ſeated on the ſouth-weſt bank of Alleghany river, oppoſite the mouth of French creek: fifty-three miles ſouth-ſouth-eaſt of Preſque Iſle, and ſixty-three northward of Pittſburg.

FRANKLIN'IA, *ſ.* in botany. See GORDONIA.

FRANK'LY, *adv.* [from *frank.*] Liberally; freely; kindly; readily.—When they had nothing to pay, he *frankly* forgave them both. *Luke* vii. 42.

Oh, were it but my life,
I'd throw it down for your deliverance,
As *frankly* as a pin. *Shakeſpeare.*

Without conſtraint; without reſerve.—He entered very *frankly*



BENJAMIN FRANKLIN, L.L.D.

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frankly into thoſe new deſigns, which were contrived at court. *Clarendon.*

FRANK'NESS, *ſ.* [from *frank.*] Plainneſs of ſpeech; openneſs; ingenuouſneſs. Liberality; bounteouſneſs. Freedom from reſerve.—The ableſt men that ever were, have had all an openneſs and *frankneſs* of dealing, and a name of certainty and veracity. *Bacon.*

FRANKS, FRANCS, or FRANQUES, a name which the Turks, Arabs, Greeks, &c. give to all the people of the weſtern parts of Europe. The appellation is commonly ſuppoſed to have had its riſe in Aſia, at the time of the croiſades; when the French made the moſt conſiderable figure among the croiſſees: from which time the Turks, Saracens, Greeks, Abyſſinians, &c. uſed it as a common term for all the Chriſtians of Europe; and called Europe itſelf *Frankiſtan.* The Arabs and Mahometans, ſays M. d'Herbelot, apply the term *Franks* not only to the French (to whom the name originally belonged), but alſo to the Latins and Europeans in general. See the article EGYPT, vol. vi. p. 322.

But F. Goar, in his notes on Condinus, cap. 5. n. 43. furniſhes another origin of the appellation *Franks*, of greater antiquity than the former. He obſerves, that the Greeks at firſt confined the name to the *Franci, i. e.* the German nations, who had ſettled themſelves in France or Gaul; but afterwards they gave the ſame name to the Apulians and Calabrians, after they had been conquered by the Normans; and at length the name was farther extended to all the Latins. In this ſenſe the word is uſed by ſeveral Greek writers; as Comnenus, &c. who, to diſtinguiſh the French, call them the *weſtern Franks.* Du Cange adds, that about the time of Charlemagne, they diſtinguiſhed eaſtern France, weſtern France, Latin or Roman France, and German France, which was the ancient France, now called *Franconia.*

From the middle of the third century, under the reign of Gordian, the Franks began to act an important part in the hiſtory of the calamities of Europe, and in that of the decline of the empire. Their language, their laws, their religion, their manners, and their uſages, prove them to have been of German origin. Great obſcurity prevails in regard to their firſt abodes, becauſe, like all uncivilized nations, they led a wandering life: but they are ſuppoſed formerly to have dwelt between the Elbe and the Weſer, and to have advanced towards the banks of the Lower Rhine previouſly to the time when the barbarians began to inundate Gaul. They conſiſted of various tribes, whoſe names diſappeared to make room for that of Franks, the origin of which is unknown. Under Valentinian, they eſtabliſhed themſelves in Belgium, and on the left bank of the Rhine. Hiſtory mentions the names of ſeveral of their kings, or chiefs, who preceded Clovis. See the article FRANCE, vol. vii. p. 648.

FRANK'STADT, a town of Moravia, in the circle of Prerau: four miles ſouth of Freyberg.

FRANKS'TOWN, a townſhip of the American States, in Huntingdon county, Pennſylvania, ſituated on the Frankſtown branch of Juniatta river: twenty miles weſt of Huntingdon.

FRANK'WALD, or PUSKOWITZ, a town of Sileſia, in the principality of Oels: four miles north-weſt of Feſtenberg.

FRAN'LEU, a town of France, in the department of the Somme, and chief place of a canton, in the diſtrict of Abbeville: two leagues and a half weſt of Abbeville.

FRANQUEMO'NT, a town of Swiſſerland, in the biſhopric of Bâle, on the Doubs, often beſieged and taken in the Swiſs wars: twenty-three miles weſt of Soleure, and ſixteen north of Neufchatel.

FRANQUEVIL'LE, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Rouen: two leagues ſouth-eaſt of Rouen.

FRAN'TIC, *adj.* [corrupted from *phrenetic, phreneticus,* Lat. φρενητικὸς, Gr.] Mad; deprived of underſtanding by violent madneſs; outrageouſly and turbulently mad:

Far off, he wonders what makes them ſo glad;
Of Bacchus' merry fruit they did invent,
Or Cybel's *frantic* rites have made them mad. *Spenſer.*

Tranſported by violence of paſſion; outrageous; turbulent:

To ſuch height their *frantic* paſſion grows,
That what both love, both hazard to deſtroy. *Dryden.*

Simply mad:

The lover, *frantic,*
Sees Helen's beauty in a brow of Egypt. *Shakeſpeare.*

FRAN'TICLY, *adv.* Madly; diſtractedly; outrageouſly.—Fie, fie, how *franticly* I ſquare my talk. *Shakeſ.*

FRAN'TICNESS, *ſ.* Madneſs; fury of paſſion, diſtraction.

FRANTZ'DORF, a town of Sileſia, in the principality of Neiſſe: four miles north of Neiſſe.

FRANT'ZIUS (Wolfgang), a learned German Lutheran divine, born at Plawen in Saxony, in 1564. He received the earlier part of his education at Frankfort on the Oder, whence he went to the univerſity of Wittemberg. In 1598 he was appointed profeſſor of hiſtory in that univerſity, and was admitted to the degree of doctor of divinity. Three years afterwards he was appointed ſuperintendant of the eccleſiaſtical diſtrict of Kemſperg, which ſtation he filled until the year 1605, when he was appointed theological profeſſor at Wittemberg. He died of a ſtroke of apoplexy in 1628, when ſixty-four years of age. Beſides ſeveral ſmaller controverſial pieces, orations, &c. he was the author of 1. *Hiſtoria Animalium Sacra,* 1671, 12mo. which was afterwards continued by John Cyprianus, a Poliſh divine. 2. *Schola Sacrificiorum Patriarchalium Sacra, hoc eſt Aſſertio Satisfactionis a Domine noſtro J. C. pro Peccatis, &c.* 4to. 3. *Tractatus Theologicus de Interpretatione Sacrarum Scripturarum maximè legitima, duabus conſtans Regulis, a Luthero ad Papatus Deſtructionem in Verſione Bibliorum Germanica uſitatis, &c.* 4to. 4. *Diſputationes quindecim per integrum Deuteronomium, quæ vicem Commentarii ſupplere poſſunt,* 4to. 5. *Schola Sacrificialis, ſeu Prælectiones in Leviticum,* 4to. 6. *Commentarius in Leviticum, in quo Leges Moſaicæ ceremoniales & rituales ſolidè explicantur,* 4to. 6. *Auguſtanæ Confeſſionis Articuli priores decem, Diſputationibus XII. breviter explicati, &c.*

FRANZ'BURG, a town of Germany; in the circle of Upper Saxony and Swediſh Pomerania, founded in 1587, on the place where ſtood a rich abbey. Duke Bogiſlas XIII. wiſhed to make it a town only for arts and manufactures; and one hundred noblemen engaged to build it. They choſe the magiſtrates, to the number of ſeven, among themſelves, but it has not flouriſhed: fourteen miles ſouth-ſouth-weſt of Stralſund, and twenty-ſeven eaſt-north-eaſt of Roſtock. Lat. 64. 9. N. lon. 30. 36. E. Ferro.

FRASCA'TI. See FRESCATI.

FRA'SERSBURGH, a ſea-port town of Scotland, ſituated on the north-eaſt of the county of Aberdeen, founded in the beginning of the ſeventeenth century, by ſir Alexander Frazer, with a tolerable harbour: thirty-two miles north of Aberdeen, and ſixteen eaſt of Banff. Lat. 57. 37. N. lon. 1. 16. E. Edinburgh.

FRAS'LA, a town of Germany, in the duchy of Stiria: ten miles weſt of Cilly.

FRAS'SEN (Claude), a learned French monk of the franciſcan order, born at Peronne in Picardy, in 1620. At ſixteen years of age he entered into a convent belonging to the order in his native town, and was afterwards ſent to purſue his ſtudies in the great franciſcan convent at Paris. He took his degrees regularly at the Sorbonne, and was admitted to that of doctor in divinity in 1662. So highly was he reſpected for his wiſdom and integrity, that he was often conſulted by Louis XIV. the parliament of Paris, the higher orders of the clergy and of the nobility, on buſineſs of peculiar importance and delicacy. He died in 1711, in the ninety-firſt year of his age. He was the author of A Syſtem of Philoſophy, in 2 vols. 4to. He alſo wrote, 2. *Scotus Academicus, ſeu Doctoris ſubtilis Theologica*

logica Dogmata, in 4 vols. folio, 1672; 3. *Diſquiſitiones Biblicæ*, in 2 vols. 4to. 1682, afterwards reprinted with conſiderable enlargements at Lucca, in 2 vols. folio, 1764; and ſeveral devotional pieces which have undergone numerous impreſſions.

FRASSINE'TO, a town of Italy, in the kingdom of Naples, and province of Bari: nine miles ſouth-ſouth-weſt of Converſano.

FRAS'TENTZ, a town of Germany, in the county of Feldkirck: two miles eaſt of Feldkirck.

FRATEL'LI, two ſmall iſlands in the Mediterranean, twenty-five miles weſt from the iſland of Scarpanto.

FRA'TER-HOUSE, or RE'FECTORY, *ſ.* The hall, or chamber, in our monaſteries, wherein the brethren took their daily repaſts. This building was uſually ſituated on the ſouth ſide of the cloiſters, provided the cloiſters were on the ſouth ſide of the church, as at Weſtminſter, Durham, Saliſbury, &c.

FRATE'RIA, *ſ.* in the ancient eccleſiaſtical law, a fraternity, brotherhood, or ſociety, of religious perſons, who were bound to pray for the good health and life of their living brethren, and the ſouls of thoſe that were dead: in the ſtatutes of the cathedral church of St. Paul in London, collected by Ralph Baldock, dean, A. D. 1295, there is one chapter *de frateria beneficiorum eccleſiæ S. Pauli, &c.*

FRATER'NAL, *adj.* [*fraternel*, Fr. *fraternus*, Lat.] Brotherly; pertaining to brothers; becoming brothers:

Plead it to her,
With all the ſtrength and heats of eloquence
Fraternal love and friendſhip can inſpire. *Addiſon.*

FRATER'NALLY, *adv.* In a brotherly manner.

FRATER'NITY, *ſ.* [*fraternité*, Fr. *fraternitas*, Lat.] The ſtate or quality of a brother: Body of men united; corporation; ſociety; aſſociation; brotherhood.—'Tis a neceſſary rule in alliances, ſocieties, and *fraternities*, and all manner of civil contracts, to have a ſtrict regard to the humour of thoſe we have to do withal. *L'Eſtrange.*—Men of the ſame claſs or character.—With what terms of reſpect knaves and ſots will ſpeak of their own *fraternity*. *South.*

FRATI'NO, a town of Italy, in the country of Friuli, belonging to the ſtate of Venice: nine miles weſt of Concordia.

FRA'TRIAGE, *ſ.* [*fratriagium*, Lat.] In law, a younger brother's inheritance. Whatever the ſons or brothers poſſeſs of the eſtate of the father, they enjoy it *ratione fratriagii*, and are to do homage to the elder brother for it, who is bound to do homage for the whole to the ſuperior lord. *Bract.* 2. c. 35.

FRATRICEL'LI, in eccleſiaſtical hiſtory, an enthuſiaſtic ſect of Franciſcans, which roſe in Italy about the year 1294. The founders were P. Maurato, and P. de Foſſombroni, who having obtained of pope Celeſtin V. a permiſſion to live in ſolitude, after the manner of hermits, and to obſerve the rule of St. Francis in all its rigour, ſeveral monks joined them, who, living after their own fancies, and making all perfection to conſiſt in poverty, were ſoon condemned by pope Boniface VIII. and his ſucceſſor, and the inquiſitors were ordered to proceed againſt them as heretics: which commiſſion they executed with their uſual barbarity. Upon this, retiring into Sicily, Peter John Oliva de Serignan had no ſooner publiſhed his Comment on the Apocalypſe, than they adopted his errors. They held the Romiſh church to be Babylon, and maintained that the rule of St. Francis was the evangelical rule obſerved by Jeſus Chriſt and his apoſtles. They foretold the reformation of the church, and the reſtoration of the true goſpel of Chriſt, by the genuine followers of St. Francis, and declared their aſſent to almoſt all the doctrines which were publiſhed under the name of the abbot Joachim, in the Introduction to the Everlaſting Goſpel, a book publiſhed in 1250, and explained by one of the ſpiritual friars whoſe name was Gerhard. Among other enormities inculcated in this book, it is pretended that St. Francis was the angel mentioned in Rev. xiv. 6, and had promulgated to the world the true and everlaſting goſpel of God; that the goſpel of Chriſt was to be abrogated in 1260, and to give place to this new and everlaſting goſpel, which was to be ſubſtituted in its room; and that the miniſters of this great reformation were to be humble and bare-footed friars, deſtitute of all worldly employments. They even elected a general, with ſuperiors, and built monaſteries, &c. They were finally condemned by pope John XXII. in conſequence of whoſe cruelty they regarded him as the true antichriſt; but ſeveral of them returning into Germany, were protected by Louis duke of Bavaria.

There are authentic records, from which it appears, that no leſs than two thouſand perſons were burnt by the inquiſition, from the year 1318 to the time of Innocent VI. for their inflexible attachment to this hereſy. The ſeverities denounced againſt them were again revived towards the cloſe of the fifteenth century by pope Nicolas V. and his ſucceſſors. However, all the perſecutions which this ſect endured were not ſufficient to extinguiſh it; for it ſubſiſted until the times of the reformation in Germany, when its remaining votaries embraced the doctrine of Martin Luther. The Fratricelli had divers other denominations: as *Dulcini*, from one of their doctors; *Bizochi*, *Beguins*, and *Beghardi*.

FRA'TRICIDE, *ſ.* [*fratricide*, Fr. *fratricidium*, Lat.] The murder of a brother.

FRAUBRUN'NEN, a town of Swiſſerland, and ſeat of a bailiwick, in the canton of Bern, which takes its name from a celebrated monaſtery, founded in 1246. A battle was fought here between the Bernois, and an army led by ſire de Courcy compoſed of Normans, Engliſh, French, &c. in which the former were victorious: ſeven miles north of Bern.

FRAUD, *ſ.* [*fraus*, Lat. *fraude*, Fr.] Deceit; cheat; trick; artifice; ſubtilty; ſtratagem:

Our better part remains
To work in cloſe deſign, by *fraud* or guile,
What force effected not. *Milton.*

Harm: [a Latiniſm. *Quis deus in* fraudem, *&c. Virg.*]

To all his angels he propos'd
To draw the proud king Ahab into *fraud*,
That he might fall in Ramoth. *Paradiſe Regained.*

FRAUD, *ſ.* in law, comprehends every kind of deceit in grants and conveyances of lands, and bargains and ſales of goods, &c. to the damage of another perſon, which may be either by ſuppreſſion of the truth, or ſuggeſtion of a falſehood. It may be laid down as a general rule, that, without the expreſs proviſion of any act of parliament, all deceitful practices in defrauding, or endeavouring to defraud, another of his known right, by means of ſome artful device, contrary to the plain rules of common honeſty, are condemned by the common law, and puniſhable according to the heinouſneſs of the offence. *Co. Lit.* 3*b*. *Dyer* 295.

As to frauds in contracts and dealings, the common law ſubjects the wrong doer, in ſeveral inſtances, to an action on the caſe; as if a perſon, having the poſſeſſion of goods, ſell them to another, affirming them to be his own, when in truth they are not, an action on the caſe lies. 1 *Rol. Abr.* 90. But if A. poſſeſſed of term for years, offers to ſell it to B. and ſays, that a ſtranger would have given him twenty pounds for this term, by which means B. buys it, though in truth A. was never offered twenty pounds, no action on the caſe lies, though B. is hereby deceived in the value. *Yelv.* 20. If on a treaty for the purchaſe of a houſe, the defendant affirms the rent to be more than it is, whereby the plaintiff is induced to give more than the houſe is worth, this is a fraud. 1 *Salk.* 211. 1 *Lev.* 102. Where a perſon is party to a fraud, all that follows by reaſon of that fraud ſhall be ſaid to be done by

by him. *Cro. Jac.* 469. But when fraud is not expreſsly averred, it ſhall not be preſumed; nor ſhall the court adjudge it to be ſo, till the matter is found by a jury. 10 *Rep.* 56.

All frauds and deceits, for which there is no remedy by the ordinary courſe of law, are properly cogniſable in equity; and it is admitted, that matters of fraud were one of the chief branches to which the juriſdiction of chancery was originally confined. It would be endleſs to enumerate the ſeveral caſes, wherein relief has been given againſt frauds: but the following inſtances are too material to be omitted. Wherever fraud or ſurpriſe can be imputed to, or collected from, the circumſtances of the tranſaction, equity will interpoſe and relieve againſt it. *Finch*, 161. 2 *P. Wms.* 203. 2 *Vern.* 189. It is ſaid, however, that it muſt not be underſtood, from caſes of this kind being generally brought into equity, that the courts of law are incompetent to relieve; for where the fraud can be clearly eſtabliſhed, courts of law exerciſe a concurrent juriſdiction with courts of equity; and will relieve by making void the inſtrument obtained by ſuch corrupt agreement or fraud. 1 *Burr.* 396. Therefore where the obligor was an unlettered man, and the bond was not read over to him, he was allowed to plead this circumſtance in an action on the bond. 9 *Hen.* V. 15. So if the bond be in part read to an unlettered man, and ſome of its material contents be omitted or miſrepreſented. 2 *Rol. Ab.* 28. It is obſervable that lord Coke, in the ſame paſſage where he confines the juriſdiction of courts of equity to ſuch "frauds, covin, and deceit, for which there is no remedy by the ordinary courſe of law," ſeems to admit that all frauds were not relievable at law. 3 *Inſt.* 84. The chancery may decree a conveyance to be fraudulent, merely for being voluntary, and without any trial at law; yet it has been inſiſted, that fraud or not, was triable only by a jury. *Pre. Ch.* 14.

A poor man was drawn in to ſell an eſtate, at a great under-value; but no fraud appearing, though the purchaſe was not a fair bargain, the ſeller could not be relieved in equity, to ſet it aſide. *Preced. Canc.* 206. There does not appear to be a ſingle caſe in the books in which it has been held that mere inadequacy of price alone is a ground for a court of equity to annul an agreement, though executory, if the ſame appear to have been fairly entered into, and underſtood by the parties, and capable of being ſpecifically performed; ſtill leſs does it appear to have been conſidered as a ground for reſcinding an agreement actually executed. *Gilb. Rep.* 155. To ſet aſide a conveyance there muſt be an inequality of price ſo ſtrong, groſs, and manifeſt, that it muſt be impoſſible to ſtate it to a man of common ſenſe, without producing an exclamation at the inequality of it. 1 *Bro. C. R.* 9. A ſtrong argument in ſupport of this rule may be drawn from thoſe caſes in which loſing bargains have been actually eſtabliſhed and decreed. See 2 *Vern.* 423. 1 *Eq. Ab.* 170. But though courts of equity will not relieve againſt agreements merely on the ground of the conſideration being inadequate, yet if there be ſuch inadequacy as to ſhew that the perſon did not underſtand the bargain he made, or was ſo oppreſſed that he was glad to make it, knowing its inadequacy, it will ſhew a command over him which may amount to a fraud. 2 *Vez.* 155. 2 *P. Wms.* 203.

A. being tenant in tail, remainder to his brother B. in tail, A. not knowing of the intail, makes a ſettlement on his wife for life for her jointure, without levying a fine, or ſuffering a recovery, which B. who knew of the intail ingroſſes, but does not mention any thing of the intail, becauſe, as he confeſſed in his anſwer, if he had ſpoke any thing of it, his brother, by a recovery, might have cut off the remainder, and barred him; and although after A.'s death, B. recovered in ejectment againſt the widow by force of the intail; yet ſhe was relieved in chancery, and a perpetual injunction granted for this fraud in B. in concealing the intail, which if it had been diſcloſed, the ſettlement might have been made good by a recovery. *Preced. Chanc.* 35. So where a mother being abſolute owner of a term, the ſame being limited to her in tail, is preſent at a treaty for her ſon's marriage, and hears her ſon declare, that the term was to come to him at his mother's death, and is a witneſs to the deed, whereby the reverſion of the term is ſettled on the iſſue of the marriage after the mother's death; ſhe was compelled in equity to make good the ſettlement. 2 *Vern.* 150.

Where the defendant, on a treaty of marriage for his daughter with the plaintiff, ſigned a writing compriſing the terms of the agreement, and afterward deſiring to elude the force thereof, and get looſe from his agreement, ordered his daughter to put on a good humour, and get the plaintiff to deliver up that writing, and then marry him, which ſhe accordingly did, and the defendant ſtood by at the corner of a ſtreet to ſee them go by to be married; the plaintiff was relieved on the point of fraud. 1 *Eq. Ab.* 20. 2 *Vern.* 373. It ſeems agreed that if a woman on the point of marriage, charge or convey her property to a mere ſtranger, for whom ſhe was not under even a moral obligation to provide, that ſuch conveyance will be decreed a fraud on the marital rights. 2 *C. R.* 41.

If A. has a prior incumbrance on an eſtate, and is a witneſs to a ſubſequent mortgage, but does not diſcloſe his own incumbrance; this is ſuch a fraud in him for which his incumbrance ſhall be poſtponed. 2 *Vern.* 151. So if A. having a mortgage on a leaſehold eſtate lends the mortgage deed to the mortgagor, with an intent to borrow more money, that is ſuch a fraud in the mortgagee, for which his mortgage ſhall be poſtponed to the ſubſequent incumbrance. 2 *Vern.* 726. See the article MORTGAGE.

Since the caſes of Kerrick *v.* Branſby, (*Bro. P. C.*) and Webb *v.* Cleverden, (2 *Ath.* 424,) it appears to have been ſettled that a will cannot be ſet aſide in equity for fraud and impoſition; becauſe a will of perſonal eſtate may be ſet aſide for fraud in the eccleſiaſtical court, and a will of real eſtate may be ſet aſide at law; for in ſuch caſes, as the *animus teſtandi* is wanting, it cannot be conſidered as a will. 2 *Ath.* 324. Though equity will not ſet aſide a will for fraud, nor reſtrain the probate of it in the proper court, yet if the fraud be proved, it will not aſſiſt the party practiſing it, but will leave him to make what advantage he can of it. 2 *Vern.* 76. But if the validity of the will has been already determined and acted upon, equity will reſtrain proceedings in the prerogative court, to controvert its validity. 1 *Ath.* 628. That the party prejudiced by the fraud may file a bill in equity for a diſcovery of all its circumſtances is unqueſtionable: the invariable practice in ſuch caſes is to ſeek relief, and the iſſue directed is to furniſh the ground upon which the court is to proceed in giving relief. *Fonblanque's Treat. Eq.* c. 2.

If a ſecurity be obtained from a perſon by fraud and practice, upon a pretence of a demand that is fictitious, it will be relieved againſt in equity. 2 *Vern.* 123. There are likewiſe ſeveral inſtances where a parol agreement intended to be reduced into writing, but prevented by fraud, has been decreed in equity, notwithſtanding the ſtatute of frauds and perjuries; as where upon a marriage treaty, inſtructions were given by the huſband to draw a ſettlement, which he privately countermanded, and afterwards drew in the woman by perſuaſions and aſſurances of ſuch ſettlement to marry him: it was decreed, that he ſhould make good the ſettlement. So where a parol agreement was concerning the lending of money on a mortgage, and the covenants propoſed were an abſolute deed from the mortgagor and a deed of defeaſance from the mortgagee, and after the mortgagee had got the deed of conveyance, he refuſed to execute the defeaſance: it was decreed againſt him on the point of fraud. 1 *Eq. Ab.* 90.

By 1 Rich. II. c. 9, no gift or feoffment of lands or goods ſhall be made by fraud for maintenance. And the diſſeiſees ſhall have their recovery againſt the firſt diſſeiſors

as well of their lands as of double damages, without regard to ſuch alienations. See alſo 4 *Hen.* IV. c. 7. 11 *Hen.* IV. c. 3, and the article DISSEISIN, vol. v. p. 887.

By 3 Hen. VII. c. 4, all deeds of gift made in truſt for the uſe of perſons making the ſaid gifts, with intent to defraud creditors, ſhall be null and void. And by 13 Eliz. c. 5, made perpetual by 29 Eliz. c. 5, every feoffment, gift, alienation, and conveyance, of lands or goods, leaſes, rents, &c. and every bond, judgment, and execution, with intent to defraud creditors or others, ſhall be of none effect; all parties and privies to ſuch conveyances, bonds, &c. ſhall forfeit one year's value of the lands and the whole of the goods, or money contained in the bond, half to the crown and half to the party grieved; and ſuffer half a year's impriſonment.—This ſtatute not to extend to any eſtate made on good conſiderations *bonâ fide* to perſons not having notice of ſuch fraud.

By 29 Car. II. c. 3, commonly known by the name of *The Statute of Frauds*, all leaſes, eſtates of freehold, or terms for years, or any uncertain intereſt in lands, made by livery and ſeiſin only, or by parol, and not put in writing and ſigned by the parties or their agents, ſhall have the force of leaſes at will only: except leaſes not exceeding the term of three years at two-thirds of the improved value. And no leaſes, eſtates, or intereſts of lands, either of freehold or terms of years, or any uncertain intereſt, not being copyhold, ſhall be aſſigned, granted, or ſurrendered, unleſs by deed or note in writing ſigned by the parties or their agents: or by the operation of law.

By 3 Will. & Mary, c. 14, made perpetual by 6 Will. III. c. 14, all wills or appointments of lands, or of any rent, &c. out of the ſame, ſhall be deemed, only as againſt creditors by bond or ſpecialty binding the heir, to be fraudulent and void. And every ſuch creditor ſhall have his action of debt upon his bonds and ſpecialties againſt the heir at law of ſuch obligors, and ſuch deviſees jointly. This ſtatute however excepts diſpoſitions for the payment of debts and raiſing portions for children in purſuance of marriage contracts made before marriage. It further provides that where any heir at law ſhall be liable to pay his anceſtor's debt, in reſpect of lands deſcended to ſuch heir, and ſhall alien the ſame before action brought, ſuch heir ſhall be anſwerable to the creditor in an action of debt to the value of the land aliened; but the lands *bonâ fide* aliened before the action brought ſhall not be liable. Every deviſee however, made liable by the ſtatute, ſhall be chargeable, in the ſame manner as the heir, though the lands deviſed ſhall be aliened before action brought.

A diſtinction has been taken between the claims of real creditors, and a debt founded *in maleficio*; for A. having brought an action againſt B. for criminal converſation with A's wife, B. aſſigned his eſtates to truſtees in truſt to pay the ſeveral debts mentioned in a ſchedule, and ſuch other debts as he ſhould name. A. recovered five thouſand pounds damages, and brought his bill to ſet aſide this deed as fraudulent, but the court held that it was not fraudulent either in law or equity; for the plaintiff was no creditor at the time of making the deed: and though it were made with an intent to prefer his real creditors before this debt when it ſhould come to be ſuch, yet it was conſcientious ſo to do. But the plaintiff was held to have an intereſt in the ſurplus after payment of the other debts. *Pre. Ch.* 105.

The following caſes may ſerve to elucidate the foregoing principles:—If a man ſeiſed of land in fee, make a feoffment of it to divers uſes, with remainders over, &c. with power of revocation by writing under hand and ſeal; here, if he for good conſideration doth enter into a recogniſance, the land ſhall be charged with the ſame: ſo if A. reſerves to himſelf power to revoke by the aſſent of B. and then bargains to another. *Bridg.* 22. *Lane*, 22. And where one hath made an eſtate with the power of revocation, and after with intent to deceive a purchaſer he makes a feoffment, &c. to a ſtranger, to extinguiſh the power, and then ſells the land for a valuable conſideration; in this caſe both the conveyances ſhall be fraudulent as to the purchaſer. 2 *Rep.* 83.

A man made a leaſe for twenty-one years, in truſt for his daughter till marriage; and if ſhe married with his conſent then to her during the term; this, till marriage, has been held fraudulent as to a purchaſer: but after marriage it is good, becauſe marriage is an advancement to the daughter, and taking effect made it upon valuable conſideration, which a marriage is always taken to be, and the huſband was drawn in by this conveyance to marry her. 1 *Sid.* 133.

If a father makes a feoffment to another, for the advancement of daughters, or his younger ſons, or for payment of his debts; and afterwards infeoffs his eldeſt ſon or heir, that is not fraud or colluſion within the ſtatute, for he is bound in law to make proviſion for his children: but where there is a grandfather, father, and two ſons, and the grandfather (living the father) conveys his land to either of the ſons, this is out of 32 Hen. VIII. c. 1, becauſe it is not a common thing ſo to do, and the father ought to have the immediate care of his children; though if he is dead, then it belongs to the grandfather. 6 *Rep.* 76. If a man levy a fine to the uſe of himſelf for life, remainder to his ſon in tail, and after ſells the fee-ſimple to another, he as a purchaſer ſhall avoid this conveyance upon 27 Eliz. c. 4, becauſe it was voluntary, and therefore fraudulent; ſo it had been if he had ſettled the remainder on his wife, unleſs there had been a conſideration on a precedent marriage. 3 *Salk.* 174.

An infant promiſed, on his marriage, to ſettle his eſtate when he came of age, upon himſelf and his iſſue; and this was held a ſufficient conſideration, though an infant by law is not compellable to fulfil ſuch promiſe. 2 *Lev.* 147. A perſon, in conſideration that his ſon is to marry the daughter of A. B. covenants to ſtand ſeiſed of lands to the uſe of his ſon for life; and after to other ſons in reverſion or remainder: the uſes thus limited in remainder, ſhall be fraudulent as to any purchaſer of the land, though the firſt be upon good conſideration. And although the conſideration of marriage is good; if there be a power to revoke annexed to the deed, it will be void as to purchaſers. *Lane*, 22.

If a man after marriage, make a voluntary conveyance of land for a jointure, or maintenance for his wife, and afterwards ſell the land for money, to one that hath no notice of it; in this caſe the conveyance, made to the uſe of the wife, ſhall be ſaid to be fraudulent: and yet if a perſon upon a marriage, before the marriage and in conſideration thereof, or after marriage in conſideration of a portion given or money paid, convey his land to the uſe of his wife, &c. it will not be a fraudulent deed. *Cro. Jac.* 158. A feme covert joins with her huſband in the alienation of her jointure, and hath a new deed of ſettlement of other lands dated the ſame day in lieu thereof, without articles or agreement precedent to this ſecond ſettlement; this is not fraudulent againſt a purchaſer, though the lands in the new ſettlement are more in value than thoſe in the firſt; for the old ſettlement being deſtroyed, and a new one made on the ſame day, it ſhall be preſumed that there was an agreement for it. 2 *Lev.* 70, 71.

The huſband who married a wife an inheritrix, promiſed, that if ſhe would join with him in a ſale of her land, and let him have the money to pay his debts, that he would leave her four hundred pounds at his death; about ſix months after the lands were ſold, he gave bond to a ſtranger to leave his wife the four hundred pounds. And it was adjudged, that this was not fraudulent as to creditors, but good againſt them. 2 *Lev.* 148. A perſon makes a voluntary conveyance, and then mortgages the ſame land, and the firſt deed is upon a trial found fraudulent; then he to whom the deed was made, exhibited his bill in equity to redeem the mortgage; and it was held, that though the firſt deed was fraudulent, *quoad* the mortgage

mortgage money, yet it was good to paſs the equity of redemption. *Chan. Rep.* 59.

Where a leaſe is made with a proviſo that if the leſſor pays ten ſhillings the leaſe ſhall be void; becauſe ten ſhillings is not the value of the leaſe and land, but only limited as a power of revocation, it is fraudulent as to a purchaſer. *Cro. Jac.* 455. And if a man makes an aſſignment of his leaſe, and yet keeps poſſeſſion of the lands, the deed of aſſignment will be adjudged fraudulent. In chancery it has been decreed, that if a man conveys his land to friends in truſt, to the uſe of his children, &c. to defraud a purchaſer, the truſt ſhall go in equity to the purchaſer; alſo it ſhall be liable for debts, to ſatisfy the ſame. *Tothil*, 43, 44. A huſband aſſigned a term of his wife's, in truſt for his wife; and it was held fraudulent againſt purchaſers. *Chan. Rep.* 225.

By the common law, an eſtate made by fraud, ſhall be avoided only by him who hath a former right, title, intereſt, debt, or demand. 3 *Rep.* 83. If one indebted do really ſell lands, though to avoid payment of debts; if the vendee be not privy to the intent, the ſale to him is good: for as to the vendee, there is no fraud in the caſe. A man gives his goods to his ſon, they are nevertheleſs liable as to his creditors; but if he gives them to one of his creditors, without any truſt or covin, it ſhall not be fraudulent to make him liable to other creditors. 3 *Salk.* 174.

If tenant for life commit a forfeiture, and he in the reverſion enters, this ſhall be as a fraudulent conveyance with reſpect to creditors. *Vent.* 257. Fraudulent gifts, or grants of goods to defraud the lord of his heriot, ſhall be void; and the value of the goods forfeited, under 13 Eliz. c. 5.

Fraudulent conveyances to multiply votes at election of knights of the ſhire, ſhall be taken againſt the perſons making them as free and abſolute; and all ſecurities for redeeming and reſtoring, &c. to be void. 10 *Anne*, c. 23. A preſentation to a benefice, or adminiſtration of goods, obtained by fraud, are void; and ſo is ſale of goods by fraud, although in open market, &c. Where a fraudulent deed or conveyance is aſſigned upon a valuable conſideration, the fraud is purged thereby. 1 *Ld. Raym.* 88.

Groſs criminal frauds are puniſhable by way of indictment or information; ſuch as playing with falſe dice, cauſing an illiterate perſon to execute a deed to his prejudice, &c. for theſe and ſuch like offences the party may be puniſhed not only with fine and impriſonment, but alſo with ſuch farther infamous puniſhment as the judges in their diſcretion ſhall think proper.

FRAUDA'TION, *ſ.* [from *fraud*, but not uſed.] The act of defrauding. *Bailey.*

FRAUD'FUL, *adj.* Treacherous; artful; trickiſh; deceitful; ſubtle:

He, full of *fraudful* arts,
This well-invented tale for truth imparts. *Dryden.*

FRAUD'FULLY, *adv.* Deceitfully; artfully; ſubtilly; treacherouſly; by ſtratagem.

FRAUD'ULENCE, or FRAUDULENCY, *ſ.* [*fraudulentia*, Lat.] Deceitfulneſs; trickiſhneſs; proneneſs to artifice.—We admire the providence of God in the continuance of Scripture, notwithſtanding the endeavours of infidels to aboliſh, and the *fraudulence* of heretics always to deprave the ſame. *Hooker.*

FRAUD'ULENT, *adj.* [*frauduleux*, Fr. *fraudulentus*, Lat.] Full of artifice; trickiſh; ſubtle; deceitful:

He with ſerpent tongue
His *fraudulent* temptation thus began. *Milton.*

She mix'd the potion, *fraudulent* of ſoul;
The potion mantled in the golden bowl. *Pope.*

Performed by artifice; deceitful; treacherous:

Now thou haſt aveng'd
Supplanted Adam,
And fruſtrated the conqueſt *fraudulent*. *Milton.*

FRAUDU'LENTLY, *adv.* By fraud; by deceit; by artifice; deceitfully.—He that by fact, word, or ſign, either *fraudulently* or violently, does hurt to his neighbour, is bound to make reſtitution. *Taylor.*

FRAUDU'LENTNESS, *ſ.* The ſtate or quality of being fraudulent. *Scott.*

FRAU'ENBACH, a river of Germany, in the circle of Upper Saxony, which runs into the Loſſa two miles ſouth-weſt of Colleda, in Thuringia.

FRAU'ENBERG, a town of Bohemia, in the circle of Pilſen: five miles ſouth-weſt of Hayd.

FRAU'ENBERG, a town of Germany, in the circle of Bavaria, and palatinate of Neuburg: nine miles north-weſt of Ratiſbon.

FRAUENBREITUN'GEN, a town of Germany, in the circle of Franconia, and county of Henneberg, ſituated on the Werra: four miles weſt of Schmalkalden.

FRAU'ENBURG, a town of Pruſſia, in the province of Ermeland, ſituated on the Friſch-Haff, built in the year 1279. Copernicus, the celebrated aſtronomer, died here in 1543: thirty-eight miles ſouth-weſt of Koniglberg.

FRAU'ENBURG, a town of the duchy of Courland: twenty miles ſouth-ſouth-eaſt of Goldingen.

FRAU'ENFELD, a town of Swiſſerland, and capital of Thurgow; taken from the houſe of Auſtria in 1460, by the Swiſs, who left the town in poſſeſſion of its own laws. It is the reſidence of a bailiff, who has no authority in the town. The proteſtants and Roman catholics have each a church; and the magiſtracy is compoſed of the profeſſors of both religions. A great part of the town was burnt down in 1771: twenty miles north-eaſt of Zurich, and fourteen ſouth-weſt of Conſtance.

FRAU'ENMARCK, a town of Hungary: ſix miles north-eaſt of Levens.

FRAU'ENSTEIN, a citadel of Germany, in the duchy of Carniola, five miles north of Crainberg.

FRAU'ENSTEIN, a town of Germany, in the circle of Upper Saxony, and territory of Erzgeburg, on the Mulda: eleven miles ſouth-ſouth-eaſt of Freyburg, and eighteen ſouth-ſouth-weſt of Dreſden.

FRAU'ENTHAL, a town of Germany, in the duchy of Stiria: ten miles ſouth of Voitſburg.

FRAUGHT, *particip. paſſ.* [from *fraight*, now written *freight*.] Laden; charged:

And now approach'd their fleet from India, *fraught*
With all the riches of the riſing ſun,
And precious ſand from ſouthern climates brought. *Dryd.*

Filled; ſtored; thronged.—The Scripture is *fraught* even with laws of nature. *Hooker.*

By this ſad Una, *fraught* with anguiſh ſore,
Arriv'd, where they in earth their blood had ſpilt. *Spenſ.*

FRAUGHT, *ſ.* [from the participle.] A freight; a cargo:

Yield up, oh love, thy crown and parted throne
To tyrannous hate! ſwell, boſom, with thy *fraught*;
For 'tis of aſpic's tongues. *Shakeſpeare.*

To FRAUGHT, *v. a.* [for *freight*, by corruption.] To load; to crowd:

Hence from my ſight:
If after this command thou *fraught* the court
With thy unworthineſs, thou dy'ſt. *Shakeſpeare.*

FRAUGHT'AGE, *ſ.* Lading; cargo. *A low word.*

Our *fraughtage*, Sir,
I have convey'd aboard. *Shakeſpeare.*

FRAU'HEIM, a town of Germany, in the duchy of Stiria: four miles north of Windiſch Weiſtritz.

FRAU'HOFEN, a town of Germany, in Lower Bavaria: three miles ſouth of Landſhut.

FRAUN'BERG, a town of Germany, in the duchy of Stiria: ſeven miles eaſt-ſouth-eaſt of Oberwoltz.

FRAU'REUTH,

FRAU'REUTH, a town of Germany, in the circle of Upper Saxony, and county of Reus: ſix miles north-eaſt of Greitz.

FRAUS LE'GIS. In the Engliſh juriſprudence, if a perſon, having no manner of title to a houſe, procure an affidavit of the ſervice of a declaration in ejectment, and thereupon gets judgment; and, by virtue of a writ of *hab. fac. poſſeſſionem*, turns the owner out of poſſeſſion of the houſe, and ſeizes and converts the goods therein to his own uſe, he may be puniſhed as a felon; becauſe he uſed the proceſs of the law with a felonious purpoſe, *in fraudem legis. Raym.* 276.

FRAU'STADT, or WSCHOWA, a town of Poland, in the palatinate of Poſen, built and inhabited by Germans, on the borders of Sileſia, and containing three proteſtant churches: the chief commerce is in cattle and wool: forty-eight miles ſouth-weſt of Poſen.

FRAU'STADT, or FRAUENTHAL, a town of Poland, on the frontiers of Sileſia, remarkable for a battle fought here in 1706, in which the Saxons were defeated by the Swedes: ſeventy miles north-weſt of Breſlau, and twenty north-eaſt of Glogau.

FRAXINEL'LA, *ſ.* in botany. See DICTAMNUS.

FRAX'INUS, *ſ.* [of Pliny, from φραξις, Gr. a hedge; or from *frago*, Lat. becauſe it grows in *locis fragoſis*.] The ASH-TREE; in botany, a genus of the claſs polygamia, order dioecia, or claſs trioecia, order diandria, natural order ſepiariæ, (jaſmineæ, *Juſſ.*) The generic characters are—I. Hermaphrodite. Calyx: none; or a perianthium one-leafed, four-parted, upright, ſharp, ſmall. Corolla: none; or petals four, linear, long, ſharp, upright. Stamina: filaments two, upright, much ſhorter than the corolla; antheræ upright, oblong, four-furrowed. Piſtillum: germ ovate, compreſſed; ſtyle cylindric, upright; ſtigma thickiſh, bifid. Pericarpium: none, except the cruſt of the ſeed; (capſule two-celled, leafy, and flatted at the top. *G.*) Seed: lanceolate, flatted, and membranaceous, one-celled. II. Female. The ſame, except that it has no ſtamens.—*Eſſential Character.* Hermaphrodite: Calyx none or four-parted; corolla none or four-petalled; ſtamina two; piſtillum one; ſeed (or capſule) one, lanceolate. Female: piſtillum one, lanceolate.

Species. 1. Fraxinus excelſior, or common aſh-tree: leaflets lanceolate, ſerrate, ſeſſile; flowers without petals. The leaves have generally five pairs of leaflets, and one odd one, of a dark green. The flowers are produced in looſe ſpikes from the ſide of the branches, and are ſucceeded by flat ſeeds which ripen in autumn. The lateral buds produce the flowers, and the terminating one the leaves. There are not only hermaphrodite and female flowers, but alſo male ones, ſo that this ſpecies ſhould ſeem referable to the order trioecia. Care ſhould be taken in obſerving the flowers; for in thoſe which are hermaphrodite, the germ which lies between the two ſtamens, does not grow up till ſome days after they appear, ſo that at firſt they appear to be male flowers. What Linnæus calls a ſeed, others call a capſule; the ſeed being covered with a leathery kind of cruſt, which does not ſplit or open.

The aſh in German and Dutch is *eſche* or *aſche*; in Daniſh and Swediſh, *aſke*; in French, *fréne*; in Italian, *fraſſino*; in Spaniſh, *freſno*; in Portugueſe, *freixo*; in Ruſſian, *jas*, *jaſen*, *jaſſen*; which name prevails in the dialects of the Sclavonian. The Engliſh is from the Saxon, æſc. Ray ſays it has its name from the colour of the bark.

We muſt be careful not to confound, as ſome have done, this tree with the mountain aſh, which is totally different from it. This has the epithet *excelſior*, from the loftineſs of the trunk; that of *mountain*, from the loftineſs of the ſituation which it delights in. Its uſual form of flowering is in March and April, ſometimes ſo late as May; of leafing from April 22 to May 15. Both are ſometimes much injured by ſpring froſts.

The timber of the aſh is next in value to the oak, and in ſome places equal to it. It is hard and tough, and of excellent uſe to the coach-maker, wheel-wright, and cart-wright, for ploughs, axle-trees, fellies, harrows, and many other implements of huſbandry; for ladders, oars, blocks for pullies, &c. &c. It makes a very ſweet fuel, with little ſmoke, but is apt to crack and fly in burning. Anciently it was in great requeſt for ſpears. For drying herrings no wood is like it, and the bark is good for the tanning of nets; being not apt to ſplit and ſcale, it is excellent for tenons and mortiſes; alſo for the cooper, turner, and thatcher: nothing is like it for palliſade hedges, hop-yards, poles, and ſpars; handles and ſtocks for tools, ſpade-trees, &c. When curiouſly veined, the cabinet-makers uſe it, and call it green ebony. The tranſverſe ſection of a branch is ſhewn in the Botany Plate II. fig. 1, 2. vol. iii. 238, 9.

By a remark in Harriſon's Deſcription of England, prefixed to Hollinſhed, chap. 19. edit. 1586, it is plain, that the aſh was then eſteemed the propereſt tree for hop-poles: "Poles are accounted to be their greateſt charge (of hops). But ſith men have learned of late to ſow aſhen keies in aſh-yards by themſelves, that inconvenience in ſhort time will be redreſſed." Aſh-pollards are of great ſervice where fuel is ſcarce; a few of them will produce many loads of lop. The loppings make the ſweeteſt of all fires, and will burn well either green or dry; only if the branches are ſuffered to grow too large, the lopping will proportionably injure the tree. If a wood of theſe trees be rightly managed, it will turn greatly to the advantage of its owner; for by the underwood, which will be fit to cut every ſeven or eight years for hoops, or every fourteen years for hop-poles, &c. there will be a continual income more than ſufficient to pay the rent of the ground, and all other charges, and ſtill there will be a ſtock preſerved for timber, which in a few years will be worth forty or fifty ſhillings the tree. The beſt ſeaſon for felling the aſh is from November to February; for if it be done either too early in autumn, or too late in the ſpring, the timber will be ſubject to be infeſted with worms, and other inſects; but for lopping pollards, the ſpring is preferable for all ſoft woods. Mr. Boutcher recommends February. The aſhes of the wood afford very good pot-aſh. The bark is uſed for tanning calf-ſkin: a ſlight infuſion of it appears of a pale yelloviſh colour when viewed againſt the light, but when looked down upon or placed between the eye and an opake object, it is blue. This blueneſs is deſtroyed by the addition of an acid, and alkalies recover it again. It will give a good green to cloths which have been blued.

In the north of Lancaſhire they lop the aſh to feed the cattle in autumn, when the graſs is upon the decline; the cattle peeling off the bark. In queen Elizabeth's time, the inhabitants of Colton and Hawkſhead fells remonſtrated againſt the number of forges in the country, becauſe they conſumed all the loppings and croppings, which were the ſole winter food for their cattle. In foreſts, the keepers browze the deer on ſummer evenings with the ſpray of aſh, that they may not ſtray too far from their walk. The leaves have been gathered to mix with tea; and poor people in ſome places have made a conſiderable advantage by collecting them for this purpoſe. An infuſion of them, from half an ounce to an ounce and an half, is a very good purge; and a decoction of two drams of the bark or ſix drams of the leaves, has been uſed to cure agues. If any cows eat of the leaves or ſhoots, the butter which is made of their milk will be rank; which is always the caſe with the butter which is made about Guildford and Godalmin, and in ſome other parts of Surrey, where there are aſh-trees growing about all their paſtures: and in good dairy countries they never ſuffer an aſh-tree to grow. The truth of this fact is doubted by others; for it is certain that there is no taſte in aſh-leaves to countenance the aſſertion, and that this is the next tree after the elm which the Romans recommended for fodder. Cream is apt to turn bitter at the fall of the leaf, and the reaſon is generally thought to be,

that

that the cattle then pick up the decayed leaves, particularly of the aſh: but the caſe is the ſame in the great low paſtures which are open and without trees, as in upland incloſures, which abound in them. The only way to avoid the ill taſte in butter at that ſeaſon, is to churn oftener, and to ſpend the butter whilſt it is new.

The aſh is, however, a very improper tree for hedge-rows and the borders of arable land: the drip of it is very unfavourable to all other vegetable productions; it exhauſts the ſoil very much; and the roots ſpread widely near the ſurface: ſo that it injures the hedges, and impoveriſhes the crops that are ſown near them. Nor, though it be a handſome tree, ought it by any means to be planted for protection or ornament, becauſe the leaves come out late, and fall early. The fertile trees alſo generally exhauſt themſelves ſo much in bearing keys or fruit, that their foliage is ſcanty, and their appearance unſightly. The trees, however, which bear female flowers only, have a full and verdant foliage, and make a handſome figure, though late in the ſeaſon. It is well calculated for ſtandards and clumps in large parks and plantations, and for groves and woods. If planted by ditch ſides, or in low boggy meadows, the roots act as underdrains, and render the ground about them firm and hard; the timber, however, is in this caſe but of little value. It was natural that our remote anceſtors, when the iſland was over-run with wood, ſhould value trees rather for their fruit than their timber: it is no wonder, then, that by the laws of Howel Dda, the price of an oak or a beech ſhould be 120 pence; while the aſh, becauſe it furniſhed no food for ſwine, was valued only at four-pence. The Edda of Woden, however, holds the aſh in the higheſt veneration; and man is deſcribed as being formed from it. Heſiod, in like manner, deduces his brazen race of men from the aſh; and in his Theogany, has nymphs of the name μελιαι. It is probably owing to the remains of Gothic veneration for this tree, that the country people, in the ſouth-eaſt part of the kingdom, ſplit young aſhes, and paſs their diſtempered children through the chaſm, in hopes of a cure. They have alſo a ſuperſtitious cuſtom of boring a hole in an aſh, and faſtening in a ſhrew-mouſe: a few ſtrokes with a branch of this tree is then accounted a ſovereign remedy againſt cramps and lameneſs in cattle, which are ignorantly ſuppoſed to proceed from this harmleſs animal. In many parts of the highlands of Scotland, at the birth of a child, the nurſe or midwife puts one end of a green ſtick of this tree into the fire, and, while it is burning, receives into a ſpoon the ſap or juice which oozes out at the other end, and adminiſters this as the firſt ſpoonful of liquor to the new-born babe.

It is not common to ſee the aſh of a very great ſize: inſtances, however, of large trees, are not wanting. Dr. Plot mentions one of eight feet diameter, valued at thirty pounds. Mr. Marſham informs us of another in Benel church-yard, near Dunbarton, in Scotland, meaſuring, in 1768, ſixteen feet nine inches in girth, at five feet from the ground. Mr. Evelyn ſays, that divers were lately ſold in Eſſex, in length one hundred and thirty-two feet. Mr. Arthur Young, in his Iriſh tour, mentions ſome of ſeventy and eighty feet in height, which were only of thirty-five years growth. The trunk of one on the bank of the Avonmore, was above fourteen feet round, and carried nearly the ſame dimenſions for eighteen feet. An aſh at Dunganſtown is twelve feet round, and quite clear of branches for thirty feet, where it meaſures ten feet round, and the arms extend in beautiful forms twenty-eight yards. At Tiny-park is another, the circumference of which, in the ſmalleſt part, ſomewhat exceeds nineteen feet, or ſix feet four inches diameter. At Luttrelſtown, the ſeat of the earl of Carhampton, are ſeveral aſh-trees from eleven to thirteen feet ſix inches round; one here was ſold for 13l. At Leixlip-caſtle is a row of eighteen aſh-trees, on a very bleak expoſure, meaſuring from nine to twelve feet round, with fair ſtems of conſiderable height, and fine branching heads. At Donirey, near Clare-caſtle, in the county of Galway, is an old aſh, that at four feet from the ground meaſures forty-two feet in circumference, at ſix feet high thirty-three feet; the trunk has long been quite hollow, a little ſchool having been kept in it; there are few branches remaining, but theſe are freſh, and very vigorous. Near Kennity-church, in the King's-county, is an aſh whoſe trunk is twenty-one feet ten inches round, and it is ſeventeen feet high before the branches break out; theſe are of enormous bulk. When a funeral of the lower claſs paſſes by, they lay the corpſe down for a few minutes, ſay a prayer, and then throw a ſtone to increaſe the heap, which has been accumulating round the root. Finally, in the church-yard of Lochabar, in Scotland, Dr. Walker meaſured the trunk of a dead aſh, which at five feet from the ſurface of the ground, was fifty-eight feet in circumference.

It is pleaſant to obſerve, that amidſt the deplorable deſtruction of valuable timber, the planting of this ſo extenſively uſeful tree has lately not been neglected; as will appear from the following account: Twenty acres, by William Wollaſton, eſq. at Great Finborough, Suffolk; thirty-five acres, by Thomas White, eſq. at Butsfield, Lancheſter, Durham; ſixteen acres, by Mr. David Day, Frindſbury, Kent; 63,000 trees, by Edward Loveden Loveden, eſq. Buſcot, near Farringdon, Berks; 6000, by John Sneyd, eſq. Belmont, Staffordſhire, between 1784 and 1786; 20,000, by Dr. Richard Watſon, biſhop of Llandaff, near Ambleſide, in Weſtmoreland, 1788; 42,000, by George Roſs, eſq. Cromarty; 57,500, by the earl of Fife, in the county of Murray.

The facility with which the aſh is propagated, and adapts itſelf to any ſoil or ſituation, even the worſt; the quickneſs of its growth, and the general demand for the timber in every part of the country, for a variety of rural and economical purpoſes, recommend this tree very much to the planter. As a farther encouragement, Mr. Boutcher has given an inſtance of the great profit of an aſh plantation, in a ſmall experiment, which he thus relates: On half a rood of heavy meadow, chiefly barren red clay and moſs, he planted aſh-trees ſix years old, and eight feet high, in rows four feet aſunder, and two feet diſtance in the row; after four years he cut them down within five or ſix inches of the ground. Having more than he wanted, in ſeven years he ſold half for pollards and hoops for 40s. In ſix years he cut them again, and ſold them for 50s. In ſix years after this he cut them again, and ſold them at the ſame price. There remained now twenty trees, intended to ſtand for timber, but he was obliged to ſell them at twenty-three years growth for 7s. a tree. Thus would an acre of indifferent ground properly ſituated for ſale yield in twenty-three years 115l. 10s. without any other expence than digging the ground for the firſt five or ſix years, and cutting the coppice. Care ſhould be taken to cut them ſlanting, with a ſharp inſtrument, leaving all the wounds ſmooth and clean. Obſerve, that no price is mentioned for the firſt cutting, which he uſed himſelf; and that he found he ſhould have had at leaſt one-third more for the price of the laſt cutting. He alſo found that he had planted too thick, and that he ſhould have had more wood, if the rows had been ſix feet aſunder, and the ſets three feet diſtant in the row.

The varieties of the common aſh-tree are, 1. That with ſimple leaves, which, however, ſometimes has them lobed and even ternate. 2. With pendulous branches, called the *weeping aſh*. 3. With variegated leaves, both yellow and white; or gold-ſtriped and ſilver-ſtriped, as the nurſerymen call them. Micheli has ſome other varieties, from the different ſhape of the fruit, the ſize and form of the leaves, &c. *Nov. Gen.* 223.

2. Fraxinus rotundifolia, or manna aſh-tree: leaflets roundiſh, acutiſh, doubly ſerrate, ſubſeſſile; flowers with petals. The ſhoots of the manna-aſh are much ſhorter, and the joints cloſer together, than the common aſh: the leaflets are ſhorter, with deeper ſerratures on their edges,

and of a lighter green; the flowers come out from the ſide of the branches, are of a purple colour, and appear in the ſpring before the leaves come out. This tree is of humble growth, ſeldom riſing to more than fifteen or ſixteen feet in height in England. The lower parts of the mountains in Calabria abound with the manna-aſh, which grows ſpontaneouſly, and without any culture; except that the woodmen cut down all the ſtrong ſtems that grow above the thickneſs of a man's leg. Towards the end of July, the gatherers of manna make an horizontal gaſh, inclining upwards, in the bole of the tree. As the liquor never oozes out the firſt day, another cut is given on the ſecond, and then the woodman fixes the ſtalk of a maple-leaf in the upper wound, and the end of the leaf in the lower one, ſo as to form a cup to receive the gum as it diſtils from each flaſh. The ſeaſon continues about a month. The men have only three carlines (1s. 1½d.) for every rotolo; which quantity, containing thirty-three ounces and a third, is ſold for twenty-four carlini and three-quarters, or ſomewhat more than ten ſhillings; if it be in tubular pieces, the price riſes one-third. Theſe pieces are called *manna in cannoli*, and theſe regular tubes are produced, by applying to the inciſion thin ſtraw, or ſmall bits of ſhrubs, upon which the manna runs as it oozes out. The trees ſucceed beſt in an eaſtern expoſure, in order to warm the juices in the morning, and to inſpiſſate thoſe which the heat has ſweated out in the evening.

3. Fraxinus ornus, or flowering aſh-tree: leaflets ovate-oblong, ſerrate, petioled; flowers with petals. Mr. Miller makes two ſpecies out of this; his F. paniculata has only or chiefly male flowers. He thus deſcribes them: F. ornus is a low tree, about the ſame height as the preceding; the leaves are much ſmaller and narrower than thoſe of our common aſh, but are ſerrate, and of the ſame dark colour; the flowers have petals. F. paniculata was raiſed, before 1730, by Dr. Uvedale, at Enfield, from ſeeds which were brought from Italy by Dr. William Sherard. The leaves have but three or four pairs of leaflets, which are ſhort, broad, ſmooth, of a lucid green, and irregularly ſerrate; the midrib is jointed, and ſwells where the leaflets come out. The flowers grow in looſe panicles at the ends of the branches, are of a white herbaceous colour, moſtly males, and appear in May. The fructification is ſeen on the Botany Plate X. fig. 23.

4. Fraxinus Americana, or American aſh-tree: leaflets quite entire, petioles cylindric. The fruits or keys are the ſame as in the common aſh, but much ſmaller, and narrow. Mr. Miller has two ſorts of this alſo, which he thus deſcribes: F. Novæ Angliæ was raiſed from ſeeds ſent from New England in the year 1724 by Mr. Moore. The leaves have but three, or at moſt four, pairs of leaflets, which are placed far diſtant from each other, and the odd leaflet runs out into a very long point; they are of a light green, and have no ſerratures on their edges. This tree ſhoots into ſtrong irregular branches, but does not grow to a large ſize in the trunk. F. Caroliniana was raiſed from ſeeds ſent from Carolina in the year 1724 by Mr. Cateſby. The leaves have ſeldom more than three pairs of leaflets, the lower being the leaſt, and the upper the largeſt; theſe are about five inches long and two broad, of a light green colour, and ſlightly ſerrate; the midrib is taper, and has ſhort downy hairs on it: the ſeeds are broader than thoſe of the common aſh, and are of a very light colour. The firſt of theſe is alſo called the *white aſh*, and the ſecond the *red aſh*. A third named the *black aſh*, and other varieties, may be found in the nurſeries.

Propagation and Culture. The common aſh propagates itſelf in plenty by the ſeeds which ſcatter in the autumn, ſo that where the ſeeds happen to fall in places where cattle do not come, there will be plenty of the plants come up in the ſpring; but, if you would have a conſiderable wood of aſh at once, prepare your ground as you would for corn, and ſow good ſtore of keys, ſome crab-kernels, &c. with oats. Take off your crop of corn in its ſeaſon, and the year following the ground will be covered with young aſhes, which will either be fit to ſtand, or be tranſplanted for divers years after. And theſe you will find to be far better than any you can gather out of the woods, eſpecially ſuckers which are worth nothing. The ſooner they are removed, the better; and aſhes of two years thus taken out of the nurſery, ſhall out-ſtrip thoſe often taken out of the hedge. You may keep the keys in ſand for a winter before you ſow them, in a covered airy place. Gather the ſeeds or keys from healthy young thriving trees in October or November; having prepared the beds, lower them about an inch, by raking ſome of the earth into the alleys; ſow the ſeed moderately thick, and then throw the earth back again lightly with a ſpade, or ſift it over them an inch thick, and rake it level. In ſpring, with a very ſmall light iron rake, the teeth about an inch aſunder, rake off the moſs, pull up the weeds, and ſift a little earth over them again. The ſecond ſpring, in the firſt open weather in February, rake off the earth as before very gently, ſift freſh over them half an inch thick, and in March and April the young plants will appear in plenty. In October ſift ſome coal-aſhes half an inch thick over them. Next ſpring prepare ſome beds ſix feet wide, with a path of two feet between each: plant all of a ſize in each bed, at one foot ſquare, firſt ſhortening the tap roots, and alſo the ſide ones. They muſt then be planted out into your nurſery in rows three feet aſunder, and each plant at one foot diſtance, where they are to remain till they are finally planted out.

Mr. Boutcher recommends the ſeeds being ſpread in an airy loft, and turned till dry, which will be in three or four weeks, and then mixed with ſand; to be ſown the beginning of April, on freſh mellow ſoil, on beds three and a half feet broad, with alleys eighteen inches, and covered three quarters of an inch deep. The ſeeds will not appear till the ſucceeding ſpring; during this time the beds muſt be kept clean, and in February they muſt be raked over: if a little rich mould is thrown over them, it will much promote the growth of the ſeedlings. The following February or March remove them, and plant them in drills eighteen or twenty inches aſunder, and eight or nine inches in the drill. In October remove them again, planting them in lines three and a half feet aſunder, and fifteen or ſixteen inches in the line, where they may remain three years. The trees will now be ſeven or eight feet high, of a proper ſize for extenſive plantations. Where large ones are wanted, remove them every fourth year.

Stocks for budding ſhould be planted out in the nurſery, a foot aſunder, and two feet diſtant in the rows. When they are one year old, and about the thickneſs of a bean ſtraw, they will be of a proper ſize for working. A little after Midſummer is the time for the operation, and care muſt be obſerved not to bind the eye too tight. They need not be unlooſed before the end of September. In March the head of the ſtock ſhould be taken off a little above the eye, and by the end of the ſummer following, if the land be good, they will have made ſtrong ſhoots. The variegated ſorts can be increaſed only in this manner.

The other ſorts are commonly propagated in the nurſeries by budding or ingrafting upon the common aſh; but are not ſo valuable as thoſe which are raiſed from ſeeds, becauſe the ſtock grows much faſter than the grafts; ſo that the lower part of the trunk, ſo far as the ſtock riſes, will often be twice the ſize of the upper; and if the trees ſtand much expoſed to the wind, the grafts are frequently broken off from the ſtock, after they are grown to a large ſize. F. paniculata is generally planted for ornament, the flowers making a fine appearance when they are in beauty, for almoſt every branch is terminated by a large looſe panicle; ſo that when the trees are large, and covered with flowers, they are diſtinguiſhable at a great diſtance. All the other ſorts ſerve to make a variety in plantations, but have little beauty to recommend them;

and as their wood ſeems to be greatly inferior to that of the common aſh, there ſhould be few of theſe planted, becauſe they will only fill up the ſpace where better trees might grow.

FRAY, *ſ.* [*effrayer*, to fright, Fr.] A battle; a fight:

He left them to the fates in bloody *fray*,
To toil and ſtruggle through the well-fought day. *Pope.*

A duel; a combat:

Since, if we fall before th' appointed day,
Nature and death continue long their *fray*. *Denham.*

A broil; a quarrel; a riot of violence:

I'll ſpeak between the change of man and boy
With a reed voice, and turn two mincing ſteps
Into a manly ſtride; and ſpeak of *frays*,
Like a fine bragging youth. *Shakeſpeare.*

To FRAY. *v. a.* [*effrayer*, Fr.] To fright; to terrify.—Theſe vultures prey only on carcaſes, on ſuch ſtupid minds as have not life and vigour to *fray* them away. *Government of the Tongue.*

[*Frayer*, Fr.] To rub.—A deer is ſaid to *fray* her head, when ſhe rubs it againſt a tree. *Whalley's Notes on B. Jonſon.*

FRA'YING, *ſ.* [from *fray*, v.] Peel of a deer's horn:

For by his ſlot, his entries, and his port,
His *frayings*, fewmets, he doth promiſe ſport. *B. Jonſon.*

FRAYLES, an iſland near the coaſt of New-Andaluſia, Terra Firma.

FRAYLES (Los), a clump of rocks which riſe above water on the ſouth ſide of the iſland of St. Domingo, in the Weſt Indies, four leagues north-weſt of the iſland of Beate, nearly oppoſite the iſles called the Seven Brothers, in the bay of Monte Chriſt, on the north ſide of the iſland. Theſe rocks are alſo called the Brothers or Monks. The rapidity of the currents renders this part of the coaſt very dangerous.

FRAY'PONT, a town of Germany, in the circle of Weſtphalia, and biſhopric of Liege, on the river Weze: eight miles ſouth-eaſt of Liege.

FRAZE, a town of France, in the department of the Eure and Loire, and chief place of a canton, in the diſtrict of Nogent-le-Rotrou: four leagues eaſt of Nogent-le-Rotrou.

FRA'ZERSBURGH. See FRASERSBURGH.

FREAK, *ſ.* [*frech*, Germ. ſaucy, petulant; φρηξ, Sax. fugitive.] A ſudden and cauſeleſs change of place. A ſudden fancy; a humour; a whim; a capricious prank.—When that *freak* has taken poſſeſſion of a fantaſtical head, the diſtemper is incurable. *L'Eſtrange.*

To vex me more, he took a *freak*
To ſlit my tongue, and make me ſpeak. *Swift.*

To FREAK, *v. a.* To variegate; to checquer.—The white pink and the panſy *freakt* with jet. *Milton.*

There fury nations harbour:
Sables of gloſſy black, and dark embrown'd,
Or beauteous, *freak'd* with many a mingled hue. *Thomſon.*

FRE'AKISH, *adj.* Capricious; humourſome.—It may be a queſtion, whether the wife or the woman was the more *freakiſh* of the two; for ſhe was ſtill the ſame uneaſy ſop. *L'Eſtrange.*

FRE'AKISHLY, *adv.* Capriciouſly; humourſomely.

FRE'AKISHNESS, *ſ.* Capriciouſneſs; humourſomeneſs; whimſicalneſs.

To FREAM, *v. n.* [*fremore*, Lat. *fremir*, Fr.] To growl or grunt as a boar. *Bailey.*

FREAM, *ſ.* in agriculture, land that has been worn out with tillage and laid down to recover itſelf. *Scott.*

FRECHIL'LA, a town of Spain, in the province of Leon: ſeventeen miles north-weſt of Palencia.

FRECKEL'BEN, a town of Germany, in the circle of Upper Saxony, and principality of Anhalt Deſſau: thirty miles weſt-ſouth weſt of Deſſau.

FRECK'ENHORST, a town of Germany, in the circle of Weſtphalia, and biſhopric of Munſter: one mile ſouth-weſt of Warendorff.

FRECK'LE, *ſ.* [*flech*, a ſpot, Germ. whence *flecke*, *freckle*.] A ſpot raiſed in the ſkin by the ſun:

Ruddy his lips, and freſh and fair his hue;
Some ſprinkled *freckles* on his face were ſeen.
Whoſe duſk ſet off the whiteneſs of the ſkin. *Dryden.*

Any ſmall ſpot or diſcoloration.—The farewell froſts and eaſterly winds now ſpot your tulips; therefore cover ſuch with mats, to prevent *freckles*. *Evelyn.*

The cowſlips tall her penſioners be;
In their gold coats ſpots you ſee:
Thoſe be rubies fairy favours;
In thoſe *freckles* live their favours. *Shakeſpeare.*

Freckles are apt to affect people of fine complexions, who have red hair, more than others, in thoſe parts expoſed to the ſun: in winter they generally diſappear. Juice of lemons, mixed with ſugar, and borax, finely powdered and digeſted for eight days, forms an uſeful compoſition for their removal. Homberg alſo recommends bullock's gall mixed with alum, and after the alum has precipitated, expoſed three or four months in the ſun in a cloſe vial, as one of the beſt remedies for clearing the ſkin from theſe appearances.

FRECK'LED, *adj.* Spotted; maculated; diſcoloured with ſmall ſpots:

Sometimes we'll angle at the brook,
The *freckled* trout to take. *Drayton.*

Now thy face charms ev'ry ſhepherd,
Spotted over like a leopard;
And, thy *freckled* neck diſplay'd,
Envy breeds in ev'ry maid. *Swift.*

FRECK'LY, *adj.* Full of freckles.

FRED. The ſame with *peace*; upon which our forefathers called their ſanctuaries *fredſtole*, *i. e.* the ſeats of peace. So *Frederic* is powerful or wealthy in peace; *Winfred*, victorious peace; *Reinfred*, ſincere peace. *Gibſon's Camden.*

FRED'DO, a river of Sicily, in the valley of Demona, which runs into the ſea.

FRE'DEBURG, a town of Germany, in the circle of the Lower Rhine, and duchy of Weſtphalia: fourteen miles ſouth of Brilon, and fifty-two eaſt of Cologne.

FREDEGA'IRE, ſirnamed *the Scholaſtic*, the moſt ancient of the French hiſtorians after Gregory of Tours, is ſuppoſed to have been a Burgundian by birth, and to have lived at leaſt as low down as 658. Nothing is known of his hiſtory or profeſſion. He compoſed a Chronicle in five books, the firſt four of which contain a chronological hiſtory from the creation to the death of Chilperic I. the fifth brings down the hiſtory to the fourth year of Clovis II. A.D. 641. It has been continued by different authors to 768. It is written in a barbarous ſtyle, defective in conſtruction and arrangement, yet it is indiſpenſable as authority for the hiſtory of three of the early kings. This chronicle is printed in the Collections of Ancient Hiſtorians, by Du Cheſne and Bouquet.

FREDEGON'DE, a woman famous in early French hiſtory for her political talents and her great crimes. She was the wife of Chilperic I. king of France. See the article FRANCE, vol. vii. p. 651.

FRE'DELAND, a town of Pruſſia, in Pomerelia: ſixty miles ſouth-ſouth-weſt of Dantzick.

FRE'DENWALDE, a town of Germany, in the circle of Upper Saxony, and Ucker Mark of Bradenburg: eleven miles ſouth of Prenzlow.

FRED'ERIC, a proper name of men.

FREDERIC THE GREAT, king of Pruſſia, born at Berlin, January 24, 1712. He was baptiſed by the name of *Charles Frederic*, but afterwards choſe entirely to drop the former of theſe names. When a child, he was committed to the care of a French governeſs, from whom he derived

derived a readineſs in that language, and a predilection for it, which he retained during life. In the progreſs of education, he enjoyed but few advantages; for it was his father's principal object to render him thoroughly verſed from childhood in military diſcipline, and in this he ſucceeded at the expence of other acquiſitions. As he grew towards manhood, however, a decided taſte for polite literature began to diſplay itſelf. It was formed by the French books which were put into his hands, and to which all his reading was confined; and it foſtered thoſe poliſhed manners which diſtinguiſhed him through life. He became likewiſe a great lover and a practitioner of muſic; as well as a voluminous writer. For a conſiderable time he purſued his ſtudies in retirement, and added mathematics and other ſolid attainments to the more amuſing branches of literature. His father's ſuccour to the imperial army in 1734, gave him the treat of a converſation with prince Eugene on military affairs; and a viſit in 1735 to Staniſlaus, king of Poland, then a fugitive at Konigſberg, gratified him with the friendſhip of an amiable and lettered ſovereign. His connection with men of letters was now extended; and in 1736 he began a correſpondence with the great object of his admiration, Voltaire, who had ſo conſiderable a ſhare in forming his taſte and opinions. Whether he derived more benefit or injury from the leſſons of this celebrated man, will be differently determined by different judges; but it was Voltaire who principally impreſſed him with that ſpirit of religious toleration which ever diſtinguiſhed his reign. Baron Bielfeld, and other perſons of literary diſtinction, formed a part of the prince's little court at Rheinſberg, which is repreſented as being at once the ſeat of the muſes and the graces; and the character ſuſtained by the prince himſelf at this period, was that of one of the moſt polite and faſcinating young men in Germany.

When he aſcended the throne of Pruſſia in 1740, his liberal and enlightened mind diſplayed itſelf in the inſtitution of a new order of knighthood, called that *of merit*, which was to admit perſons of deſert in arms or arts, without diſtinction of birth or country. He wrote to ſeveral of the moſt eminent men of letters in different ſtations, inviting them to ſettle in his dominions; and he recalled the philoſopher Wolf, and made him head of the univerſity of Halle. Voltaire, with Maupertuis and Algarotti, had an interview with him near Cleves; the two latter ſoon after took up their reſidence with him. He now alſo publiſhed "Anti-Machiavel," a work intended to refute the diſhoneſt maxims of the celebrated Italian, relative to the morals of ſovereigns.—He always employed the intervals of improving the internal government of his dominions, and in forming eſtabliſhments calculated to promote their proſperity. The academy of ſciences founded at Berlin by Frederic I. had, through the diſcouragements of the ſucceeding reign, fallen to decay. He inſtituted it anew, gave it a more enlarged plan, compriſing the belles-lettres and ſpeculative philoſophy, as well as pure ſcience, provided it with able members, and wrote an ode in honour of its renovation.

About the year 1746, he appeared as an author in two works, which are among thoſe that have done him moſt honour. They are written in French, the only language which he uſed in the capacity of a man of letters; for he ſeems ever to have diſliked his native tongue, and to have deſpiſed German literature. His *Mémoires pour ſervir à l'Hiſtoire de la Maiſon de Brandebourg*, is a conciſe account of his electoral and royal houſe, written in a good taſte, and with much apparent impartiality. His Poem on the Art of War, in ſix books, is the moſt conſiderable of his productions of that claſs, and may rank among the moſt ſplendid and beſt planned of didactic works in verſe. The compoſition of theſe and other literary pieces, his various ſtudies and amuſements, and the journeys he occaſionally made to different parts of his dominions, occupied all the leiſure he could command from thoſe royal duties which he always performed with the greateſt exactneſs. He had, from his acceſſion, entirely debarred himſelf from the pleaſures of the chace, by which the time of ſo many princes is uſeleſsly conſumed. If he could be ſaid in any reſpect to be waſteful of his hours, it was in the practice of muſic: all his other relaxations partook of ſomething mental. He indulged his taſte for the fine arts in decorating the royal palaces, and erecting many ſplendid edifices at Berlin and Potzdam, which during his reign became, in their exterior, equal to the fineſt places in Europe. Their internal opulence and comfort, however, did not keep an equal pace; indeed, the richeſt architectural beauties were often laviſhed upon buildings which were in reality only military barracks.

In 1750 Frederic was made happy in a viſit from the great object of his admiration, Voltaire. No literary man was probably ever received by a ſovereign with more diſtinction and cordiality; and for a time his preſence ſeemed to inſpire the monarch with all that pleaſure which a perpetual flow of wit, ſeaſoned with good ſenſe and refined taſte, was calculated to produce in a cultivated mind. He likewiſe derived from him much inſtruction in the arts of writing and criticiſm, and much uſeful correction in his own compoſitions. It will rather belong to the life of a wit, than of a king, to give a detail of thoſe literary ſquabbles, and other circumſtances of diſguſt, which terminated in Voltaire's diſmiſſion from the court of Berlin in 1753. Both of them loſt credit by their connection; the king, perhaps, the leaſt; though the arreſtation of Voltaire at Frankfort, upon his return, was a very unhandſome meaſure, and too much favoured of German deſpotiſm. The monarch was afterwards however reconciled, and renewed a literary commerce with him before his death, which happened in 1786, though their mutual eſteem and affection appears never to have been perfectly reſtored. As a man of letters, Frederic would probably have ſhone even independently of his rank, or rather, perhaps, the more, had he merely had the education and employment of a man of letters. Beſides the works already mentioned as written by him, he publiſhed Military Inſtructions; and a variety of pieces in verſe and proſe, on miſcellaneous topics, all compoſing four volumes 8vo. under the title of *Œuvres Primitives*. After his death appeared his *Œuvres Poſthumes*, in fifteen volumes 8vo. of which the principal are the Hiſtory of his own Time; the Hiſtory of the Seven Years' War; Memoirs from the Peace of Hubertſburg to the Partition of Poland in 1775: all theſe contain much valuable information, with as much impartiality as could be expected. Of his correſpondence alone there are ſeven volumes, much of it very intereſting. For his great military exploits, deep policy, and ſucceſsful reign, ſee the article PRUSSIA.

FREDERIC, a county of the American States, in Maryland, bounded north by Pennſylvania, weſt and north-weſt by Waſhington, eaſt by Baltimore, and ſouth-weſt by Potowmack river. On the Monocacy river and its branches are about thirty-ſeven griſt-mills, a furnace, iron forge, and a glaſs manufactory, called the Etna glaſs works, which are in a thriving ſtate. This county is about thirty miles each way, reckoning from the extreme parts. The Cotoctiny mountain extends from the Potowmack in a north direction through this county into Pennſylvania, between the ſouth mountain and Monocacy Creek; the eaſtern parts are generally level. It contains 30,791 inhabitants. Chief town, Frederic-town.

FREDERIC, a county of the American States, in Virginia, bounded north by Berkley, ſouth by Shanandoah, weſt by Hampſhire, and eaſt by Shanandoah river, which ſeparates it from Loudon county. It is thirty miles in length, and twenty in breadth, and contains 19,681 inhabitants. Iron ore is found here in great plenty; and works have been erected which produce 160 tons of bar iron, and 650 tons of pig, annually. Pots and other utenſils, caſt thinner than uſual of this iron, may be ſafely thrown into or out of the waggon, in which they are tranſported. Both this and Berkley county have a good ſoil.

Between

Between the waters of Opeckan creek and the Shanandoah is the richeſt limeſtone land in the eaſtern parts of the ſtate. Near the north mountain in this county is a curious cave, by ſome called *Zaney's Cave*. Its entrance is on the top of an extenſive ridge. You deſcend thirty or forty feet as into a well, from whence the cave then extends, nearly horizontally, four hundred feet into the earth, preſerving a breadth of from twenty to fifty feet, and a height of from five to twelve feet. After entering this cave, the mercury, which, in the open air, was at 50, roſe to 57 of Fahrenheit's thermometer. Here is alſo a natural well, ſomewhat larger than a common well, and riſes as near the ſurface of the earth as in the neighbouring artificial wells; but is of a depth, as yet unknown. It is ſaid there is a current in it tending ſenſibly downwards. Chief town is Wincheſter.

FREDERIC, a townſhip of the American States, in Montgomery county, Pennſylvania.

FREDERIC, a town of the American States, of the north ſide of Saſſafras river in Cecil county, Maryland, and ſeparated by that river from George Town in Kent county. It lies ſix miles ſouth-weſt of Warwick, and fourteen eaſt of Grove point in Cheſapeak bay. Lat. 39. 22. 30. N.

FREDERIC-FORT, a fort of the American States in Waſhington county, Maryland, ſituated on the north-eaſt bank of Potowmack river, near the ſouth line of Pennſylvania.

FREDERIC-HOUSE, a trading ſtation in Upper Canada, on the head water of Abbitibbe river. Lat. 48. 35. N. lon. 82. 6. W.

FREDERI'CA, a town of the American States in Kent county, ſtate of Delaware, ſituated between the two main branches of Mother Kill, a ſtream which falls into Delaware ſeven miles from the town, and three ſouth-eaſt of James's creek, which leads up to Dover: twelve miles eaſt of Dover, and eighty eight from Philadelphia.

FREDERI'CA, a town of the American States in Glynn county, Georgia, ſituated on St. Simon's iſland, in a very pleaſant ſituation, built by general Oglethorpe. The fortreſs was beautiful and regular, but is now in ruins. The town ſtands on an eminence, upon a branch of Alatamaha river, which waſhes the weſt ſide of this agreeable iſland, and forms a bay before the town, affording a ſafe and commodious harbour for veſſels of the largeſt burden, which may lie along the wharf. It was ſettled by ſome Scotch highlanders, about the year 1735, who accepted of an eſtabliſhment both here and at Darien, to defend the colony, if needful, againſt the neighbouring Spaniards. Lat. 31. 15. N. lon. 80. W.

FRED'ERICHRODE, a town of Germany, in the circle of Upper Saxony, and principality of Gotha: ſix miles ſouth Gotha.

FRED'ERICHSHULE, a town of Germany, in the circle of Upper Saxony, and duchy of Croſſen: five miles ſouth-eaſt of Zulichau.

FRED'ERICHSTHAL, a town of Germany, in the circle of Upper Saxony, and margraviate of Meiſſen: ſix miles weſt of Senftenberg.

FRED'ERICHSWALDE, a town of Germany, in the circle of Upper Saxony, and duchy of Pomerania, on the Ihna: three miles north-weſt of Stargard.

FREDERI'CIA, a ſtrong ſeaport town of Denmark, in North Jutland, and dioceſe of Ripen; it is ſituated on the Little Belt, with a cuſtom-houſe, where all veſſels pay a toll. The circumference is extenſive, but not filled with houſes or people. It was firſt begun in 1651, by Frederic III. but the fortifications were ſcarcely completed, and the town built and properly inhabited, when the Swedes, in 1657, took it by ſtorm, and burnt a great part of it. At the concluſion of the war, both the fortifications and the town were repaired, and, in order to increaſe the number of its inhabitants, Chriſtian V. in 1682, granted a charter, which rendered Fredericia an aſylum for all bankrupts, whether natives or foreigners, and allowed the Calviniſts, Papiſts, and Jews, the free exerciſe of their religion. This town was formerly exempt from the exciſe, which it now pays. The fortifications are of ſo large a compaſs that they require a numerous garriſon to defend them. Fredericia has alſo ſeveral commercial privileges, but as it wants a good harbour, it cannot improve them to the beſt advantage. Here are two Lutheran churches (in one of which the ſervice is alternately performed in the Daniſh and German languages), a Calviniſt church, a popiſh church, a ſynagogue, a grammar-ſchool, and good arſenal. A conſiderable quantity of tobacco is planted both within and without the walls. Lat. 55. 37. N. lon. 9. 44. E. Greenwich.

FREDERICK'ENBURG, a town of Germany, in the circle of Upper Saxony, and principality of Anhalt Zerbſt: one mile ſouth-weſt of Zerbſt.

FRED'ERICSBURG, a town of Germany, in the circle of Upper Saxony, and duchy of Pomerania, formerly called *Quarckenburg*: thirty miles ſouth-ſouth-weſt of Colberg, and twenty-five north-north-eaſt of Stargard.

FRED'ERICSBURG, a poſt town of the American States, in Spotſylvania county, Virginia; ſituated on the ſouth-weſt bank of Rappahannock river, 110 miles from its mouth in Cheſapeak bay. It is an incorporated town, and regularly laid out into ſeveral ſtreets; the chief of which runs parallel with the river, and contains two tobacco warehouſes, and ſeveral ſtores of well aſſorted goods. Its public buildings are an epiſcopal church, an academy, court-houſe, and gaol. It is a place of conſiderable trade, and contains about 2000 inhabitants. A forge in this neighbourhood made ſome time ago, about 300 tons of bar iron in a year, from pigs imported from Maryland. It is fifty miles ſouth-ſouth-weſt of Alexandria, ſixty-eight north by eaſt of Richmond, 102 ſouth-weſt of Baltimore, and 205 ſouth-weſt of Philadelphia. Lat. 38. 22. N. lon. 77. 36. W.

FRED'ERICSHALL, a ſeaport town of Norway, on the frontiers of Sweden, ſituated at the mouth of the river Tiſte, in a bay called the *Swineſund*; the harbour would be ſafe and commodious, but from the quantity of ſaw-duſt brought down the river from the ſaw-mills up the country, which it is neceſſary to remove at leaſt yearly. The town contains about 3000 inhabitants. Near it is the fortreſs of Oever-Bierget, or Fredericſtein, in the ſiege of which the heroic Charles XII. loſt his life. The principal commerce is in timber: fifty miles north of Uddevalla, and fifty-two ſouth of Chriſtiania.

FRED'ERICSHOLM, a fortreſs of Norway; three miles ſouth of Chriſtianſtand.

FRED'ERICSSUND, a ſeaport town of Denmark, in the iſland of Zealand; the chief trade is in corn: nineteen miles north-weſt of Copenhagen. Lat. 55. 50. N. lon. 12. 13. E. Greenwich.

FRED'ERICSTADT, a fortreſs and ſeaport town of Norway, ſituated on the river Glomme, containing a well-ſupplied arſenal, built in 1567, and ſince ſtrengthened and fortified, till it is now the moſt regular fortreſs in the ſouthern part of Norway. The number of inhabitants is leſs than 1000, who carry on ſome trade in planks, maſts, and timber: forty-three miles ſouth Chriſtiania. Lat. 59. 2. N. lon. 11. 1. E. Greenwich.

FRED'ERICSTADT, a town of Denmark, in the duchy of Sleſwick, ſituated on the north coaſt of the Eider, founded by ſome Dutch Arminian emigrants, immediately after the ſynod of Dort. The inhabitants are compoſed of Arminians, Lutherans, Calviniſts, Anabaptiſts, Quakers, and Jews. They are principally employed in manufactures of ſilk and woollen, navigation and commerce: eighteen miles weſt-ſouth-weſt of Sleſwick. Lat. 54. 26. N. lon. 9. 10. E. Greenwich.

FRED'ERICSTADT. See BERLIN.

FRED'ERICSTOWN, a townſhip of the American States, in the Dutcheſs county, New York, which contains, by the cenſus, 5932 inhabitants, of whom 188 are qualified to be electors.

FRED'ERICSVORN, a town of Norway, in the province of Aggerhuus: three miles ſouth of Laurvig.

FRED'ERICSWERK, a ſeaport of Denmark, ſituated in a bay on the north coaſt of the iſland of Zealand; where

is a cannon-foundery, and manufactures of military articles, eſtabliſhed in 1756.

FRED'ERICTON, a conſiderable townſhip of the American States, in the province of New-Brunſwick, ninety miles up St. John's river, which is ſo far navigable for ſloops.

FRED'ERICTOWN, a poſt town of the American States, in Maryland, and capital of Frederic county, ſituated on both ſides of Carroll's creek, a ſtream that empties into Monocacy river, over which are two bridges. The ſtreets are regularly laid out, interſecting each other at right angles. The dwelling-houſes, chiefly of ſtone and brick, are about 700 in number, many of which are handſome and commodious. The arſenal of the ſtate of Maryland is placed here, the ſituation being ſecure and central. The public edifices are, one church for Preſbyterians, two for German Lutherans and Calviniſts, and one for Baptiſts, an elegant court-houſe, a goal, and a market-houſe. It is a very flouriſhing town, and has conſiderable trade with the back ſettlements. The Etna glaſs-works are ſituated four miles above the town, on Tuſkarora creek. Frederictown is four miles eaſt of Cotoctin mountain, forty-ſeven weſt by north of Baltimore, twenty-four eaſt of Sharpſburg, and 148 ſouth-weſt by weſt of Philadelphia. Lat. 39. 24. N.

FRE'DUM, *ſ.* in the ancient law, a compoſition made by a criminal, to be freed from proſecution, of which the third part was paid into the exchequer. Formerly compoſitions were paid for crimes in general, particularly for murder. The magiſtrate was to determine the compoſition, and protect the offender againſt the violence of reſentment. See *Monteſquieu's Spirit of Laws*, l. 30. c. 20.

FREE, *adj.* [ꝼɼeah, Saxon; *vry*, Dutch.] At liberty; not a vaſſal; not enſlaved; not a priſoner; not dependent.—A *free* nation is that which has never been conquered, or thereby entered into any condition of ſubjection. *Temple.*

Free to herſelf my potent mind remains,
Nor fears the victor's rage, nor feels his chains. *Prior.*

Uncompelled; unreſtrained:

Do faithful homage, and receive *free* honours,
All which we pine for now. *Shakeſpeare.*

Not bound by fate; not neceſſitated:

Freely they ſtood who ſtood, and fell who fell;
Not *free*, what proof could they have given ſincere
Of true allegiance, conſtant faith, or love? *Milton.*

Permitted; allowed:

To gloomy cares my thoughts alone are *free*,
Ill the gay ſports with troubled thoughts agree. *Pope.*

Licentious; unreſtrained:

I know there are to whoſe preſumptuous thoughts
Thoſe *freer* beauties, ev'n in them, ſeem faults. *Pope.*

Open; ingenuous; frank:

Caſtalio, I have doubts within my heart;
Will you be *free* and candid to your friend? *Otway.*

Acquainted; converſing without reſerve:

'Tis not to make me jealous,
To ſay my wife is fair, feeds well, loves company,
Is *free* of ſpeech, ſings, plays, and dances, well:
Where virtue is, theſe make more virtuous. *Shakeſpeare.*

Liberal; not parſimonious: with *of*.—Alexandrian verſes, of twelve ſyllables, ſhould never be allowed but when ſome remarkable beauty or propriety in them atones for the liberty: Mr. Dryden has been too *free* of theſe in his latter works. *Pope.*

Glo'ſter too, a foe to citizens,
O'ercharging your *free* purſes with large fines,
That ſeeks to overthrow religion. *Shakeſpeare.*

Frank: not gained by importunity; not purchaſed.—We wanted words to expreſs our thanks: his noble *free* offers left us nothing to aſk. *Bacon.*—Clear from diſtreſs:

Who alone ſuffers, ſuffers moſt i'th' mind,
Leaving *free* things and happy ſhows behind. *Shakeſp.*

Guiltleſs; innocent.—My hands are guilty, but my heart is *free*. *Dryden.*

Make mad the guilty, and appall the *free*,
Confound the ign'rant. *Shakeſpeare.*

Exempt; with *of* anciently; more properly *from*:

Such allow'd infirmities, that honeſty
Is never *free of*. *Shakeſpeare.*

Who fears not to do ill, yet fears the name;
And *free from* conſcience, is a ſlave to fame. *Denham.*

Inveſted with franchiſes; poſſeſſing any thing without vaſſalage; admitted to the privileges of any body: with *of*:

What do'ſt thou make a ſhipboard? To what end
Art thou *of* Bethlem's noble college *free*?
Stark-ſtaring mad, that thou ſhould'ſt tempt the ſea?
Dryden.

Without expence; by charity, as a *free-ſchool*. [Applied to a horſe.] Willing to move.—Raunging the foreſt wide on courſer *free*. *Spenſer.*

To FREE, *v. a.* [from the adjective.] To ſet at liberty; to reſcue from ſlavery or captivity; to manumit; to looſe.—He recovered the temple, *free'd* the city, and upheld the laws which were going down. 2 *Mac.* ii. 22.

Should thy coward tongue
Spread its cold poiſon through the martial throng,
My jav'lin ſhall revenge ſo baſe a part,
And *free* the ſoul that quivers in thy heart. *Pope.*

To rid from; to clear from any thing ill; with *of* or *from*.—It is no marvail, that he could think of no better way to be *free'd of* theſe inconveniencies the paſſions of thoſe meetings gave him, than to diſſolve them. *Clarendon.*

Hercules
Free'd Erymanthus *from* the foaming boar. *Dryden.*

To clear from impediments or obſtructions:

Fierce was the fight; but haſt'ning to his prey,
By force the furious lover *free'd* his way. *Dryden.*

To baniſh; to ſend away; to rid. *Not in uſe:*

Never any ſabbath of releaſe
Could *free* his travels and afflictions deep. *Daniel.*

To exempt.—For he that is dead is *free'd* from ſin. *Romans* vi. 7.

FREE-BENCH, *ſ.* in law, that eſtate in copyhold lands which the wife hath on the death of her huſband for her dower, according to the cuſtom of the manor: but it is ſaid that ſuch wife ought to be eſpouſed a virgin; and is to hold the land only ſo long as ſhe lives ſole and continent. *Kitch.* 102. Of this free-bench ſeveral manors have ſeveral cuſtoms; and Fitzherbert calls it a cuſtom, whereby in certain cities the wife ſhall have the whole lands of the huſband for her dower, &c. *F. N. B.* 150. In the manors of Eaſt and Weſt Embourne in the county of Berks, and the manor of Torre in Devonſhire, and other parts of the weſt of England, there is a cuſtom, that when a copyhold tenant dies, his widow ſhall have her free-bench in all his cuſtomary lands, *dum ſola & caſta fuerit*; but if ſhe commits incontinency, ſhe forfeits her eſtate.

FREE-CHAPEL, *ſ.* a chapel that is exempt from the juriſdiction of the dioceſan. Thoſe chapels are properly free-chapels which are of the king's foundation, and by him exempted from the ordinary's viſitation; alſo chapels founded within a pariſh for the ſervice of God, by the devotion and liberality of pious men, over and above the mother-church, and endowed with maintenance by the founders, which were free for the inhabitants of the pariſh to come to, were therefore called free-chapels. *Reg. Orig.* 40. The free-chapel of St. Martin-le-grand is mentioned

tioned in 3 Edw. IV. c. 4, as are others likewiſe by ancient ſtatutes: but theſe chapels were given to the king, with the chantries, &c. by 1 Edw. VI. c. 14.

FREE-MA'SON, *ſ.* See MASON.

FREE-TOWN, a town erected by the Engliſh ſettlers on the peninſula of Sierra Leone in Africa.

FREE-TOWN, a thriving townſhip of the American States, in Briſtol county, Maſſachuſetts, incorporated in 1683, contains 2202 inhabitants, and lies fifty miles ſoutherly of Boſton.

FREE-WAR'REN, *ſ.* See WARREN.

FREEBO'RD, *ſ.* in law, ground claimed in ſome places more or leſs beyond or without the fence: it is ſaid to contain two foot and a half. *Mon. Ang. Tom.* 2. p. 141.

FREEBOOT'ER, *ſ.* A robber; a plunderer; a pillager. See the article BUCANEER, vol. iii. p. 472–476. —Perkin was not followed by any Engliſh of name: his forces conſiſted moſtly of baſe people and *freebooters*, fitter to ſpoil a coaſt than to recover a kingdom. *Bacon.*

FREE'BOOTER's POINT, a cape at the weſtern extremity of the iſland of Anagada, in the Weſt Indies.

FREEBOOT'ING, *ſ.* Robbery; plunder; the act of pillaging.—Under it he may cleanly convey any fit pillage that cometh handſomely in his way; and when he goeth abroad in the night on *freebooting*, it is his beſt and ſureſt friend. *Spenſer.*

FREE'BORN, *adj.* Not a ſlave; inheriting liberty.—I ſhall ſpeak my thoughts like a *freeborn* ſubject, ſuch things perhaps as no Dutch commentator could, and I am ſure no Frenchman durſt. *Dryden.*

O baſeneſs, to ſupport a tyrant's throne,
And cruſh your *freeborn* brethren of the world. *Dryden.*

FREE'COST, *ſ.* Without expence; free from charges.

FREED'MAN, *ſ.* A ſlave manumitted:

The *freedman* joſtles, and will be preferr'd;
Firſt come, firſt ſerv'd, he cries. *Dryden.*

FREE'DOM, *ſ.* Liberty; exemption from ſervitude; independence:

O *freedom!* firſt delight of human kind!
Not that which bondmen from their maſters find,
The privilege of doles; nor yet t' inſcribe
Their names in this or t'other Roman tribe:
That falſe enfranchiſement with eaſe is found;
Slaves are made citizens by turning round. *Dryden.*

Privileges; franchiſes; immunities:

By our holy ſabbath have I ſworn
To have the due and forfeit of my bond:
If you deny it, let the danger light
Upon your charter, and your city's *freedom*. *Shakeſpeare.*

Power of enjoying franchiſes.—This prince firſt gave *freedom* to ſervants, ſo as to become citizens of equal privileges with the reſt, which very much increaſed the power of the people. *Swift.*—Exemption from fate, neceſſity, or pre-determination.—In every ſin, by how much the more free will is in its choice, by ſo much is the act the more ſinful; and where there is nothing to importune, urge, or provoke the will to any act, there is ſo much an higher and perfecter degree of *freedom* about that act. *South.*

I elſe muſt change
Their nature, and revoke the high decree
Unchangeable, eternal, which ordain'd
Their *freedom*; they themſelves ordain'd their fall. *Milton.*

Unreſtraint.—I will that all the feaſts and ſabbaths ſhall be all days of immunity and *freedom* for the Jews in my realm. 1 *Mac.* x. 34.—The ſtate of being without any particular evil or inconvenience.—The *freedom* of their ſtate lays them under a greater neceſſity of always chuſing and doing the beſt things. *Law.*—Eaſe or facility in doing or ſhowing any thing. [In colloquial language.] Any mark of aſſumed familiarity. In this ſenſe the word has a plural.

"FREEDOM's the jewel all men wiſh to hold:
For none love fetters, tho' they're made of gold."

The Latins ſay, *Dico tibi verum, libertas optima rerum. Nunquam ſervili ſub nidu vivito fili.*

We, who live in this much-favoured land of liberty, hardly know or are ſenſible of our happy ſtate. Yet thoſe who have travelled, and ſeen in what ſlavery and ſervile ſubjection the lower orders and middling rank of people live, under the deſpotic government of foreign princes, and the pride and inſolence of their miniſters and officers, daily admoniſh us of the ſuperior advantages of the Britiſh conſtitution, and of the bleſſings derived from it.

FRE'ED-STOOL, *ſ.* a ſeat in our monaſteries, made of ſtone, whereon, when ſeated, it proved a ſanctuary for thoſe who had fled there for protection. The firſt granted was by Athelſtan to John de Beverley, in which minſter it now remains; another is in the priory church of Hexham.

FREEFOOT'ED, *adj.* Not reſtrained in the march:

We will fetters put upon this fear,
Which now goes too *freefooted*. *Shakeſpeare.*

FREEHEART'ED, *adj.* Liberal; unreſtrained:

Love muſt *freehearted* be, and voluntary;
And not inchanted, or by fate conſtrain'd. *Davies.*

FREE'HOLD, *ſ.* in law, conſiſts of land or tenement which a man holds in fee-ſimple, fee-tail, or for term of life. *Bract. lib.* 2. c. 9. It is deſcribed to be of two ſorts: *freehold in deed*, and *freehold in law*; the firſt being the real poſſeſſion of lands, &c. in fee, or for life; the other, the right a perſon hath to ſuch lands or tenements, before his entry or ſeiſure. Freehold is alſo extended to offices, which a man holds either in fee, or during life: and, in the regiſter of writs it is ſaid, that he who holds land upon an execution of a ſtatute-merchant until he is ſatisfied the debt, holds as freehold to him and his aſſigns, and the ſame of a tenant by *elegit*; but ſuch tenants are not in fact freeholders, only as freeholders for their time, till they have received the profits of the land to the value of their debt. *Reg. Judic.* 68. A leaſe for ninety-nine years, &c. determinable upon a life or lives, is not a leaſe for life to make a freehold, but a leaſe for years, or chattel determinable upon life or lives; and an eſtate for one thouſand years is not a freehold, or of ſo high a nature as an eſtate for life. *Co. Lit.* 6. He that hath an eſtate for the term of his own life, or the life of another, hath a freehold, and no other of a leſs eſtate; though they of a greater eſtate have a freehold, as tenant in fee, &c. *Lit.* 57.

When a man pleads *liberum tenementum* generally, it ſhall be intended that he hath an eſtate in fee; and not a bare eſtate for life. *Cro. Eliz.* 87. An eſtate of freehold cannot by the common law commence *in futuro*; but it muſt take place preſently in poſſeſſion, reverſion, or remainder. 5 *Rep.* 94.

A man made a deed of gift to his ſon and his heirs, of lands after his death, and no livery was made; now if there had been livery, it had been void, becauſe a freehold cannot commence *in futuro*; and it has been held, that it ſhall not enure as a covenant to ſtand ſeiſed, by reaſon of the word *give*; by which was intended a tranſmutation of the eſtate, and not to paſs it by way of uſe. *March. Rep.* 50. Whatſoever is part of, or fixed to, the freehold goes to the heir; and glaſs windows, wainſcot, &c. affixed to the houſe are parcel of the houſe, and cannot be removed by tenants. 4 *Rep.* 63. But it hath been adjudged, that if things neceſſary for trade, &c. are affixed to the freehold by the leſſee, he may take them down and remove them, ſo as he do it before the end of the term, and he do not thereby injure the freehold. 1 *Salk.* 368.

Any thing fixed to the freehold may not be taken in diſtreſs for rent or in execution, &c. It is not felony at common law, only treſpaſs, to ſteal or take any thing annexed to the freehold; ſuch as lead on a church, or houſe, corn or graſs growing on the ground, apples on a tree, &c.

Though

Though if they are ſevered from the freehold, whether by the owner or a thief, if he ſevered them at one time, and took them away at another, it was larceny to take them. 1 *Hawk. P.C.* But now, by 4 Geo. II. c. 32, to ſteal lead on houſes, &c. is made felony.

The ſtatute of Magna Charta, c. 29, ordains, "that no perſon ſhall be diſſeiſed of his freehold but by judgment of his peers, or according to the law of the land;" which does not only relate to common diſſeiſins, but the king may not otherwiſe ſeize into his hands the freehold of the ſubject. *Wood's Inſt.* 614. None ſhall diſtrain any freeholders to anſwer for their freeholds, or any thing touching the ſame, without the king's writ. 52 *Hen.* III. c. 22. Nor ſhall any perſon be compelled to anſwer for his freehold, before any lord of a manor. 15 *Rich.* II. c. 12. —For the freehold qualifications neceſſary in certain caſes, ſee the article PARLIAMENT; and for the definition and deſcription of freehold eſtates, ſee the article ESTATES, vol. vii. p. 25.

FREE'HOLD, a town of the American States, in Monmouth county, New Jerſey, fifteen miles weſt of Shrewſbury, and twenty ſouth-eaſt by ſouth of New Brunſwick. In this town was fought the obſtinate battle called the Monmouth battle, on the 28th of June, 1778, between the American army under general Waſhington, and the Engliſh under the command of general ſir Henry Clinton, who was retreating from Philadelphia. This town contains 3785 inhabitants.

FREE'HOLD, a townſhip of the American States, in Albany county, New York, containing 1822 inhabitants, of whom 562 are qualified to be electors.

FREE'HOLDER, *ſ.* One who has a freehold.—As extortion did baniſh the old Engliſh *freeholder*, who could not live but under the law; ſo the law did baniſh the Iriſh lord, who could not live but by extortion. *Davies.*

FREE'LY, *adv.* At liberty; without vaſſalage; without ſlavery; without dependence. Without reſtraint; heartily; with full guſt.—If my ſon were my huſband, I would *freelier* rejoice in that abſence wherein he won honour, than in the embracements of his bed, where he would ſhew moſt love. *Shakeſpeare.*—Plentifully; laviſhly:

I pledge your grace; and if you knew what pains
I have beſtow'd to breed this preſent peace,
You would drink *freely*. *Shakeſpeare.*

Without ſcruple; without reſerve:

Let ſuch teach others who themſelves excel,
And cenſure *freely* who have written well. *Pope.*

Without impediment.—To follow rather the Goths in rhyming than the Greeks in true verſifying, were even to eat acorns with ſwine, when we may *freely* eat wheat-bread among men. *Aſcham.*

The path to peace is virtue: what I ſhow,
Thyſelf may *freely* on thyſelf beſtow:
Fortune was never worſhipp'd by the wiſe;
But ſet aloft by fools, uſurps the ſkies. *Dryden.*

Without neceſſity; without predetermination.—He leaves us to chuſe with the liberty of reaſonable beings: they who comply with his grace, comply with it *freely*; and they who reject it, do alſo *freely* reject it. *Rogers.*—Frankly; liberally; without coſt.—By nature all things have an equally uncommon uſe: nature *freely* and indifferently opens the boſoms of the univerſe to all mankind. *South.*—Spontaneouſly; of its own accord.

FREE'MAN, *ſ.* One not a ſlave; not a vaſſal.—If to break looſe from the conduct of reaſon, and to want that reſtraint of examination and judgment which keeps us from chuſing or doing the worſt, be liberty, true liberty, madmen and fools are the only *freemen*. *Locke.*—One partaking of rights, privileges, or immunities:

He made us *freemen* of the continent,
What nature did like captives treat before. *Dryden.*

What this union was is expreſſed in the preceding verſe, by their both having been made *freemen* on the ſame day. *Addiſon.*

In the diſtinction of a freeman from a vaſſal under the feudal policy, *liber homo* was commonly oppoſed to *vaſſus* or *vaſſalus*; the former, denoting an allodial proprietor; the latter, one who held of a ſuperior. See the article TENURE.

FREEMIND'ED, *adj.* Unperplexed; without load of care.—To be *freeminded*, and cheerfully diſpoſed, at hours of meat, ſleep, and exerciſe, is one of the beſt precepts of long laſting. *Bacon.*

FREEMO'NT, a cape on the north coaſt of the iſland of Jerſey: five miles north of St. Helier.

FREE'NESS, *ſ.* The ſtate or quality of being free. Openneſs; unreſervedneſs; ingenuouſneſs; candour.—The reader may pardon it, if he pleaſe, for the *freeneſs* of the confeſſion. *Dryden.*—Generoſity; liberality.—I hope it will never be ſaid that the laity, who by the clergy are taught to be charitable, ſhall in their corporations exceed the clergy itſelf, and their ſons, in *freeneſs* of giving. *Sprat.*

FREE'PORT, a townſhip of the American States, in Cumberland county, diſtrict of Maine, ſituated at the head of Caſco-bay; adjoining to Durham on the north-eaſt and to North Yarmouth on the ſouth-weſt: about ten miles north-eaſt of Portland, and 140 north by eaſt of Boſton. It was incorporated in 1789, and contains 1330 inhabitants.

FREE'SCHOOL, *ſ.* A ſchool in which learning is given without pay.—To give a civil education to the youth of this land in the time to come, proviſion was made by another law, that there ſhould be one *freeſchool* at leaſt erected in every dioceſe. *Davies.*

FREE'SPOKEN, *adj.* Accuſtomed to ſpeak without reſerve.

FREE'STONE, *ſ.* Stone commonly uſed in building, as ſand-ſtone, Portland-ſtone, &c.—Freeſtone is ſo named from its being of ſuch a conſtitution as to be wrought and cut freely in any direction. *Woodward.*—The ſtreets are generally paved with brick or *freeſtone*, and always kept very neat. *Addiſon on Italy.*

FREE'THINKER, *ſ.* A libertine; a contemner of religion.—Of what uſe is freedom of thought, if it will not produce freedom of action, which is the ſole end, how remote ſoever in appearance, of all objections againſt Chriſtianity? And therefore the *freethinkers* conſider it as an edifice, wherein all the parts have ſuch a mutual dependance on each other, that if you pull out one ſingle nail, the whole fabric muſt fall to the ground. *Swift.*

FREEWILL', *ſ.* The power of directing our own actions without reſtraint by neceſſity or fate.—We have a power to ſuſpend the proſecution of this or that deſire: this ſeems to me the ſource of all liberty; in this ſeems to conſiſt that which is improperly called *freewill*. *Locke.* Voluntarineſs; ſpontaneity.—I make a decree, that all they of the people of Iſrael in my realm, which are minded of their own *freewill* to go up to Jeruſalem, go with thee. *Ezra*, vii. 13.

FREE'WILL-ISLAND, an iſland in the Eaſtern Indian Ocean. Lat. 0. 50. N. lon. 137. 51. E. Greenwich.

FREE'WOMAN, *ſ.* A woman not enſlaved.—All her ornaments are taken away; of a *freewoman* ſhe is become a bondſlave. 1 *Mac.* ii. 11.

To FREEZE, *v. n.* preter. *froze*; [*vrieſen*, Dut.] To be congealed with cold. See the articles FREEZING, FROST, and ICE.—The aqueous humour of the eye will not *freeze*, which is very admirable, ſeeing it hath the perſpicuity and fluidity of common water. *Ray.*—To be of that degree of cold by which water is congealed.—Thou art all ice, thy kindneſs *freezes*. *Shakeſpeare.*

Heav'n *froze* above ſevere, the clouds congeal,
And thro' the cryſtal vault appear'd the ſtanding hail.
Dryden.

To FREEZE, *v. a.* pret. *froze*; part. *frozen* or *froze*.

To

To congeal with cold.—O'er many a *frozen*, many a fiery alp. *Milton.*—To kill by cold.—My maſter and miſtreſs are almoſt *frozen* to death. *Shakeſpeare.*—To chill by the loſs of power or motion:

Death came on amain
And exercis'd below his iron reign;
Then upward to the ſeat of life he goes;
Senſe fled before him, what he touch'd he *froze*.' *Dryden.*

FREEZE, *ſ.* See FRIEZE.

FREEZ'ING, or CONGELATION, *ſ.* the fixing of a fluid body into a firm or ſolid maſs by the action of cold; as water when it freezes into ice. But it differs from cryſtallization, which is rather a ſeparation of the particles of a ſolid from a fluid in which it had been diſſolved more by the moiſture than the action of heat. The proceſs of congelation is always attended with the emiſſion of heat, as is found by experiments on the freezing of water, wax, ſpermaceti, &c. for in ſuch caſes it is always found that a thermometer dipt into the fluid maſs, keeps continually deſcending as this cools, till it arrive at a certain point, being the point of freezing, which is peculiar to each fluid, where it is rather ſtationary, and then riſes for a little, while the congelation goes on. But by what means it is that fluid bodies ſhould thus be rendered ſolid by cold, or fluid by heat, or what is introduced into the bodies by either of thoſe principles, are matters the learned have never yet been able to diſcover, or to ſatisfy themſelves upon. The following phenomena however are uſually obſerved.

Water, and ſome other fluids, ſuddenly dilate and expand in the act of freezing, ſo as to occupy a greater ſpace in the form of ice than before, in conſequence of which it is that ice is ſpecifically lighter than the ſame fluid, and floats in it. And the degree of expanſion of water, in the ſtate of ice, is by ſome authors computed at about $\frac{1}{10}$ of its volume. Oil however is an exception to this property, and quickſilver too, which ſhrinks and contracts ſtill more after freezing. Mr. Boyle relates ſeveral experiments of veſſels made of metal, very thick and ſtrong; in which, when filled with water, cloſe ſtopped, and expoſed to the cold, the water being expanded in freezing, and not finding either room or vent, burſt the veſſels. A ſtrong barrel of a gun, with water in it cloſe ſtopped and frozen, was rent the whole length. Huygens, to try the force with which it expands, filled a cannon with it, whoſe ſides were an inch thick, and then cloſed up the mouth and vent, ſo that none could eſcape; the whole being expoſed to a ſtrong freezing air, the water froze in about twelve hours, and burſt the piece in two places. Mathematicians have computed the force of the ice upon this occaſion; and they ſay, that ſuch a force would raiſe a weight of 27720 pounds. Major Edward Williams, of the royal artillery, made many experiments on the force of it, at Quebec, in the years 1784 and 1785. He filled all ſizes of iron bomb-ſhells with water, then plugged the fuze hole cloſe up, and expoſed them to the ſtrong freezing air of the winter in that climate; ſometimes driving in the iron plugs as hard as poſſible with a ſledge hammer; and yet they were always thrown out by the ſudden expanſion of the water in the act of freezing, like a ball ſhot by gunpowder, ſometimes to the diſtance of between 400 and 500 feet, though they weighed near three pounds; and when the plugs were ſcrewed in, or furniſhed with hooks or barbs, to lay hold of the inſide of the ſhell by, ſo that they could not poſſibly be forced out, in this caſe the ſhell was always ſplit in two, though the thickneſs of the metal of the ſhell was about an inch and three quarters. It is farther remarkable, that through the circular crack, round about the ſhells, where they burſt, there ſtood out a thin film or ſheet of ice, like a fin; and in the caſes when the plugs were projected by freezing water, there ſuddenly iſſued out from the fuze-hole, a bolt of ice, of the ſame diameter, and ſtood over it to the height ſometimes of eight inches and a half. And hence we need not be ſurpriſed at the effects of ice in deſtroying the ſubſtance of vegetables and trees, and even ſplitting rocks, when the froſt is carried to exceſs.

It is alſo obſerved that water loſes of its weight by freezing, being found lighter after thawing again, than before it was frozen. And indeed it evaporates almoſt as faſt when frozen, as when it is fluid. It is ſaid too that water does not freeze in vacuo; requiring for that purpoſe the preſence and contiguity of the air. But this circumſtance is liable to ſome doubt, and it may be ſuſpected that the degree of cold has not been carried far enough in theſe inſtances; as it is found that mercury in thermometers has even been frozen, though it requires a vaſtly greater degree of cold to freeze mercury than water. That water which has been boiled, freezes more readily than that which has not been boiled; and that a ſlight diſturbance of the fluid diſpoſes it to freeze more ſpeedily; having ſometimes been cooled ſeveral degrees below the freezing point, without congealing when kept quite ſtill, but ſuddenly freezing into ice on the leaſt motion or diſturbance. That the water, being covered over with a ſurface of oil of olives, does not freeze ſo readily as without it; and that nut oil abſolutely preſerves it under a ſtrong froſt, when olive oil would not. That rectified ſpirit of wine, nut oil, and oil of turpentine, ſeldom freeze. That the ſurface of the water, in freezing, appears all wrinkled; the wrinkles being ſometimes in parallel lines, and ſometimes like rays, proceeding from a centre to the circumference.

FREEZING MIX'TURE, a preparation for the artificial congelation of water, and other fluids. According to Mr. Boyle, all kinds of ſalts, whether alkaline or acid; and even all ſpirits, as ſpirit of wine, &c. as alſo ſugar, and ſaccharum ſaturni, mixed with ſnow, are capable of freezing moſt fluids; and the ſame effect is produced, in a very high degree, by a mixture of oil of vitriol, or ſpirit of nitre, with ſnow. M. Homberg remarks the ſame of equal quantities of corroſive ſublimate, and ſal ammoniac, with four times the quantity of diſtilled vinegar. Many artificial freezing mixtures are uſed in preparing ice under different forms for the table; for which ſee the article ICE.

Very extraordinary inſtances of artificial freezing have been made in Ruſſia, at Hudſon's-bay, and other parts, by which quickſilver was frozen into a ſolid maſs of metal. And the ſame thing had before happened from the natural cold of the atmoſphere alone, in Siberia. In the winter of 1733, profeſſor Gmelin, with two other gentlemen of the Ruſſian academy, were ſent to explore thoſe inhoſpitable regions. In the winter of 1734–5, Mr. Gmelin being at Yeneſeiſk in 58° 30′ north lat. and 92° lon. eaſt from Greenwich, firſt obſerved ſuch a deſcent of the mercury, as muſt have been attended with congelation, being far below its freezing point —40 of Fahrenheit's thermometer. "Here, (ſays he), we firſt experienced the truth of what various travellers have related with reſpect to the extreme cold of Siberia; for, about the middle of December, ſuch ſevere weather ſet in, as we were ſure had never been known in our time at Peterſburg. The air ſeemed as if it were frozen, with the appearance of a fog, which did not ſuffer the ſmoke to aſcend as it iſſued from the chimneys. Birds fell down out of the air as dead, and froze immediately, unleſs they were brought into a warm room. Whenever the door was opened, a fog ſuddenly formed round it. During the day, ſhort as it was, parhelia and haloes round the ſun were frequently ſeen; and in the night mock moons, and haloes about the moon. Finally, our thermometer, not ſubject to the ſame deception as the ſenſes, left us no doubt of the exceſſive cold; for the quickſilver in it was reduced, on the 5th of January, old ſtyle, to —120° of Fahrenheit's ſcale, lower than it had ever been obſerved in nature."

A ſimilar inſtance happened at Yakutſk, in 620° north lat. and 150° eaſt lon. The weather here was unuſually mild for the climate, yet the thermometer fell to —72°; and one perſon informed the profeſſor by a note,

that the mercury in his barometer was frozen. He haſtened immediately to his houſe to behold ſuch a ſurpriſing phenomenon; but though he was witneſs to the fact, obſerving that the mercury did not continue in one column, but was divided in different places as into little cylinders, which appeared frozen, yet the prejudice he had entertained againſt the poſſibility of the congelation, would not allow him to believe it.

Another ſet of obſervations, in the courſe of which the mercury muſt frequently have been congealed, were made by profeſſor Gmelin at Kirenga fort, in 57½ north lat. and 108 eaſt lon. his thermometer, at different times, ſtanding at —108, —86, —100, —113, and many other intermediate degrees, in the courſe of the winter of 1737–8. On the 27th of November, after the thermometer had been ſtanding for two days at —46°, he found it ſunk at noon to —108. Suſpecting ſome miſtake, after he had noted down the obſervation, he inſtantly ran back, and found it at —102; but aſcending with ſuch rapidity, that in the ſpace of half an hour it had riſen to —19°. This phenomenon, which appeared ſo ſurpriſing, doubtleſs depended on the expanſion of the mercury frozen in the bulb of the thermometer, and which now melting, forced upwards the ſmall thread in the ſtem. And ſimilar appearances were obſerved on other days afterwards, when the thread of quickſilver in the thermometer was ſeparated about 6 degrees. A ſecond inſtance where a natural congelation of mercury has certainly been obſerved, is recorded in the tranſactions of the royal academy of ſciences at Stockholm, as made by Mr. Andrew Hellant. The weather, in January 1760, was remarkably cold in Lapland; ſo that on the 5th of that month, the thermometers fell to —76, —128, or lower; on the 23d and following days they fell to —58, —79, —92, and below —238 entirely into the ball. This was obſerved at four different places in Lapland, ſituated between the 65th and 78th degrees of north lat. and the 21ſt and 28th degree of eaſt longitude.

But the congelation of quickſilver, by an artificial freezing mixture, was firſt obſerved, and put beyond doubt, by Mr. Joſeph Adam Braun, profeſſor of philoſophy at Peterſburg. This gentleman, wiſhing to try how many degrees of cold he could produce, availed himſelf of a good opportunity which offered for that purpoſe on the 14th of December 1759, when the mercury in the thermometer ſtood in the natural cold at —34, which it is now known is only 5 or 6 degrees above its point of congelation. Aſſiſting this natural cold therefore with a mixture prepared of aquafortis and pounded ice, his thermometer was ſunk to —69. Part of the quickſilver muſt now have been really congealed, but unexpected by him, and he only thought of purſuing his object of producing ſtill greater degrees of cold; and having expended all his pounded ice, he was obliged to uſe ſnow inſtead of it. With this freſh mixture the mercury ſunk to —100, —240, and —350°. Taking the thermometer out, he found it whole, but the quickſilver fixed, and it continued ſo for twelve minutes. On repeating the experiment, with another thermometer which had been graduated no lower than —220, all the mercury ſunk into the ball, and became ſolid as before, and did not re-aſcend till after a ſtill longer interval of time. Mr. Braun now ſuſpected that the quickſilver was really frozen, and prepared for making a deciſive experiment. This was accompliſhed on the 25th of the ſame month, and the bulb of the thermometer broken as ſoon as the metal was congealed; when it appeared that the mercury was changed into a ſolid and ſhining metallic maſs, which flatted and extended under the ſtrokes of a peſtle, being rather leſs hard than lead, and yielding a dull ſound like that metal. Mr. Æpinus made ſimilar experiments at the ſame time, employing as well thermometers as tubes of a larger bore; in which laſt he remarked, that the quickſilver fell ſenſibly on being frozen, aſſuming a concave ſurface, and likewiſe that the congealed pieces ſunk in fluid mercury: alſo, in their farther experiments, they invariably found that the mercury ſunk lower when the whole of it was congealed, than if any part of it remained fluid: all ſhewing that, contrary to water, mercury contracted in freezing. It was farther obſerved, that the mercury when congealed looked like the moſt poliſhed ſilver, and when beaten flat, it was eaſily cut with a penknife, like ſoft thin ſheet lead.

The fact being thus eſtabliſhed, and fluidity no longer to be conſidered as an eſſential property of quickſilver, Mr. Braun communicated an account of his experiments to the Peterſburg academy, on the 6th of September, 1760; of which a large extract was inſerted in the Philoſophical Tranſactions, vol. lii. p. 156. He afterwards declared that he never ſuffered a winter to paſs without repeating the experiment of freezing quickſilver, and never failed of ſucceſs when the natural cold was of a ſufficient ſtrength for the purpoſe; and this degree of natural cold he ſuppoſes at —10 of Fahrenheit; though ſome commencement of the congelation might be perceived when the temperature of the air was as high as +2.

The reſults of all his experiments were, that with the abovementioned frigorific mixtures, and once with rectified ſpirits and ſnow, when the natural cold was at —280, he congealed the quickſilver, and diſcovered that it is a real metal that melts with a very ſmall degree of heat. However, not perceiving the neceſſary conſequence of its great contraction in freezing, he always confounded its point of congelation with that of its greateſt contraction in freezing, and thus marked the former a great deal too low. In the proceſs of his obſervations, Mr. Braun found that double aquafortis was more effectual than ſpirit of nitre; but with this ſimple ſpirit, which ſeldom brings the mercury lower than —148, this metal may be frozen in the following manner: ſix glaſſes being filled with ſnow as uſual, and the thermometer put in one of them, the ſpirit of nitre was poured upon it; when the mercury would fall no lower in this, the thermometer was removed to the ſecond, and ſo on to the third and fourth, in which fourth immerſion the mercury was congealed.

Mr. Æpinus gives the following direction for uſing the fuming ſpirit of nitre: Take ſome of this ſpirit, cooled as much as poſſible, and put it into a wine glaſs till it be about half full, filling it up with ſnow, and ſtirring them till the mixture become of the conſiſtence of pap; by which means you obtain, almoſt in an inſtant, the neceſſary degree of cold for the freezing of quickſilver.

It is remarked by Mr. Braun, that by the mixture of ſnow and ſpirit of nitre, which froze the mercury, he never was able to bring thermometers, filled with the moſt highly rectified ſpirit of wine, lower than —148; ſo that the cold which will freeze mercury, will not freeze ſpirit of wine; and therefore ſpirit thermometers are the moſt fit to determine the degree of coldneſs in frigorific mixtures, till we can conſtruct ſolid metallic thermometers with ſufficient accuracy. Mr. Braun tried the effects of different fluids in his frigorific mixtures: he always found that Glauber's ſpirit of nitre and double aquafortis were the moſt powerful; and from a number of experiments made when the temperature of the air was between 21 and 28 of Fahrenheit, he concludes, that ſpirit of ſalt pounded upon ſnow increaſed the natural cold 360; ſpirit of ſal ammoniac, 12; oil of vitriol, 42; Glauber's ſpirit of nitre, 70; aquafortis, 48; ſimple ſpirit of nitre, 36; dulcified ſpirit of vitriol, 24; Hoffman's anodyne liquor, 38; ſpirit of hartſhorn, 12; ſpirit of ſulphur, 12; ſpirit of wine rectified, 24; camphorated ſpirit, 18; French brandy, 14; and ſeveral kinds of wine increaſed the naturalcold to 7, 8, or 9, degrees.

The moſt remarkable freezing of mercury by natural cold, was that related by Dr. Peter Simon Pallas, who had been ſent by the empreſs of Ruſſia, with ſome other gentlemen, on an expedition ſimilar to that of Mr. Gmelin. Being at Kraſnoyarſk in 1772, in north lat. 560 30′, and eaſt lon. 93°, he had an opportunity of obſerving the phenomenon very accurately. On the 6th and 7th of December that year, ſays he, there happened the greateſt

cold

cold I have ever experienced in Siberia: the air was calm at the time, and ſeemingly thickened; ſo that, though the ſky was in other reſpects clear, the ſun appeared as through a fog. I had only one ſmall thermometer left, in which the ſcale went no lower than —7°; and on the 6th in the morning, I remarked that the quickſilver in it ſunk into the ball, except ſome ſhort columns which ſtuck faſt in the tube. When the ball of the thermometer, as it hung in the open air, was touched with the finger, the quickſilver roſe; and it could plainly be ſeen that the ſolid columns ſtuck and reſiſted a good while, and were at length puſhed upward with a ſort of violence. He alſo placed upon the gallery, on the north ſide of his houſe, ſome quickſilver in an open bowl. Within an hour he found the edges and ſurface of it frozen ſolid; and ſome minutes afterward the whole was condenſed by the natural cold into a ſoft maſs very much like tin. While the inner part was ſtill fluid, the frozen ſurface exhibited a great variety of branched wrinkles; but in general it remained pretty ſmooth in freezing. The congealed mercury was more flexible than lead; but on being bent ſhort, it was found more brittle than tin; and when hammered out thin, it ſeemed ſomewhat granulated. When the hammer was not perfectly cooled, the quickſilver melted away under it in drops; and the ſame thing happened when the metal was touched with the finger, by which alſo the finger was immediately benumbed. When the frozen maſs was broken to pieces in the cold, the fragments adhered to each other and to the bowl in which they lay. In the warm room it thawed on its ſurface gradually, by drops, like wax on the fire, and did not melt all at once. Although the froſt ſeemed to abate a little towards night, yet the congealed quickſilver remained unaltered, and the experiment with the thermometer could ſtill be repeated. On the 7th of December he had an opportunity of making the ſame obſervations all day; but ſome hours after ſunſet, a northweſt wind ſprung up, which raiſed the thermometer to —46°, when the maſs of quickſilver began to melt.

The experiments of Mr. Braun were ſucceſsfully repeated at Gottingen, in 1774, by M. Blumenbach; being encouraged to this attempt by the exceſſive cold of the winter that year, eſpecially the night of January the 11th, when he made the experiment, the thermometer ſtanding at —10 in the open air. M. Blumenbach at five in the evening, put three drachms of quickſilver into a ſmall ſugar glaſs, and covered it with a mixture of ſnow and Egyptian ſal ammoniac, ſetting the glaſs out in the air upon a mixture alſo of ſal ammoniac. At one the next morning, the mercury was found frozen quite ſolid, and hard to the glaſs; and did not melt again till ſeven or eight the next morning. The colour of the frozen mercury was a dull pale white with a bluiſh caſt, like zinc, very different from the natural appearance of quickſilver.

In 1775, by ſimilar means, quickſilver was twice frozen by Mr. Hutchins, governor of Albany fort, in Hudſon's bay, viz. in the months of January and February of that year. And the ſame was done on the 28th of January, 1776, by Dr. Lambert Bicker, ſecretary of Rotterdam. The temperature of the atmoſphere was then at +2°; and the loweſt it could reduce the thermometer by artificial cold, was —94; when, on breaking the glaſs, the mercury was found frozen.

In the beginning of 1780, M. von Elterlein, of Vytegra, a town of Ruſſia, in lat. 61° north, and lon. 36° eaſt, froze quickſilver by natural cold. On the 4th of January, 1780, the cold being increaſed to —34 that evening at Vytegra, he expoſed to the open air three ounces of very pure quickſilver in a china tea-cup, covered with paper pierced full of holes. Next day, at eight in the morning, he found it ſolid, and looking like a piece of caſt lead, with a conſiderable depreſſion in the middle. On attempting to looſen it in the cup, his knife raiſed ſhavings from it as if it had been lead, which remained ſticking up; and at length the metal ſeparated from the bottom of the cup in one maſs. He then took it in his hand to try if it would bend: it was ſtiff like glue, and broke into two pieces; but his fingers immediately loſt all feeling, and could ſcarcely be reſtored in an hour and a half by rubbing with ſnow. At eight o'clock the thermometer ſtood at —57; but half after nine it was riſen to —40; and then the two pieces of mercury which lay in the cup had loſt ſo much of their hardneſs, that they could no longer be broken, or cut into ſhavings, but reſembled a thick amalgam, which, though it became fluid when preſſed by the fingers, immediately afterwards reſumed the conſiſtence of pap. With the thermometer at —39, the quickſilver became fluid. The cold was never leſs on the fifth than —28, and by nine in the evening it had increaſed again to —33. This experiment ſeems to fix the freezing point of mercury at —40 of Fahrenheit's thermometer, or 40 below 0; which is 72° below the freezing point of water.

In the winter of 1781–2, Mr. Hutchins reſumed the ſubject of freezing quickſilver by artificial cold, with ſuch ſucceſs, that from his experiments and thoſe of M. von Elterlein, laſt mentioned, the freezing point of mercury is now almoſt as well ſettled, viz. at —40, as that of water is at +32. Other philoſophers indeed had not been altogether inattentive to this ſubject. Profeſſor Braun himſelf had taken great pains to inveſtigate it; but for want of a proper attention to the difference between the contraction of the fluid mercury by cold, and that of the congealing metal by freezing, he could not determine any thing certain concerning it.

An inſtance of the natural congelation of quickſilver alſo occurred in Jemptland, one of the provinces of Sweden, on the 1ſt of January, 1782; and again, on the 26th of the ſame month, Mr. Hutchins obſerved the ſame effect of the cold at Hudſon's bay; when he found that at the point of its freezing a mercurial thermometer ſtood at —40, and a ſpirit thermometer at —30. On this ſubject, ſee the Philoſophical Tranſactions, vol. li. p. 672; lii. 156; lxvi. 174; lxxiii. 303 and 325; lxxvi. 241; lxxvii. 285; lxxviii. 43; and ſeveral others, particularly lxxix. 199, &c. being experiments on the congelation of quickſilver in England, by Mr. Richard Walker, where he proves that mercury may be frozen not only in England in ſummer, but even in the hotteſt climate, at any ſeaſon of the year, and without the uſe of ice or ſnow.

FREEZ'ING POINT, the point or degree of cold, ſhewn by a mercurial thermometer, at which certain fluids begin to freeze, or, when frozen, at which they begin to thaw again. On Fahrenheit's thermometer, this point is at +32 for water, and at —40 for quickſilver, theſe fluids freezing at thoſe two points reſpectively. It would alſo be well if the freezing points for other fluids were aſcertained, and the whole arranged in a regular table.

FREEZ'LAND PEAK, a cape on Sandwich Land, in the South Pacific Ocean. Lat. 59. 2. S. lon. 27. W. Greenwich.

FREGEL'LA, in ancient geography, a famous town of the Volſci in Italy on the Liris, deſtroyed for revolting from the Romans. *Livy.*

FREGE'NE, a town of Etruria. *Pliny.*

FRE'HER (Marquard), an eminent juriſt, born in 1565, at Augſburg, of a family diſtinguiſhed in the law and magiſtracy. He ſtudied firſt at Altdorff, and was thence ſent to Bourges, where he received his licence in law from the celebrated Cujas, in 1585. He was made a counſellor to the elector palatine, John-Caſimir, and in 1596 obtained the profeſſorſhip of law in the univerſity of Heidelberg. The elector Frederic IV. employed him in various important concerns, and created him vice-preſident of the ſenate. He diſtinguiſhed himſelf by his dexterity in negociations at the courts of the king of Poland and ſeveral German princes; at the ſame time he did not neglect his literary purſuits, which were particularly turned to hiſtory and antiquity. He died at Heidelberg in 1614, at the age of forty-nine, leaving behind him a variety

variety of works eſteemed by the learned. Of theſe the principal are, 1. *De Re monetaria veterum Romanorum, & hodierni apud Germanos Imperii, Lib. II.* 2. *Parergon, Lib. II.* 3. *Rerum Bohemicarum Scriptores varii.* 4. *Rerum Germanicarum Scriptores a Carolo Magno ad Fredericum III.* 5. *Corpus Hiſtor. Franciæ.* And 6. *Originum Palatinorum Comment.* He was a collector of ancient paintings, and poſſeſſed a well-choſen cabinet of conſular and imperial medals, ſeveral of which he elucidated in his writings.

FREIDD'EGG, a town of Germany, in the archduchy of Auſtria: ſeven miles ſouth-ſouth-weſt of Ips.

FREID'NAU, a town of Germany, in the duchy of Stiria: ſix miles weſt of Rakelſpurg.

FRE'JENAL, or FREXENEL, a town of Spain, in the county of Seville: forty-ſeven miles north of Seville.

FREIN'STEIN, a town of Germany, in the circle of Franconia, and county of Erbach, ten miles ſouth of Erbach.

FRIEN'WALDE, a town of Germany, in the circle of Upper Saxony, and duchy of Pomerania: fifteen miles north-eaſt of Stargard, and thirty-four ſouth-ſouth-eaſt of Cammin.

To FREIGHT, *v. a.* preter. *freighted*; part. *fraught*; which being now uſed as an adjective, *freighted* is adopted: [*fretter*, Fr.] To load a ſhip or veſſel of carriage with goods for tranſportation:

Nor is, indeed, that man leſs mad than theſe,
Who *freights* a ſhip to venture on the ſeas;
With one frail interpoſing plank to ſave
From certain death, roll'd on by ev'ry wave. *Dryden.*

To load as the burthen; to be the thing with which a veſſel is freighted:

I would
Have ſunk the ſea within the earth, or ere
It ſhould the good ſhip ſo have ſwallow'd, and
The *freighting* ſouls within her. *Shakeſpeare.*

FREIGHT, *ſ.* Any thing with which a ſhip is loaded:

He clears the deck, receives the mighty *freight*;
The leaky veſſel groans beneath the weight. *Dryden.*

The money due for tranſportation of goods.

Ships are freighted either by the ton, or by the great; and in reſpect of time, the freight is agreed for, at ſo much per month, or at a certain ſum for the whole voyage. If a ſhip freighted by the great, happens to be caſt away, the freight is loſt; but if a merchant agrees by the ton, or at ſo much for every piece of commodities, and by any accident the ſhip is caſt away, if part of the goods is ſaved, it is ſaid ſhe ought to be anſwered her freight *pro rata*: and when a ſhip is inſured and ſuch a misfortune happens, the inſured commonly transfer thoſe goods over to the aſſurers, towards a ſatisfaction of what they make good. *Lex Mercat.*

If freight is agreed for the lading and unlading of cattle at ſuch a port, and ſome die before the ſhip arrives there, the whole freight ſhall be paid for the living and the dead; but if the agreement be for tranſporting them, freight ſhall be only paid for the living: it is the ſame of ſlaves. *Ibid.* 85. The lading of a ſhip in conſtruction of law, is bound for the freight; the freight being in point of payment preferred before any other debts to which the goods ſo laden are liable, though ſuch debts as to time were precedent to the freight. *Hil.* 27 *Car.* II. *B.R.* If part of the lading be on ſhip-board, and through ſome misfortune happening to the merchant, he has not his full lading aboard at the time agreed, the maſter ſhall have freight by way of damage, for the time thoſe goods were on-board; and is at his liberty to contract with another, leſt he loſe his ſeaſon and voyage: and where a ſhip is not ready to take in, or the merchant not ready to lade his goods aboard, the parties are not only ſo at liberty, but the perſon damnified may bring an action againſt the other, and recover his damages ſuſtained. *Leg. Rhod.*

If the freighter of a ſhip ſhall lade on-board prohibited goods, or unlawful merchandize, whereby the ſhip is detained, or the voyage impeded; he ſhall anſwer the freight agreed for. *Style* 220. And when goods are laden aboard, and the ſhip hath broke ground, the merchant may not afterwards unlade them; for if he then changes his mind, and reſolves not to venture, but will unlade again, by the marine law the freight becomes due. If a maſter freights out his ſhip, and afterwards ſecretly takes in goods unknown to the firſt laders, by the law marine he forfeits his freight: and if a maſter of a ſhip ſhall put into any other port than what the ſhip was freighted to, he ſhall anſwer damages to the merchant; unleſs he is forced in by ſtorm, enemies, or pirates; and in that caſe he is obliged to ſail to the port agreed, at his own expence. *Leg. Oleron.* A ſhip is freighted ſo much out and ſo much in, there ſhall be no freight due till the voyage is performed; ſo that, if the ſhip be caſt away coming home, the freight outwards, as well as inwards, are both gone. 1 *Brownl.* 21. *Dougl.* 541. Where a ſhip periſhes, the whole freight from the laſt place or time of payment will be loſt. And if no freight be payable till the return, if the ſhip is loſt returning, the freight outwards ſhall be loſt as well as that inwards. *Mal.* 98.

The goods carried, generally, are a ſecurity for the freight, and the maſter is not bound to deliver them without payment. *Dougl.* 104. If a freighted ſhip becomes diſabled without the maſter's fault, he has his option to re-fit, (if poſſible, in convenient time,) or to hire another ſhip to carry the goods. If the merchant will not agree to this, the maſter is entitled to the full freight for the whole voyage. 2 *Burr.* 882. 1 *Bl. Rep.* 190.

The maſter ſhall have his freight though the goods are ſpoiled, if the merchant takes them. The merchant may abandon all, though all are not loſt: but he cannot abandon ſome and take ſome: if he abandon all, he is excuſed freight. If the ſhip is diſabled or taken when part of the voyage is performed, without fault of the maſter, he ſhall be paid a rateable proportion of the freight. 2 *Burr.* 882. See the article CHARTER-PARTY, vol. iv. p. 119.

FREIGHT'ER, *ſ.* [*fretteur*, Fr.] He who freights a veſſel.

FREIGNE', a town of France, in the department of the Mayne and Loire: twenty miles weſt of Angers.

FREI'MERSHEIM, a town of Germany, in the palatinate of the Rhine, taken by the French in 1794: four miles north-north-eaſt of Landau.

FREIND (John), a learned Engliſh phyſician, born in 1675, at Croton in Northamptonſhire, of which place his father was rector. He was educated at Weſtminſter-ſchool, under Dr. Buſby, and went thence, in 1690, to Chriſt-church college, Oxford. He became one of the ornaments of that ſeminary, and was ſelected, together with Mr. Foulkes, for the taſk of publiſhing a Latin tranſlation of the oration of Æſchines againſt Cteſiphon, and of Demoſthenes de Corona. Soon after, he edited a corrected edition of the Delphin Ovid's Metamorphoſes. A Latin ode addreſſed to Dr. Hannes upon the death of the duke of Glouceſter in 1700, diſtinguiſhes the name of Freind as a polite ſcholar, in the *Muſæ Anglicanæ*. Before this time he had commenced the ſtudy of phyſic, and in 1699 communicated to the royal ſociety an account of a remarkable hydrocephalus, which is publiſhed in their Memoirs. Another communication to the ſociety, in 1701, contains a relation of ſingular convulſive and ſpaſmodic ſymptoms affecting two poor families in Oxfordſhire. A work which immediately brought him into notice as a phyſician and phyſiologiſt was his *Emmenologia, in quâ Fluxus muliebris menſtrui phænomena, periodi, vitiæ, cum medendi methodo, ad rationes mechanicas, exiguntur*, 8vo. 1703. In this piece he took his ſtation among the mechanical phyſicians, whoſe ſect then flouriſhed under the auſpices of Baglivi and other learned men. Deriving the cauſe of the evacuation in queſtion from plethora, he conſiders the effects of lentor in the blood and rigidity in the veſſels on the

the one hand, and of the oppoſite ſtates in both, on the other, and adapts his pathological and curative ideas to this theory. The work was very favourably received, and though it met with oppugners, raiſed him into general reputation. In 1704 he was appointed to read chemical lectures before the univerſity. In theſe he attempted to explain all chemical operations upon mechanical and phyſical principles. Dr. John Keil was the firſt who made this attempt, and Freind purſued it with ingenuity and clearneſs of method, though his ſucceſs has not been ſufficient to place him high among chemical philoſophers. The lectures were ſome years afterwards publiſhed, with a dedication to ſir Iſaac Newton. In 1705 he accompanied the earl of Peterborough in his Spaniſh expedition, in quality of phyſician to the Engliſh troops. He was abroad nearly two years, and returned through Italy, taking Rome in his way, where he viſited the eminent phyſicians Baglivi and Lanciſi. It appears that he was much in the confidence of lord Peterborough, whoſe conduct he vindicated after his return, in a publication printed in 1707. During that year he was created doctor of phyſic by diploma, and publiſhed his chemical lectures. He was afterwards admitted into the royal ſociety. In 1712 he attended the duke of Ormond as his phyſician in his campaign in Flanders. From this time he reſided chiefly in London, where he roſe to high profeſſional reputation, and was received as fellow of the college of phyſicians in 1716. He publiſhed in that year the firſt and third books of *Hippocrates de Morbis Popularibus*, Greek and Latin, ſubjoining to them a Commentary on Fevers. This is a performance of great erudition, affording a perſpicuous view of the practice of the Greek phyſicians, of which he is for the moſt part a zealous defender. It alſo touches upon ſome points of modern practice, and in particular recommends the uſe of purgatives in the ſecondary fever of the confluent ſmallpox. This opinion was animadverted upon by Dr. Woodward in a publication entitled The State of Phyſic and Diſeaſes, written with unbecoming acrimony. To this, Dr. Freind firſt oppoſed a ludicrous reply, in the name of that noted empyric, Byfield. At length he thought proper to give a ſerious anſwer, in a Latin letter addreſſed to Dr. Mead, entitled *De Purgantibus in ſecunda Variolarum Confluentium Febre*, 8vo. 1719; which contains many valuable obſervations elegantly expreſſed, and much contributed to eſtabliſh the practice for which he contended. He paſſed through the offices of the college during this period, and in 1720 delivered a Harveian oration, which was much applauded. We are not acquainted with the reaſons which induced him, while purſuing with ſo much ſucceſs his medical career, to engage in political life; but in 1722 he entered into parliament as burgeſs for Launceſton. His connexions were with the party at this time in oppoſition to the court; and as the times were critical, and his attachments warm, his conduct ſoon expoſed him to ſuſpicion. Biſhop Atterbury's plot for the reſtoration of the Stuart family was the leading topic of this period, and when a motion againſt the prelate was made in the houſe of commons, Dr. Freind was among the ſpeakers in his favour. As the circumſtances of the time had given the miniſtry a pretext for the ſuſpenſion of the habeas corpus act, ſeveral perſons of conſequence were committed to cuſtody, among whom was Dr. Freind, charged with ſuſpicion of high-treaſon. The oppoſition ſuggeſted that the only ground for this was his parliamentary conduct; but Walpole declared privately to ſeveral perſons, that there was poſitive proof of the blackeſt treaſon againſt him. This, however, was never brought forward; and, after a confinement in the Tower from March 15, 1723, to June 21 of the ſame year, he was liberated. He now laid the plan of his greateſt work, of which the firſt part appeared in 1725, and the ſecond in 1726. This was The Hiſtory of Phyſic from the time of Galen to the Beginning of the Sixteenth Century, chiefly with Regard to Practice, in a Diſcourſe written to Dr. Mead, 2 vols. 8vo. This learned performance was meant as a kind of ſupplement to the Hiſtory of Phyſic by Daniel Le Clerc. It is divided into three parts, treating reſpectively of the Greek phyſicians after Galen, of the Arabians, and of the moderns.

Whatever political ſuſpicions might have fallen upon Dr. Freind in conſequence of his connections, the ſtain of diſaffection to the reigning family muſt be regarded as obliterated by his appointment, on the acceſſion of George II. to the poſt of phyſician to queen Caroline. He did not long, however, enjoy this honourable truſt, for a decline of his conſtitution put a period to his life in July, 1728, in his fifty-ſecond year. The Latin works of Dr. Freind were publiſhed by Dr. Wigan, in a folio volume, London, 1733, with a Latin verſion of the Hiſtory of Phyſic, and a Life of the author prefixed. Several foreign editions of the ſame have been given.

FREIN'DORFF, a town of Germany, in the archduchy of Auſtria: four miles ſouth-eaſt of Tulln.

FREIN'SHEIM, a town of Germany, in the circle of the Lower Rhine, and palatinate of the Rhine: ten miles weſt-north-weſt of Manheim, and twenty weſt-north-weſt of Heidelberg.

FREIN'SHEIM (John), born at Ulm, in Suabia, in 1608. He ſtudied at the univerſities of Marpurg and Gieſſen, whence he was transferred to Straſburg. Some German poems of his compoſition made him known to Matthew Bernegger, who took him into his houſe, and gave him the uſe of his library. The young ſtudent improved this advantage with inceſſant diligence, and carried his reſearches into every part of literature. His knowledge of languages was uncommonly extenſive, comprehending not only thoſe of antiquity, but moſt of the modern European dialects. In 1634 he was invited to Metz, as interpreter to the king's ſecretaries. After occupying it for three years, he returned, and married the daughter of Bernegger, with whom he took up his reſidence. He accepted, in 1642, the profeſſorſhip of politics and eloquence at Upſal. There he continued five years, when queen Chriſtina engaged him at a liberal ſtipend to act as her librarian and hiſtoriographer. In 1651 he requeſted permiſſion, on account of his health, to return to Germany; and in the next year he was invited to Heidelberg by the elector Charles-Louis, and created electoral counſellor, and honorary profeſſor in the univerſity. In this ſituation he cultivated an extenſive correſpondence with the learned throughout Europe, and was honoured with the friendſhip and eſteem of many perſons of rank. He died at Heidelberg in 1660, at the age of 52. This diſtinguiſhed profeſſor rendered himſelf eminent by his ſervices to claſſical literature. He illuſtrated with learned commentaries, tables, &c. the Latin hiſtorians Florus, Q. Curtius, and Tacitus; and compoſed ſupplements for the loſt books of Livy, which are much eſteemed. He alſo publiſhed many Latin orations, poems, and diſſertations. He was aſſiſted in ſome of his claſſical labours by his brother, Melchior Freinſheim.

FREIRE DE ANDRA'DA (Hyacinth), a Portugueſe writer, born about 1597, of a noble family at Beja. He was brought up at the univerſity of Coimbra, where he took the degree of doctor in canon law, and applied to the ſtudy of theology. He likewiſe took a part in political diſcuſſion, and wrote a treatiſe in Spaniſh, entitled *Portugal Reſtaurado*, in which he maintained the right of the houſe of Braganza to the crown. After receiving prieſt's orders, he went to the court of Spain, where he was well received by the firſt miniſter of Philip IV. who conſulted him upon affairs of importance, and conferred upon him a valuable abbacy in the province of Beira. His patriotic freedom of ſpeech, however, deſtroyed his proſpects of advancement, and brought him into perſonal danger. Being interrogated reſpecting the pretenſions of the king of Spain to the crown of Portugal, he replied, "That they were only thoſe of force and uſurpation;" and having compoſed a work in favour of the title of Ca-

tharine ducheſs of Braganza, orders were iſſued for his arreſtation. He had time, however, to eſcape to his abbey, where he remained till the acceſſion of John IV. to the crown of Portugal in 1640. Upon that event he repaired to Liſbon, where he was received with diſtinction by the king and the prince of Brazil, and was offered the poſt of preceptor to the prince Alfonſo, which he declined. Upon the death of his father he returned to Liſbon to ſettle his family affairs, and continued there, devoted to his ſtudies, till his death, in 1657. Freire de Andrada was an elegant writer in his own language; and his Life of Don John de Caſtro is reckoned one of the beſt compoſed works in the Portugueſe language. It has been tranſlated into Latin. He alſo wrote ſome poems, which are contained in a collection printed at Liſbon in 1717, under the title of *Fenix Renacida*. He was of a frank and generous character, pleaſant in converſation, liberal to the poor, and attached to his friends, whom he defended in their abſence, though he would freely reproach them with their faults face to face.

FREI'SACH, a town of Germany, in the duchy of Carinthia, belonging to the archbiſhopric of Salzburg, ſituated on the Metnitz. It has a caſtle, college, a convent of Dominicans, and a commandery of the Teutonic order: four miles north-north-eaſt of Gurck, and eight north of St. Veit.

FREISCH'BACH, a town of Germany, in the palatinate of the Rhine, taken by the French in 1794: ſix miles eaſt-north-eaſt of Landau.

FRE'JUS, or FREJULS, a town of France, and principal place of a diſtrict, in the department of the Var; formerly a ſeaport, but now at two miles from the ſea. It was flouriſhing as early as the time of Julius Cæſar, being then called *Forum Julii*, and is ſuppoſed to have been founded by a colony from Marſeilles; and many monuments of its ancient grandeur ſtill remain, ſuch as an aqueduct, an amphitheatre, ſtatues, inſcriptions, &c. Before the revolution, it was a ſee of a biſhop, ſuffragan of Aix: ten poſts ſouth-weſt of Nice, and 115 ſouth-ſouth-eaſt of Paris. Lat. 43. 28. N. lon. 24. 24. E. Ferro.

FREIXIE'RA, a town of Portugal, in the province of Entre Duero e Minho: two leagues and a half north-eaſt of Amarante.

FREI'XEL, a town of Portugal, in the province of Tra los Montes: five leagues ſouth of Mirandela.

FRE'MINET (Martin), a French painter, born at Paris in 1567. He was brought up under his father, a painter of little merit, but ſoon diſplayed a genius ſuperior to his education. At the age of twenty-five he viſited Italy, in which country he remained ſixteen years. He was captivated with the ſublime character of Michael Angelo, and with the ſtyle of Parmegiano in the contour of his figures and air of his heads. He was employed in the palace of the duke of Savoy; but returning at length to his own country, he was made firſt painter to Henry IV. who committed to him the decoration of his chapel at Fontainbleau. After the death of that king, he was continued in the ſame employment by Louis XIII. who created him a knight of the order of St. Michael. He is reckoned to have excelled in compoſition, and to have been well acquainted with anatomy, perſpective, and architecture. But he delighted in ſhewing his ſkill by giving extraordinary outlines to his figures, by marking the muſcles and ſinews with great diſtinctneſs, and putting them into violent and conſtrained motions. Hence his ſtyle of painting is hard, and there is little of beauty or ſoftneſs in his works. He died in 1619, while finiſhing the chapel of Fontainbleau. The ceiling of this edifice is the moſt conſiderable of his works: it is divided into ſeveral compartments, forming different pictures on ſacred ſubjects. Nine valuable prints of ſcripture pieces have been engraved from this maſter.

FREMONA, a town of Abyſſinia, in the kingdom of Tigré, where the Portugueſe miſſionaries took up their firſt reſidence; 135 miles from the iſland of Maſſua.

FREMO'NT D'ABLANCOURT (Nicholas de), nephew of the celebrated Perrot d'Ablancourt. He was carefully educated under his uncle, and early diſtinguiſhed himſelf by his knowledge and talents. Through the recommendation of M. de Turenne he was appointed, in 1663, envoy from France to the court of Portugal; and in 1675, official reſident at Straſburg. After the death of his patron he returned to France, and ſpent his time in ſtudy and the ſociety of the learned. As he was a ſteady Proteſtant, the revocation of the edict of Nantes cauſed him to quit his country, and he took up his abode in Holland. He was highly eſteemed by the prince and princeſs of Orange, and obtained a penſion from them, with the title of hiſtoriographer. One of his principal correſpondents was the learned Richard Simon, in whoſe letters he is uſually deſignated under the name of *Caraïte*. This eſtimable perſon died in 1693. He added to his uncle's tranſlation of Lucian, the Dialogue between the Letters of the Alphabet, and the Supplement to the True Hiſtory. In 1664 he publiſhed ſome elegant Dialogues. He defended his uncle's tranſlation of Tacitus againſt the ſtrictures of Amelot de la Houſſaye in a publication in 1686, written with an acrimony not expected from one of his mildneſs in converſation. He publiſhed a French Catechiſm; and after his death appeared his Memoirs concerning the Hiſtory of Portugal, from the Treaty of the Pyrenées to 1668, 12mo. Paris, 1701.

FRE'MUND, [ƿeoh, free, and Mund, peace, Sax.] A proper name.

FREN, *ſ.* A ſtranger. An old word wholly forgotten here; but retained in Scotland. *Beattie.*

But now from me his madding mind is ſtart,
And wooes the widow's daughter of the glen;
And now fair Roſalind hath bred his ſmart,
So now his friend is changed for a *fren*. *Spenſer.*

FRENAY'-LE-VICOMTE, a town of France, and principal place of a diſtrict, in the department of the Sarte: three leagues ſouth-ſouth-weſt of Alençon, and ſix north le Mans. Lat. 48. 17. N. lon. 17. 41. E. Ferro.

FRENAY'E (La), a town of France, in the department of the Sarte, and chief place of a canton, in the diſtrict of Mamers: two leagues eaſt of Alençon.

FRENCH, *adj.* Any thing produced in, or belonging to France: the French language, French cuſtoms, polity, &c. See the article FRANCE.

FRENCH, a river of North America, in Maſſachuſetts, has its ſource in a ſmall pond, on the borders of Leiceſter and Spenſer, in Worceſter county, and runs through Oxford and joins Quinebauge river, in Thompſon townſhip, in Connecticut. It derives its name from the French Proteſtants, who obtained a ſettlement in the town of Oxford, after the revocation of the edict of Nantz, in 1685.

FRENCH AMERICA. The only part of the continent which the French nation now poſſeſs, is the diſtrict or province of Cayenne, and the iſland of the ſame name on its coaſt, in South America. In the Weſt Indies the French claim the following iſlands, though ſeveral of them are taken by the Engliſh; to which the reader is referred for a particular deſcription: St. Domingo, or Hiſpaniola, now called, by Deſſalines, Hayti; Gaudaloupe, St. Lucia, Tobago, St. Bartholomew, Deſeada, and Marigalante. The French were among the laſt nations who made ſettlements in the Weſt Indies; but they made ample amends by the vigour with which they purſued them, and by that chain of judicious meaſures which they uſed in drawing from them every advantage that the nature of the climate would yield, and in contending againſt the difficulties which it threw in their way.

FRENCH BEAN. See PHASEOLUS.

FRENCH BROAD, a navigable river of North America, in Tenneſſee, which riſes on the ſouth-eaſt ſide of the Great Iron and Bald mountains, in North Carolina. It is formed by two main branches, which receive ſeveral

ſtreams

ſtreams in their courſe. Theſe unite about fifty-eight miles from the ſource of the Nolachucky, the eaſtern branch; thence it flows north-weſterly about twenty-five miles, and joins the Holſton eleven miles above Knoxville, and is from 400 to 500 yards wide. The navigation of this branch is much interrupted by rocks, as is alſo the Tenneſſee branch, which joins the main river fifty miles below this. A large, clear, medicinal ſpring, ſaid to be efficacious in curing many diſeaſes, has been lately diſcovered on the waters of this river, about thirty miles in a direct line from its mouth. The water is ſo hot, that a patient at firſt going into it can ſcarcely bear it. Nearer the mouth of the river, a valuable lead-mine has been diſcovered.

FRENCH CHALK, *ſ.* An indurated clay, extremely denſe, of a ſmooth gloſſy ſurface, ſoft and unctuous to the touch; of a greyiſh white colour, variegated with a duſky green. See MINERALOGY.

FRENCH CREEK, a north-weſtern water of Alleghany river in North America, into which it falls along the north ſide of Fort Franklin, eighty miles north by eaſt of Pittſburg. It affords the neareſt paſſage to lake Erie. It is navigable with ſmall boats to Le Beuf, by a very crooked channel; the portage thence to Preſque Iſle, from an adjoining peninſula, is fifteen miles. This is the uſual route from Quebec to Ohio.

FRENCH HONEYSUCKLE, *ſ.* in botany. See HEDYSARUM CORONARIUM.

FRENCH-HORN, *ſ.* [a French improvement on the horn.] An inſtrument of wind-muſic made of metal.—A flute, a violin, a hautboy, and a *French-horn*, may all ſound the ſame tone, and be eaſily diſtinguiſhable. *Reid's Inquiry.*

FRENCH LICK, in Tenneſſee, North America, is a large ſalt ſpring, near which the town of Naſhville now ſtands.

FRENCH MARYGOLD, *ſ.* in botany. See TAGETES.

FRENCH RIVER, a river of Upper Canada, which runs from lake Herou to lake Nippiſſing.

FRENCH TOWN, a town of the American States in Cecil county, Maryland, on the eaſt ſide of Elk river, a mile ſouth of Elkton, from which it is ſeparated by Elk Creek, ſix miles below Elk-ferry. This town was laid out at the expence of ſeveral philanthropic perſons in Pennſylvania, as a place of retreat for the unfortunate French emigrants who fled to America.

To FRENCH'IFY, *v. a.* [from *French.*] To infect with the manner of France:

Has he familiarly diſſik'd
Your yellow ſtarch, or ſaid your doublet
Was not exactly *Frenchified.* *Shakeſpeare.*

FRENCH'MAN, *ſ.* a native of France.

FRENCHMAN's BAY, a town of the American States, on the ſea-coaſt of Lincoln county, Maine, and is formed by Mount Deſert iſland on the weſtward, and the peninſula of Goldſborough townſhip on the eaſtward. Round Mount Deſert iſland it has an inland circular communication with Blue Hill bay.

FRENCHMAN's BAY, a bay on the ſouth coaſt of the iſland of Jamaica, between Great Pedro bay and Starvegut bay.

FRENCKE, a river of Germany, in the circle of the Upper Rhine, which runs into the Ergetz, near Lichſtall, in the biſhopric of Bale.

FREND'WITE, [from Sax. ꝑneond, *amicus*, and ꝑiꝛe, *multa.*] A mulct or fine formerly exacted of him who harboured his outlawed friend. *Blount.*

FRENE, a town of France, in the department of the Upper Marne, and chief place of a canton, in the diſtrict of Bourbonne les Bains: four miles eaſt-ſouth-eaſt of Bourbonne.

FRENET'IC, *adj.* [*frenetique*, Fr. φρενητικος, Gr. generally therefore written *phrenetic.*] Mad; diſtracted:

He himſelf impotent,
By mean of his *frenetic* malady. *Daniel.*

FRENEU'SE-LAKE, a large lake of North America, through which St. John's river in New-Brunſwick paſſes.

FREN'ICLE DE BESSY (Bernard), a celebrated French mathematician in the 17th century, the intimate companion of Des Cartes, Fermat, Merſenne, and of other learned mathematicians who were contemporaries with them at Paris. He particularly excelled in the ſcience of arithmetic; and Des Cartes frequently expreſſed his ſurpriſe at his expertneſs in ſolving the moſt difficult problems without the aid of algebra. He was choſen a member of the French Academy of Sciences in 1666, and died in 1675. In the fifth volume of the Ancient Memoirs of the Academy, ſeveral of his pieces are inſerted: among which are, 1. A Method of reſolving Problems by Excluſions. 2. A Treatiſe of right-angled Triangles in Numbers. 3. A Short Treatiſe on Combinations. 4. Tables of Magic Squares, &c. In the *Commercium Epiſtolicum de Quæſtionibus quibuſdam Mathematicis*, printed at Oxford in 1658, the reader may find ſeveral of his letters written in the Latin language.

FRENI'GERENT, *adj.* [from the Lat. *frænum*, a bridle, and *gero*, to carry.] Guiding the bridle. *Cole. Not much uſed.*

FRENOY-LE-GRAND, a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Compeigne: ſeven miles ſouth-weſt of Compeigne.

FRENS'WEGEN, a town of Germany, in the circle of Weſtphalia, and county of Bentheim: three miles north-north-weſt of Northorn.

FRENTA'NI, in ancient geography, a people of Italy, near Apulia, who received their name from the river *Frento*, now *Fortore*, which runs through the eaſtern part of their country, and falls into the Adriatic oppoſite the iſlands of Diomede. *Livy.*

FREN'ZY *ſ.* [φρενιτις, Gr. *phrenitis*, Lat. whence *phrenetiſy*, *phrenetſy*, *phrenzy*, or *frenzy.*] Madneſs; diſtraction of mind; alienation of underſtanding; any violent paſſion approaching to madneſs.—Why ſuch a diſpoſition of the body induceth ſleep, another diſturbs all the operations of the ſoul, and occaſions a lethargy or *frenzy*: this knowledge exceeds our narrow faculties. *Bent.*

True fortitude is ſeen in great exploits,
That juſtice warrants, and that wiſdom guides:
All elſe is touring *frenzy*: and diſtraction. *Addiſon.*

FREN'ZY, *adj.* [from the ſubſtantive.] Diſtracted; mad. *Not much uſed.*

FRE'QUENCE, *ſ.* [*frequence*, Fr. *frequentia*, Lat.] Crowd; concourſe; aſſembly:

He, in full *frequence* bright
Of angels, thus to Gabriel ſmiling ſpake. *Milton.*

FRE'QUENCY, *ſ.* [*frequentia*, Lat.] Common occurrence; the condition of being often ſeen or done.—Should a miracle be indulged to one, others would think themſelves equally entitled to it; and if indulged to many, it would no longer have the effect of a miracle: its force and influence would be loſt by the *frequency* of it. *Atterbury.* Concourſe; full aſſembly:

Thou cam'ſt ere while into this ſenate: who,
Of ſuch a *frequency*, ſo many friends
And kindred thou haſt here, ſaluted thee? *Ben Johnſon.*

FRE'QUENT, *adj.* [*frequent*, Fr. *frequens*, Lat.] Often done; often ſeen; often occurring:

An ancient and imperial city falls;
The ſtreets are fill'd with *frequent* funerals. *Dryden.*

Uſed often to practice any thing.—Every man thinks he may pretend to any employment, provided he has been loud and *frequent* in declaring himſelf hearty for the government. *Swift.*—Full of concourſe.—*Frequent* and full. *Milton.*

To FREQUE'NT, *v. a.* [*frequento*, Lat. *frequenter*, Fr.] To viſit often; to be much in any place; to reſort often to.

10.—There were ſynagogues for men to reſort unto: our Saviour himſelf and the apoſtles *frequented* them. *Hooker.*

To ſerve my friends, the ſenate I *frequent*;
And there what I before digeſted, vent. *Denham.*

FREQUENT'ABLE, *adj.* Converſable; acceſſible. *A word not uſed, though not inelegant.*—While youth laſted in him, the exerciſes of that age and his humour not yet fully diſcovered, made him ſomewhat the more *frequentable* and leſs dangerous. *Sidney.*

FREQUENTA'TION, *ſ.* [*frequentatio*, Lat.] Habit of frequenting.—The *frequentation* of courts checks this petulancy of manner. *Cheſterfield.*

FREQUENT'ATIVE, *adj.* [*frequentatif*, Fr. *frequentativus*, Lat.] A grammatical term applied to verbs ſignifying the frequent repetition of an action.

FREQUENT'ER, *ſ.* One who often reſorts to any place.—Perſons under bad imputations are no great *frequenters* of churches. *Swift.*

FREQUENT'ING, *ſ.* [from the participle.] The act of viſiting frequently.

FRE'QUENTLY, *adv.* [*frequenter*, Lat.] Often; commonly; not rarely; not ſeldom; a conſiderable number of times; manifold times.—I could not without much grief obſerve how *frequently* both gentlemen and ladies are at a loſs for queſtions and anſwers. *Swift.*

FRE'QUENTNESS, *ſ.* Frequency.

FRE'REN, or VREREN, a town of Germany, in the circle of Weſtphalia, and county of Lingen: ſix miles ſouth-eaſt of Lingen.

FRERET' (Nicholas), born at Paris in 1688, was the ſon of a ſolicitor in parliament. He was brought up to the bar, and through complaiſance to his family took an advocate's gown, without any inclination to the profeſſion. His favourite ſtudies were hiſtory and chronology, which he purſued with ſo much ardour and ſucceſs, that he obtained admiſſion into the Academy of Inſcriptions at the age of twenty-five. He ſignaliſed his entrance by a Diſcourſe on the Origin of the French, a learned but bold performance; which, in conjunction with ſome imprudent language on the quarrel between the princes of the blood and the regent, cauſed him to be impriſoned in the Baſtile. During his confinement, almoſt the only author given him to read was Bayle. He peruſed him ſo often, that he had him almoſt by heart; and the ſceptical principles of this philoſopher impreſſed him ſo deeply, that they were never obliterated. Their influence appeared in two of his works, the Letters from Thraſybulus to Leucippus, and the Examination of the Apologiſts of Chriſtianity; the latter a poſthumous piece, printed in 1767. After his liberation he addicted himſelf entirely to his former ſtudies. The fruits of theſe were, many Memoirs, inſerted in different volumes of the collection of papers by the Academy of Inſcriptions, and replete with profound erudition and curious diſcuſſion: the preface, notes, and a part of the tranſlation, of the Spaniſh romance entitled Tirante the White: ſeveral light pieces, on ſubjects which ſerved him as a relaxation from ſeverer taſks. He wrote with order and perſpicuity, but was fond of maintaining ſingular opinions. He died in 1749.

FRERON' (Elie-Catherine), born at Quimper in 1719. He entered young among the Jeſuits, and his literary taſte was cultivated by the fathers Brumoi and Bougeant. Upon ſome diſguſt he quitted the Jeſuits in 1739, and became a coadjutor of the abbé Des Fontaines in his periodical publications. He then publiſhed a critical journal of his own, under the title of *Lettres de Mad. la Compteſſe*, 1746, 12mo. in which he treated with freedom the literary reputation of ſome authors, who had the credit to procure the ſuppreſſion of his work. It re-appeared, however, in 1749, under the title of *Lettres ſur quelques Ecrits de ce Tems*, and was well received by the public, who were amuſed by the livelineſs and ſeverity of its ſtrictures. King Staniſlaus gave his protection to the author, and took pains to free the work from the interruptions it occaſionally met with. After publiſhing thirteen volumes of this journal, he dropt it in 1754 for a new one, entitled *L'Année Littéraire*; and of this he continued to iſſue eight volumes yearly as long as he lived. The ſpirit of his journal was that of attachment to ancient principles, and of zeal againſt the new philoſophy, as well as againſt innovation and neologiſm of all kinds. This was ſupported by a conſiderable fund of wit and gaiety, and general good taſte, when his judgment was not warped by prejudice. His own ſtyle was pure, but not free from college pedantry. He had the misfortune of uniting againſt him ſome of the principal writers of the time, of whom the moſt formidable was Voltaire. Freron had long carried on a warfare againſt this diſtinguiſhed author without provoking his notice. At length, on the occaſion of a ſevere criticiſm upon his comedy of *La Femme qui a Raiſon*, the wrath of the dramatiſt broke forth. He brought Freron upon the ſtage in his *Ecoſſaiſe*; and never omitted any opportunity of throwing odium and contempt upon him and his works. It is ſaid, however, that Voltaire acknowledged him to poſſeſs taſte, and extenſive acquaintance with French literature. Beſides his periodical works, he publiſhed *Opuſcules*, three volumes 12mo. conſiſting of pieces in proſe and verſe, the latter of which are judged to be compoſitions of labour rather than of genius. He alſo wrote *Les vrais Plaiſirs, ou les Amours de Venus et Adonis*, tranſlated from the Italian of Marino; and he began a tranſlation of Lucretius. He died in 1776.

FRES'CA, *ſ.* in old records, freſh water.

FRESCAD'ES, *ſ.* from the Italian, cool walks, ſhady places. *Scott.*

FRESCA'TI, or FRASCATI, a ſmall town of Italy, ſituated on the brow of a hill, about twelve miles to the eaſtward of Rome. It derives its name from the coolneſs of the air, and freſh verdure of the fields around. It is built on the ruins of the ancient Tuſculum; and the Tuſculan villa where Cicero wrote his famous queſtions is at a place now called *Grotta Ferrata*, about two miles diſtant. There is a fine proſpect from this town into the neighbouring country, which abounds with the ſeats and chateaus of the nobility. It is the ſee of a biſhop, who is one of the ſix ſenior cardinals.

FRESCLO'NE, a town of Italy, in the kingdom of Naples, and province of Moliſe: two miles ſouth-weſt of Moliſe.

FRES'CO, *ſ.* [Italian.] Coolneſs; ſhade; duſkineſs, like that of the evening or morning:

Helliſh ſprites
Love more the *freſco* of the nights. *Prior.*

A picture uſually drawn upon the ſides of rooms, upon lofty walls, or in alcoves, &c.

Here thy well-ſtudy'd marbles fix our eye;
A fading *freſco* here demands a ſigh. *Pope.*

Painting in FRESCO is performed with water-colours on freſh plaſter, or on a wall laid with mortar not quite dry. This mode of painting has a great advantage by incorporating with the mortar, and drying along with it, by which means it becomes very durable. *Vitruvius*, lib. vii. cap. 4. calls it *udo tectorio*. The art is very ancient, having been practiced in the early ages of Greece and Rome. It is chiefly performed on walls newly ſtuccoed, plaſtered with lime and ſand; but the ſtucco is only to be laid as the painting goes on; no more being to be done at once than the painter can diſpatch in a day, while it dries. Before he begins to paint, a cartoon or deſign is uſually made on paper, to be calked, and transferred to the wall, about half an hour after the plaſter is applied.

FRESH, *adj.* [ꝼꝛeꝛc, Sax. *fraiſche*, Fr.] Cool; not vapid with heat:

I'll cull the fartheſt mead for thy repaſt;
The choiceſt herbs I to thy board will bring,
And draw thy water from the *freſheſt* ſpring. *Prior.*

Not ſalt.—They keep themſelves unmixt with the ſalt water; ſo that, a very great way within the ſea, men may

may take up as *freſh* water as if they were near the land. *Abbot.*—New; not had before:

No borrowed bays his temples did adorn,
But to our crown he did *freſh* jewels bring. *Dryden.*

New; not impaired by time:

That love which firſt was ſet, will firſt decay;
Mine of a *freſher* date will longer ſtay. *Dryden.*

In a ſtate like that of recentneſs:

We will revive thoſe times, and in our memories
Preſerve and ſtill keep *freſh*, like flowers in waters.
Denham.

Thou ſun, ſaid I, fair light!
And thou enlighten'd earth, ſo *freſh* and gay! *Milton.*

Recent; newly come:

Amidſt the ſpirits Palinurus preſs'd;
Yet *freſh* from life, a new admitted gueſt. *Dryden.*

Repaired from any loſs or diminution:

Nor lies ſhe long; but as her fates ordain,
Springs up to life; and *freſh* to ſecond pain;
Is ſav'd to-day, to-morrow to be ſlain. *Dryden.*

Florid; vigorous; cheerful; unfaded; unimpaired:

Two ſwains
Freſh as the morn, and as the ſeaſon fair. *Pope.*

Healthy in countenance; ruddy.—It is no rare obſervation in England to ſee a *freſh*-coloured luſty young man yoked to a conſumptive female, and him ſoon after attending her to her grave. *Harvey.*

Haſt thou beheld a *freſher* gentlewoman,
Such war of white and red within her cheeks? *Shakeſpeare.*

Briſk; ſtrong vigorous.—As a *freſh* gale of wind fills the ſails of a ſhip. *Holder.*—Faſting; oppoſed to eating or drinking. *A low word.* Sweet; oppoſed to ſtale or ſtinking. Unpractiſed.—How green and *freſh* you are in this old world. *Shakeſpeare, K. John.*—In this ſenſe of the word members of the univerſity of Oxford for a ſhort period after their entrance are nick-named *freſhmen. Maſon's Supplement.*

FRESH, *ſ.* Water not ſalt:

He ſhall drink nought but brine; for I'll not ſhew him
Where the quick *freſhes* are. *Shakeſpeare.*

To FRESH, *v. a.* [from the *adjective.*] To refreſh:

But quickly ſhe it overpaſt, ſo ſoone
As ſhe her face had wypt to *freſh* her blood. *Spenſer.*

FRESH DISSEIS'IN, in law, that diſſeiſin which a man might formerly ſeek to defeat of himſelf, and by his own power, without reſorting to the king, or the judicature; as where it was not above fifteen days old, or of ſome other ſhort continuance. *Britton, c.* 5. Of this, *Bracton* writes at large, concluding it to be arbitrary. *Lib.* 4. *c.* 5. See the article DISSEISIN, vol. v. p. 887.

FRESH FORCE, *ſ.* in law, a force newly done in any city, borough, &c. And if a perſon be diſſeiſed of any lands or tenements within ſuch a city, or borough, he who hath a right to the land, by the uſage and cuſtom of the ſaid city, &c. may bring his *aſſiſe*, or *bill of freſh force*, within forty days after the *force* committed; and recover the lands. *F. N. B.* 7. This remedy may alſo be had where any man is deforced of any lands, after the death of his anceſtor, to whom he is heir; or after the death of tenant for life, or in tail, in dower, &c. within forty days after the title accrued; and in a bill of *freſh force*, the plaintiff or demandant ſhall make proteſtation to ſue in the nature of what writ he will, as *aſſiſe* of *mortdanceſtor*, of *novel diſſeiſin, intruſion, &c. New Nat. Br.* 15. The aſſiſe or bill of *freſh force* is ſued out without any writ from the chancery; but after the forty days, there is to be writ out of chancery, directed to the mayor, &c. But this writ is obſolete ſince ejectments have come in uſe for recovering the poſſeſſion of lands, &c.

FRESH SUIT, in law, is ſuch a preſent and earneſt following of an offender, where a robbery is committed, as never ceaſes from the time of the offence done or diſcovered, until he be apprehended. And the benefit of ſuch purſuit of a felon is, that the party purſuing ſhall have his goods reſtored to him; which otherwiſe are forfeited to the king. *Staundf. Pl. Cor. lib.* 3. *c.* 10. When an offender is thus apprehended, and indicted, upon which he is convicted, the party robbed ſhall have reſtitution of his goods; and though the party robbed do not apprehend the thief preſently, but that it be ſome time after the robbery, if the party did what in him lay to take the offender; and notwithſtanding in ſuch caſe he happen to be apprehended by ſome other perſon, it ſhall be adjudged *freſh purſuit. Terms de Ley.* It has been anciently holden, that to make a *freſh ſuit*, the party ought to make *hue and cry* with all convenient ſpeed, and to have taken the offender himſelf, &c. But at this day, if the party hath been guilty of no groſs negligence, but hath uſed all reaſonable care in inquiring after, purſuing, and apprehending, the felon, he ſhall be allowed to have made ſufficient *freſh ſuit. 2 Hawk. P. C. c.* 23. Alſo it is ſaid, that the judging of *freſh ſuit* is in the diſcretion of the court, though it ought to be found by the jury; and the juſtices may, if they think fit, award reſtitution without making any inquiſition concerning the ſame. *2 Hawk. P. C. c.* 23.

Where a gaoler immediately purſues a felon, or other priſoner, eſcaping from priſon, it is *freſh ſuit*, to excuſe the gaoler: and if a lord follow his *diſtreſs* into another's ground, on its being driven off the premiſes, this is called *freſh ſuit*; ſo where a tenant purſues his cattle, that eſcape or ſtray into another man's lands, &c. *Freſh ſuit* may be either within the *view*, or without; as to which the law makes ſome difference: and it has been ſaid, that *freſh ſuit* may continue for ſeven years. *3 Rep. S. P. C.*

To FRESH'EN, *v. a.* To make freſh:

Preclufive drops let all their moiſture flow
In large effuſion o'er the *freſhen'd* world. *Thomſon.*

To FRESH'EN, *v. n.* To grow freſh:

A *freſhening* breeze the magic power ſupply'd,
While the wing'd veſſel flew along the tide. *Pope.*

FRESH'ES, *ſ.* in ſea-language, denotes the impetuoſity of an ebb-tide, increaſed by heavy rains, and flowing out into the ſea, often diſcolouring it to a conſiderable diſtance, and forming a line that ſeparates the two colours, and which may be diſtinctly perceived for a great length along the coaſt. The word is of common uſe in America, where the inundations ſo called are of great ſervice. They bring down the ſoil to the intervals below, and form a fine mould, producing corn, grain, and herbage, in the moſt luxuriant plenty. They alſo afford another benefit, in regard to many rivers in America, viz. in equalizing the ſurface of the ſtream where rapid falls, or caſcades, obſtruct the navigation; ſo that rafts of timber and other merchandize are floated down to the ſea-ports.

FRESH'ET, *ſ.* A pool of freſh water:

All fiſh from ſea or ſhore,
Freſhet or purling brook, or ſhell or fin. *Milton.*

FRESH'LY, *adv.* Coolly; newly; in the former ſtate renewed:

Then ſhall our names,
Familiar in their mouth as houſhold words,
Be in their flowing cups *freſhly* remember'd. *Shakeſpeare.*

With a healthy look; ruddily.—Looks he as *freſhly* as he did the day he wreſtled. *Shakeſpeare.*

FRESH'NESS, *ſ.* Newneſs; vigour; ſpirit; the contrary to vapidneſs.—Moſt odours ſmell beſt broken or cruſhed; but flowers preſſed or beaten, do loſe the *freſhneſs* and ſweetneſs of their odour. *Bacon.*—Freedom from diminution by time; not ſtaleneſs.—For the conſtant *freſhneſs* of it, it is ſuch a pleaſure as can never cloy or overwork the mind; for ſurely no man was ever weary of

thinking that he had done well or virtuouſly. *South.*—Freedom from fatigue; newneſs of ſtrength.—The Scots had the advantage both for number and *freſhneſs* of men. *Hayward.*—Coolneſs:

She laid her down to reſt,
And to the wind expos'd her glowing breaſt,
To take the *freſhneſs* of the morning air. *Addiſon.*

Ruddineſs; colour of health:

The ſecret venom, circling in her veins,
Works through her ſkin, and burſts in bloating ſtains;
Her cheeks their *freſhneſs* loſe and wonted grace,
And an unuſual paleneſs ſpreads her face. *Granville.*

FRESH'WATER, [a compound word of *freſh* and *water*, uſed as an adjective.] Raw; unſkilled; unacquainted. A low term borrowed from the ſailors, who ſtigmatiſe thoſe who come firſt to ſea as *freſhwater* men, or novices.—Thoſe nobility, as *freſhwater* ſoldiers which had never ſeen but ſome light ſkirmiſhes, in their vain bravery made light account of the Turks. *Knolles.*—When applied to pure water, it means that which riſes inland, and forms rivers; or that which is taken from the pump or well, and not tinctured with gaſeous or ſaline particles. It is commonly oppoſed to *ſalt*-water.

FRESH'WATER, a river of Wales, in the county of Pembroke, which runs into the ſea: ſix miles ſouth-eaſt from Pembroke Haven, forming a bay at its mouth, to which it gives name.

FRESH'WATER BAY, a bay in the Straits of Magellan. Lat. 53. 27. N. lon. 72. 13. W. Greenwich.

FRESH'WATER BAY, a bay on the ſouth-weſt coaſt of the Iſle of Wight. Lat. 50. 37. N. lon. 1. 31. W. Greenwich.

FRESH'WATER BAY, a bay on the eaſt coaſt of Newfoundland. Lat. 49. 10. N. lon. 53. 30. W. Greenwich.

FRESHWATER SOL'DIER, in botany. See STRATIOTES.

FRESNE, a town of France, in the department of the Meuſe, and chief place of a canton, in the diſtrict of Verdun: three leagues and a half ſouth-eaſt of Verdun, and four north-north-eaſt of St. Mihiel.

FRESNE ST. MAMETZ, a town of France, in the department of the Upper Saône, and chief place of a canton, in the diſtrict of Gray: four leagues north-eaſt of Gray, and four ſouth-weſt of Veſoul.

FRESNEAU', a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Chamont: ten miles ſouth of Beauvais.

FRESNES, a town of France, in the department of the Straits of Calais, and chief place of a canton, in the diſtrict of Arras: two leagues and a half north-eaſt of Arras.

FRESNES, a town of France, in the department of the Calvados: twelve miles ſouth of Vire.

FRESNIL'LO, a town of Mexico, in the province of Zacatecas: forty miles north of Zacatecas.

FRES'NO, a town of Spain, in Old Caſtile: five miles ſouth of Borgo d'Oſma.

FRES'NO, a town of Spain, in Andaluſia: twenty miles north of Cordova.

FRESNOY', a town of France, in the department of the Oiſe: ſeven miles ſouth-weſt of Compiegne.

FRESNOY' (Charles-Alphonſe du), ſon of an apothecary in Paris, where he was born in 1611. Deſtined by his father to the medical profeſſion, he was carefully educated for that purpoſe, and diſtinguiſhed himſelf at college by his progreſs in literature. But the prizes which he obtained for his poetical exerciſes, nouriſhed his paſſion for that art, and inſpired him with diſguſt to the ſtudy of phyſic. To a love for poetry he joined that for its ſiſter art, painting; and notwithſtanding all the rigours of parental authority, he perſevered in his purpoſe of following the latter as his profeſſion. He practiſed for two years in the ſchools of Perrier and Vouet, and at the age of twenty-one departed for Italy. At Rome he employed himſelf in drawing ruins and pieces of architecture, amidſt the greateſt pecuniary difficulties, deſtitute as he was of all ſupport from his irritated relations. He had paſſed two years in this manner, when his youthful companion and friend Mignard arrived in that capital. Every thing was ſoon in common between them: they lodged, worked, and ſtudied, together, and obtained the name of *the inſeparables*. They copied for the cardinal of Lyons all the fine pictures of the Farneſe palace; but the principal objects of their ſtudy were the works of Raphael, and the relics of antiquity. Of the two friends, Mignard had the readieſt hand, but Du Freſnoy poſſeſſed the moſt learning, and the profoundeſt knowledge in the theory of his art. He continued to pay his devoirs to the muſes; and as he painted, he wrote down his obſervations, which were the ground-work of the poem on painting, by which he has acquired his chief celebrity. Though he wrought ſlowly, and his pictures are few in number, he is thought to have approached more nearly than almoſt any artiſt to Titian, whom he imitated in his colouring, as he did the Caracci in deſign. After paſſing ſome time at Venice, where Mignard joined him, he returned to Paris in 1656. He took up his abode with a friend, and painted a few altar-pieces, landſcapes, and cabinet pictures. On the return of Mignard, Du Freſnoy rejoined his old friend, and continued with him till his laſt illneſs. He did not ceaſe to beſtow additional touches upon his poem, which he forbore to publiſh till he had a French verſion to appear along with it. This was at length undertaken by De Piles, and Du Freſnoy had begun a commentary upon it, when he was carried off by a paralytic ſtroke, at the age of fifty-four, in 1665. His poem *De Arte Graphica*, appeared three years afterwards. His tranſlator, Maſon, is ſo little its encomiaſt as to ſay, "Nobody, I ſhould ſuppoſe, ever read Freſnoy to admire, or even criticiſe, his verſification, but either to be inſtructed by him as a painter, or improved as a virtuoſo." It has nevertheleſs kept a reſpectable place among modern Latin poems; and beſides the French verſion of De Piles, which was well received, it has been thought worthy of tranſlation into Italian and Engliſh; in the latter language, firſt by Dryden, and lately, with much more correctneſs, by Maſon, who has ſubjoined ſome valuable notes.

FRES'QUEL, a river of France, which runs into the Aude, near Carcaſſonne.

FRESSELI'NES, a town of France, in the department of the Creuſe, and chief place of a canton, in the diſtrict of La Souterraine, on the Creuſe: five leagues north-north-weſt of Gueret.

FRESSENVIL'LE, a town of France, in the department of the Somme: ten miles weſt of Abbeville.

FRESSIN', a town of France, in the department of the Straits of Calais, and chief place of a canton, in the diſtrict of Montreuil: one league and a half north of Heſdin.

FRES'TA, a town of Sweden, in the province of Upland: twenty-one miles ſouth-eaſt of Upſal.

FRES'WICK WATER, a ſmall river of Scotland, which runs into the ſea, near Wick-town, in the county of Caithneſs.

FRET, *ſ.* [Of this word the etymology is very doubtful: ſome derive it from ϸnetan, to eat; others from ϸnetϸan, to adorn; ſome from φείττω; *Skinner* more probably from *fremo*, or the French *fretiller*: perhaps it comes immediately from the Latin *fretum*.] A frith; or ſtrait of the ſea; where the water by confinement is always rough.—Euripus generally ſignifieth any ſtrait, *fret*, or channel of the ſea, running between two ſhores. *Brown.*—Any agitation of liquors by fermentation; confinement; or other cauſe.—The blood in a fever, if well governed, like wine upon the *fret*, diſchargeth itſelf of heterogeneous mixtures. *Derham.*—That ſtop of the muſical inſtrument which cauſes or regulates the vibrations of the ſtring.—It requireth good winding of a ſtring before it will

will make any note; and, in the tops of lutes, the higher they go, the leſs diſtance is between the *frets*. *Bacon.*

The harp
Had work, and reſted not: the ſolemn pipe
And dulcimer, all organs of ſweet ſtop,
All ſounds on *fret* by ſtring or golden wire,
Temper'd ſoft tunings, intermix'd with voice
Choral or uniſon. *Milton.*

Work riſing in protuberances.—The *frets* of houſes, and all equal figures, pleaſe; whereas unequal figures are but deformities. *Bacon.*—We take delight in a proſpect well laid out, and diverſified with fields and meadows, woods and rivers, in the curious *fret*-works of rocks and grottos. *Spectator.*—Agitation of the mind; commotion of temper; paſſion:

Calmneſs is great advantage: he that lets
Another chafe, may warm him at his fire,
Mark all his wand'rings, and enjoy his *frets*
As cunning fencers ſuffer heat to tire. *Herbert.*

To FRET, *v. a.* To agitate violently by external impulſe or action:

You may as well forbid the mountain pines
To wag their high tops, and to make a noiſe
When they are *fretted* with the guſts of heav'n. *Shakeſpeare.*

To wear away by rubbing.—In the banks of rivers, with the waſhing of the water, there were divers times *fretted* out big pieces of gold. *Abbot.*—To hurt by attrition:

Antony
Is valiant and dejected; and, by ſtarts,
His *fretted* fortunes gave him hope and fear
Of what he has and has not. *Shakeſpeare.*

To corrode; to eat away.—It is *fret* inward, whether it be bare within or without. *Lev.* xiii. 55.

The painful huſband, plowing up his ground,
Shall find all *fret* with ruſt, both pikes and ſhields,
And empty helms under his harrow found. *Hakewill.*

To form into raiſed work:

Nor did there want
Cornice or freeze, with boſſy ſculptures grav'n;
The roof was *fretted* gold. *Milton.*

To variegate; to diverſify:

Yon grey lines,
That *fret* the clouds, are meſſengers of day. *Shakeſpeare.*

To make angry; to vex.—Becauſe thou haſt *fretted* me in all theſe things, behold I will recompenſe thy way upon thine head. *Ezek.* xvi. 43.—Injuries from friends *fret* and gall more, and the memory of them is not ſo eaſily obliterated. *Arbuthnot.*

To FRET, *v. n.* To be in commotion; to be agitated:

Th' adjoining brook, that purls along
The vocal grove, now *fretting* o'er a rock,
Now ſcarcely moving through a ready pool. *Thomſon.*

To be worn away; to be corroded.—Take a piece of glovers' leather that is very thin, and put your gold therein, with ſal armoniac, binding it cloſe, and then hang it up: the ſal armoniac will *fret* away, and the gold remain behind. *Peacham.*—To make way by attrition or corroſion.—It inflamed and ſwelled very much; many wheals aroſe, and *fretted* one into another with great excoriation. *Wiſeman.*—To be angry; to be peeviſh; to vex himſelf.—His heart *fretteth* againſt the Lord. *Prov.* xix. 3.

Helpleſs, what may it boot
To *fret* for anger, or for grief to moan! *Spenſer.*

Be lion-mettled, proud, and take no care
Who chafes, who *frets*, or where conſpirers are. *Shakeſp.*

FRET'EVAL, a town of France, in the department of the Loir and Cher: two leagues north-eaſt of Vendome, and ſix north of Blois.

FRET'FUL, *adj.* Angry; peeviſh; in a ſtate of vexation.—They are extremely *fretful* and peeviſh, never well at reſt; but always calling for this or that, or changing their poſture of lying or ſitting. *Harvey.*

Thy knotty and combined locks to part,
And each particular hair to ſtand on end,
Like quills upon the *fretful* porcupine. *Shakeſpeare.*

FRET'FULLY, *adv.* Peeviſhly.

FRET'FULNESS, *ſ.* Paſſion; peeviſhneſs; a diſeaſe or diſturbance of the mind. It is not eaſy to imagine, how a temper ſo abhorrent to all ſociability, can inſinuate itſelf into the heart of man; but life is pregnant with examples of it. Perhaps, where it does not proceed from a ſullen ſelfiſhneſs, from an unſympathiſing ſpirit; it may generally owe its birth and growth to an exceſs of care and anxiety; in ſome inſtances, to too delicate and faſtidious feelings; and, what may ſeem ſtrange, in a few, to even an exceſs of tenderneſs and love. An undue attachment to any one object ſo weds the heart to this ſingle object, ſo magnifies the importance of it, ſo inflames, and gives ſuch a corroding anxiety to, our hopes, that we live for no other object; we loſe the reliſh for the thouſand pleaſantries of life; we fear an enemy in every thing around us, in the ordinary occurrences of life; the cheerful tone of the mind is gone; and, with all the deſire of joy and happineſs, joy and happineſs hide themſelves from us, as if they fled from our preſence. An over-anxious attachment to children has robbed many a parent of all the affections of their children; and many a one has driven away a friend by an over-nice delicacy and jealous attention to the punctilios of friendſhip. All the benevolent charities of life love to breathe a free, unreſtrained, and pleaſant, air; their natural food is good-humour and cheerfulneſs, which the peeviſh, the fretful, and diſcontented, man has not to give. As the diſeaſe ariſes from ſuffering the affections to be narrowed and contracted to one or a few objects, ſo there is no cure to be expected but from the enlargement of the ſoul; we muſt ſet limits to the attachment which has monopoliſed us, by counteracting its influence, by throwing open the heart anew to the ten thouſand agreeable objects with which God has been pleaſed to enrich his world. We muſt lay ourſelves out to find the agreeable and the good in many ways, as well as one; and by indulging to the diverſified charities, bring back good temper and cheerfulneſs to the mind. This cure is indeed hard to be effected, ſuch is the ſullen obſtinacy of the diſeaſe; but it is poſſible to him who will attempt it; while the repreſentation of the ill is at leaſt of uſe to thoſe, whom it has not invaded. It ſhews the neceſſity of not ſuffering our hearts to be ſtolen away by one uſurping object from all the other allowable good and comfort which the Creator has been pleaſed to ſpread before man. He, who gives way to the unhappy ſpirit of fretfulneſs, will ſoon loſe every friend whom he has acquired in his better days, and never know the happineſs of gaining a new one.

FRETH'UN, a town of France, in the department of the Straits of Calais: one league ſouth of Calais.

FRET'OY (Le), a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Noyon: five miles north-weſt of Noyon.

FRET'TY, *adj.* Adorned with raiſed work.

FREU'DENBERG, a town of Germany, in the circle of Weſtphalia, and principality of Naſſau Siegen: five miles weſt-north-weſt of Siegen.

FREU'DENBERG, a town of Germany, in the circle of Bavaria, and Upper Palatinate: four miles eaſt of Amberg.

FREU'DENBERG, a town of Germany, in the circle of Franconia, and county of Wertheim, on the Main: eight miles north of Wertheim, and twenty-eight north-eaſt of Heidelberg.

FREU'DENSTADT, a town of Germany, in the circle of Swabia, and duchy of Wurtenberg, founded in the year 1600, as an aſylum for the Proteſtants who were perſecuted

fecuted in Germany; it is ſituated in the Black Foreſt, fortified in the modern manner, and defended by a citadel: thirty-ſix miles ſouth-weſt of Stuttgart, and twenty-four ſouth-eaſt of Straſburg. Lat. 48. 23. N. lon. 26. E. Ferro.

FREU'DENTHAL, a town of Sileſia, in the principality of Troppau, celebrated for its breed of horſes, and manufacture of fine linen. It was taken by the Pruſſians in 1741 and 1744, and afterwards reſtored to the houſe of Auſtria: ſeventeen miles weſt of Troppau, and eleven ſouth-weſt of Jagendorf.

FREU'DENTHAL, or BRISTRA, a village of Carniola, with a Carthuſian monaſtry, ſituated near the riſe of the Feiſtritz: five miles north of Cirknitz.

FRE'VENSTEIN, a town of Germany, in the duchy of Stiria: three miles north-eaſt of Windiſch Weiſtritz.

FREVE'NT, a town of France, in the department of the Straits of Calais, and chief place of a canton, in the diſtrict of St. Pol: two leagues and a half ſouth of St. Pol, and ſix weſt of Arras.

FREVIL'LE, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Caudebec: one league and a half north-eaſt of Caudebec.

FREUND'SBERG, a town of Germany, in the county of Tyrol: two miles eaſt of Schwatz.

FREUND'SHEIM, a town of Germany, in the county of Tyrol: twenty-four miles weſt of Innſpruck.

FREX'ENAL. See FREJENAL.

FREY (John-Cecil), a German philoſopher and phyſician, born at Keiſerſtul, a town in the county of Baden, towards the end of the 16th century. He applied himſelf particularly to the ſtudy of philoſophy, and, going to Paris, delivered public lectures at Montague college, in that city. In one of his pieces, Frey boaſts of having been the firſt perſon in Europe who maintained philoſophical theſes in the Greek language, and of having been the means of bringing this mode of diſputation into general eſteem. Afterwards he applied himſelf to the ſtudy of medicine, and was admitted to the degree of doctor in that faculty. He died of the plague at Paris, in 1631. He lived on terms of great intimacy with Baleſdens, who was one of the firſt members of the French academy, and who publiſhed a collection of his friend's philoſophical pieces, entitled *Joanni Cæcilii Frey, Doctoris Medici Pariſienſis Facultatis, necnon Philoſophorum ejuſdem Academiæ Decani, Opera quæ reperiri potuerunt, in unum Corpus collecta*, 8vo. 1645. In 1646, a ſecond collection of the *Opuſcula* of Frey, on philoſophical and medical ſubjects, was publiſhed at Paris, in 8vo.

FREY'A, one of the Saxon idols.

FREY'BERG, a mountain of Swiſſerland, in the canton of Glaris, ſeven miles ſouth of Glaris.

FREY'BERG. See FRIBURG.

FREY'BERG, or FRIEDBERG, a town of Germany, in the circle of Upper Saxony, and margraviate of Meiſſen, and capital of the circle of Erzgeburg, ſituated on a branch of the Muldaw, near ſome mountains which ſeparate the country from Bohemia. It contains ſix churches, 2000 houſes, and 60,000 ſouls. In the environs are mines of copper, tin, lead, and ſilver, which employ a great many hands, and produce about 10,000 rix dollars a-year. The ſoil, though mountainous, is fertile. Here is the general ſepulture of the princes of the electoral houſe of Saxony. It was taken by the Imperial troops in 1632; and in 1762 the Pruſſians here obtained an advantage over the Auſtrians: nineteen miles weſt-ſouth-weſt of Dreſden, and eighteen ſouth-ſouth-weſt of Meiſſen. Lat. 50. 53. N. lon. 31. 1. E. Ferro.

FREY'BORG, or PRIBOR, a town of Moravia, in the circle of Prerau: twenty-eight miles eaſt-north-eaſt of Prerau, and thirty-ſix eaſt of Olmutz.

FREY'BURG. See FRIBURG.

FREY'BURG, a town of Sileſia, in the principality of Schweidnitz, near the river Polſnitz: ſeven miles weſt of Schweidnitz.

FREY'BURG, a town of Germany, in the circle of Upper Saxony, and circle of Thuringia: ſixteen miles ſouth of Halle, and four north-north-weſt of Naumburg.

FREYE AEMTER, a country of Swiſſerland, ſurrounded by the cantons of Zurich, Bern, Lucerne, and Zug, and the county of Baden. It was anciently called the *County of Rori*, or *Wagghenthal*, and belonged to the counts of Habſburg, from whom the Swiſs conquered it, in 1415, and kept it. The inhabitants are Roman Catholics; their chief employment is the cultivation of their fields and vineyards. The country is about ſeven or eight leagues in length, and three or four in breadth. The number of inhabitants is about 20,000.

FREY'ENSTADT, a town in Germany, in the circle of Bavaria, and lordſhip of Breiteneck, ſituated on the Schwarzach: twenty miles ſouth-eaſt of Nuremberg, and thirty-one north-weſt of Ratiſbon. Lat. 49. 9. N. lon. 29. 8. E. Ferro.

FREY'ENSTEIN, a town of Germany, in the circle of Upper Saxony, and Mark of Prignitz: four miles ſouth-eaſt of Meyenburg.

FREY'ENTHURN, a town of Germany, in Middle Carniola, on the Kulp: ſeven miles ſouth of Rudolfſworth.

FREY'ENWALDE, a town of Germany, in the circle of Upper Saxony, and Middle Mark of Brandenburg, on the Oder; the inhabitants carry on a conſiderable trade in fiſh, corn, beer, linen, medicinal waters, and alum: thirty-two miles north-eaſt of Berlin, and twenty-four north-weſt of Cuſtrin.

FREY'HAN, a town of Sileſia, in the principality of Oels: ſix miles north-north-eaſt of Militſch.

FREY'HEIL, a town of Bohemia, in the circle of Konigingratz; in the neighbourhood are ſome warm baths: ſix miles north-weſt of Trautenau.

FREY'HOFF, a town of Germany, in the duchy of Carniola, ſituated on the Kulp: ſeven miles ſouth-weſt of Landſtraſs.

FREY'HUNG, a town of Germany, in the circle of Bavaria, and principality of Sulzbach: eleven miles north of Amberg, and ten north-eaſt of Sulzbach.

FREY'LA, a town of Spain, in the country of Granada: eighteen miles north-north-eaſt of Guadix.

FREYL'ING, a town of Germany, in the archduchy of Auſtria: four miles eaſt-ſouth-eaſt of Efferding.

FREYSIN'GEN, or FREISINGEN, or FRISINGEN (Biſhopric of), an eccleſiaſtical principality of Germany, in the circle of Bavaria, ſituated between the cities of Munich and Landſhut, founded by St. Corbinien, who was conſecrated biſhop by pope Conſtantius III. about the year 710. As a prince of the empire, his aſſeſſment amounts to 464 florins, and his tax to the imperial chamber 152 rixdollars nineteen kruitzers. The territories include the town of Freyſingen, the county of Iſmaning, the lordſhip of Burgkrain, and the county of Werdenfels.

FREYSIN'GEN, a town of Germany, in the circle of Bavaria, and reſidence of the biſhop of Freyſingen, of which it is the capital, ſituated on the Moſach, not far from the Iſer, one part at the foot of a mountain, and the other on its ſummit. The epiſcopal palace and cathedral church are beautiful edifices, and both ſituated in the upper part of the town. When the biſhopric was firſt founded, this town appears to have been the capital of Upper Bavaria. In 1116, it was deſtroyed by Guelpho II. duke of Bavaria: ſeventeen miles north-north-eaſt of Munich, and eighteen ſouth-weſt of Landſhut. Lat. 48. 20. N. lon. 29. 29. E. Ferro.

FREY'STADT, a town of Pruſſia, in the province of Oberland: eighty miles ſouth-weſt of Konigſberg.

FREY'STADT, a town of Sileſia, in the principality of Glogau; containing a Roman Catholic church, a convent, and a Lutheran church and ſchool, the privilege for the two latter was purchaſed for 90,000 florins. Here is a manufacture of good cloth: nineteen miles weſt-north-weſt of Gros-Glogau, and fourteen north-eaſt of Sagan.

FREY'STADT, a town of Sileſia, in the principality of Teſchen: ſeven miles north-north-weſt of Teſchen.

FREY'STATT, or FREUSTADT, a town of Germany, in the archduchy of Auſtria: eighty-two miles weſt of Vienna, and thirteen north of Ens. Lat. 48. 25. N. lon. 32. 8. E. Ferro.

FREY'STATTL, a town and caſtle of Hungary, on the Waag: two miles north-eaſt of Leopoldſtadt.

FREY'STETT, or FREYSTAETT, a town of Germany, in the circle of the Upper Rhine, and county of Catzenelnbogen, on the Main; where Roman Catholics, Lutherans, and Calviniſts, are allowed the free exerciſe of their religion: twelve miles north-weſt of Darmſtadt.

FREY'TAG (Frederic Gotthelf), a burgomaſter of Nuremberg, born at Schulpforten in 1723. He made himſelf celebrated by the ſervice which he rendered to the ſciences, and died on the 12th of February, 1776. His acquaintance with the hiſtory of literature was not only extenſive, but profound; and his works relative to this ſubject will be laſting monuments of his erudition and diligence. The principal of them are: 1. *Rhinoceros veterum ſcriptorum Monumentis deſcriptus*, Lip. 1747, 8vo. 2. *Analecta literaria, de Libris rarioribus*, ibid. 1751, 8vo. 3. *Oratorum et Rhetorum Græcorum quibus Statuæ honoris Cauſa poſitæ fuerunt*, Decas Lip. 1752, 8vo. 4. *Apparatus literarius, ubi Libri partim antiqui, partim rari, recenſentur*, tom. i. Lip. 1752; tom. ii. 1753; tom. iii. 1756. This is a continuation of the *Analecta literaria*. 5. *Specimen hiſtoriæ literatæ, quo Virorum Feminarumque μητροδιδακτων Memoriam recolit*, ibid. 1765, 8vo. 6. An Account of ſcarce and remarkable Books, vol. i. Gotha, 1776, 8vo. The author left two other volumes in manuſcript ready for the preſs, which have not been publiſhed. Beſides theſe, Freytag was the author of many tranſlations from the French, and of various eſſays and papers publiſhed in the *Acta Acad. Erford*, the *Schriftſteller nach der mode*; the *Naturforſcher*; and other periodical works.

FREY'UNG, a town of Germany, in the circle of Bavaria, and biſhopric of Paſſau: fourteen miles north of Paſſau.

FREY'WALDE, a town of Sileſia, in the principality of Grotkau, reſerved by the houſe of Auſtria, in 1742: fifteen miles ſouth of Neiſſe.

FREZI'ER (Amedée-Francis) born at Chamberry in 1682, of a family diſtinguiſhed in the long robe, originally from Scotland (probably one of the Frazers). He firſt ſtudied juriſprudence at Paris, but his inclination leading him to mathematics, he entirely devoted himſelf to that ſcience, and entered the corps of engineers in 1707. The court employed him in a ſurvey of the Spaniſh colonies of Peru and Chili in 1711; and on his return from thoſe countries he publiſhed a Voyage to the South-Sea, 4to. 1716; a work in good eſteem. He was afterwards entruſted with the ſuperintendence of the fortifications at St. Malo, St. Domingo, and Landau, and was rewarded with the croſs of St. Louis, and a lieutenant-colonelcy. In 1740 he was appointed director of all the fortified places in Brittany. He fixed his reſidence in Breſt, where he died in 1772. The other works of Frezier are, *Traité des Feux d'Artifice*, 8vo. 1747. *Elemens de Stereotomie*, two volumes 8vo. 1759: and the latter enlarged under the title of *Theorie et Pratique de la Coupe des Pierres et des Bois*, three volumes, 4to. 1769. Theſe are accounted uſeful and accurate works; the laſt is eſpecially eſteemed.

FRIABI'LITY, *ſ.* Capacity of being eaſily reduced to powder.—Hardneſs, *friability*, and power to draw iron, are qualities to be found in a loadſtone. *Locke.*—It is ſuppoſed that friability ariſes from hence, that the body conſiſts wholly of dry parts irregularly combined, and which are readily ſeparated, as having nothing unctuous or glutinous to bind them together.

FRI'ABLE, *adj.* [*friable*, Fr. *friabilis*, Lat.] Eaſily crumbled; eaſily reduced to powder.—The liver, of all the viſcera, is the moſt *friable*, and eaſily crumbled or diſſolved. *Arbuthnot.*

FRI'AR, *ſ.* [A corruption of *frere*, Fr.] A religious; a brother of ſome regular order.—He's but a *friar*, but he's big enough to be a pope. *Dryden.*

All the prieſts and *friars* in my realm,
Shall in proceſſion ſing her endleſs praiſe. *Shakeſpeare.*

Friars are generally diſtinguiſhed into four principal branches, viz. 1. Minors, grey friars, or franciſcans. 2. Auguſtines. 3. Dominicans, or black friars. 4. White friars or carmelites. From theſe four the reſt of the orders deſcended. See FRANCISCANS, AUGUSTINES, &c. Friar, in a more peculiar ſenſe, is reſtrained to ſuch monks as are not prieſts; for thoſe in orders are uſually dignified with the appellation of *father*.

FRI'AR's COWL, *ſ.* The trivial name of a plant. It agrees with arum, from which it differs only in having a flower reſembling a cowl.

FRIAR's HOOD, a mountain of the iſland of Ceylon, near the eaſt coaſt: ſixty-eight miles eaſt of Candi.

FRIAR's ISLAND, an iſland in the Atlantic, near the weſtern coaſt of Ireland: three miles ſouth from Inis Boffin.

FRI'ARLIKE, *adj.* Monaſtic; unſkilled in the world.—Their *friarlike* general would the next day make one holyday in the Chriſtian calendars, in remembrance of thirty thouſand Hungarian martyrs ſlain of the Turks. *Knolles.*

FRI'ARLY, *adj.* Like a friar, or man untaught in life.—Seek not proud riches, but ſuch as thou may'ſt get juſtly, uſe ſoberly, diſtribute cheerfully, and leave contentedly; yet have no abſtract nor *friarly* contempt of them. *Bacon.*

FRI'ARY, *ſ.* A monaſtery or convent of friars.

FRI'ARY, *adj.* Like a friar.—Francis Cornfield did ſcratch his elbow when he had ſweetly invented to ſignify his name, St. Francis, with a *friary* cowl in a corn field. *Camden.*

FRI'AS, a town of Spain, in Old Caſtile, ſituated on an eminence near the Ebro: twenty miles north-north-eaſt of Burgos, and 138 north of Madrid. Lat. 42. 42. N. lon. 13. 24. E. Ferro.

FRIA'TION, *ſ.* [*frio*, Lat. to crumble.] The act of crumbling; the act of reducing to powder. *Scott. Not much uſed.*

FRI'AUVILLE, a town of France, in the department of the Moſelle, and chief place of a canton, in the diſtrict of Briey: two leagues and a quarter ſouth of Briey, and four and a quarter weſt of Metz.

FRIB'BLE, *ſ.* A fop; an inſignificant fellow.

To FRIB'BLE, *v. n.* To trifle:

Though cheats, yet more intelligible
Than thoſe that with the ſtars do *fribble*. *Hudibras.*

FRIB'BLER, *ſ.* A trifler.—A *fribbler* is one who profeſſes rapture for the woman, and dreads her conſent. *Spectator.*

FRI'BURG, or FREYBURG, a town of Germany, in the circle of Swabia, and capital of the Auſtrian Briſgau, ſituated at the foot of a ſtony mountain, on the river Traiſam, founded in 1118, by Berthold III. duke of Zahringen, from whom it came to the counts of Furſtenberg, with whom it had many diſputes on account of its privileges, and at laſt purchaſed its freedom for twenty thouſand marks of ſilver. This ſum was advanced by the houſe of Auſtria, by which means the town became ſubject to that family. It was formerly an important fortreſs; but being taken ſeveral times by the Swedes and the French, it was diſmantled by the latter, in 1744. The ſtreets are broad and well paved. The principal church is a ſuperb edifice. Here is an univerſity, founded in 1457, by Albert IV. duke of Auſtria, with an academy and five colleges depending on it. Here are beſides ten

convents, a commandery of the Teutonic order, and thirteen churches. The principal buſineſs carried on is poliſhing cryſtals and precious ſtones: thirty-four miles ſouth-ſouth-eaſt of Straſburg, and thirty north-north-eaſt of Bale. Lat. 48. 2. N. lon. 35. 34. E. Ferro.

FRI'BURG, or FREYBURG, called *Friburg in Uchland*, to diſtinguiſh it from *Friburg in the Briſgau*, a town of Swiſſerland, and capital of a canton to which it gives name, built in 1179, by Berthold IV. duke of Zahringen, whoſe uncle, Berthold III. had built a town of the ſame name, in the Briſgau, and whoſe ſon, Berthold V. was the founder of Bern. Theſe princes, who are vicars of the empire in the provinces of the ancient kingdom of Burgundy, had great difficulty to ſupport an authority always diſputed by the grand vaſſals. In fact, they poſſeſſed only that part of the kingdom which lay to the weſt of Mount Jura; and the circumſtance of their being ſtrangers made the nobility obey them with reluctance. It was therefore political wiſdom in them to ſtrengthen the part of the common people, to ſerve as a counterpoiſe to the unruly ambition of the nobility. Theſe dukes gave their new towns charters, or bulls, on the model of the city of Cologne. Thus a great number of families of the inferior nobility and neighbouring inhabitants, went with joy to eſtabliſh themſelves in an aſylum, which protected them againſt the tyranny of the greater barons. Berthold IV. granted to this Friburg the ſame privileges that his uncle had granted to Friburg in the Briſgau. After the houſe of Zahringen became extinct, by the death of Berthold V. in 1218, the two towns of Bern and Friburg met with a different fate. Bern made an important ſtep towards independence, in putting itſelf under the immediate protection of the empire. Friburg came under the power of count Ulrich, of Kiburg, who had married the ſiſter of the laſt duke of Zahringen, without impeachment or derogation of their privileges. From the family of Kiburg it came into the poſſeſſion of the count of Habſburg, who was called to the empire, and became chief of the houſe of Auſtria, to which family it continued its attachment till the year 1449, when it put itſelf under the protection of the duke of Savoy, with a reſervation of its privileges and immunities. In 1481, it joined the grand confederacy, and became one of the cantons of Swiſſerland. The length of the whole canton is about forty miles, and its breadth about twenty. It is almoſt ſurrounded by the canton of Bern, except a narrow part which touches the lake of Neufchatel. The north-weſt part of the country is more level than the reſt, and produces abundance of corn and fruit; the other parts are mountainous, but contain good paſtures, which feed great herds of cattle. The cheeſe made in this canton, particularly in the bailiwick of Gruyeres, is the beſt produced in Swiſſerland, and great quantities are exported to France and other countries. In ſome places they cultivate vineyards and make wine. There are ſeveral medicinal ſprings. The principal rivers are the Sanen, the Senſen, and the Broye, or Bruw. The inhabitants are Roman Catholics, under the biſhop of Lauſanne, in number 72,800, which are divided into ſeven towns, and 103 pariſhes. The language of the inhabitants in the town of Friburg is principally German; in the reſt of the canton, partly German and partly Patois, which is a mixture of German and French. The town of Friburg is ſituated on the Sanen, and almoſt ſurrounded by it. Part of it is built on an elevated rock, part of it in a deep valley, and towards the weſt it occupies a ſmall plain. The ſtreets are irregular, ſteep, clean, and tolerably wide; the houſes are well built, and ſome of them handſome; there are ſeveral churches and convents. It is ſurrounded with walls, towers, and ſharp rocks. Friburg contains ſome manufactures, but none that are important. Sixteen miles ſouth-weſt of Bern, and twenty-ſeven north-eaſt of Lauſanne. Lat. 46. 50. N. lon. 24. 40. E. Ferro.

FRI'BURG, a town of Germany, in the circle of Upper Bavaria: eighteen miles eaſt-ſouth-eaſt of Burkhauſen, and fifteen ſouth-ſouth-eaſt of Brannau.

FRI'BURG, or FREYBURG, a town of Germany, belonging to the electorate of Saxony, in Thuringia: five miles north of Naumburg.

FRI'BURG L'EVE'QUE, a town of France, in the department of the Meurte, and chief place of a canton, in the diſtrict of Dieuze: two leagues and a half weſt of Sarburg, and two eaſt of Dieuze.

FRI'BUS, a town of Bohemia, in the circle of Elnbogen: nine miles weſt of Joachimſthal.

FRICAN'DOES, *ſ.* [*fricandeau*, Fr.] In cookery, a ſort of Scotch collops.

FRICASSE'E, *ſ.* [French.] A diſh made by cutting chickens or other ſmall things in pieces, and dreſſing them with ſtrong ſauce:

Oh, how would Homer praiſe their dancing dogs,
Their ſtinking cheeſe, and *fricaſſee* of frogs!
He'd raiſe no fables, ſing no flagrant lye,
Of boys with cuſtard choak'd at Newberry. *King.*

To FRICASSE'E, *v. a.* [from the noun.] To dreſs in fricaſſee:

Sir-loins and rumps of beef offend my eyes,
Pleas'd with frogs *fricaſeed*. *Bramſton.*

FRICA'TION, *ſ.* [*fricatio*, Lat.] The act of rubbing one thing againſt another.—Gentle *frication* draweth forth the nouriſhment, by making the parts a little hungry, and heating them: this *frication* I wiſh to be done in the morning. *Bacon.*

FRICEN'TI, a town of Italy, in the kingdom of Naples, and province of Principato Citra; the ſee of a biſhop, united with Avellino: twelve miles north-weſt of Conza.

FRICHE, or FRISCHE (James du), a learned French benedictine monk of the congregation of St. Maur, born at Sees in Normandy, in 1641. He had diligently applied to literature before he embraced the eccleſiaſtical life, which was at the age of twenty-two; and his ſubſequent improvement was ſuch, that his ſuperiors conſidered him as a proper perſon to be ſelected for ſuperintending ſome of the noble editions of the fathers which they ſent into the world. They fixed upon him to publiſh from collated manuſcripts the works of St. Ambroſe, and aſſociated with him in this taſk father Nicholas de Nourri, known to the learned world by other valuable works. This edition of St. Ambroſe was publiſhed at Paris, in two volumes, folio; the firſt in 1686, and the ſecond in 1690; both enriched with notes, various readings, remarks, &c. When this work was completed, father Friche was employed to prepare for the preſs a new edition of the works of St. Gregory Nazianzen; but he had ſcarcely formed his plan, before his labours were terminated by his death, which took place at Paris in 1693, when about fifty-two years of age. He was alſo the author of The Life of St. Auguſtine, prefixed to the benedictine edition of the works of that father, in writing which he had availed himſelf of the aſſiſtance of father Hughes Vaillant.

FRIC'TION, *ſ.* [*friction*, Fr. *frictio*, from *frico*, Lat.] The act of rubbing two bodies together.—Do not all bodies which abound with terreſtrial parts, and eſpecially with ſulphureous ones, emit light as often as thoſe parts are ſufficiently agitated, whether the agitation be made by heat, *friction*, percuſſion, putrefaction, or by any vital motion? *Newton.*—The reſiſtance in machines cauſed by the motion of one body upon another. Medical rubbing with the fleſh-bruſh, or cloths.—*Frictions* make the parts more fleſhy and full, as we ſee both in men and in the currying of horſes; for that they draw a greater quantity of ſpirits to the parts. *Bacon.*

The phenomena ariſing from the friction of divers bodies, under different circumſtances, are very numerous and

and conſiderable. Mr. Hawkſbee gives a number of experiments of this kind; particularly of the attrition or friction of glaſs, under various circumſtances; the reſult of which was, that it yielded light, and became electrical. Indeed all bodies by friction are brought to conceive heat; many of them to emit light; particularly a cat's back, ſugar, beaten ſulphur, mercury, ſea water, gold, copper, &c. but above all, diamonds, which when briſkly rubbed againſt glaſs, gold, or the like, yield a light equal to that of a live coal when blown by the bellows.

FRICTION, in mechanics, denotes the reſiſtance a moving body meets with from the ſurface on which it moves.

Friction ariſes from the roughneſs or aſperity of the ſurface of the body moved on, and that of the body moving; for ſuch ſurfaces conſiſting alternately of eminences and cavities, either the eminences of the one muſt be raiſed over thoſe of the other, or they muſt be both broken and worn off: but neither can happen without motion, nor can motion be produced without a force impreſſed. Hence the force applied to move the body is either wholly or partly ſpent on this effect; and conſequently there ariſes a reſiſtance, or friction, which will be greater as the eminences are greater, and the ſubſtance the harder; and as the body, by continual friction, becomes more and more poliſhed, the friction diminiſhes.

As the friction is leſs in any body that rolls, than when it ſlides, hence in machines, leſt the friction ſhould employ a great part of the power, care is to be taken that no part of the machine ſlide along another, if it can be avoided; but rather that they roll, or turn upon each other. With this view it may be proper to lay the axes of cylinders, not in a groove or concave matrix, as uſual, but between little wheels, called friction wheels, moveable on their reſpective axes; for by this contrivance, the friction is transferred from the circumference of thoſe wheels to their pivots. And in like manner the friction may be ſtill farther diminiſhed, by making the axis of thoſe wheels reſt upon other friction wheels that turn round with them. This was long ſince recommended by P. Caſabus; and experience confirms the truth of it. Hence alſo it is, that a pulley moveable on its axis reſiſts leſs than if it were fixed, and the cord ſliding over the circumference. And the ſame may be obſerved of the wheels of coaches, and other carriages. Indeed about twenty years ago, friction balls or rollers were placed within the naves of carriage wheels by ſome perſons, particularly a Mr. Varlo; and lately Mr. Garnett had a patent for an improved manner of applying friction wheels to any axis, as of carriages, blocks or pulleys, ſcale beams, &c. in which the incloſed wheels or rollers are kept always at the ſame diſtance by connecting rods or bars. From theſe principles, with the aſſiſtance of the higher geometry, Olaus Roemer determined the figure of the teeth of wheels that ſhould make the leaſt reſiſtance poſſible, which he found ſhould be epycloids. And the ſame was afterwards demonſtrated by De la Hire, and Camus.—See the article MECHANICS.

FRICTION, in a medical ſenſe, if duly repeated, will do more in the recovery of health, and towards the ſupport of it, than is generally apprehended; it promotes perſpiration, quickens the circulation, and opens the finer veſſels through which thoſe diſcharges are made, on which health and vigour much depend. Friction contributes not only to the conveyance of medicine into the body, but alſo to their action and uſefulneſs when introduced. This means of health is beſt uſed when the *primæ viæ* are moſt empty, when the chylopoetic organs are too languid. Frictions with rough cloths over the whole belly, when the patient is faſting, produces advantageous effects. Gentle friction with pinguious ſubſtances relax; but ſtrong friction with rough dry cloths ſtrengthen. It has been conſidered particularly uſeful in caſes of aſcites, and many others, where the action of the abſorbent ſyſtem is neceſſary to be promoted.

FRIDAW', a town of Germany, in the duchy of Stiria: nine miles eaſt-ſouth-eaſt of Pettaw, and 104 ſouth of Vienna. Lat. 46. 30. N. lon. 33. 57. E. Ferro.

FRI'DAY, *ſ.* [ꝼꝛıꝺ bæg, Sax.] The ſixth day of the week, ſo called from *Friga*, or *Friya*, a goddeſs worſhipped by the Saxons on this day. It is a faſt-day, in memory of our Saviour's crucifixion, unleſs Chriſtmas-day happen to fall on Friday, when it is the greateſt feſtival in the year.—*Good Friday* is that next before Eaſter, on which day our Saviour was crucified.—Among aſtrologers, Friday has been generally conſidered as the moſt changeable and unſettled day in the week; whence the poet, in a peeviſh humour, caſt the metaphor at the ladies:

For Venus, like her day, will change her cheer,
And ſeldom ſhall we ſee a *Friday* clear. *Dryden.*

FRID'BERG, a town of Germany, in the duchy of Stiria: thirty-two miles eaſt of Pruck, and forty-two ſouth of Vienna. Lat. 47. 32. N. lon. 33. 58. E. Ferro.

FRID'BERG, or FRIEDBERG, a town of Germany, in the circle of Upper Bavaria. This town was ſacked by the Swedes in 1632, and taken by the Auſtrians in 1743: four miles ſouth-eaſt of Augſburg, and twenty-eight weſt-north-weſt of Munich. Lat. 48. 20. N. lon. 28. 37. E. Ferro.

FRID'BERG, or FRIEDBERG, an imperial town of Germany, in the circle of the Upper Rhine, on the Eſbach, in the Witteravia, which holds the twelfth ſeat on the bench of the imperial towns of the Rhine, and ſits and votes at the diets of the Upper Rhine. In the matricula of the empire it is charged twenty-four florins, and to the chamber of Wetzlar twenty-nine rix-dollars twenty-nine kruitzers: twelve miles north of Frankfort on the Maine, and twenty-eight eaſt-north-eaſt of Mentz. Lat. 50. 14. N. lon. 26. 23. E. Ferro.

FRI'DECK, a town of Pruſſia, in the territory of Culm: twelve miles eaſt of Culm.

FRI'DECK, a town of Sileſia, in the principality of Teſchen: ten miles weſt-ſouth-weſt of Teſchen, and ten ſouth of Oderberg.

FRI'DEGAST, an idol worſhipped by the ancient Britons.

FRID'ERICHSBERG, a fort and colony on the coaſt of Guinea: about twenty-five leagues from Cape Coaſt Caſtle.

FRID'ERICHSHALL. See FREDERICSHALL.

FRID'ERICH's-ODE, a town of Denmark, in Jutland, built by Frederic III. near the ſea. It was taken by the Swedes, in 1657: fifty miles north of Sleſwick.

FRI'DEWALDE, a town of Germany, in the circle of Weſtphalia, and county of Sayn; endowed, in 1324, with the ſame privileges as Frankfort, but not to ſo much advantage: it is a fief of Heſſe Darmſtadt: nine miles ſouth of Siegen.

FRI'DEWALDE, a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe Caſſel: eighteen miles weſt of Eiſenach, and thirty-five ſouth-ſouth-eaſt of Caſſel.

FRI'DING, a town of Germany, in the Auſtrian Swabia, on the Danube: twenty miles ſouth-eaſt of Tubingen.

FRID'LAND, a town of Pruſſia, in the province of Natangen: twenty miles ſouth-eaſt of Konigſberg.

FRID'MAN, a town of Hungary: ſeventeen miles north-north-weſt of Palotza.

FRI'DO, a town of Italy, in the kingdom of Naples, and province of Baſilicata: ſeven miles eaſt-ſouth-eaſt of Potenza.

FRID'RICHSTEIN, a town of Germany, in the duchy of Carniola: one mile north-weſt of Gottſchee.

FRID'STOLL, *ſ.* [Sax. ꝼꝛıꝺ, *pax*, and ꝑꝛol, *ſedes.*] A ſeat, chair, or place of peace, where, in ancient times, criminals flew for ſafety and protection. In the charter of immunities granted to the church of St. Peter in York by Henry I. and confirmed anno 5 Hen. VII. fridſtoll is expounded *cathedra pacis & quietudinis, &c.* And there were many ſuch in England; but the moſt famous was

at

at Beverley, which had this inſcription: *Hæc ſedes lapidea* freedſtoll *dicitur*, i. e. *pacis cathedra, ad quam reus fugiendo perveniens, omnimodam habet ſecuritatem.*

FRIED'BERG, a town of Sileſia, in the principality of Neiſſe: ſix miles ſouth-weſt of Ziegenhals.

FRIED'BERG, or FRIEDENBURG, a town of Sileſia, in the principality of Jauer, on the Queiſs: eleven miles ſouth-weſt of Lowenberg, and fourteen weſt-north-weſt of Hirſchberg.

FRIED'BERG HO'HEN, a town of Sileſia, in the principality of Schweidnitz, where the king of Pruſſia defeated the Auſtrians, on the 4th of June, 1745: five miles ſouth-weſt of Striegau, and ten north-weſt of Schweidnitz.

FRIED'BURG, a Moravian ſettlement in Wachovia, or Surrey county, North Carolina.

FRIE'DEBERG, a town of Germany, in the circle of Upper Saxony, and New Mark of Brandenburg: forty-ſix miles north-eaſt of Frankfort on the Oder, and eighty-two eaſt-north-eaſt of Berlin.

FRIE'DEBURG, a town of Germany, in the circle of Upper Saxony, and county of Mansfeld: four miles eaſt of Gerbſtadt.

FRIE'DEBURG, a town of Germany, in the circle of Weſtphalia, and county of Eaſt Frieſland: twenty-two miles eaſt-north eaſt of Embden. Lat. 53. 30. N. lon. 25. 8. E. Ferro.

FRIE'DELAND, a town of Sileſia, in the principality of Schweidnitz: ſixteen miles ſouth-weſt of Schweidnitz.

FRIE'DENSHUETTEN, a Moravian ſettlement, whoſe name ſignifies *Tents of Peace*, ſituated on Suſquehannah river, in Pennſylvania, about twenty-four miles below Tioga point; eſtabliſhed by the United Brethren in 1765. It then conſiſted of thirteen Indian huts, and upwards of forty houſes, built after the European manner, with a neat chapel. Next to the houſes the ground was laid out in gardens; and between the ſettlement and the river about 250 acres were divided into regular plantations of Indian corn.

FRIE'DENSTADT, or *Town of Peace*, a Moravian ſettlement which was eſtabliſhed between Great Beaver and Yellow creeks: about forty miles north-weſt of Pittſburg. It was abandoned in 1773.

FRIE'DEWALDE, a town of Sileſia, in the principality of Neiſſe: ſix miles ſouth of Grotkau.

FRIE'DERICKSTÆD, a town on the weſt coaſt of the iſland of Santa Cruz. Lat. 17. 48. N. lon. 93. 25. W. Greenwich.

FRIED'LAND, a town of Moravia, in the circle of Olmutz: eighteen miles north-north-eaſt of Olmutz.

FRIED'LAND, a town of Luſatia, on a canal which communicates with the Spree: eight miles north of Lieberoſe.

FRIED'LAND, a town of Bohemia, in the circle of Boleſlau: nine miles north-eaſt of Krottau.

FRIED'LAND, a town of Germany, in the circle of Upper Saxony, and duchy of Mecklenburg: fourteen miles north-eaſt of New Brandenburg.

FRIED'LAND, a Moravian ſettlement in Wachovia.

FRIED'LINGEN, or FRIDLINGEN, a town and fort of Germany, in the circle of Swabia, near the Rhine, between Huningue and Bale. In 1702, a battle was fought here between the Imperialiſts under the command of prince Louis of Baden, and the French under the marquis de Villars, in which the latter were victorious, and afterwards took the town.

FRIE'LED, a town of Sweden, in the province of Smaland, thirty-three miles north-weſt of Wexio.

FRIEND, *ſ.* [*vriend*, Dut. ꝼꝛeonb, Sax.] This word, with its derivatives, is pronounced *frend*, *frendly*: the *i* totally neglected. One joined to another in mutual benevolence and intimacy: oppoſed to foe or enemy.

—Some man is a *friend* for his own occaſion, and will not abide in the day of thy trouble. *Ecclus*, vi. 8.

God's beniſon go with you, and with thoſe
That would make good of bad, and *friends* of foes.
Shakeſpeare.

Wonder not to ſee this ſoul extend
The bounds, and ſeek ſome other ſelf a *friend*. *Dryden.*

One without hoſtile intentions:

Who comes ſo faſt in ſilence of the night?
—A *friend*.—What *friend*? your name. *Shakeſpeare.*

One reconciled to another: this is put, by the cuſtom of the language, ſomewhat irregularly in the plural number:

He's *friends* with Cæſar,
In ſtate of health thou ſay'ſt, and thou ſay'ſt free. *Shakeſp.*

An attendant or companion:

The king ordains their entrance, and aſcends
His regal ſeat, ſurrounded by his *friends*. *Dryden.*

Favourer; one propitious.—Aurora, riding upon Pegaſus, ſheweth her ſwiftneſs, and how ſhe is a *friend* to poetry, and all ingenious inventions. *Peacham.*—A familiar compellation.—*Friend*, how cameſt thou in hither? *Matthew*, xxii. 12.

What ſupports me, do'ſt thou aſk?
The conſcience, *friend*, t' have loſt mine eyes o'erply'd
In liberty's defence. *Milton.*

A quaker.

The FRIENDS, or *Quakers*, are a ſect of diſſenters from the church of England, which, from the ſtriking difference they exhibit in appearance, manners, and worſhip, from the generality of their countrymen, among whom they nevertheleſs live in commercial and ſocial intercourſe, forms an intereſting ſubject of enquiry to the contemplative and obſerving mind. In our account of them, we ſhall firſt advert to that which is moſt immediately obvious; their conduct with reſpect to the reſt of the world: in the next place, to their more domeſtic economy, and their dealings with each other. It will then be proper to trace theſe practices to the principles from which they have proceeded; and, laſtly, a ſketch of the hiſtory and preſent ſtate of this people, will complete the account.

The firſt thing which occurs to an obſerver in ſeeing a quaker, is his unornamented, and ſometimes unfaſhionable, dreſs: for the former, a deſire to avoid that which is ſuperfluous, and a fear to adopt that which is thought to promote perſonal pride, are the aſſigned motives; and with regard to the latter ſingularity, it may be obſerved that faſhion, ever varying, rather leaves the quaker, who thinks frequent change inconſiſtent with a religious character, than the quaker forſakes the faſhion. If we ſtep into their houſes, we obſerve more or leſs of the ſame ſimplicity in their furniture, and their tables, and the like abſtinence from ſuperfluity in the time ſpent in convivial enjoyments. If we next obſerve their converſation, it will be found to be void of the compliments, and hyperbolical deſcription, which are ſo much the ſeaſoning of modern diſcourſe; but that which gives it the greateſt appearance of ſingularity, is the practice of uſing the ſecond perſon ſingular in ſpeaking to one; their diſuſe of the appellations Mr. Mrs. Sir, Madam, &c. and, when they mention the months or days of the week, calling them by numerical names, as firſt month, ſecond day, and the like. In conformity with this ſtrictneſs of domeſtic life, they forbear alſo to join with their neighbours in public amuſements; and indeed they inveigh againſt them, as not only a waſte of much time, which might be employed to beneficial purpoſe, and often deſtructive of health, but alſo as the means of enfeebling the mind and unfitting it to bear the difficulties which are the lot of human nature; and further, as an introduction to diſſipation, and licentiouſneſs of conduct. They nevertheleſs join with the reſt of the community in many objects of

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public concern, in which utility to mankind is the leading motive; but in ſome caſes of this kind they forbear to intermeddle; either when an oath is required to be taken, from which they ſcrupulouſly refrain, or when the buſineſs leads to ſome promotion of the claims of the clergy, from the acknowledgment of whoſe right to pecuniary pay they are pertinaciouſly averſe. In uniſon with this latter ſcruple, they have adopted among themſelves a mode of marriage, which the legiſlature hath recogniſed; and they inter among themſelves, without ceremony, the remains of their dead: at the ſame time alſo it ſhould be mentioned, that they ſupport their own poor, without claiming for them their inherent right to parochial maintenance. For theſe, and other purpoſes, which naturally occur in a ſociety ſo much embodied in itſelf as this is, they have a regular ſyſtem of diſcipline, which is ſimple in its conſtruction, efficacious in its operation, and in general well and diſintereſtedly ſupported, and without expence to their community for the pay of officers.

The execution of this diſcipline is by monthly meetings of the members of certain diſtricts, in which meetings every member of orderly conduct hath a ſeat. Here the wants of the poor are attended to; applications from perſons deſirous of joining the ſociety received and determined; diſorderly members diſunited; collections for the common exigencies ordered, and regiſters kept. As it is evident that ſome or moſt of theſe purpoſes may require attention beyond that which can be given in a ſitting of a few hours, and where information on many points may be wanted, committees are there formed to ſupply theſe wants: and, generally ſpeaking, as the quakers proceed with great deliberation in moſt things they do, the uſe and continuance of theſe committees are very great.

Several of theſe diſtricts are ſuperintended by a quarterly meeting; and all the quarterly meetings in the country are under the direction of a yearly meeting; which may not only be conſidered as the legiſlative body, but as the deciſive court of appeal: for as perſons conceiving themſelves to be aggrieved by the deciſion of a monthly meeting, may appeal to the quarterly meeting, ſo from this latter lies an appeal, but a final one, to the yearly meeting. This general meeting requires from the quarterly meetings an annual account of the ſtate of the ſociety, which is given in the form of anſwers to certain queries, relative to the conduct of the members at large, and their conformity with their principles; and theſe queries are alſo put by the quarterly to the monthly meetings: thus a conſtant connection is preſerved. Beſides the concourſe of members which attend theſe laſt-mentioned meetings, repreſentatives are alſo appointed, on whom the tranſmiſſion of accounts is particularly entruſted; but great latitude is given in this ſociety for the employment of all well-qualified members in the management of their public concerns. Such is the general outline of the quakers' diſcipline. There are, nevertheleſs, a few other particulars on which it may be proper briefly to touch.

Monthly meetings are themſelves often ſub-divided, when they conſiſt of more than one congregation for worſhip. The ſub-diviſions are called preparative meetings, becauſe they prepare buſineſs for their monthly meeting; but they are not allowed to keep records of their proceedings, and ſeldom to decide on any point. In ſeveral of the countries in which yearly meetings are eſtabliſhed, theſe meetings have dependent bodies ſettled in the principal town, who watch during the intervals of the yearly meeting over what may affect the welfare of the whole, particularly the operation of the politics of the day, or of pendent, as well as of exiſting, laws; and theſe meetings, or rather the oldeſt of them, (that of London,) which was inſtituted in a time of perſecution, are called "meetings for ſufferings." The approved miniſters alſo of this ſociety, and certain other experienced members denominated *elders*, have meetings by themſelves attached to the meetings for diſcipline, under the appointment of which they are held. In theſe meetings of miniſters and elders, the conduct of that part of the body is enquired into, and advice applied without unneceſſary public expoſure.

This ſociety alſo aſſigns to women a conſiderable ſhare in the management of their diſcipline, believing that in many caſes concerning their own ſex their aſſiſtance is peculiarly proper. The women, therefore, at the ſame time, and in the ſame town, with the men, hold monthly, quarterly, and yearly, meetings; in which the buſineſs is conducted according to rules preſcribed to them by the men's meetings. The quakers think, that in a religious Chriſtian ſociety there is no ſubordination of man to man, but that the ſpirit of Chriſt alone ought to preſide: therefore, in no one of their meetings have they any preſident or chairman.

With reſpect to their peculiar doctrines, we give them nearly in the words of a ſhort account, publiſhed a few years ſince, entitled A Summary of the Hiſtory, Doctrine, and Diſcipline, of Friends, written at the deſire of the Meeting for Sufferings in London.

"We agree (ſay they), with other profeſſors of the Chriſtian name, in the belief of one Eternal God, the creator and preſerver of the univerſe; and in Jeſus Chriſt, his ſon, the Meſſiah, and *mediator of the new covenant. Heb.* xii. 24. When we ſpeak of grace, of the miraculous conception, birth, life, miracles, death, reſurrection, and aſcenſion, of our Saviour, we prefer the uſe of ſcripture terms; and contented with that which divine wiſdom hath ſeen meet to reveal, we attempt not to explain thoſe myſteries which remain under the veil: nevertheleſs, we acknowledge and aſſert the divinity of Chriſt, who is *the wiſdom and power of God unto ſalvation.* 1 *Cor.* i. 24. To Chriſt alone, and not to the Scriptures, we give the title of the *Word* of *God*; *John*, i. 1. although we highly eſteem thoſe ſacred writings, in ſubordination to the Spirit, from which they were given forth; 2 *Pet.* i. 21. and we hold that they are able to make *wiſe unto ſalvation through faith in Chriſt Jeſus.* 2 *Tim.* iii. 15. We reverence thoſe moſt excellent precepts which are recorded to have been delivered by our great Lord, and we firmly believe that they are practicable, and binding on every Chriſtian; and that in the life to come every man will be rewarded *according to his works. Matt.* xvi. 27. And further, it is our belief that, in order to enable mankind to put in practice theſe ſacred precepts, many of which are contradictory to the unregenerate will of man, *every man coming into the world* is endued with a meaſure of the *light*, grace, or good ſpirit, of Chriſt, *John*, i. 9, by which, as it is attended to, he is enabled to diſtinguiſh good from evil, and to correct the diſorderly paſſions and corrupt propenſities of his fallen nature, which mere reaſon is altogether inſufficient to overcome. For all that belongs to man is fallible, and within the reach of temptation; but this divine grace, which comes by him who hath *overcome the world*, *John*, xvi. 33, is to thoſe who humbly and ſincerely ſeek it, an all-ſufficient and preſent help in time of need. By this the ſnares of the enemy are detected, and deliverance is experienced through faith in its operation, whereby the ſoul is tranſlated out of the kingdom of darkneſs, into the marvellous light and kingdom of the Son of God.

"Being thus perſuaded that man, without the ſpirit of Chriſt inwardly revealed, can do nothing to the glory of God, or to effect his own ſalvation, we think this influence eſpecially neceſſary to the performance of the higheſt act of which the human mind is capable, even the worſhip of the Father of Lights and of Spirits, in ſpirit and in truth; therefore we conſider as obſtructions to pure worſhip all forms which divert the attention of the mind from the ſecret influence of this *unction from the Holy-one*, 1 *John*, ii. 20, 27; and, in the performance of worſhip, we dare not depend for our acceptance with him, on a formal repetition of the words and experiences of others; but, ceaſing from the activity of the imagination, we believe

it to be our duty, when assembled for that purpose, to wait in silence, to have a true sight of our condition bestowed upon us; believing even a single sigh, arising from such a sense of our infirmities, and of the need we have of divine help, to be more acceptable to God, than any performances, however specious, which originate in the will of man. *Rom.* viii. 26.

"As that which is needful for a man's own direction, and for his acceptance with God, must be eminently so, to enable him to be helpful to others, we believe the renewed assistance of the light and power of Christ to be indispensably necessary for all true ministry; and that this holy influence is not at our command, or to be procured by study; but is the free gift of God to chosen and devoted servants. Hence arises our testimony against preaching for hire; and hence our conscientious refusal to support such ministers as receive wages by tithes or other means. As we dare not encourage any ministry but that which we believe to spring from the influence of the Holy Spirit; so neither dare we attempt to restrain this ministry to persons of any condition in life, or to the male sex alone; but, as male and female are one in Christ, we hold it proper that such of the female sex as we believe to be endued with a right qualification for the ministry, should exercise their gifts for the general edification of the church: and this liberty we esteem a peculiar mark of the gospel dispensation, as foretold by the prophet Joel, chap. ii. 28, 29; and noticed by the apostle Peter, *Acts*, ii. 16, 17.

"There are two ceremonies in use amongst most professors of the Christian name; water-baptism, and what is termed the Lord's supper. The first is esteemed the means of initiating into the church of Christ; the latter, of maintaining communion with him. But as we have been convinced that nothing short of his redeeming power inwardly revealed can set the soul free from the thraldom of sin; by this power alone we believe salvation to be effected. We hold that, as there is one Lord, and one faith, so his *baptism is one*; *Eph.* iv. 5. that nothing short of it can make us members of his mystical body; and that the baptism with water, administered by his forerunner John, belonged, as John confessed, to an inferior and decreasing dispensation. *John*, iii. 30. With respect to the other rite, we believe that communion between Christ and his church is not maintained by that, nor any other, external performance; but only by a real participation of his divine nature through faith; *2 Peter*, i. 4. that this is the supper alluded to in the Revelation, *Behold I stand at the door, and knock. If any man hear my voice, and open the door, I will come in to him, and will sup with him, and he with me*; *Rev.* iii. 20. and that where the substance is attained, it is unnecessary to attend to the shadow, which doth not confer grace; and concerning which opinions so different, and animosities so violent, have arisen.

"Now as we thus believe that the grace of God, which comes by Jesus Christ, is alone sufficient for salvation, we can neither admit that it is conferred on a few only, whilst others are left without it; nor, thus asserting its universality, can we limit its operation to a partial cleansing of the soul from sin even in this life. We entertain worthier notions of the power and goodness of our Heavenly Father, and believe that he doth vouchsafe to assist the obedient to experience a total surrender of the natural will to the guidance of his pure unerring spirit, *Matt.* v. 48; through whose renewed assistance they are enabled to bring forth fruits unto holiness, and to stand perfect in their present rank. *Eph.* iv. 13. *Col.* iv. 12.

"With respect to oaths, we abide literally by Christ's positive injunction, *Swear not at all*, *Matt.* v. 34. delivered in his sermon on the mount; from which also, from our Lord's example, and from the correspondent convictions of his spirit in our hearts, we are confirmed in the belief, that wars and fightings are, in their origin and effects, utterly repugnant to the gospel; which still breathes peace and good-will to men. *Matth.* v. 39-44. xxvi. 52, 53. *Luke*, xxii. 51. *John*, xviii. 11. We are also clearly of the judgment, that if the benevolence of the gospel were generally prevalent in the minds of men, it would prevent them from oppressing, much more enslaving, their brethren, (of whatever colour or complexion;) for whom, as for themselves, Christ died: and would even influence their treatment of the brute creation, which would no longer groan the victims of their avarice, and of their false ideas of pleasure.

"Some of our tenets have, in former times, subjected our friends to much suffering from government; though our principles are a security to it; as they inculcate submission to the laws in all cases wherein conscience is not violated. But we hold, that as Christ's kingdom is not of this world, it is not the business of the civil magistrate to interfere in matters of religion. We therefore think persecution, even in the smallest degree, unwarrantable.

"We think necessary that those who are admitted into membership with us, should be previously convinced of those doctrines which we deem essential; yet we require no formal subscription to any articles, either as the condition of membership, or to qualify for the service of the church. We prefer the judging of men by their fruits, in a dependance on the aid of him, who, by his prophet, hath promised to be *a spirit of judgment to him that sitteth in judgment*. *Isai.* xxviii. 6. Without this there is a danger of receiving numbers into outward communion, without any addition to that spiritual sheepfold, whereof our blessed Lord declared himself to be both the *door* and the *shepherd*; that is, of such as know his voice, and follow him in the paths of obedience." *John*, x. 7-11.

If we date the origin of this people from the time that George Fox, who is generally reckoned the first quaker, publicly preached their doctrines, we must fix it in or about the year 1647. Fox was then about twenty-three years of age. He had been from his childhood of a cast so serious, that his mother had wished him to be educated for the ministry. He was, as well as several of his most early adherents, an illiterate man, although very well read in the Bible, which he quoted on all occasions with great readiness. He has been described as melancholy and enthusiastic; but some of his conversations preserved in his journal seem to contradict the former assertion: the latter will always be repeated, or at least believed, by those who deny the quaker doctrine before-mentioned, of the immediate and indispensable agency of Christ's spirit on the human mind. He has been charged with magnifying his own attainments, his mission, and the union in which he believed himself to be with the divine nature, in terms of extravagance if not of blasphemy: however, from the latter charge he may at least be cleared in the instances which are adduced from such of his writings as are extant in the original editions. George Fox led a life of almost incessant exertion until the year 1690, when he died possessed of the love and esteem of the body, then fully established; which he had seen arise from the principles he had published forty-three years before. See Fox, vol. vii. p. 633.

A people so singular, so different in their customs from the rest of the nation; and above all, so opposed to the generally-received notions concerning worship and ministry, soon attracted the notice and opposition of such whose tenets they oppugned, and of none more, nor with more inconvenience to themselves, than of the ministers. It was not long, however, before persons, above the vulgar rank in station and learning, became converts to their doctrines. About the years 1652, 1653, and 1654, Francis Howgill and Thomas Lawson, both ministers in the North of England, Anthony Pearson, a justice of the peace in Westmorland, John Stubbs, a man skilled in Greek and oriental languages, and George Whitehead and William Caton, persons employed in the tuition of youth, were convinced of the doctrines of Fox; and not only so, but soon became preachers themselves. Many others, nearly

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at the ſame time, having adopted the principles, betook themſelves to ſpread the doctrine of the quakers, ſo that previous to the reſtoration of Charles II. they were a numerous body.

Perſecution, the too common lot of diſſent, and which the experience of former ages had not taught the people of that day to view as the nurſe of it, was early and vigorouſly, although vainly, employed to overthrow them. During the commonwealth, impriſonment and ſtripes from the magiſtrate, each ſometimes attended with circumſtances of extraordinary ſeverity; and, from the unreſtrained rabble, other and various kinds of perſonal abuſe, were the returns which their doctrines met with from their countrymen. After the reſtoration, the oath of allegiance coming ſo much into uſe, it proved an additional cauſe of vexation to the quakers, who ſcrupled to ſwear; and when other methods failed, was uſed as a trap whereby to ſhut them up in priſons and purſue them to premunire. Laws alſo were made in this reign, particularly levelled againſt them, the penalty of one of which was baniſhment. In theſe rigorous meaſures the king ſeemed rather to be led than to lead; and much of the reſpite from perſecution which the quakers experienced during his reign, ſeems to have ariſen from his willingneſs to relieve.

Their ſufferings in England, however, great as they were, did not equal thoſe which they underwent in America, particularly in the province of Maſſachuſſetts, from a people who themſelves too had fled, in the former reign, from the ſcourge of perſecution. Here, for a quaker to reſide, would incur puniſhment. The tender bodies even of women and girls were lacerated with ſtripes, expoſed to the rigours of a wintry climate, and ſometimes denied food, except on the condition of a ſubmiſſion to the perſecutor's will, with which the perſecuted ſcrupled to comply. But theſe ſeverities did not intimidate the quakers, nor ſatisfy the zealots who oppreſſed them. In the next place, therefore, they had recourſe to maiming, by cutting off the ears, a practice they had learned by ſuffering at home; but as this produced not the effect they wiſhed, the penalty of death was enacted for ſuch quakers as ſhould return into the colony after baniſhment. In conſequence of this law, two men, ſometime after a woman, and next another man, were hanged at Boſton. At length one of the baniſhed perſons, by name Samuel Shattock, came to England, and found means to prefer his complaints to king Charles. "There is a vein of innocent blood (ſaid Burrough, an eminent and zealous quaker, to the king, on repreſenting to him the cruelties of the coloniſts) opened in thy dominions, which, if it be not ſtopt, will overrun all."—"But I will ſtop that vein," ſaid Charles; and without delay he iſſued an order to the New England governor, and appointed the baniſhed Shattock his deputy for its tranſmiſſion to the colony. Thus the effuſion of innocent blood was ſtopped, ſo far as to prevent further capital puniſhment; but, notwithſtanding the king's prohibition, it long continued to be drawn by the ſcourge.

On the acceſſion of James II. the penal laws againſt diſſenters, or rather the execution of them, was ſuſpended; and on that of William and Mary, they were tolerated by law; at the ſame time to the affirmation of the quakers was allowed, in many caſes, the legal force of an oath.

The quakers, whom ſome people would brand with the charge of ſuperior obſtinacy, and to whom others would allow the merit of firmer adherence to their principles than moſt other men, ſtill complain of their ſufferings, although they do not now conſider themſelves as perſecuted. Conſiſtently with the ſcruple mentioned in the account of their doctrines, they refuſe to pay tithes to the clergy; and the laws for recovering them (having been made in times when oppoſition to the clergy and ſacrilege were nearly ſynonymous) being oppreſſive in their operation, it is no extraordinary thing in the preſent century for the coſts to exceed the demand, and for the doors of a priſon to be ſhut upon a conſcientious quaker. Eaſier means of recovery were provided in the reigns of William, and George I. but theſe laws are limited to tithes of ſmall amount; and it is at the option of the claimant to uſe them, or have recourſe to the exchequer, or to the biſhop's court: the ultimatum of which laſt is excommunication.

The preſent reigning family of Great Britain has, as occaſion offered, ſhewn itſelf friendly to the quakers; and has received many public profeſſions of its attachment. This ſociety is alſo now conſidered by the government, and the legiſlature, as an uſeful and valuable part of the community; for, whilſt their principles forbid them to defend their country by the uſe of arms, the ſame peaceful tenets, ſo far as they prevail, infure her internal tranquillity. Although they ſupport their own poor, they bear of courſe their proportion of the parochial aſſeſſments; and they may be ſaid to contribute to the proſperity of the nation by their induſtry and their morality.

Meetings of this people are ſcattered over Great Britain, Ireland, and North America. The European continent has alſo thoſe who bear their name and own their doctrine, and who are known to their tranſmarine brethren, although not all of them fully connected with them in ſociety, particularly the north-eaſt parts of Germany, and the ſouth of France.

The yearly meeting for Great Britain is held in London; that for Pennſylvania and New Jerſey at Philadelphia; and there are alſo on that continent five others, namely, New England, New York, Maryland, and Virginia; the two Carolinas with Georgia have the other.

It will be generally thought that, although the writings of the quakers are numerous, that ſociety hath not produced many eminent authors. The moſt celebrated are their apologiſt, Robert Barclay, of Urie in Scotland, who died in 1690; and William Penn, the founder of Pennſylvania, whoſe deceaſe was in 1718. Thoſe who deſire further information concerning the quakers' principles, would do well to conſult theſe writings; and for their hiſtory, that by William Sewell, of which the edition in 1800, and that by John Gough in 1789, contain ample information. There has alſo been publiſhed in the laſt year (1805) a conciſe and clear account of their doctrine, entitled The Principles of Religion as profeſſed by the Society of Chriſtians called Quakers, by Henry Tuke. In the catalogue of their writers, it may alſo be proper to mention Benezet and Woolman, both inhabitants of America, who took an early part in expoſing the iniquity of negro-ſlavery, and the ſlave-trade practices, of which the quakers have been ſtrenuous oppoſers. Thoſe who deſire only an outline of the quakers' riſe, progreſs, and tenets, may conſult the ſummary before-mentioned, firſt publiſhed in 1790, and ſeveral times ſince: and the quakers are in general very liberal in the diſtribution of their books, for the information of thoſe who wiſh to be acquainted with them.

The name of quaker appears to have been given to this people by one Gervas Bennett, a juſtice of the peace in Derbyſhire, in 1650; at firſt rather as a retort upon George Fox, who had bid him quake or tremble at the word of the Lord; but, ſuiting with the contempt in which they were then held, the appellation ſpread and became general: nevertheleſs, they themſelves give to each other the ſimple appellation of FRIENDS; by which name alſo they begin to be called by modern authors.

To FRIEND, *v. a.* To favour; to befriend; to countenance; to ſupport.—I know that we ſhall have him well to *friend*. *Shakeſpeare.*

When vice makes mercy, mercy's ſo extended,
That, for the fault's love, is th' offender *friended*. *Shakeſp.*

"Tell thy FRIEND thy ſecret, and he'll lay his foot on thy throat." The Spaniards ſay, *Dio tuo amigo tuo ſecreto,*

gli tenerte ha el piè on el peſcue. Too much familiarity breeds contempt.—And yet, "A FRIEND in need is a FRIEND indeed." The Latins ſay, *Amicus certus in re incerta cernitur*; the French, *On connoit l'ami en beſoin*; the Germans, *Ginen guten freund erhenner man in der noht.*—It is good, however, according to another proverb, "To prove our FRIENDS before we have need," leſt in times of abſolute neceſſity, we find our confidence miſplaced, and all our ſupport reſting on a broken reed: for, according to another proverb, "All are not FRIENDS who ſpeak us fair." Therefore, "Be a FRIEND to thyſelf, and others will befriend thee." If by induſtry and frugality, ſobriety and economy, we make our own circumſtances eaſy and affluent, ſo as not to be for ever wanting friends on pecuniary occaſions, we ſhall then generally find friends enough: whereas, on the contrary, ſay the Latins, *Infelicibus nulli ſunt cognati, nec amici*; The unhappy, the poor, and the wretched, have neither friends nor relations.

"Be a FRIEND to one, and an enemy to none." The Spaniards ſay, *Amigo de uno, enemigo de ningúno*; that is, Have one boſom friend, and carry it fair and candidly to the whole world.—Yet, "Never truſt much to a new FRIEND, or an old enemy." A very wholeſome and ſeaſonable proverb; for it is hard to diſcover how far the firſt can be confided in, or on what principle of cordial affection the other might have been induced to forego his enmity. The Latins ſay, *Subita amicitia raro ſine pœnitentia colitur*; the Spaniards, *De amigo reconciliádo guándate del como del diablo*; Be as wary of a reconciled friend, as you would be of the grand deceiver.—But, "A FRIEND in the way, is better than a penny in the purſe." The Spaniards ſay, *Aquéllos ſon ricos que tiénen amigos*; Thoſe are rich who have friends at hand. Friends do indeed not unfrequently ſupply the place of riches; but it is pretty certain that riches oftener ſupply the place of friends, or are made the inſtrument of procuring them: hence riches, when judiciouſly managed, are always a bleſſing.

FRIEND, Dr. See FREIND.

FRIEND'ED, *adj.* Well diſpoſed; inclined to love:

Not *friended* by his wiſh to your high perſon,
His will is moſt malignant, and it ſtretches
Beyond you to your friends. *Shakeſpeare.*

FRIEND'ING, *ſ.* Friendlineſs:

And what ſo poor a man as Hamlet is
May do, to expreſs his love and *friending* to you,
God willing, ſhall not lack. *Shakeſpeare.*

FRIEND'LESS, *adj.* Wanting friends; wanting ſupport; without countenance; deſtitute; forlorn.—Alas! I am a woman, *friendleſs*, hopeleſs. *Shakeſpeare.*

To ſome new clime, or to thy native ſky,
Oh *friendleſs* and forſaken virtue fly. *Dryden.*

To what new clime, what diſtant ſky,
Forſaken, *friendleſs*, will ye fly? *Pope.*

FRIEND'LESS MAN. The Saxon term for him whom we now call an outlaw, becauſe he was, upon his excluſion from the king's peace and protection, denied all help of friends.

FRIEND'LINESS, *ſ.* A diſpoſition to friendſhip. Exertion of benevolence.—Let all the intervals be employed in prayers, charity, *friendlineſs* and neighbourhood, and means of ſpiritual and corporal health. *Taylor.*

FRIEND'LY, *adj.* Having the temper and diſpoſition of a friend; kind; favourable; benevolent.—They gave them thanks, deſiring them to be *friendly* ſtill unto them. 2 *Mac.* xii. 31.

Let the Naſſau-ſtar in riſing majeſty appear,
And guide the proſp'rous mariner
With everlaſting beams of *friendly* light. *Prior.*

Diſpoſed to union; amicable:

Like *friendly* colours found our hearts unite,
And each from each contract new ſtrength and light. *Pope.*

Salutary; homogeneal:

Not that Nepenthe, which the wife of Thone
In Egypt gave to Jove-born Helena,
Is of ſuch power to ſtir up joy as this,
To life ſo *friendly*, or ſo cool to thirſt. *Milton.*

FRIEND'LY, *adv.* In the manner of friends; with appearance of kindneſs; amicably:

Here between the armies,
Let's drink together *friendly*, and embrace;
That all their eyes may bear thoſe tokens home,
Of our reſtored love and amity. *Shakeſpeare.*

FRIEND'LY I'SLANDS, a cluſter of iſlands in the Southern Pacific Ocean, ſo named by captain Cook in 1773, on account of the friendſhip which appeared to ſubſiſt among the inhabitants, and from their courteous behaviour to ſtrangers. Abel Janſen Taſman, an eminent Dutch navigator, firſt touched here in 1643, and gave names to the principal iſlands. Captain Cook laboriouſly explored about ſixty of them; but the whole cluſter are found to be upwards of 150 in number. The three iſlands which Taſman ſaw he named New Amſterdam, Rotterdam, and Middleburgh. The firſt is the largeſt, and extends about twenty-one miles from eaſt to weſt, and about thirteen from north to ſouth. Theſe iſlands are inhabited by a race of Indians, who cultivate the earth with great induſtry. The iſland of Amſterdam is interſected by ſtraight and pleaſant roads, with fruit-trees on each ſide, which provide ſhade from the ſcorching heat of the ſun. The chief iſlands are Annamooka, Tangataboo, the reſidence of the ſovereign and the chiefs, Lefooga, and Eooa. Lefooga is about ſeven miles long, and in ſome places not above two or three broad. It is in many reſpects ſuperior to Annamooka. The plantations are both more numerous and more extenſive; and incloſed by fences which, running parallel to each other, form fine ſpacious public roads, which would appear beautiful in countries where rural conveniences have been carried to the greateſt perfection. They are, in general, highly cultivated, and well-ſtocked with the ſeveral roots and fruits which theſe iſlands produce; and captain Cook endeavoured to add to their number by planting Indian corn, and the ſeeds of melons, &c. Eooa, when viewed from the ſhip at anchor, formed one of the moſt beautiful proſpects in nature, and very different from the others of the Friendly Iſles; which being low and perfectly level, exhibit nothing to the eye but the trees which cover them; whereas here, the land riſing gently to a conſiderable height, preſents groves of trees interſperſed at irregular diſtances, in beautiful diſorder; but covered with graſs near the ſhores, abounding with fruit-trees, amongſt which are the habitations of the natives. To obtain a view of as great a part of the iſland as poſſible, captain Cook and his officers walked up to the higheſt point of land, from whence they beheld many beautiful meadows of prodigious extent, adorned with tufts of trees, and intermixed with plantations of cocoa-nut and bread-fruit trees.

The natives of theſe iſlands ſeldom exceed the common ſtature; but are very ſtrong and well made, eſpecially as to their limbs. They are generally broad about the ſhoulders; and though the muſcular diſpoſition of the men, which ſeems a conſequence of much action, rather conveys the appearance of ſtrength than of beauty, there are ſeveral to be ſeen who are really handſome. The women are not ſo much diſtinguiſhed from the men by their features as by their general form, which is for the moſt part deſtitute of the ſtrong fleſhy firmneſs that appears in the latter; though the features of ſome are ſo delicate, as not only to be a true index of their ſex, but to lay claim to a conſiderable ſhare of beauty and expreſſion; for the bodies and limbs of moſt of the females are

are well proportioned, and ſome abſolutely perfect models of a beautiful figure. But the moſt remarkable diſtinction in the women, is the uncommon ſmallneſs and delicacy of their fingers, which may be put in competition with the fineſt in Europe. The general colour is a caſt deeper than the copper brown; but ſeveral of the men and women have a true olive complexion; and ſome of the laſt are even a great deal fairer. Their countenances very remarkably expreſs the abundant mildneſs which they poſſeſs; and are entirely free from that ſavage fierceneſs which marks nations in a barbarous ſtate. They are frank, cheerful, and good-natured.

Their hair is in general ſtraight, thick, and ſtrong, though a few have it buſhy or frizzled. The natural colour is black; but the greateſt part of the men, and ſome of the women, have it ſtained of a brown or purple colour, and a few of an orange caſt. They wear it variouſly cut. Some have it cut off on one ſide of the head only; others have it entirely cut off except a ſingle lock; the women in general wear it ſhort. The men have their beards cut ſhort; and both men and women ſtrip the hair from the arm-pits. The men are ſtained from about the middle of the belly to about half-way down the thighs with a deep blue colour. The women have only a few ſmall lines or ſpots thus imprinted on the inſide of their hands. Their kings, as a mark of diſtinction, are exempted from this cuſtom. The men uſe circumciſion. The dreſs of both men and women is the ſame, which conſiſts of a piece of cloth or matting, about two yards wide, and two and a half long; at leaſt ſo long as to go once and a half round the waiſt, to which it is confined by a girdle or cord. The ornaments worn by both ſexes are necklaces, made of the fruit of the pandanus, and various ſweet-ſmelling flowers, which go under the name of *kahulla*. Others are compoſed of ſmall ſhells, the wing and leg bones of birds, ſhark's teeth, all which hang looſe upon the breaſt; rings of tortoiſe ſhells on the fingers; and a number of theſe joined together as bracelets on the wriſts. The lobes of the ears are perforated with two holes, in which they wear cylindrical bits of ivory about three inches long.

Yams, plantains, and cocoa-nuts, compoſe the greateſt part of their vegetable diet. Of their animal food, the chief articles are, hogs, fowls, fiſh, and all ſorts of ſhell-fiſh; but the lower people eat rats. The two firſt vegetable articles, with bread-fruit, are what may be called the baſis of their food, at different times of the year, with fiſh and ſhell-fiſh; for hogs, fowls, and turtle, ſeem only to be occaſional dainties, reſerved for their chiefs. Their food is generally dreſſed by baking; and they have the art of making, from different kinds of fruit, ſeveral diſhes which are eſteemed very good. The generality of them lay their victuals upon the firſt leaf they meet with; but when food is ſerved up to the chiefs, it is commonly laid upon green plantain leaves. The women are not excluded from eating with the men; but there are certain ranks or orders amongſt them that can neither eat nor drink together. This diſtinction begins with the king; but where it ends could not be learnt. They ſeem to have no ſet time for meals. They go to bed as ſoon as it is dark, and riſe with the dawn in the morning. Their private diverſions are chiefly ſinging, dancing, and muſic, performed by the women. The bulk of the people are ſatisfied with one wife; the chiefs, however, have commonly ſeveral women.

They appear to have little conception of future puniſhment; but they believe that they are juſtly puniſhed upon earth; and conſequently uſe every method to render their divinities propitious. The Supreme Author of all things they call *Kallafootaonga*; who, they ſay, is a female reſiding in the ſky, and directing the thunder, wind, rain, and in general all the changes of weather. They believe that when ſhe is angry with them, the productions of the earth are blaſted; that many things are deſtroyed by lightning; and that they themſelves are afflicted with ſickneſs and death as well as their hogs and other animals. When this anger abates, they ſuppoſe that every thing is reſtored to its natural order.

Of the nature of their government, no more is known than the general outline. According to the information received, the power of the king is unlimited, and the life and property of the ſubject are at his diſpoſal; and inſtances enough were ſeen to prove that the lower order of people have no property, nor ſafety for their perſons, but at the will of the chiefs to whom they reſpectively belong. When any one wants to ſpeak with the king, he advances and ſits down before him with his legs acroſs; which is a poſture to which they are ſo much accuſtomed, that any other mode of ſitting is diſagreeable to them. To ſpeak to the king ſtanding would be accounted a ſtriking mark of rudeneſs. It is a particular privilege annexed to his ſovereignty, not to be punctured nor circumciſed, as all his ſubjects are. The climate is healthy; and the population of theſe iſlands is ſuppoſed to amount to about 200,000. Lat. 19. 40. to 21. 30. S. lon. 184. 46. to 185. 45. E. Greenwich.

FRIEND'LY SOCI'ETIES. Aſſociations, chiefly among the inferior claſs of tradeſmen, for the purpoſe of affording each other relief in ſickneſs; and their widows and children ſome aſſiſtance at their death. Theſe have been thought worthy the protection of the legiſlature, to prevent frauds which had ariſen from the irregular principles on which many of them were conducted. The 33 Geo. III. c. 54, provides that any number of perſons may form themſelves into a ſociety, and raiſe among themſelves a fund for their mutual benefit, and make rules and impoſe fines. The rules, declaring the purpoſe for which ſuch ſocieties are eſtabliſhed, are to be exhibited to the quarter ſeſſions, who may annul or confirm them; in which latter caſe they are to be ſigned by the clerk of the peace. No rule thus confirmed to be altered but at a general meeting of the ſociety, and ſubject to the controul of the ſeſſions. Societies may appoint officers, who are to give ſecurities for their truſt, the treaſurer or truſtees by bond to the clerk of the peace, and other perſons to the treaſurer or truſtees; which bonds are exempted from the ſtamp duty. Committee of not leſs than eleven members may be appointed; their powers to be declared by the ſociety and ſubject to their controul. Treaſurers and truſtees are enabled to lay out ſubſcriptions in purchaſe of ſtock, &c. and to ſell and change funds for the uſe of the ſociety; to render accounts, and pay over balances. In caſe of miſbehaviour of truſtees, application to be made to the court of chancery, in which proceedings are to be free of all expence of fees, ſtamps, &c. and counſel to be aſſigned gratis by the court. Executors or aſſignees of truſtees, &c. dying or becoming bankrupt, to pay the demands of the ſociety in the firſt place. Effects of the ſocieties veſted in treaſurers and truſtees, who may bring and defend actions. Societies not to be diſſolved without conſent of five-ſixths of the members; rules entered in a book to be received as evidence. Societies may receive donations. Complaints of members againſt ſtewards, &c. to be ſettled by two juſtices. If rules direct diſputes to be ſettled by arbitration, the award of the arbitrators ſhall be final. Members of ſocieties producing certificates of ſteward, &c. not to be removeable from any pariſh till actually chargeable: and ſimilar proviſions are made relative to this, as to other certificates under the poor laws. Thus have the legiſlature, with that humanity which peculiarly diſtinguiſhes the Britiſh conſtitution, taken under their care a ſet of men who, though generally uſeful and induſtrious, are but too apt not to be ſufficiently conſcious of the benefits conferred upon them, by a form of government in which charity is enforced and regarded as a ruling principle.

FRIEND'SHIP, *ſ.* [*vriendſcap*, Dut.] The ſtate of minds united by mutual benevolence; amity.—There is little *friendſhip* in the world, and leaſt of all between equals. *Bacon.*—Higheſt degree of intimacy:

My ſons, let your unſeemly diſcord ceaſe,
If not in *friendſhip*, live at leaſt in peace. *Dryden.*

Favour; perſonal kindneſs.—Raw captains are uſually ſent, only preferred by *friendſhip*, and not choſen by ſufficiency. *Spenſer.*

His *friendſhips*, ſtill to few confin'd,
Were always of the middling kind. *Swift.*

Aſſiſtance; help:

Gracious, my lord, hard-by here is a hovel:
Some *friendſhip* will it lend you 'gainſt the tempeſt;
Repoſe you there. *King Lear.*

Conformity; affinity; correſpondence; aptneſs to unite.—We know thoſe colours which have a *friendſhip* with each other, and thoſe which are incompatible, in mixing together thoſe colours of which we would make trial. *Dryden.*

Many connections are formed and dignified with the name of *friendſhip*, upon no other principle but the ſordid hope which one or perhaps each of the parties entertains of accompliſhing ſome ſelfiſh purpoſe through the aſſiſtance of the other: but ſuch a connection is ſo baſe in its nature, and ſo tranſitory in its duration, as to render it unworthy of the name of friendſhip. The inſtinctive affection which a parent entertains for his child, as well as that which the child feels for his parent, ſeem intended by nature to form an union between the perſons thus related to each other: but the union between parents and children, when ſupported by no other principle but inſtinct, is different from friendſhip; it extends no farther than to cauſe the parent to provide for his child during his helpleſs years, and the child to look up to his parent for protection and ſupport. We need not mention that appetite which is the foundation of love, and is the proviſion which nature has made for the continuation of our ſpecies. This appetite alone, unaſſiſted by ſome nobler principle, cannot give riſe to any connection worthy of an honourable name.

When two perſons of virtue and abilities contemplate each the other's character and conduct, they cannot but view them with complacency and eſteem. Habits and actions diſplaying prudence, fortitude, moderation, integrity, benevolence, and piety, naturally command the approbation of the impartial ſpectator, and even affect him with delight. Hence the ſociety of ſuch a perſon is ever preferred to one who is diſgraced by the oppoſite qualities. Whenever men of ſuch truly reſpectable characters enjoy opportunities of mutual intercourſe, an attachment naturally takes place between them, entirely diſintereſted, and founded ſolely on the approbation with which the one cannot avoid regarding the conduct of the other. The eſteem which the one is thus induced to entertain for the other will lead them to ſeek frequent opportunities of enjoying each other's ſociety, mutually to aſk and liſten to advice, to truſt their moſt ſecret and important purpoſes to each other's confidence, and to be no leſs concerned each of them for the other's intereſt and honour than for his own. This, and this alone, is genuine friendſhip; founded on virtue, and on that approbation which virtue never fails to command: it is a natural conſequence of intercourſe between virtuous men. Where it is once eſtabliſhed, it cannot die, while thoſe virtues to which it owes its origin continue to adorn the perſons between whom it ſubſiſts.

But to cheriſh and preſerve friendſhip, Dr. Blair inculcates the following excellent admonitions: "It is material to the preſervation of friendſhip, that openneſs of temper and manners, on both hands, be cultivated. Nothing more certainly diſſolves friendſhip, than the jealouſy which ariſes from darkneſs and concealment. If your ſituation oblige you to take a different ſide from your friend, do it openly. Avow your conduct; avow your motives; as far as honour allows, diſcloſe yourſelves frankly; ſeek no cover from unneceſſary and myſterious ſecrecy. Mutual confidence is the ſoul of friendſhip. As ſoon as that is deſtroyed, or even impaired, it is only a ſhow of friendſhip that remains. What was once cordial intimacy, degenerates firſt into formal civility. Conſtraint on both ſides next ſucceeds; and diſguſt or hatred ſoon follows. The maxim that has been laid down by certain crooked politicians, to behave to a friend with the ſame guarded caution as we would do to an enemy, becauſe it is poſſible that he may one day become ſuch, diſcovers a mind which never was made for the enjoyments of friendſhip. It is a maxim which may indeed find place in mere political and party friendſhips, where perſonal advancement is always in view: but it is altogether inconſiſtent with the ſpirit of thoſe friendſhips, which are formed, and underſtood to be nouriſhed, *by the heart.*

"The moſt important object for the preſervation of friendſhip is, to cultivate, in all intercourſe among friends, gentle and obliging manners. It is a common error to ſuppoſe, that familiar intimacy ſuperſedes attention to the leſſer duties of behaviour; and that, under the notion of freedom, it may excuſe a careleſs, or even a rough, demeanour. On the contrary, an intimate connection can only be kept up, by a conſtant wiſh to be pleaſing and agreeable. The nearer and cloſer that men are brought together, the more frequent that the points of contact between them become, there is the greater neceſſity for the ſurface being ſmooth, and every thing being removed that can grate or offend. Let no harſhneſs, no appearance of neglect, no ſupercilious affectation of ſuperiority, occur in the intercourſe of friends. A tart reply, a propenſeſs to rebuke, a captious and contradictious ſpirit, are often known to embitter domeſtic life, and to ſet friends at variance. In thoſe ſmaller articles of behaviour, where men are too apt to be careleſs, and to indulge their humour without reſtraint, the real character is often underſtood to break forth, and ſhew itſelf. It is by no means enough, that, in all matters of ſerious intereſt, we think ourſelves ready to prove the ſincerity of our friendſhip. Theſe occur more rarely. The ordinary tenor of life is compoſed of ſmall duties and offices, which men have occaſion daily to perform; and it is only by rendering daily behaviour agreeable, that we can long preſerve the comforts of friendſhip."

FRI'ER, *ſ.* See FRIAR.

FRI'ER, *ſ.* with printers, a part of a ſheet or page rather grey than black, from a want of ink.

FRIE'RA, a town of Portugal, in the province of Tra-los-Montes: four leagues ſouth-weſt of Outeiro.

FRIER's HEAD, a cape on the eaſt coaſt of the iſland of Antigua. Lat. 17. 11. N. lon. 61. 22. W. Greenwich.

FRI'ERY, *adj.* abounding in ſuch grey ſpots as mentioned above. See FRIER.

FRIESL'AND, one of the ſtates of the United Netherlands, or Batavian republic, ſo called from the Friſons, a warlike people, whoſe country formerly extended from the Scheldt to the Weſer. The country of which we are now ſpeaking, is bounded on the north by the German Ocean, on the eaſt by Groningen and Overiſſel, on the ſouth by Overiſſel and the Zuyder Sea, and on the weſt by the Flie river. Frieſland in its air and ſoil reſembles Holland, eſpecially in the north-weſt parts, which lie lower than the ſea, and are particularly remarkable for fine paſtures, in which, beſides excellent oxen, cows, and ſheep, a great number of large horſes are bred, for ſale into Germany and other countries. In the more elevated parts is found good corn land, and the wheat is particularly eſteemed for the fineneſs of the ears and whiteneſs of the flour. Peat forms one of the principal articles of fuel, and towards the ſouth and ſouth-eaſt there are extenſive heaths and woods. The inhabitants, for want of ſandhills along the ſea-coaſt, are under the neceſſity of ſecuring themſelves by means of dykes; which, though abſolutely neceſſary, yet are attended with vaſt expence. Formerly, when the care of theſe dykes were only the private concern of the proprietors of particular eſtates, they were very low, and frequently

quently suffered to fall to decay, so as to be unable to withstand the impetuosity of the waves, especially when driven by a strong north-westerly wind; and by such breaches the country has been laid under water, and great numbers of persons perished, not to mention the loss of their cattle. In order as much as possible to preserve themselves when under these calamities, the inhabitants raised several eminences, from twenty to twenty-five feet high, and of considerable circumference; to which, unless by the rapidity of the inundations intercepted, they betook themselves with their cattle and household furniture, and there remained till the flood subsided. In process of time, houses, or rather whole villages and towns, were built on these tumuli. In the year 1570, the dykes were ordered to be made higher and wider, at the charge of the public; and since this the irruptions of the sea have been less frequent. Friesland may vie with Holland in the number of canals with which it is in all parts intersected; and great is the convenience of these canals, both for the carrying off the superfluous waters into the sea, and likewise for facilitating traffic and intercourse. The principal reaches from Harlingen through Franeker, as far as Lewarden and Dokkum, and Groningen, and even to the frontiers of East Friesland. In the whole province are eleven towns, and three hundred and thirty-six villages. The inhabitants still retain their old customs and manner of living, even to the ancient Friesen dialect and accent, which latter circumstance renders the language of the country people in particular unintelligible to the other Netherlanders. Friesland is famous for its woollen stuffs, but more especially for its linen, which is the finest in Europe. Friesland had princes of its own, afterwards dukes, and then kings; among whom Radbold II. was particularly famous. These last were succeeded by podestats, elected from among the people. So early as the year 1436, part of Friesland devolved to the house of Burgundy. The greater part of it, however, still continues under podestats. In 1498, the emperor Maximilian I. created duke Albert, of Saxony, hereditary governor of Friesland; and though this was done on condition that he should maintain the people in their ancient liberties, yet would they never acknowledge him. In 1515, Charles V. purchased of George duke of Saxony his claim to this country, and reduced it under his own dominion; but in the days of his son, Philip II. the Friesons recovered their liberty, and acceded to the alliance of Utrecht. Lewarden is the capital.

FRIES'LAND (East), a principality of Germany; bounded on the north by the sea, on the east by the county of Oldenburg, on the south by the bishopric of Munster, and on west by Groningen; about thirty-eight miles from north to south, and thirty-six from east to west. The air is moist and thick, but much purified by sea breezes; the spring and harvests are late, the land is flat, low, and defended by strong and lofty dykes against the waves of the sea. The land along the coasts is rich and fertile, chiefly meadow land, with few corn fields. The cattle are of an extraordinary size and goodness, as are the sheep and horses. It is not uncommon for a ewe to yean four lambs. The butter and cheese are abundant and rich. In the centre of the country the soil is for the most part sandy, interspersed with fens and moors, in which the inhabitants dig peat for fuel, a circumstance of the more importance as wood is scarce. Fowl and game are plentiful, and the geese in particular of an uncommon size, even to weigh as much as twenty-four pounds apiece. The principal river is the Ems, by means of which the trade and navigation of the country are very considerable. The exportation principally consists in large horses, horned cattle, cheese, butter, oats, beans, rape-seed, and fine linen which they sell for Holland. Anciently, East Friesland was divided into a great number of lordships, the greater part of which, in 1430, submitted to Edzard, surnamed Cyrksena, or Sirksena, whose successors became princes of the empire, in 1454, with the title of count. This family becoming extinct, in 1744, Frederic II. king of Prussia seized on it, in consequence of the expectancy granted to the house of Brandenburg by the emperor Leopold, in 1694. On the other hand, the house of Brunswick Luneburg, in the person of George II. king of England, protested against it, and laid claim to the principality, on account of an hereditary union entered into, in 1691, with prince Christian Eberhard; making his pretensions known to the regency of East Friesland and to the aulic chamber of the empire; but the king of Prussia denying the authority of the emperor or regency, and threatening to support his actions by force of arms, he was suffered to remain in possession. The inhabitants are partly Lutherans and partly Calvinists; the Catholics have a free toleration in many towns, and the Moravians at Emden, Leer, and Norden. The Jews have likewise their synagogues. The ancient language of the country is forgotten; High German and Dutch are equally spoken. The nobility, the towns, and the peasants, form the states, whose transactions with their princes, joined to the imperial ordinances, serve for the laws of the country. The states consent to the taxes, and raise them; the excise is in their hands, and they yet retain some privileges. The principal towns are Aurich, Norden, and Emden. The assessment for the roman month is fixed at 192 florins, and the tax to each chamber term 160 rixdollars, eighty-six kruitzers. The revenue to the sovereign is about 300,000 rixdollars.

FRIES'ACH, a town of Germany, in the circle of Upper Saxony, and Middle Mark of Brandenburg. This town was taken by the French, in March 1797: twenty-eight miles north-west of Berlin.

FRIES'EN, a town of Germany, in the duchy of Stiria: nine miles north-north-east of Windischgratz.

FRIE'SNITZ, a town of Germany, in the circle of Upper Saxony, and circle of Newstadt: two miles east of Neustadt.

FRIEZE, [*drap de frise*, Fr.] A coarse warm cloth, made perhaps first in *Friesland*.—He could no more live without his *frieze* coat than without his skin. *Addi*

The captive Germans of gigantic size,
Are rank'd in order, and are clad in *frieze*. *Dryde*

FRIEZE, or FRIZE, *s.* [in architecture.] A large flat member which separates the architrave from the cornice; of which there are as many kinds as there are orders of columns. See ARCHITECTURE, vol. ii. p. 65.

Nor did there want
Cornice or *frieze* with bossy sculptures grav'n;
The roof was fretted gold. *Milton.*

FRIEZ'ED, *adj.* Shagged or napped with frieze.

FRIE'ZELIKE, *adj.* Resembling a frieze.—I have seen the figure of Thalia, the comic muse, sometimes with an entire head piece and a little *friezelike* tower, running round the edges of the face, and sometimes with a mask for the face only. *Addison.*

FRI'GATE, *s.* [*fregate*, Fr. *fregata*, Ital.] A small ship. Ships under fifty guns are generally termed *frigates*. See NAVAL ARCHITECTURE.—The treasure they fought for was, in their view, embezzled in certain *frigates*. *Raleigh.*

On high-rais'd decks the haughty Belgians ride,
Beneath whose shades our humble *frigates* go. *Dryden.*

FRIGATE BA'Y, a bay on the south coast of the island of St. Christopher: two miles east-south-east of Basseterre.

FRIGATOO'N, *s.* a Venetian vessel, commonly used in the Adriatic, built with a square stern, and without any fore-mast, having only a main-mast, mizen-mast, and bow-sprit.

FRIGEFAC'TION, *s.* [*frigus* and *facio*, Lat.] The act of making cold.

To

To FRI'GEFY, *v. a.* [*frigus*, cold, and *facio*, Lat. to make.] To make cold. *Not much uſed.*

To FRI'GERATE, *v. a.* To make cold. *Not uſed.*

FRI'GERATORY, *ſ.* [*frigeratorium*, Lat.] A place to make any thing cold; a place to keep any thing cold.

To FRIGHT, *v. a.* [ꝼꝛıꝿꝺꝛan, Sax.] To terrify; to diſturb with fear; to ſhock with fear; to daunt; to diſmay. This was in the old authors more frequently written *affright*, as it is always found in the ſcripture.—The mind *frights* itſelf with any thing reflected on in groſs, and at a diſtance: things thus offered to the mind, carry the ſhew of nothing but difficulty. *Locke.*

Such a numerous hoſt
Fled not in ſilence through the *frighted* deep,
With ruin upon ruin, rout on rout. *Milton.*

FRIGHT, *ſ.* A ſudden terror:

You, if your goodneſs does not plead my cauſe,
May think I broke all hoſpitable laws,
To bear you from your palace-yard by might,
And put your noble perſon in a *fright*. *Dryden.*

The conſequences of *fright* are often fatal.—The general effects are a great contraction of all the ſmall veſſels, and a repulſion of the blood into the large and internal ones; hence the ſuppreſſion of perſpiration, the general oppreſſion, trembling, and anguiſh, from the heart and lungs being overcharged with blood, &c. After great frights, perſons rarely recover their uſual vivacity; and epilepſies that are cauſed by frights are rarely, if ever, cured. When a perſon is affected with terror, or ſudden or great frights, the principal endeavours ſhould be to reſtore the circulation to its due order, to promote perſpiration, and to allay the agitation or commotion, in which the patient is obſerved to be. The cuſtom of giving cold water in theſe caſes is bad. Place the affrighted perſon in a quiet ſituation; a little warm liquor, as camomile tea or ſuch like, ſhould be given him to drink; the legs may be put into warm water, and there continue for ſome time; the legs ſhould be rubbed, and the camomile tea repeated every ſix or eight minutes; when the ſkin becomes warm, and there is a tendency to perſpiration, ſleep may be promoted by a gentle opiate. See the article FEAR, vol. vii. p. 287.

To FRIGHT'EN, *v. a.* To terrify; to ſhock with dread:

The rugged bear's, or ſpotted lynx's brood,
Frighten the valleys and infeſt the wood. *Prior.*

FRIGHT'FUL, *adj.* Terrible; dreadful; full of terror:

Without aid you durſt not undertake
This *frightful* paſſage o'er the Stygian lake. *Dryden.*

FRIGHT'FULLY, *adv.* Dreadfully; horribly.—This will make a prodigious maſs of water, and looks *frightfully* to the imagination; 'tis huge and great. *Burnet.*—Diſagreeably; not beautifully. *A woman's word:*

Then to her glaſs; and, Betty, pray,
Don't I look *frightfully* to-day? *Swift.*

FRIGHT'FULNESS, *ſ.* The power of impreſſing terror.

FRI'GID, *adj.* [*frigidus*, Lat.] Cold; wanting warmth. In this ſenſe it is ſeldom uſed but in ſcience.—In the torrid zone the heat would have been intolerable, and in the *frigid* zone the cold would have deſtroyed both animals and vegetables. *Cheyne.*—Wanting warmth of affection. Impotent; without warmth of body. Dull; without fire of fancy:

If juſtice Philip's coſtive head,
Some *frigid* rhyme diſburſes,
They ſhall like Perſian tales be read,
And glad both babes and nurſes. *Swift.*

FRIGIDA'RIUM, *ſ.* [Latin.] A place to cool any thing in; a cold bath.

FRIGID ZO'NE, the ſpace about either pole of the earth to which the ſun never riſes for one whole day at leaſt in their winter. Theſe two zones extend to about twenty-three degrees and a half every way from the pole, as their centre.

FRIGI'DITY, *ſ.* [*frigiditas*, Lat.] Coldneſs; want of warmth. Dulneſs; want of intellectual fire.—Driving at theſe as at the higheſt elegancies, which are but the *frigidities* of wit. *Brown.*—Of the two extremes, one would ſooner pardon phrenzy than *frigidity*. *Pope.*—Want of corporeal warmth.—The boiling blood of youth hinders that ſerenity which is neceſſary to ſevere intenſeneſs; and the *frigidity* of decrepit age is as much its enemy, by reaſon of its dulling moiſture. *Glanville.*—Coldneſs of affection.

FRI'GIDLY, *adv.* Coldly; dully; without affection.

FRI'GIDNESS, *ſ.* Coldneſs; dulneſs; want of affection.

FRI'GIFY, *v. a.* [*frigus*, cold, and *facio*, Lat. to make.] To make cold. *Not much uſed.*

FRIGILIA'NA, a town of Spain, in the kingdom of Grenada: thirteen miles eaſt of Velez-Malaga.

FRIGORI'FIC, *adj.* [*frigorificus*, of *frigus* and *facio*, Lat.] Cauſing cold. Some philoſophers, as Gaſſendus, and other corpuſcularians, denying cold to be a mere privation or abſence of heat, contend that there actual frigorific corpuſcles or particles, as well as fiery ones: whence proceed cold and heat. But later philoſophers allow of no other frigorific particles beſide thoſe nitrous ſalts, &c. which float in the air in cold weather, and occaſion freezing.

FRI'KEN, a lake of Sweden, in the province of Warmeland: forty miles in length, but narrow.

FRILL, *ſ.* An edging of fine linen on the boſom of a ſhirt.

To FRILL, *v. a.* [*frilleux*, Fr.] To quake or ſhiver with cold. Uſed of a hawk; as, the hawk *frills*.

FRIM, *adj.* [from ꝼꝛemian, Sax. *proficere.*] In good caſe. *Ray's North Country Words.*—Though not to be met with in books, this is a common word with country-folks in general. *Maſon's Suppl.*

FRINGE, *ſ.* [*friggio*, Ital. *frange*, Fr.] Ornamental appendages added to dreſs or furniture. It is in converſation uſed of looſe and ſeparate threads.—Thoſe offices and dignities were but the facings or *fringes* of his greatneſs. *Wotton.*

The golden *fringe* ev'n ſet the ground on flame,
And drew a precious trail. *Dryden.*

To FRINGE, *v. a.* To adorn with fringes; to decorate with ornamental appendages.—Either ſide of the bank, *fringed* with moſt beautiful trees, reſiſted the ſun's darts. *Sidney.*

Here, by the ſacred bramble ting'd,
My petticoat is doubly *fring'd*. *Swift.*

FRINGE-TREE, *ſ.* in botany. See CHIONANTHUS.

FRINGIL'LA, *ſ.* the FINCHES; [from *frigillago*, Lat. of *frigus*, cold; becauſe theſe birds are many of them attached to the mountains, and can bear an extreme degree of cold.] In ornithology, a genus belonging to the order of paſſeres, the characters of which are: Bill conical, ſharp-pointed, ſtraight. There are no leſs than a hundred and ſixteen ſpecies of this genus now known, named as follows:

1. Fringilla Lapponica, the Lapland finch: head black; body black and grey mixed; eye-brows white; outermoſt tail-feathers marked with a white wedged ſpot; throat and breaſt black; nape of the neck ferruginous; belly, vent, and firſt quill feathers on the outer edge, white. This ſpecies is ſix inches and a half-long; inhabits Europe, Aſia, and America; runs along the ground like a lark, and warbles like it on the wing. The female only differs from the male in being paler. At Hudſon's Bay, where it is called *tecumaſhiſh*, it differs ſomewhat in ſize, meaſuring only five inches. The breaſt is whitiſh, with a len-

FRINGILLA.

G.Edwards delt.

J.Pass sculpt.

1. The American Goldfinch. 2. The white-throated Sparrow. 3. The dusky Linnet.
4. Amadavad Linnet. 5. The Siskin. 6. The Serin.

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a longitudinal black ſtreak down it; in other things not greatly different. It is found with us in the neighbourhood of Severn river, in winter only, appearing firſt about November, and is commonly found near juniper trees. Some of the males have more ferruginous about the head. It is alſo met with in Lapland, and the interior of Siberia, being often found near the Uralian chain. It breeds in the northern parts, and unites into flocks: when it changes place, it runs like a lark on the ground; ſings like a linnet, frequently while vibrating in the air, like the lark. It likewiſe inhabits, though leſs frequent, the fields of the inner bays of Greenland, and makes the neſt in June, of moſs and graſs, lined with feathers; lays five or ſix eggs, of a browniſh ſlate, mixed with a duller colour; is ſuppoſed to migrate into America in autumn.

2. Fringilla Surinama, the Surinam finch: bill ſharp, and of a yellow-colour; body grey; the belly whittiſh; quills black, the prime ones near the baſe white, the ſecondaries white both at the baſe and tips; tail blackiſh; the firſt and ſecond feathers have a white ſpot on the inſide; the third, fourth, and ſixth, white at the tips. Inhabits Surinam.

3. Fringilla longiroſtris, the long-billed finch: a ſize bigger than the chaffinch; bill grey brown; head and throat black; round the neck a collar of chefnut; back, wing-coverts, ſcapulars, and rump, brown and yellow mixed; all the under parts orange yellow; quills brown, edged with olive without, and within fringed with yellow; the outer edges of the ſecondaries are alſo fringed with yellow; tail olive; legs grey brown. Inhabits Senegal.

4. Fringilla cælebs, the chaffinch: this bird, ſo well known in England, is called by the Greeks, σπίζα; the Italian names are, *franguello*, *franguеglio*, and *frenguello*; in German, *finck*, *roth finck*, *winche*; in Poliſh, *ſlowick*; in Swediſh, *finke*, *bofincke*; in Bohemian, *penkeway*; in French, *pinçon*, the pincher, on account of its fierce bite; or from *pinch*, its chirp. Theſe are migratory birds, though with us they remain during the winter. They reſort to our dwellings, and viſit our farm-yards to obtain an eaſier ſubſiſtence; they are little paraſites who ſeek to live at our expence, without contributing to our pleaſures; for in that ſeaſon they never ſing. During the reſt of the time they lodge in cloſe hedges, in ever-greens, and in holes, where they are ſometimes found dead when the weather is exceſſively ſevere. Thoſe which migrate into other climates aſſemble often in prodigious flocks. A very remarkable circumſtance in the migration of the chaffinches, is what Geſner mentions of thoſe of Swiſſerland, and Linnæus of thoſe of Sweden: that only the females remove to other climates, and the males reſide in the country during the winter. This ſingular remark is corroborated by the late Mr. White, of Selbourn, in Hampſhire, who found that the vaſt flocks of chaffinches which generally appeared in his neighbourhood about Chriſtmas, were almoſt entirely hens. Yet, as he ſeems not to have diſſected any, he might have been deceived by the change of plumage, which is extremely probable. The migrations vary in different countries. Aldrovandus aſſures us, that the chaffinches ſeldom breed near Bologna, but almoſt all depart about the end of winter, and return the ſucceeding autumn. They are ſpread through the whole of Europe, from the ſhores of the Baltic and Sweden, where they are frequent, and neſtle, to the Straits of Gibraltar, on the coaſts of Africa, and at the Cape of Good Hope.

The chaffinch is a ſprightly bird, and perpetually in motion. It begins to chant very early in the ſpring, and ſeveral days before the nightingale, and gives over about the ſummer ſolſtice. Some connoiſſeurs in ſinging birds very much eſteem the notes of the chaffinch; and Latham ſays, that thoſe bred in Eſſex have the fineſt ſong. If a young chaffinch taken from the neſt be educated under a canary, a nightingale, &c. it will have the ſong of its inſtructors. This facility in learning the ſongs of other birds accounts for the diverſity obſerved in the warble of the chaffinches. In the Netherlands, five or ſix kinds of chaffinches are diſtinguiſhed by the various length of their airs.

Theſe birds conſtruct their neſt very round and compact, and place it in the cloſeſt trees or buſhes; ſometimes they build in our gardens upon the fruit-trees, and conceal the neſt ſo artfully that we can hardly perceive it. It is compoſed of white moſs and ſmall roots on the outſide, and lined with wool, hairs, ſpiders' webs, and feathers. The female lays five or ſix eggs, which are reddiſh grey, ſprinkled with blackiſh ſpots, more frequent near the large end. The male never deſerts his mate in the time of hatching; he ſits at night always at hand; and if during the day he remove to a ſhort diſtance, it is only to procure food. Jealouſy has perhaps ſome ſhare in this exceſſive aſſiduity; for theſe birds are of an amorous complexion: when two males meet in the ſpring, they fight obſtinately, till one of them is vanquiſhed and expelled; and the combat is ſtill more fierce, if they be lodged with only a ſingle female.

The parents feed their brood with caterpillars and inſects: they alſo eat theſe themſelves, but their ordinary ſubſiſtence is ſmall ſeeds, thoſe of the white thorn, poppy, burdock, roſe-tree, and eſpecially beech-maſt, rape and hemp-ſeed. They feed alſo upon wheat and oats, and are expert in ſhelling the grain to obtain the mealy ſubſtance. Though rather obſtinate, they can in time be inſtructed, like goldfinches, to perform ſeveral little feats; they learn to employ their wings and feet to draw up the cup when they want to eat or drink.

This bird is ſomewhat ſmaller than our ſparrow, and is too well known to require a minute deſcription. The ſides of the head, the fore-part of the neck, the breaſt, and the loins, are of a wine colour; the upper part of the head and of the body chefnut; the rump olive; and a white ſpot on the wing. In the female the bill is more ſlender, and the colours leſs bright than in the male; but in both ſexes the plumage is very ſubject to vary. Of the males, ſome have the upper part of the head and neck cinereous, and others of a brown chefnut; in ſome the quills of the tail neareſt the two middle ones are edged with white, and in others they are entirely black; age probably occaſions theſe ſlight differences. One mentioned by Latham was ſhot near London, with coal-black legs. In the north of England they are ſometimes called white-linnets, and flax-finches; by others *ſpink* from their cry.

Several varieties of the chaffinch are mentioned by authors, the principal of which are as follow: 1. The *variegated chaffinch*. In this the head and neck are aſh-coloured; cheeks browniſh; rump greeniſh; the under parts browniſh fleſh-colour; the leſſer and greater wing-coverts white; the middle ones, quills, and tail, black; the two outer ones half-way white on the outer margins. 2. The *white chaffinch*, which is wholly white. 3. The *collared chaffinch*, being of the common colour, except the crown of the head, and a collar round the neck, both of which are white. Added to theſe, are two others, viz. one with the fore-parts white, the hinder ferruginous; another with the back yellowiſh, the under parts very pale, and more white than uſual in the wings.

5. Fringilla montifringilla, the bramble finch: larger than the chaffinch; length ſix inches; bill yellowiſh; tip black; the head, hind part of the neck, and back, are black, margined with rufous brown; rump white; throat, fore-part of the neck, and breaſt, pale rufous orange; lower part of the breaſt and belly white; ſmaller wing-coverts pale rufous; the middle ones rufous white; the great ones black, tipped with white, and thoſe neareſt the body with pale rufous; quills brown, with yellowiſh edges; tail forked; legs grey. The female is plainer in colour, and is brown where the male is black, and rufous grey where he is rufous.

This ſpecies migrates into England at certain ſeaſons,

but does not build here: it is frequently found among the chaffinches, and ſometimes comes in vaſt flocks. They are alſo ſeen, at certain times, in vaſt clouds in France, inſomuch that the ground has been quite covered with their dung, and more than ſix hundred dozen were killed each night. They are ſaid to be particularly fond of beech-maſt, and will eat ſeeds of various other kinds: their fleſh is eaten by many, but is bitter. They are ſaid to breed about Luxemburg, making their neſt on the talleſt fir-trees, compoſed of long moſs without, and lined with wool and feathers within: the eggs are four or five in number, yellowiſh, and ſpotted; and the young are fledged at the end of May. This ſpecies is found more or leſs throughout Europe; is common in the pine foreſts of Ruſſia and Siberia; but thoſe of the laſt are darker in colour, and leſs in ſize.

There is a variety of the brambling, with a black ſtreak over each eye, tending to the hind head; acroſs the back part of the head another, meeting the firſt; on the wing-coverts a bar of reddiſh white, and a ferruginous one below; throat and breaſt tawny; belly and rump white. This was met with off the coaſt of Japan, and is in the collection of ſir Joſeph Banks.

There is alſo another variety of a paler colour than the common brambling, and the head wholly white; found in the Ardennes.

6. Fringilla lulenſis, the lulean finch: brown; breaſt and ſhoulders rufous; wings black with a rufous ſpot; ſize of the gold-finch; bill brown; head and neck above blackiſh-aſh: throat white; belly and vent whitiſh; wing-coverts with alternate rufous and black bands, the laſt white; quill feathers black; tail dark cinereous. Inhabits Sweden.

7. Fringilla erythrocephala, the red-headed finch: length near five inches; bill black; head and neck rich ſcarlet; ſpace round the eyes black; back, breaſt, and belly olive; wings black, with two bars of white on the coverts; tail black; legs grey. Inhabits the iſland of Mauritius.

8. Fringilla pſittacea, the parrot finch: ſize of the ſparrow; bill black; face, to behind the eye, and the throat, deep ſcarlet; rump and tail the ſame; reſt of the body parrot green, lighteſt beneath; the wings, when folded, reach the baſe of the tail; the outer edge of the quills is green, the inner cinereous brown; the tail cuneiform; the two middle feathers deep ſcarlet, with the ſhafts brown; the other five, on each ſide, have only the outer web ſcarlet, the inner brown. Brought by Dr. J. R. Forſter, from New Caledonia.

9. Fringilla carduelis, the goldfinch: beauty of plumage, melody of ſong, ſagacity, and docility, are united in this charming little bird, which, were it rare, and imported from a foreign country, would indeed be highly prized. Crimſon red, velvet black, white, and gold yellow, are the chief colours which gliſten on its plumage; and the mixture of lighter and deeper tints ſtill heightens their luſtre. Hence its names in different languages. In Germany, it is called *ſtieglitz*, *diſtel-vogel*, *kletter*, *truns*, *roth-vogel*; in Holland, *pitter*; in Bohemia, *ſteglick*; in Savoy, *charderaulat*; in Poland, *ſczigil*; in Sweden, *ſtiglitza*; in Italy, *gardello*, *gardellino*, *cardelino*, *carzerino*; in Spain, *ſirguerito*, *ſiele colore*, *ſorte pintacilgo*. The Latin epithet *carduelis* is derived from *carduus*, a thiſtle, on which it feeds; and the French name *chardonneret* is formed from *chardon*, which alſo ſignifies a thiſtle. It is the θρανὶς of Ariſtotle and the ancient Greeks.

When the wings of the goldfinch are cloſed, each appears marked with a train of white points, which are apparent on the dark ground: theſe are the white ſpecks which terminate all the quills of the wing, except the two or three firſt. The quills of the tail are of a ſtill deeper black; the ſix intermediate ones tipt with white, and the two laſt have on each ſide on their inner webs an oval white ſpot, which is conſpicuous. But theſe white points vary in their number and arrangement; and in general the plumage of the goldfinch is far from being conſtant.

The female has leſs red than the male, and no black at all. The young ones do not aſſume their fine red till the ſecond year; they are at firſt ſtained with dirty obſcure colours, and for that reaſon the bird-catchers call them *grey-pates*; but the yellow on the wings appears early, and alſo the white ſpots on the quills of the tail; yet theſe ſpots are of a duller white.

The males have a well-known and pleaſing ſong. They begin about the firſt of March, and continue during the whole of the genial ſeaſon; they chant even in the winter, when kept in warm apartments, where they enjoy the temperature of ſpring. Aldrovandus ranks them the ſecond of the ſinging birds; Daines Barrington admits them only into the ſixth place. In England, the goldfinches from Kent are ſaid by Latham to be the beſt ſingers; but this ſeems very doubtful.

Theſe birds, like the chaffinches, conſtruct the neateſt and moſt compact neſts. They conſiſt of fine moſs, lichens, liver-wort, ruſhes, ſmall roots, and the down of thiſtles, interwoven with great art, and lined with dry graſs, hair, wool, and down; they generally place them in trees, and particularly on pears, plums, and walnuts, and commonly ſelect the weak branches which ſhake the moſt. Sometimes they neſtle in copſes, and ſometimes in thorny buſhes; and it is ſaid that the young goldfinches bred in ſuch ſituations are of darker plumage, but more ſprightly, and ſing better than others. Olina makes the ſame remark in regard to thoſe hatched in the month of Auguſt. The female begins to lay about the middle of ſpring, at firſt five eggs, ſpotted with reddiſh-brown near the large end. If the neſt be demoliſhed, ſhe makes a ſecond, or even a third, hatch, but the number of eggs diminiſhes each time. Theſe birds are much attached to their young: they feed them with caterpillars and inſects; if both be caught together, and ſhut up in the ſame cage, the parents will ſtill continue their care. In breeding theſe birds, the cock goldfinch ought to have only one female. It is ſomewhat ſingular, that the cock goldfinch, when ſhut up in a large breeding cage with different females, is not ſo much diſpoſed to pair with his own female as with the hen canary, or any other female of a warm temperament. Sometimes the hen goldfinch breeds with the cock canary, but this is unfrequent; and on the other hand, the hen canary, if ſeparated from the males, will conſort with the cock goldfinch. The female is the firſt to feel the ardour of paſſion, and endeavours, by alluring arts, and the influence of the genial ſeaſon, to urge her languid paramour to conſummate their pairing. The preliminaries laſt commonly ſix weeks, during which time the hen canary makes a complete laying of addle eggs, for which her inceſſant ſolicitations have not procured fecundation. However, after the union is accompliſhed, he proceeds to diſcharge the duties of a parent; he aſſiſts his mate in conſtructing the neſt, and carries food to her while ſhe is engaged in hatching, or in rearing her young.

Though theſe conſtrained amours will ſometimes ſucceed with a hen canary and a wild goldfinch, it is better to raiſe together thoſe intended for breeding, and not to pair them till they are two years old. The offſpring reſembles more the father in the ſhape of the bill, in the colours of the head and of the wings, and in ſhort in all the extremities, and the mother in the reſt of the body: they have alſo been remarked to be ſtronger, and live longer, and to have a clearer ſong; but to be not ſo docile in adopting the notes of artificial muſic. Theſe hybrids are ſtill capable of propagating, and when they are paired with the hen canary, the ſecond generation has a manifeſt analogy to the ſpecies of the goldfinch: ſo much does the male influence predominate in the act of generation.

The goldfinch flies low, but with an even continued motion, like the linnet; and not by jerks and bounds, like the ſparrow. It is an active and laborious bird; if not

not employed in pecking the heads of poppies, of hemp, or of thiſtles, it is conſtantly buſy in carrying backwards and forwards whatever it can find in its cage. They live in harmony with each other, ſeek each other's ſociety, give marks of regard at all ſeaſons, and ſeldom quarrel but about their food. They are not ſo peaceful with other birds; they beat the canaries and linnets; but, in their turn, they receive the ſame treatment from the titmouſe.

The docility of the goldfinches is almoſt every where known: they can be inſtructed without much trouble to perform ſeveral movements with accuracy, to fire a cracker, and to draw up ſmall cups containing their food and drink; but for this laſt purpoſe they muſt be *clothed*. This clothing conſiſts of a ſmall belt of ſoft leather two lines broad, with four holes, through which the feet and wings are paſſed, and the ends joining under the belly, are held by a ring which ſupports the chain of the cup. In ſolitude it delights to view its image in the mirror, fancying it ſees another of its own ſpecies; and this attachment to ſociety ſeems to equal the cravings of nature; for often it is obſerved to pick up the hemp-ſeed, grain by grain, and advance to eat at the mirror, imagining, no doubt, that it feeds in company.

The goldfinches begin to aſſemble in autumn, and during that ſeaſon they are caught with eaſe. In winter they fly in numerous flocks; they approach the highways near which are thiſtles and wild ſuccory; they ſhake off the ſnow to obtain the ſeeds and the caterpillars. They live to a great age; Geſner ſaw one at Mayence which was twenty-three years old; they were obliged once a-week to ſcrape its nails and bill, that it might drink, eat, and ſit upon its bar; its common food was poppy ſeeds; its feathers were all turned white; it could not fly, but remained in whatever ſituation it was placed. They are ſubject to epilepſy, and to melting of the fat; and the moulting often proves fatal to them.

Their tongue is parted at the tip into ſmall filaments; the bill long; the edges of the lower mandible fitted into the upper; the noſtrils covered with ſmall black feathers; the outer toe connected to the middle one as far as the firſt joint. Total length of the bird five inches and ſome lines; the bill ſix lines; the alar extent eight or nine inches; the tail two inches, and conſiſts of twelve quills; it is a little forked, and projects ten or twelve lines beyond the wings.

Of this ſpecies of goldfinch there are many varieties, the principal of which are as follow:

1. The *white eyed goldfinch*, in all reſpects like the common one, except the fore-part of the head, which is red, and about the eyes white.

2. The *ſtriped-headed goldfinch*, which has the head ſtriped alternately with red and yellow.

3. The *ſwallow goldfinch*, with the bill fleſh-coloured; irides yellow; the head, throat, and neck, black, ſpotted with red near the bill; the breaſt, back, ſcapulars, and rump, yellowiſh-brown; belly, ſides, thighs, and under tail-coverts, white; the reſt as in common; legs fleſh-colour.

4. The *red-and-white goldfinch*; this is red on the forehead, cheeks, and throat; the other parts white, except the wings and tail, which are browniſh aſh-colour; and that part of the wing which in common is yellow, in this is of a dingy hue.

5. The *white goldfinch*; theſe are generally of a pure white, except the outer edge of the quills, which are yellow; a little mixture of the ſame on the wing-coverts; the ends of ſome of the quills half black, and tipped with white; legs white. One in the Leverian Muſeum had the parts which are uſually red, of a very pale red, a little gloſſy. Briſſon alſo ſays he has ſeen birds of this ſort. Buffon mentions one with a black head; the red parts very pale; the under parts greyiſh-white; the wing-coverts pale olive; the yellow of the wings as uſual; wings and tail white; bill and legs reddiſh-white: this was caught at large. There was one alſo in the Leverian Muſeum wholly white; and another all white except the crown of the head, which is mottled with red, and a creſcent of the ſame under the throat; the wings yellowiſh.

6. The *black goldfinch*; which is wholly black, except four of the middle quills, viz. from the fourth to the ſeventh, brimſtone-coloured on the outer edge, and white within from the baſe to the middle; bill and legs whitiſh. Goldfinches entirely black are not uncommon; ſome have the appearance of red about the head, others not. One of the firſt of theſe is in Dr. Latham's collection, which had been a caged bird, and gradually became of that colour. It had hemp-ſeed for its uſual food. Buffon mentions one that changed black all at once, after being four years in a cage. It kept ſo for eight months, when it began to reſume its former colours; and this circumſtance happened three times. An electrified goldfinch loſt the red of the head and yellow on the wings ſix months after.

7. The *black-and-green goldfinch*; which has the bill ſurrounded with a ſaffron-coloured ring; the reſt of the head and upper parts blackiſh; breaſt greeniſh-black; belly and under parts browniſh aſh-colour; edge of the wing greeniſh-black; quills black.

8. The *Canary goldfinch*; the head is not unlike the common goldfinch, but leſs bright; the upper parts of the body yellowiſh-brown; the under parts yellow; wings like the goldfinch; tail yellow, tipped with black.

10. Fringilla melba, the green goldfinch: ſize of the common goldfinch; bill fleſh-coloured; fore-part of the head and throat of a bright red; between the bill and the eye bluiſh aſh-colour; the upper parts of the bird are golden-green; the wing-coverts and ſecondaries greeniſh, with red margins; quills duſky; breaſt olive-green, changing into white on the belly and under the tail; all beneath variegated with broken duſky tranſverſe lines; the rump, and tail, bright red; legs pale brown. The female has a pale yellow bill; top of the head and neck aſh-colour; baſe of the wings and rump yellowiſh-green, inſtead of red; the tail brown, edged with dull red. In other things not unlike the male. This is ſaid to inhabit China and Braſil.

11. Fringilla Afra, the red-faced finch: length near ſix inches; general colour of the plumage deep dull green; cheeks tinged with crimſon; prime quills duſky, with dull orange edges; tail dull crimſon; legs yellow. Inhabits Angola.

12. Fringilla alario, the Cape finch: larger than the houſe ſparrow; bill aſh colour; head and neck black; the black ending in a point on the breaſt; the breaſt, and the reſt of the under parts, white; thighs rufous; upper parts of the body cheſnut; quills blackiſh; inner part of the leſſer ones, and under the wings, cheſnut; tail of this laſt colour; and the four outer feathers marked with a longitudinal blackiſh ſpot at the tip; legs brown. Inhabits the Cape of Good Hope.

13. Fringilla leucotis, the white-eared finch. Oſbeck mentions five ſmall birds, which he takes to be finches, and all varieties of the ſame ſpecies. The firſt with the head, back, and wing-coverts, purple; the inner ſide of the body yellow; prime quills and tail fine blue; the ſecondaries green; on the ears a white ſpot. The ſecond like the former; but the back and tail purple. The third with a green head, and a purple breaſt and tail. Fourth, the breaſt of a light green; the head and leſſer wing-coverts brown. The fifth with the head, back, wing-coverts, and tail, of a fine deep brown; the under ſide of the body, and under wing-coverts, fine crimſon. Each of theſe birds is diſtinguiſhed by a white ſpot on the ears.

14. Fringilla Amandava, the Amadavad finch: ſize of a wren; bill of a dull red; all the upper parts brown, with a mixture of red; the under the ſame, but paler; the middle of the belly darkeſt; all the feathers

of the upper wing-coverts, breaſt, and ſides, have a ſpot of white at the tip; the quills are brown; tail black; legs yellowiſh-white. The female differs in having a mixture of white on the throat and fore part of the neck; and the belly of a pale yellow colour; but in other things reſembles the male. This pretty little bird inhabits Java, Malacca, and other parts of Aſia. See the Plate, fig. 4.

There is a ſmaller variety of this bird, which inhabits Bengal: the bill is reddiſh; general colour of the plumage brown, mixed with a little white on the breaſt; tail duſky black; legs pale yellow.

15. Fringilla granatina, the Braſilian finch: this beautiful bird is near five inches in length; bill like red coral; irides dark; eyelids ſcarlet; ſides of the head, round the eye, bloſſom-coloured violet; baſe of the bill above blue; throat, lower part of the belly, and thighs, greeniſh-black; the reſt of the head and body cheſnut; the back and ſcapulars incline to brown; the rump blue; the quills are brown; tail black; legs pale grey. Theſe often differ in colour: ſome have a ſpot of brown between the bill and eye; and the hinder parts of the body, both above and beneath, violet; others are of the ſame colour on the lower belly and thighs as on the upper parts. In ſome parts the tail is reddiſh. The female has the red bill; a little purple under the eyes; the top of the head fulvous; the back grey-brown; throat and under parts pale fulvous; the lower part of the belly and vent whitiſh; the reſt as in the male, but leſs bright. This curious bird inhabits Braſil, has an agreeable ſong, and is frequently kept in cages by all the Europeans, being a very lively bird.

16. Fringilla Zeylonica, the Ceylon finch: this is very ſmall; bill and head black; the whole body yellow, inclining to green on the back; the under parts white and duſky; quills and tail duſky; the outer edges yellow. Inhabits China, and the iſland of Ceylon. There is a variety, with the bill black; head tawny; back green; breaſt and belly yellowiſh-white; wings and tail duſky. Perhaps only of a different ſex, as both inhabit the ſame regions.

17. Fringilla fuſcicollis, the brown-throated finch: bill red; crown of the head green; from the eyes a line of white, paſſing backwards; throat pale brown; beneath a patch of aſh-colour; then a ſpot of pale red; the back ferruginous; rump and vent green; wings duſky; on the lower part of the quills a yellow ſpot; tail half yellow, half black; legs yellow. Native of China.

18. Fringilla ignita, the fire finch: ſize of the ſmaller redpole: bill duſky; general colour of the plumage gloſſy browniſh red; vent rather darker; quills duſky; tail the ſame; legs fleſh-colour. The female is of a pale reddiſh-brown; forehead and between the eyes crimſon; tail reddiſh, with the end duſky. Inhabits Gambia, in Africa.

19. Fringilla triſtis, the American goldfinch: ſize of the chaffich; bill white; irides hazel; fore part of the head black; the reſt of the body bright ſhining yellow; thighs and tail-coverts yellowiſh-white; the wing-coverts black, croſſed with a band of white; quills black; the edges and tips of the leſſer ones white; tail black; legs white. The female wants the black on the head; the upper parts are olive green; throat, breaſt, and rump, pale yellow: belly and vent white; wings and tail like the male, but leſs bright. The young bird is at firſt like the female in all things, except in having the black forehead. See the Plate, fig. 1. Theſe inhabit North America, particularly about New York, where they are called *York yellows*. They are ſummer birds, and feed on thiſtles like our goldfinch. The ſame beautiful ſpecies is found at Surinam and Guiana, in the ſavannas. It is ſaid they loſe their fine yellow in the winter, and conſtantly reſume it again in the ſpring, with new luſtre.

20. Fringilla zena, the Bahama finch: length ſix inches and a quarter; bill lead-colour; irides pale; the head, fore part of the neck, back, and ſcapulars, black; on each ſide of the head two ſtreaks of white; under the chin a large yellow ſpot; the hind part of the neck, rump, and upper tail-coverts, dull red; breaſt orange-coloured; belly, thighs, and vent, white; wings brown; on the coverts a band of white; tail brown; legs lead-colour. In the female the colours are leſs vivid; the head and neck aſh-colour; the under parts of the body are paler than the upper, and a tinge of aſh-colour runs through the whole of the plumage. Natives of the Bahama iſlands, Jamaica, and other parts of the Weſt Indies and South America.

21. Fringilla lepida, the lepid finch: leſs by one-half than the canary bird; the general colour is greeniſh-brown; bill and eyes black; above the eyes a fulvous ſtripe, and a leſſer one of the ſame beneath them; the chin fulvous; breaſt black; legs grey. Inhabits the woods about Havannah, in the iſland of Cuba, and is eaſily tamed: it is very frequently ſinging, but in ſo weak a voice as ſcarcely to be heard, except almoſt cloſe to it.

22. Fringilla Carthaginienſis, the Carthagenian finch: a little larger than the canary-bird; bill pale brown; general colour of the plumage cinereous, ſpotted with brown and yellow; legs brown. Found in the woods of Carthagena, in South America, and has a note not unlike that of a chaffinch. Feeds on ſeeds.

23. Fringilla Æthiops, the negro finch; colour deep black; irides rufous. It inhabits the woods of South America; feeds on fruits and ſeeds, and is eaſily tamed. It ſings with the feathers of the head erected.

24. Fringilla autumnalis, the autumnal finch: of a greeniſh-colour; the top of the head ferruginous; vent teſtaceous; and the tail even at the end. Inhabits Surinam.

25. Fringilla citrinella, the citril finch: rather larger than the canary-bird; bill brown; plumage on the upper parts yellowiſh-green ſpotted with brown; the under and rump greeniſh-yellow; the breaſt of the male much inclined to yellow; leſſer wing-coverts greeniſh, the greater duſky edged with green; quills much the ſame; as are the feathers of the tail; legs fleſh-colour. This ſpecies is common in the ſouth of France, and about Rome; found alſo in Greece, Turkey, and other neighbouring parts. It is remarkable for its ſong, which is ſaid to be as fine as that of the canary-bird, to which it ſeems to have great affinity.

26. Fringilla ſerina, the ſerin finch: ſize of the canary; the upper mandible grey-brown, the under whitiſh; the plumage on the upper part of the body brown, mixed with yellowiſh-green; beneath of a greeniſh-yellow, marked on the ſides with longitudinal ſpots of brown; on the wings a greeniſh band; the quills and tail brown, margined with greeniſh-grey; legs brown. Inhabits Italy, Auſtria, Styria, and is not uncommon in the ſouth of France. The Italians highly value this bird, for its melodious ſong: whence ſome have derived the original of *ſerenade*, to ſound ſoft and pleaſant muſic. This bird is ſhewn at fig. 6. Scopoli obſerves that it is gregarious in ſpring, and frequents orchards; is fond of cabbage and hemp-ſeed; frequently takes ſudden flights upwards, and, after fluttering in the air for a little while, and warbling at the ſame time, alights with expanded wings nearly on the ſame ſpot from whence it roſe.

27. Fringilla Senegala, the Senegal finch: very little bigger than a wren: bill reddiſh, edged all round with brown; and beneath the under mandible a line of brown quite to the tip; the ſame alſo is ſeen on the ridge of the upper mandible; the upper part of the head, throat, fore part and ſides of the neck, breaſt, and upper part of the belly, ſides, rump, and upper tail-coverts, are of a vinaceous red-colour; the lower part of the belly, thighs, and under tail-coverts, greeniſh-brown; the hind part of the head and neck, the back, ſcapulars, and wing-coverts, are brown; tail black; legs grey. There is one brought from

from Abyſſinia, by Mr. Bruce, which he calls *danbik*, in which the red wholly covers the neck and wing coverts, as well as the under parts; and ſpotted on the ſides of the breaſt and wing-coverts with white. Theſe are natives of Senegal, and other parts of Africa; and feed on millet. This affords the natives an eaſy method of catching them: they ſupport a large hollowed gourd, the bottom uppermoſt, on a ſtick, with a ſtring leading to ſome covered place, and ſtrew under it ſome millet; the little birds, haſtening in numbers to pick it up, are caught beneath the trap, by the ſtick being pulled away by the obſerver at a diſtance. The females are ſaid to ſing nearly as well as the males. They are familiar birds; and when once uſed to the climate, will live five or ſix years in a cage. They are bred in Holland by the bird-fanciers.

28. Fringilla noctis, the rufous-chinned finch: length four inches and three-quarters; bill black; irides red; the whole plumage is black, except the chin, juſt under the bill, which is of a rufous orange-colour, and a ſpot of the ſame between the bill and eye; the legs blackiſh. Inhabits Jamaica, Martinique, Mexico, and other parts of South America.

There is a variety which is lead-blue, the quill and tail feathers blackiſh.

29. Fringilla Martinenſis, the Martinico finch: general colour black; throat rufous; a black patch on the breaſt. Native of Martinico, and feeds on graſs-ſeeds.

30. Fringilla nitens, the gloſſy finch: leſs than a ſparrow; bill fleſh-colour; irides white; plumage wholly blue black, with a poliſhed ſteel gloſs; legs fleſh-colour. The female has the feathers on the upper parts blackiſh, margined with yellowiſh brown; behind the eye a blackiſh ſtreak; the rump grey; beneath duſky yellowiſh brown; tail black, edged with grey; legs reddiſh. There is a variety of this ſpecies wholly black; bill and legs duſky. Native of Cayenne.

31. Fringilla melanictera, the black-and-orange finch: ſize of a linnet; bill pale brown; general colour of the plumage black, except the wings and tail, the edges of which are deeply margined with ferruginous; on the belly a few ſpots of white; legs brown. This is ſaid to come from Macao, and feeds on ants.

32. Fringilla melanoleuca, the white-breaſted finch: ſize of the preceding; general colour black, except an irregular bar of white acroſs the breaſt; bill and legs paliſh-brown. Native of Java.

33. Fringilla pecoris, the cow-pen finch: bigger than the mountain finch; bill blackiſh; head and neck duſky brown; back, wings, body, and tail, fine black, gloſſed with green and blue; legs brown. The female is deep brown; breaſt and belly light cinereous; chin white; wings and tail duſky. It arrives at New York in May, lays five eggs in June, and migrates ſouthward in Auguſt. In the winter time it is found in Virginia and Carolina. It delights to feed in the pens among the cattle, whence the name.

34. Fringilla Sinica, the olive finch: ſize of a linnet; bill yellowiſh; the upper parts of the body olive brown, with a tinge of rufous on the wing-coverts, back, and rump; round the bill, the throat, and fore-part of the neck, olive green; the reſt of the under parts rufous, tinged with yellow on the belly; under tail-coverts, and under wing-coverts, of a fine yellow; the greater wing-coverts fartheſt from the body black; tail black, with the baſe of the feathers yellow; legs yellowiſh. The female differs only in that the colours are leſs vivid.

35. Fringilla forficata, the fork-tailed finch: neck, breaſt, and rump, pale yellow; back olive; tail long, forked, blueiſh-black; head with a black pendent creſt. Dr. Shaw doubts whether it might not with more propriety be conſidered as a ſpecies of Muſcicapa, or fly-catcher. Inhabits Ceylon.

36. Fringilla melanocephala, the black-headed finch: length four inches; bill red; back, wings, and tail, ferruginous brown; head, and fore-part of the neck, black; ſides of the neck, and ſides under the wings, a little ſtreaked with black; hind part of the neck and belly white; quills black; legs lead-colour.

37. Fringilla fuſca, the brown finch: ſize of a wren; bill duſky upper parts of the plumage brown; the feathers edged with dark brown; under parts browniſh white; legs duſky. This and the laſt are natives of China.

38. Fringilla nævia, the white-cheeked finch: ſize of a ſparrow; bill pale aſh-colour; head, neck, and under parts, the ſame, marked on the upper parts and neck with duſky ſtreaks; under parts plain; back and wings pale rufous, with duſky ſtreaks; ſides of the head white; through the eye a reddiſh ſtreak, bounded on the under part with black; on the under jaw a ſtreak of black, which joins the black above the eye at the hinder part; tail duſky; legs black. Inhabits the Cape of Good Hope.

39. Fringilla Euſtachia, the Euſtatian finch: ſize of a chaffinch; bill red; the head, neck, and upper parts, of a fine yellow; on each ſide of the head, under the eye, is a ſpot of blue; the breaſt and under parts orange; wings, tail, and legs, red. Inhabits the iſle of St. Euſtatia.

40. Fringilla variegata, the variegated finch: length five inches three-quarters; bill yellowiſh; the head of a pale red, mixed with purple; the breaſt pale yellow, ſhaded deeper; the body covered with feathers, marbled with red, yellow, blue, and white; quills and tail variegated like the back; legs red. Inhabits New Spain, where it is known by the name of *twite*.

41. Fringilla nivalis, the ſnow finch: length ſeven inches; bill black; head and hind part of the neck cinereous; back, ſcapulars, and rump, grey brown; the margins paleſt; upper tail-coverts black; the thighs pale aſh-colour; all the under parts of the body are as white as ſnow, as are the wing-coverts and ſecondary quills, except the two neareſt the body, which are brown; the baſtard wing and greater quills black; the two middle feathers of the tail are black; the others white, tipped with black. This ſpecies inhabits various parts of the European continent, particularly near Dauphiny, in France; alſo about the ſnowy tops of the Caucaſian mountains, and thoſe of Perſia, deſcending from thence into the plains in winter.

42. Fringilla montiola, the mountain finch: ſize of a ſparrow; bill reddiſh; the upper parts brown, mixed with darker brown; quills and tail, darkeſt, edged with a paler colour; acroſs the wings two bars of white; the crown of the head cheſnut, mixed in the middle with grey brown; ſides of the head and neck, and all the under parts white; legs brown. Inhabits Canada.

43. Fringilla Caſpa, the Caſpian finch: this has a ſhort thick bill; the upper mandible black, the under yellowiſh; about the gape a few briſtles; the fore-part of the head, and throat, are white; the reſt of the head, the neck, the upper and under parts of the body, grey, inclining to red, but moſt ſo on the breaſt; the wings and tail are black; legs yellowiſh. This bird is met with in Abyſſinia, and is alſo found in Barbary, to the ſouth of Tunis; it flies in flocks, and is frequent about farm-yards and granaries, like our ſparrow; often ſeen in the date villages to the weſt of the lake of Marks; has an exceeding fine note, ſuperior to that of a canary-bird; but will not bear tranſporting from its native place.

44. Fringilla arcuata, the creſcent finch: length ſix inches; bill black; the head, and neck before as far as the breaſt, are alſo black; at the eye begins a ſtreak of white, which paſſes down on each ſide of the neck, and, growing broader, paſſes round the fore-part, like a creſcent; hind part of the neck pale brown; back, ſcapulars, and leſſer wing-coverts, cheſnut; the middle coverts black, tipped with white; the greateſt, and quills, brown, edged with grey; tail deep brown; legs brown. Inhabits the Cape of Good Hope.

45. Fringilla elegans, the elegant finch: ſize of the houſe ſparrow; bill red, a little bending, forehead, all round

round the bill, and throat, red; breaſt yellow; hind part of the head and neck duſky aſh-colour; back and wings green; tip of the quills duſky; breaſt, belly, and ſides, croſſed with irregular lines of white ſpots; the lower belly, thighs, and vent, white; rump and tail red, inclining to cheſnut; legs fleſh-colour. Inhabits Africa.

46. Fringilla formoſa, the lovely finch: colour green; chin and throat yellowiſh; belly barred with white and black; bill and legs red; tail-feathers blackiſh. Perhaps the other ſex of the laſt. Inhabits India.

47. Fringilla butyracea, the yellow finch: ſize of the canary; bill dark brown: irides hazel; plumage on the upper parts olive green; rump and under parts yellow; over the eye a yellow ſtreak; a ſmaller ſtreak or two beneath the eye: and one of green paſſing through it; the quills olive green; edged with white; the tail yellowiſh green; legs brown. Inhabits the Eaſt Indies.

48. Fringilla canaria, the canary finch, or canary bird. If the nightingale be the ſongſter of the grove, the canary finch is the muſician of the chamber. The melody of the former is derived from nature alone, that of the latter is directed and improved by inſtruction. With a weaker voice, with leſs extent of modulation, with leſs variety of notes, the canary has a finer ear, greater facility of imitation, and a more retentive memory; and, as the characters of animals depend principally on the quality of their perceptions, this delicate bird, alive to every impreſſion, becomes alſo more ſocial, more gentle; forms acquaintance, and even ſhews attachment. It feeds on grain, like the other domeſtic birds; and is more eaſily bred than the nightingale, which lives only on fleſh and inſects, and which requires its meal to be purpoſely prepared. Its education is attended alſo with greater ſucceſs: it readily lays aſide the melody of its native airs to adopt the harmony of our voices and inſtruments; it eagerly follows the notes, and improves and heightens their delicacy. The nightingale, proud of its nocturnal ſong, ſeems deſirous to preſerve its purity; at leaſt, he ſlights our muſic, and perpetually recurs to the rich beauties of nature. His ever-varied ſong cannot be altered by man; but that of the canary is more pliant, and can be modelled by our taſte. The one therefore contributes more than the other to the comforts of ſociety; the canary ſings at all times, recreates our ſpirits in the gloomieſt retreats, and even adds to our happineſs; it amuſes all young people, and infuſes cheerfulneſs into innocent and captive minds; and its little loves, which are manifeſt when it breeds, have a thouſand and a thouſand times awakened the tenderneſs of ſympathizing and feeling hearts.

To the happy climate of the Heſperides, this pleaſing bird owes its birth, or, at leaſt, its perfection; for, in Italy, there is a ſpecies ſmaller than that of the canaries, called the *citril*, and in Provence another almoſt as large, called the *ſerin*; but both theſe are more ruſtic, and may be regarded as the wild branches of a poliſhed ſtem. All the three intermix in a ſtate of captivity; but in the range of nature, each propagates in its peculiar climate.

The colour of the common canary is uniform, and of a grey citron yellow on all the upper parts of the body, and even on the belly; but it is only the tips of the feathers that are tinged with that delicate hue, the reſt of them being entirely white. The female is of a paler yellow than the male; but this citron-colour verging more or leſs on white, which the canary aſſumes in France, and ſome other countries, is not the tint of its native climate; for it varies according to the different temperatures. "I have obſerved, (ſays Buffon,) that the canary finch, which becomes entirely white in France, is in Teneriffe of almoſt as deep a grey as the linnet; this change of colour is owing probably to the coldneſs of the climate." This ſuppoſition, however, ſeems in part erroneous, becauſe the colour can be varied by the difference of food, by confinement, and above all by the mixture of breeds.

In the beginning of the eighteenth century, the curious in birds reckoned twenty-nine varieties of canaries, all of them diſtinctly deſcribed, as follows: 1. The common grey canary. 2. The grey canary, with down, and white feet. 3. The white-tailed canary. 4. The common flaxen canary. 5. The flaxen canary, with red eyes. 6. The golden flaxen canary. 7. The flaxen canary, with down. 8. The white-tailed flaxen canary. 9. The common yellow canary. 10. The yellow canary, with down. 11. The white-tailed yellow canary. 12. The common agate canary. 13. The agate canary, with red eyes. 14. The white-tailed agate canary. 15. The agate canary, with down. 16. The common pink canary. 17. The pink canary, with red eyes. 18. The golden pink canary. 19. The pink canary, with down. 20. The white canary, with red eyes. 21. The common variegated canary. 22. The variegated canary, with red eyes. 23. The flaxen variegated canary. 24. The flaxen variegated canary, with red eyes. 25. The black variegated canary. 26. The jonquil-black variegated canary, with red eyes. 27. The jonquil black variegated canary, of a regular plumage. 28. The full canary, (that is entirely of a jonquil-yellow,) which is the rareſt. 29. The creſt canary, (or rather the crowned,) which is one of the moſt beautiful.

The primitive ſtock from which theſe were deſcended is the common canary. All thoſe which have other uniform colours derive them from the difference of climate. Thoſe which have red eyes are more or leſs inclined to a pure white plumage; and the variegated are rather artificial than natural. The ſhades and arrangement of the colours of the variegated canaries differ exceedingly; ſome are black on the head, others not; ſome are ſpotted irregularly, and others with great regularity. The differences of colour are commonly perceived only on the upper part of the bird; they conſiſt of two large black ſpots on each wing, the one before and the other behind, in a large creſcent of the ſame colour placed on the back, pointing its concavity towards the head, and joining by its horns to the two anterior black ſpots of the wings. The tail is ſurrounded behind by an half collar of grey, which ſeems to be a compound colour reſulting from the intimate mixture of black and yellow. The tail and its coverts are almoſt white.

But, beſides theſe primary varieties, which ſeem to have been introduced by the change of climate, and ſome ſecondary ones that have ſince appeared, there are others more apparent, which reſult from the union of the canary with the ſerin, and with the cini; for not only do theſe three birds breed together, but the young hybrids are capable of procreation. The ſame may be ſaid in regard to the fruits of the commerce of the canary with the ſiſkin, with the goldfinch, with the linnet, with the yellow-hammer, with the chaffinch, and even it is ſaid with the ſparrow; for d'Arnault aſſured Salerne, that he ſaw at Orleans a grey hen canary which had eſcaped from an aviary, couple with a ſparrow, and make her hatch in a ſparrow-can, placed againſt a houſe, which thrived. Theſe birds, though very different from each other, and apparently diſcriminated widely from the canaries, can by proper care and attention be made to pair with them. The canary muſt be removed from thoſe of its own ſpecies; and the experiment ſeems to ſucceed better when performed with the female than with the male. The ſiſkin and goldfinch are the only birds with which it is well aſcertained that the male canary can propagate.

When we wiſh to pair canaries with goldfinches, ſays Buffon, we muſt take the goldfinches at ten or twelve days old, and put them in the neſt with canaries of the ſame age; we muſt raiſe them together in the ſame aviary, and accuſtom them to the ſame food. It is uſual to lodge the male goldfinches with the female canaries, and they aſſociate much more readily than if the female goldfinches were joined with the male canaries. We may obſerve, however, that the union is more tardy, becauſe the goldfinch is later in pairing than the canary; on the contrary,

contrary, if the female goldfinch be placed beſide the male canary, they ſooner couple. It is found that the ſiſkin is the only bird, of which the male and female propagate equally with thoſe of the male or female canaries. The female canary alſo breeds readily with the goldfinch; not ſo eaſily with the cock linnet; and even produces, though with more difficulty, under the male chaffinches, yellow-hammers, and ſparrows; whereas the male canaries cannot impregnate the females of theſe birds. Nature is therefore more uniform and permanent in the male than in the female; in the former, the characters are deeply imprinted; in the latter, the qualities are modified by the influence of external cauſes.

When canaries are paired of an uniform colour, that of their young is alſo uniform. If the parents be of different colours, the fruits of their commerce will have a richer plumage; and as the combinations that can take place are numerous, an immenſe variety of tints may be produced. But when the canaries of an uniform colour are croſſed with thoſe which are variegated, the changes are prodigiouſly multiplied, and there is ſcarcely any limit to theſe ſportive modifications.

With reſpect to the intercourſe of the canary with birds of other ſpecies, we ſhall here ſtate the moſt authentic obſervations. Of all the canaries, the cock cini, or green canary, has the ſtrongeſt voice, and appears to be the moſt vigorous, and the moſt ardent in propagation; it is ſufficient for three female canaries, and while they are ſitting in the neſts, it ſupplies them and their young with food. The ſiſkin and the goldfinch are neither ſo powerful nor ſo aſſiduous, and a ſingle female canary ſatisfies their appetite. The croſs breed of the cini, of the ſiſkin, and of the goldfinch, with the hen canary, are ſtronger than the canaries, ſing longer, and their notes are fuller and more ſonorous; but they are ſlower in receiving inſtruction; for the moſt part, they whiſtle imperfectly, and ſeldom one can be found that can repeat a ſingle air complete.

When we wiſh to have a breed of the goldfinch with the hen canary, the former ſhould be two years old, and the latter one, for the canary arrives ſooner at maturity. It will be better if both be reared together, though that precaution is not abſolutely neceſſary; for the author of the Treatiſe on Canaries miſtakes in aſſerting, that the hen muſt never have had commerce with a male of her own ſpecies, and that this would prevent her from receiving thoſe of a different kind. The following fact is directly contrary to this opinion: for Buffon relates that twelve canaries were put together, four males and eight females. Groſs chickweed killed three of theſe males, and all the females loſt their firſt hatch. Inſtead of theſe cock canaries, three male goldfinches were ſubſtituted, and put into the aviary in the beginning of May. Towards the end of July they had two neſts of young, which thrived well: and in the following year there were three hatches of each cock goldfinch with the female canaries. Theſe commonly do not breed with the goldfinch, except from the age of one to four; while they continue prolific with their own males till eight or nine: and it is only the variegated female that breeds with the goldfinch after its fourth year. Thus it appears that the hen canaries, though accuſtomed to the commerce of their own ſpecies, liſten to the invitation of the male goldfinches, and ſubmit without reluctance to their embraces. The union is even as productive as with their proper mates, ſince they have three hatches a-year with the goldfinch. The caſe is different in the intercourſe of the cock linnet with the canary, there being commonly but one hatch, very ſeldom two, in the year.

The progeny of the canaries with the ſiſkins, with the goldfinches, &c. are prolific, and can breed not only with both the ſpecies from which they ſprung, but likewiſe with each other; and thus may perpetuate an endleſs variety. Sprengel has made many obſervations with regard to the croſs-breeds of the canaries with other ſpecies, and particularly with the goldfinches; he has ſhewn that the progeny always continued to propagate with each other, and with the parent races. The proof which he has adduced is complete, though before him theſe hybrids were conſidered as ſterile. We muſt own, however, that the fruits of the intermixture in theſe hybrids are far from being ſo certain or ſo numerous as in the pure ſpecies; they generally have only one hatch a-year, ſeldom two, their eggs are often addle, and the ſucceſs depends on many minute circumſtances, which it would be impoſſible to obſerve, and ſtill leſs to deſcribe with preciſion. Theſe hybrids, which are ſtronger than the canaries, and have a louder voice, are alſo longer lived. But there is an obſervation which applies alike to all, that the period of their lives is abridged by their ardour in propagation. A cock canary raiſed by itſelf, and without intercourſe with the female, lives generally thirteen or fourteen years; and the croſs-breed of the goldfinch will reach its eighteenth or nineteenth year. The croſs-breed of the ſiſkin, if kept apart from the females, live fifteen or ſixteen years. Whereas the cock canary, which has one or ſeveral females, ſeldom lives longer than ten or elven years; the croſs-breed of the ſiſkin eleven or twelve, and that of the goldfinch fourteen or fifteen. It is alſo neceſſary to part them from the females after the time of hatching; that is, from the month of Auguſt to that of March: elſe the heat of their deſires would waſte them, and abridge their lives by two or three years.

The beſt way to breed from theſe birds, is to give them a chamber, having a ſunny aſpect, and facing the eaſt in winter. For in the cage they will often break the eggs to repeat their embrace; but, when they are lodged in an apartment where there are more females than males, they will pay their addreſſes to another, and allow the firſt to hatch undiſturbed. Beſides, the males, from jealouſy, will not ſuffer diſorders to be committed; and when one is prompted by ardour to teaſe his female and break her eggs, they will give him a beating, ſufficient to allay his concupiſcence. The materials given to build their neſt, are the ſcrapings of fine linen rags, cows and ſtags hair, moſs, and ſlender dry ſtalks of hay. The goldfinches and ſiſkins, when lodged with the hen canaries, to obtain a croſs-breed, make uſe of the moſs and hay, but the canaries prefer the hair and lint; but theſe muſt be well divided, leſt the fibres, ſticking to their feet, ſhould occaſion the eggs to be broken. To feed them, a crib is placed in the chamber, which is pierced all round with holes that admit the head; and into it a portion of this mixture is put; three pints of rape-ſeed, two of oats, two of millet, and a pint of hemp-ſeed; and the crib is repleniſhed every twelve or thirteen days, taking care that the grains be well cleaned and winnowed. This food is proper when they are only ſitting; but the day before the young are excluded from the ſhell, the parents ought to have a dry cake baked without ſalt, and after eating it, they ſhould have hard boiled eggs; one being ſufficient for two males and four females, and two for four males and eight females, and ſo in proportion. To vary ſomewhat their diet, they ſhould every three days be preſented on a plate with a bit of white bread ſoaked in water, and ſqueezed in the hand; this being not ſo rich as the cake, will prevent them from growing too fat while breeding. It would alſo be proper to give them a few canary ſeeds, but only once in two days, leſt they be heated too much. Sugar biſcuit commonly produces that effect, and is attended with another ſtill worſe, that the hens fed on it lay eggs that are addle, or too ſmall and tender. When the eggs are ſmall, the rape-ſeed ſhould be boiled every day to blunt its acrimony. After the hatch, the canaries ought to be purged with plaintain and lettuce-ſeeds; but care muſt be taken to remove the young birds, which would be greatly weakened by this regimen, and the parents muſt not be confined to it longer than two days. When you want to feed them with the ſtick, you ought not, as moſt bird-catchers adviſe, leave them with the mother till the eleventh

eleventh or twelve day; you ought to remove them with their neſt as early as the eighth day. The food for the young canaries ought to be prepared before hand; it is a paſte compoſed of boiled rape-ſeed, yolks of eggs, and crumbs of cake, mixed together, and beaten up with a little water. It ought to be given every two hours, and put into their bill. It muſt not be too liquid, leſt it turn ſour, and it muſt be made freſh every day till the young can eat without aſſiſtance.

The produce of theſe captive birds is not ſo regular, but appears to be more numerous than it probably would be in the ſtate of liberty. Some females have four or five hatches annually, and lay four, five, ſix, or ſeven, eggs each time; and generally they have three hatches, and the moulting hinders them from another. Some however ſit even during moulting, if they happen to be laying before that ſeaſon. The birds of the ſame hatch do not all moult at the ſame time. The weakeſt firſt drop their feathers, and the ſtrongeſt more than a month afterwards. In jonquil canaries this change of plumage is tedious, and commonly more dangerous than in the other kinds. The female jonquils have only three hatches, each of three eggs; the flaxen-coloured canaries are too delicate, and their brood ſeldom thrives. The pink ſhew a reluctance to pair with each other; in a large aviary the male but rarely couples with the female of his own colour, and to form the union, they muſt be confined together in a cage. The white ſort are commonly valuable in every reſpect; they lay and breed as well, or better than the others, and the variegated white are the hardieſt of all.

Whatever differences there may be in the diſpoſitions and prolific powers of theſe birds, the period of incubation is the ſame; all of them ſit thirteen days; and when the excluſion of the young is a day earlier or later, it is owing to ſome particular circumſtance. Cold retards the proceſs, and heat forwards it; accordingly the firſt hatch, which is in April, requires thirteen days and a half, or even fourteen days, if the weather is chilly; but the third, which happens during the heats of July and Auguſt, is effected in twelve days and a half, or even twelve days. It would be proper to ſeparate all the good eggs from the bad; and, to do this with certainty, we ought to wait to the eighth or ninth day, and take each gently by the two ends for fear of breaking it, and examine it in a ſtrong light, or by a candle, and reject all that are addle, which if left would only fatigue the hen. By this trial we may often reduce three hatches to two; and in that caſe the third female may be liberated, and permitted to begin a ſecond neſt.

The young canaries differ from the old ones both in the colour of their plumage, and in ſome other circumſtances. As the bird grows up, the arrangement, and the ſhades of colour, change; the old ones can be diſtinguiſhed from the young by their ſtrength, their plumage, and their ſong; the tints are deeper and more lively; their toes are rougher, and incline more on black, if they are of the grey kind; their nails are alſo thicker and longer than thoſe of the young ones. The female is often ſo like the male that they cannot at firſt be diſtinguiſhed; however, the colours are always deeper in the male, the head rather thicker and longer, and the temples of a yellow more inclined to orange; and under the bill there is a ſort of yellow flame which deſcends lower than in the female; its legs are alſo ſtronger, and it begins to warble almoſt as ſoon as it is able to feed itſelf. It is true that ſome females chant at that tender age, with almoſt as much ſpirit as the males: but, joining all theſe marks together, we may be able, even before the firſt month, to decide which are males or females; after that time there is no more uncertainty in that reſpect, for the ſong of the males then begins to decide their ſex.

The young canaries drop their feathers the firſt year ſix weeks after they are hatched; they become low-ſpirited, appear bloated, and conceal the head in their plumage; at this time the down only falls; but the following year they loſe the quills, even thoſe of the wings and of the tail. The young birds of the later hatches which happen in September or after, ſuffer much more from the moulting, than thoſe which are excluded in the ſpring; in that delicate condition the cold is extremely pernicious, and they would all periſh if not kept where it is temperate, or even pretty warm. As long as the moulting laſts, nature labours at the production of new feathers: and hence the exuberance of life being diverted into different channels, their ardour ceaſes, and the buſineſs of propagation is for the time ſuſpended.

The moſt fatal and the moſt common diſtemper, eſpecially in young canaries, is what is called the ſwallow *(avalure)*, in which the bowels ſeem to be ſwallowed, and drawn to the extremity of their body; the inteſtines are perceived through the ſkin of the belly in the ſtate of inflammation, redneſs, and diſtenſion; the feathers on that part drop, the bird pines, gives over eating, though always ſitting beſide the food, and dies in a few days. The ſource of the diſeaſe is the exceſſive abundance or richneſs of the aliments. All remedies are vain, and the change of regimen is the only thing which can recover a few out of a great number. The bird is put into a ſeparate cage, and given water and lettuce ſeeds; thus the heat that conſumes it is tempered, and evacuations are ſometimes performed which ſave its life. This diſtemper alſo is the fruit of their artificial education, for it ſeldom attacks thoſe which are trained by their parents; we ought therefore to take the greateſt care not to overfeed them with the ſtick; boiled rape-ſeed, and ſome chickweed, are proper, but no ſugar or biſcuit; and in general we ſhould give them too little rather than too much. When the canary utters a frequent feeble cry, which ſeems to come from the bottom of its breaſt, it is ſaid to be aſthmatic; it is alſo ſubject to a certain obſtruction of voice, eſpecially after moulting. This ſort of aſthma is cured by giving it the ſeeds of plantain, and hard biſcuit ſoaked in white wine; and to reſtore its voice it ought to have generous food, ſuch as yolks of eggs beat up with crumbs of bread; and for drink, liquorice-water, that is, water in which that root has been ſteeped and boiled. The canaries are alſo ſubject to a ſort of ſhanker on the bill. This diſorder is owing to the ſame cauſe with the ſwallow, the abundance or richneſs of food producing an inflammation, which, inſtead of affecting the inteſtines, ſometimes extends to the throat or palate, the ſame cooling remedies muſt be applied; they ſhould have lettuce-ſeeds and bruiſed melon-ſeeds mixed with their drink. The mites and the ſcab, with which theſe ſmall birds are ſometimes affected, are generally owing to the dirtineſs with which they are kept. Care muſt be taken to preſerve them clean, to give them water to bathe in, to avoid putting old or bad wood in their cages, and to cover them only with new cloth that is not moth-eaten; and the ſeeds and herbs with which they are to be fed ſhould be fanned and waſhed. We muſt pay this attention, if we would wiſh them to be neat and healthy. In the ſtate of nature they would themſelves preſerve cleanlineſs; but impriſoned, they are ſubject to the loathſome diſorders incident to that ſtate: however, many of theſe birds, though reduced to captivity, are never ſick, and in theſe, habit ſeems to have become a ſecond nature. In general, the ſource of their diſeaſes is the heat of their conſtitution. They always need water: and if a plate with ſnow be placed in the cage, or in the aviary, they will roll in it ſeveral times with expreſſions of pleaſure, though in the coldeſt weather. This proves that it is rather pernicious than uſeful to keep them in very hot places. But there is another diſtemper to which the canaries and many other birds are ſubject, eſpecially in the ſtate of confinement: this is the epilepſy. The yellow canaries in particular are oftener than the others ſeized with the falling ſickneſs, which attacks them ſuddenly, and even ſurpriſes them in the midſt of their moſt impaſſioned ſong. Thoſe that eſcape the firſt attack of this epilepſy, live a long time after, and

ſometimes attain the ſame age with thoſe which have never been affected by that diſtemper. It is ſaid that a ſmall inciſion in the toes would be beneficial, for in that way parrots are cured of the epilepſy.

The hen canaries can, like the females of other birds, lay eggs without commerce with the male. The egg, in itſelf, is only a matrix which the bird excludes, and will remain unprolific if not impregnated with the ſeed of the male; and the heat of incubation, inſtead of quickening it, only haſtens its putrefaction. If the females be entirely ſeparated from the males, ſo as not to ſee and hear them, they very ſeldom lay; for they oftenеſt drop their eggs when melted by the view or the ſong of the males: ſo much do even diſtant objects act upon feeling animals, and ſo many are the ways in which the ſubtle flame of love is communicated.

Moſt of the canary birds which are imported from Tyrol, have been educated by parents, the progenitor of which was inſtructed by a nightingale; our Engliſh canary birds have commonly more of the titlark notes. The traffic in theſe birds makes a ſmall article of commerce, as four Tyroleſe generally bring over to England ſixteen thouſand every year; and though they carry them on their backs one thouſand miles, as well as pay twenty pounds duty for ſuch a number, yet upon the whole it anſwers to ſell theſe birds at five ſhillings a-piece. The chief place for breeding canary birds is Inſpruck and its environs, from whence they are ſent to Conſtantinople, as well as every part of Europe. Phil. Tranſ. vol. lxiii. part 2.

The Moſambique canary, mentioned by Buffon as brought from Moſambique in Africa, is a variety of this ſpecies, and ſomewhat ſmaller; the body is brown above; eyebrows yellow.

49. Fringilla flaveola, the ſaffron-fronted finch: ſize of a canary-bird; general colour yellow; bill convex, of a pale colour, with a brown tip: the forehead ſaffron-colour; the back inclines to green; quills and tail edged with yellow; legs pale.

50. Fringilla ſpinus, the ſiſkin. Of all the granivorous birds, the ſiſkin is reckoned the moſt akin to the goldfinch; both have the bill elongated and ſlender near the point; both are gentle, docile, and lively. The fruits of their intermixture are alſo deſirable to propagate. Some naturaliſts have been induced, by theſe analogies, to regard them as two contiguous varieties belonging to the ſame ſpecies; indeed all the granivorous birds may be claſſed together; for their croſs breeds are prolific. Since this general character extends to them all, it becomes the more neceſſary to ſelect the diſtinguiſhing features, and to trace the preciſe boundaries of each family. Fig. 5, on the Plate, is a correct likeneſs of the ſiſkin. It is ſmaller than the goldfinch; its bill is proportionally ſhorter, and its plumage is entirely different; its head is not red, but black; its throat brown; the fore part of its neck, its breaſt, and the lateral quills of its tail, yellow; the belly yellowiſh-white; the under part of the body olive-green, ſpeckled with black, which aſſumes a yellow caſt on the rump, and ſtill more yellow on the ſuperior coverts of the tail. But in the more intimate qualities, which reſult directly from organization or inſtinct, the differences are ſtill greater. The ſiſkin has a ſong peculiar to itſelf, and much inferior to that of the goldfinch; it is very fond of alder-ſeeds, which the goldfinch will never touch, and the ſiſkin, in its turn, is indifferent about thiſtle-ſeeds; it creeps along the branches, and ſuſpends itſelf from their extremity like a titmouſe. It is a bird of paſſage, and in its migrations flies at a great height, and is heard before it can be ſeen; but the goldfinch continues with us the whole year, and never flies very high; nor are theſe two birds ever obſerved to aſſociate together. The ſiſkin can be taught, like the goldfinch, to draw up the little bucket; it is equally docile, and, though not ſo active, it is more cheerful; for it begins always the earlieſt in the morning to ſing, and to rouſe the other birds. But, as it has an unſuſpicious temper, it is eaſily decoyed into all ſorts of ſnares, traps, ſprings, &c. and it is more eaſily trained than any other bird caught in the adult ſtate. We need only to offer it habitually the proper ſort of food in the hand, and it will ſoon become as tame as the moſt familiar canary. We may even accuſtom it to perch upon the hand at the ſound of a bell; for if at firſt we ring at each meal, the ſubtle aſſociation of perceptions, which obtains alſo among the animals, will afterwards rouſe it to the call. Though the ſiſkin appears to ſelect its food with care, it conſumes much; but its voracious appetite is ſubordinate to a noble paſſion; it has always in an aviary ſome favourite of its own ſpecies, or if that is not to be obtained, a bird of another ſpecies, which it cheriſhes and feeds with the fondneſs of a parent. It drinks often, but ſeldom bathes; it only approaches the margin of the water, and dips its bill and breaſt, without much fluttering, except perhaps in hot weather.

It is ſaid that it breeds on the iſlands in the Rhine, in Swiſſerland, Greece, and Hungary, and that it prefers the mountain foreſts. It is a common practice with bird-fanciers to croſs them with the canary; but very frequently the eggs are addle; for the temperament of the ſiſkin wants much of the warmth of the canary. The hybrids reſemble both parents.

In Germany, the ſiſkins begin to migrate in October, or even earlier; at this time they eat the hop-ſeeds, to the great injury of the proprietors; and the places where they halt are ſtrewed with leaves. They entirely diſappear in December, and return in February. In Burgundy, they arrive at the ſeaſon of vintage, and repaſs when the trees are in flower; they are particularly fond of the bloſſoms of the apple-tree. In autumn they deſcend from the mountains, and appear in flocks of more than two hundred, and ſit all upon the ſame tree, or at a very little diſtance from each other. The paſſage continues fifteen or twenty days, after which ſcarcely any more are ſeen. Their immenſe flights happen only once in the courſe of three or four years, and ſome have ſuppoſed them to be brought by the wind.

The ſong of the ſiſkin is very agreeable, though much inferior to that of the goldfinch, which it acquires, it is ſaid, with tolerable facility; it alſo copies the canary, the linnet, the pettychaps, &c. if it has an opportunity of hearing them when young. According to Olina, this bird lives ten years, and is but little ſubject to diſeaſes, except the melting of the fat, when fed with hemp ſeed.

The male ſiſkin has the top of the head black, the reſt of the upper part of the body olive, and ſlightly variegated with blackiſh; the ſmall upper coverts of the tail entirely yellow; the great coverts olive, terminated with cinereous; ſometimes the throat is brown, and even black; the cheeks, the fore-part of the neck, the breaſt, and the lower coverts of the tail, of a fine lemon yellow; the belly yellowiſh-white; the flanks the ſame, but ſpeckled with black; there are two olive or yellow tranſverſe ſtripes on the wings, the quills of which are blackiſh, edged exteriorly with an olive-green; the quills of the tail yellow, except the two intermediate ones, which are blackiſh, edged with olive-green; they have all a black ſhaft; the bill has a brown point, the reſt white, and the legs are grey. In the female, the upper part of the head is variegated with grey, and the throat is white.

This bird is pretty common throughout Europe, and found not unfrequently in England in the winter ſeaſon; but in ſome years much ſcarcer than in others. During the time of its being in England, it may be met with mixed with the leſſer redpole, on alder-trees, ſometimes in great numbers; it often runs on the under part of the branches, feeding on the ſeeds of theſe trees; and departs in ſpring. No one has deſcribed the neſt. It is ſuppoſed to conceal it with great cunning; nor has it ever been known to breed with us. In Suſſex it is called the *barley bird*, as being ſeen in that ſeed time. About

London it is known by the name of *aberdevine*. In the weſtern and ſouthern parts of Ruſſia this bird is found in plenty; but is not met with towards the Uralian chain, nor in Siberia.

There are three varieties of this ſpecies of the ſiſkin: 1. The *black ſiſkin*, with a yellowiſh crown; met with in Sileſia. Buffon mentions one taken at large, which he thought to be a mixed breed between a canary and the ſiſkin. 2. The *black-and-yellow ſiſkin*; the top of the head black; throat, round the neck, and breaſt, yellow; the rump yellow, changing into white on the upper tail-coverts; the back olive-brown; wings and tail black, edged with white; belly and vent whitiſh; legs pale. The female is very like the male, but the colours leſs bright: found about New York. 3. The *olive ſiſkin*; bill cinereous; pupil of the eye bluiſh; upper parts of the body pale olive; beneath yellow; head black; quills black, edged with yellow; and a ſtripe of the ſame on the wings; legs cinereous. The female has the crown grey-brown; cheeks and throat pale yellow. Found in the woods about Buenos Ayres, and in the Straits of Magellan. It is ſaid to ſing better than any other bird of South America.

51. Fringilla Mexicana, the Mexican ſiſkin: ſize of the common ſiſkin; upper parts greeniſh-brown; the under yellowiſh-white; quills and tail green, like the back. Inhabits Mexico, where it is called *acatechichictli*.

52. Fringilla catotol, the catotol ſiſkin: ſize of the preceding; the upper parts variegated with yellow and blackiſh; the under white; legs aſh-colour. Inhabits the plains of Mexico, and is ſaid to ſing agreeably.

53. Fringilla barbata, the bearded ſiſkin: the general plumage is pale yellow; wings green, ſpotted with black and red; chin bearded; bill white, at the baſe tipt with black; head black; chin, in the young bird, yellow, when half a year old covered with black hairs, and when full grown appearing as if bearded. Inhabits the mountains of Chili, and in winter deſcends into the plains; it is eaſily tamed, ſings charmingly, and imitates the notes of other birds; builds in trees; ſize of the canary bird. The female is, without the beard, cinereous; wings here and there ſpotted with yellow.

54. Fringilla diuca, the Chilian ſiſkin: ſize of the preceding; general plumage blue; chin white. Inhabits Chili, about houſes; ſings finely, eſpecially at ſun-riſe.

55. Fringilla Sinenſis, the Chineſe ſiſkin: leſs than the ſparrow; bill and head black; hind part of the neck, and back, olive-green; the fore-part, belly, and vent, yellow; wing-coverts the ſame; the leſſer croſſed with two black bands, the larger tipped with a ſpot of black; the quills are black, but the greater ones are yellow halfway from the baſe; tail half black half yellow, like the quills; legs black. Inhabits China.

56. Fringilla flammea, the flame-coloured finch: length four inches; bill pale brown; the head of a deep flame-colour, inclining to crimſon, and the feathers ſomewhat longer than the reſt; the plumage on the upper parts of the body brown; beneath pale crimſon, or roſe-colour; legs pale brown. This is ſaid by Linnæus to have come from Norland: deſcribed by him from Rudbeck's paintings. It ſeems to be confined to the northern regions, though not aſcertained by the leaſt hiſtory annexed to either of the ſpecimens in the Britiſh or Leverian muſeums.

57. Fringilla flaviroſtris, the Arctic finch: bill yellow like wax, with a brown tip; the male is wholly of an obſcure ſooty-brown colour, paleſt beneath; the breaſt-feathers have frequently the tips varied with garnet-colour; quills and tail duſky, edged with grey; legs black. The female inclines to brown; otherwiſe like the male. This ſpecies is found in Norway, and in the north-eaſt part of Siberia. In winter it migrates to the ſouth, frequenting inhabited places, and is ſeen about barns, being a tame ſpecies; it is frequent about the Jeniſei in the ſevereſt part of the winter, and returns north earlier than the ſnow bunting; it is not ſeen in Ruſſia.

58. Fringilla cannabina, the greater redpole: leſs than the common linnet, but about the ſame length; the bill is duſky; irides hazel; on the forehead is a blood-coloured ſpot; the reſt of the head and neck aſh-colour; the breaſt tinged with a fine roſe-colour; back, wing-coverts, and ſcapulars, bright reddiſh-brown; the firſt quill feather black; the exterior and interior edges of the eight following white, forming a bar of white on the wing; the ſides are yellow; middle of the body white; tail duſky, edged with white; legs brown. The head of the female is aſh-coloured, ſpotted with black; back and ſcapulars of a browniſh red; breaſt and ſides yellow, ſtreaked with duſky lines. This bird is frequently met with in flocks on the ſea-coaſts, and in flight-time near London; and is alſo common on the continent of Europe, like the former, but found more northward than that bird, in which parts it breeds. It breeds alſo in the northern parts of England and Scotland, upon the mountains: alſo in Cumberland. It makes its neſt on the ground, and lays three bluiſh-white eggs, mottled with yellow, and ſpeckled with brown. It is likewiſe found in America, where it ſhifts its quarters according to the ſeaſon, and unites into flocks, in the ſame manner as in Europe. It inhabits alſo Hudſon's Bay.

59. Fringilla linota, the common linnet. Few birds are better known than the linnet; but ſtill fewer, perhaps, unite more amiable qualities: a pleaſing ſong, docility of diſpoſition, and ſuſceptibility of attachment. Endowed with ſuch talents, it could not long preſerve its freedom; and ſtill leſs, when nurſed in cages, could it retain the beauties of its original plumage. In fact, the red colour with which nature has painted its head and breaſt, and which in the ſtate of liberty ſparkles with great luſtre, wears off, and ſoon diſappears entirely in our cages and aviaries. There remain only a few obſcure veſtiges after the firſt moulting.

This bird poſſeſſes ſtrong powers of imitation. Some have even ſucceeded in teaching it to ſpeak different languages, that is, to articulate ſome Italian, French, and Engliſh, words, with conſiderable fluency. Many perſons have, from curioſity, gone from London to Kenſington merely to hear an apothecary's linnet, which articulated the words *pretty boy*. The fact is, it had been taken out of the neſt when only two or three days old, before it had time to acquire the parent ſong; and juſt beginning to liſten with attention, it was ſtruck with the ſound of *pretty boy*, and learned it from imitation. This fact ſeems to eſtabliſh the opinion of the late Daines Barrington, that birds have no innate ſong; and that the warble peculiar to the different ſpecies and its varieties, have nearly the ſame origin with the languages and the dialects of various nations.

The linnet, in the wine countries, often builds its neſt in vineyards, and hence it has been called the *vine-linnet*, or wine-bird. It builds alſo in juniper, hawthorn, blackthorn, and hazel-nut, trees, in young copſes, &c. Their neſts are compoſed of ſlender roots, ſmall leaves, and moſs, on the outſide; and lined with feathers, hairs, or wool; they lay five or ſix eggs, of a dull white, ſpotted with brown-red at the large end. The linnets have ſeldom more than two hatches, except their neſts be robbed, which obliges them to renew their labours; and in this way they may be made to lay four times in the year. The mother feeds the young by diſgorging into their bill what had been prepared and half-digeſted in her craw.

After the hatching is over, and the family raiſed, the linnets go in numerous flocks, which are formed about the end of Auguſt, when the hemp, on which they delight to feed, is arrived at maturity; and at this time ſixty have been caught in one drawing of the net. They continue to live thus in ſociety during the whole winter; they fly very crowded, alight and riſe together, perch on the ſame trees, and about the beginning of ſpring they all begin to chant. They live alſo upon all kinds of ſmall ſeeds, particularly thoſe of thiſtles, &c. and hence they

haunt indiſcriminately uncultivated lands, and ploughed fields.

The ſong of the linnet is announced by a ſort of prelude. In Italy the linnets of Abruzzo and of the Marche of Ancona are preferred. It is generally ſuppoſed in France that the warble of the red linnet is ſuperior to that of the grey. The females are naturally deſtitute of ſong, nor can they ever acquire it. The adult males caught in the net profit as little by inſtruction; and the young males taken out of the neſt are alone ſuſceptible of education. They are fed with oatmeal-gruel, and rape-ſeed ground with milk or ſugared water; and in the evening they are whiſtled to in the weak light of a candle, care being taken to articulate diſtinctly the words or notes which they are to repeat. Sometimes, to begin them, they are held on the finger before a mirror, in which they view their image, and believe they ſee another bird of their own ſpecies; they ſoon fancy that they hear the notes of a companion, and this illuſion produces a ſort of emulation which animates their ſong, and quickens their progreſs. It is ſuppoſed that they ſing more in a ſmall cage than in a large one.

The name of theſe birds points out their proper food. They are called linnets *(linariæ)* becauſe they prefer linſeed to all other food, though they feed on the ſeeds of panic, rape, hemp, millet, canary-graſs, raddiſh, cabbage, poppy, plantain, beet, and ſometimes on thoſe of the melon. Geſner ſays, that if poppy-ſeeds alone be given for food either to linnets or goldfinches, they will become blind. Some give them ſweet cake, prickly-ſorrel, chickweed, ears of wheat, oats pounded, and even a little ſalt; but all theſe muſt be properly varied. They break the ſmall grains in their bill, and reject the ſhell: they ought to have very little hemp-ſeed, for it fattens them too much; and exceſſive fat occaſions their death, or at leaſt renders them unfit for ſinging. In thus feeding and raiſing them, we may not only teach them what airs we chuſe with a canary-whiſtle, a flageolet, &c. but we alſo tame them. They readily diſtinguiſh thoſe who are kind to them, become fond of them, alight on them in preference, and behold them with an affectionate air. They have been known to live upwards of ſeventeen years.

The linnet is a pulverulent bird, and it would be proper to ſtrew in the bottom of the cage a layer of fine ſand, and renew it occaſionally; there ought alſo to be a ſmall bath.—The total length of the bird is five inches and a few lines; its alar extent nearly nine inches; its bill five lines; its tail two inches, ſomewhat forked, and ſtretching an inch beyond the wings. In the male the top of the head and the breaſt are red; the throat, and the under part of the body, ruſty white; the upper, cheſnut; almoſt all the feathers of the tail and of the wings are black, edged with white; and hence when the wings are cloſed there is a white ray parallel to the feathers. The female has commonly none of the red that we have mentioned; and the plumage is more varied than in the male.

There are two varieties mentioned of this bird. The one white; the quills and tail black, edged with white, as in the common. The other, with a greeniſh bill; the legs black, and a very forked tail; otherwiſe like the common linnet. One, wholly white, was alſo ſhewn in the Leverian Muſeum.

60. Fringilla linaria, the ſmaller redpole: this is about half the ſize of the greater redpole; bill duſky; irides hazel; on the forehead is a rich ſpot of purpliſh red; breaſt of the ſame colour, but leſs bright; back duſky, edged with reddiſh-brown; ſides yellowiſh or aſh-colour, marked with narrow duſky lines; quills and tail duſky, edged with dirty white; on the wing-coverts are two whitiſh bars; legs duſky. The female is leſs lively in colour; has no red on the breaſt, and the ſpot on the forehead is of a ſaffron-colour. This ſpecies is alſo common in England, and makes its neſt chiefly in the mountains of Wales; and is now and then found in other parts of this iſland. They are ſeen upon the coaſt of Kent in great numbers in November, about which time they migrate into England in large flocks. A neſt of this ſpecies was found on an alder ſtump, near a brook, about two or three feet from the ground; the outſide compoſed of dry ſtalks, and other plants, intermixed with wool, and lined with hair and feathers. The eggs are four in number, of a pale bluiſh-green, thickly ſprinkled near the blunt end with ſmall reddiſh ſpots. The bird was ſo tenacious of her neſt, as to ſuffer herſelf to be taken off by the hand, and when releaſed would not forſake it. This bird is known about London by the name of *ſtone redpole*. Linnæus, Kramer, and others, mention its being very fond of the ſeeds of alder. This we have ſeen frequently; for whole flocks of theſe birds, mixed with the ſiſkin, frequent many places where alders grow, for the ſake of picking the catkins; they generally hang like the titmouſe, with the back downwards, and in this ſtate are ſo intent on their work, that they may be entangled one after another by dozens, by means of a twig ſmeared with birdlime, faſtened to the end of a fiſhing-rod, or other long pole. This ſpecies ſeems to be in plenty throughout Europe, from the extreme parts of Ruſſia on the one hand, to Italy on the other. Is very common in Greenland, and was alſo met with by our late voyagers at Oonalaſhka. In America it is likewiſe well-known. Hence it ſeems to be a bird common to the whole of the northern part of the globe without exception.

61. Fringilla montium, the mountain linnet: length ſix inches and a half; bill pale; irides hazel; the feathers on the upper part of the body duſky; thoſe on the head edged with aſh-colour, the others with browniſh-red; the rump pale crimſon; the under parts of the body pale; thoſe of the throat and breaſt blackiſh, with pale edges; wings and tail duſky; tips of the greater coverts and ſecondaries whitiſh; legs brown. The female wants the red mark on the rump.

The *twite linnet* is a variety of the above: length only four inches and a half: bill yellowiſh, with a brown tip; the top of the head and rump are both red; over the eyes a rufous band; the upper parts black, edged with rufous; the under rufous, ſpotted with black on the throat; belly white; legs brown; between the bill and eye a dark brown ſpot, and on the chin another. The female wants the red ſpot on the rump. Twites are taken in the flight ſeaſon near London, along with other linnets. It is probable that the name has been taken from their twittering note, having no muſic in it; and indeed the bird-catchers can tell at ſome diſtance whether there be any twites mixed among linnets, merely from this circumſtance. The twite is ſuppoſed to breed in the more northern parts of our iſland.

62. Fringilla caudacuta, the ſharp-tailed finch: varied with rufous and brown; eyebrows, chin, and neck above, rufous; tail entire, the feathers all pointed at the tips; length four inches and a half; bill and legs pale; irides brown; feathers of the body brown, edged with pale rufous; chin and ſtreak above the eyes pale rufous. Inhabits Georgia.

63. Fringilla Georgiana, the Georgian finch: brown, beneath whitiſh; leſſer wing-coverts wholly, quill and tail-feathers on the outer webs rufous; chin and throat mouſe-colour; under the arm-pits a black ſtreak: length ſix inches; bill duſky; irides brown; head brown, a little tumid; middle of the back blackiſh; legs brown. Inhabits Georgia.

64. Fringilla argentoratenſis, the Straſburgh linnet: ſize of the common linnet; head and upper parts, as far as the rump, brown; beneath, as far as the upper part of the belly, and ſides, rufous ſpotted with brown; the belly and vent whitiſh; quills and tail brown; legs reddiſh. Inhabits the environs of Straſburgh, where it is called *gyntel*; and is ſaid to lay four eggs.

65. Fringilla Angolenſis, the Angola linnet: ſize of the chaffinch; bill brown; the feathers round the baſe black; upper parts of the head, neck, and body, brown-

iſh

iſh aſh-colour, each feather darker in the middle; round the eyes, and on each ſide of the throat, white; the under parts dull orange; the rump, and upper tail-coverts, bright yellow; greater wing-coverts and quills brown, edged with yellow; tail edged with grey; legs fleſh-colour. The female has the upper parts rufous brown, each feather darkeſt in the middle; ſides of the head pale rufous; near the baſe of the bill a brown mark, which paſſes towards the hind head; from the breaſt to the vent pale rufous, ſpotted with brown; the reſt like the male. Theſe come from Angola, where the male bears the name of *negral*, or *tobaque*; the female, *benguelinha*. This is perhaps the *vengoline*, mentioned by the Hon. Daines Barrington, which he ſays ſings better than any bird that is not European, except the American mocking bird.

66. Fringilla atra, the duſky linnet: this ſmall but elegant ſpecies is ſhewn in the Plate at fig. 3. Length only four inches; bill aſh-colour; general colour of the plumage duſky brown, inclining to red; aſh-colour on the breaſt and rump; all the feathers have the tips of a lighter colour; legs duſky. This is a native of Angola and Braſil; and has a ſweet ſong.

67. Fringilla macroura, the long-tailed linnet: length ſeven inches and a half; bill brown; the upper part of the plumage like that of a ſky-lark; the middle of each feather very dark; the under parts of the body pale aſh-colour; tail long, and cuneiform in ſhape; the two middle feathers narrow, and ſharp at the ends, of a greeniſh-brown; quills brown, with greeniſh margins; legs brown. Native of Cayenne.

68. Fringilla petronia, the ring ſparrow: larger than the common ſparrow; bill ſtrong; the upper mandible brown, the other pale grey, with a brown tip; the head, and upper part of the neck and back, grey ſpotted with brown; all beneath, grey and white mixed; the fore-part of the neck yellow; round the head, above the eyes, a ring of dirty white; quills and tail duſky, edged with grey. This bird frequents Europe, chiefly Germany, in ſome parts of which it is pretty numerous: it is alſo found in Italy; and is migratory, except in the warmer climates, where it frequents woods, and builds in the holes of trees. It has one brood in a year, and lays four or five eggs. At the end of July collects into flocks, and remains ſo till ſpring. It is a tender bird, often found dead in the hollows of trees in hard winters. It lives both on ſeeds and inſects. This ſpecies was found in Norton Sound, by our late circumnavigators.

There are two varieties: 1. Above varied with black and reddiſh; beneath white-aſh; wings barred with white; tail feathers grey-brown. 2. Neck and collar whitiſh.

69. Fringilla ſtulta, the fooliſh ſparrow: ſize of the houſe-ſparrow: rufous grey above, ſpotted with ruſt-colour; over the eye a white ſtreak, and a yellow ſpot on the throat; beneath yelloviſh; two bands of white on the wings; and a blackiſh tail, edged with rufous. Native of Italy.

70. Fringilla Bononienſis, the ſpeckled ſparrow of Bologna: ſize of the preceding; bill yellow; irides white; head and neck the ſame, marked with yelloviſh ſpots; back and rump black, white, and yelloviſh, mixed; under parts yelloviſh-white; quills duſky; tail and legs yelloviſh. Native of Italy.

71. Fringilla leucura, the white-tailed ſparrow: this is yelloviſh above, ſpotted with cheſnut, and ſtreaked with white; head and under parts yelloviſh-white; tail cinereous-white. Found in the neighbourhood of Bologna.

72. Fringilla brachyura, the ſhort-tailed ſparrow: whole body yelloviſh; breaſt and belly paleſt; bill of a deeper yellow. Native alſo of Italy.

73. Fringilla Dalmatica, the Dalmatic ſparrow: this is bigger than the houſe ſparrow; bill whitiſh; the upper parts of the body reddiſh; the under whitiſh; tail forked; legs pale yellow. Inhabits Dalmatia.

74. Fringilla Bengalus, the Bengal finch: ſize of the ſmaller redpole; bill fleſh-colour; irides hazel; head, and upper parts of the body, grey; the lower part of the back and rump, and all the under parts, blue; on each ſide of the head is a curved purpliſh-red ſpot, placed beneath the eyes and rather behind them; the quills are brown, edged with grey; the tail pale blue, and wedge-ſhaped; legs whitiſh. The female is the ſame in colour, but wants the red ſpot beneath the eyes.

75. Fringilla Jamaica, the Jamaica finch: length five inches; bill black; the upper parts of the plumage dull blue; the feathers very ſoft; the under parts of a paler blue, inclining to yellow on the belly; wing-coverts greeniſh-blue; quills and tail the ſame; legs black. Inhabits Jamaica. The male and female are much alike.

76. Fringilla cana, the grey-headed finch: this is a large ſpecies; length eight inches; bill three quarters of an inch; the upper mandible bluiſh-brown; the under paler; head and throat grey; upper part of the neck and body yellow-brown; the under parts yellow; vent white; wings and tail dull brown, ſtreaked with white lines; legs bluiſh. Inhabits Jamaica.

77. Fringilla Savannarum, the Savanna finch: length only four inches; bill brown; over the eye a yellow ſtreak; crown, and upper parts of the body, dull brown, mixed with whitiſh and fillemot colour; beneath, as far as the breaſt, pale yelloviſh-brown; belly white; quills brown, tipped with white; tail brown; legs whitiſh. Inhabits Jamaica, where Sloane tells us, that "it ſits on the ground in the plains, and runs thereon after the manner of ſky-larks, as low as they can, to avoid being diſcovered; and, when raiſed, fly not far nor high, but alight again very near."

78. Fringilla coccinea, the ſcarlet finch: length four inches and a half; bill like that of a goldfinch; general colour of the plumage a brilliant deep orange, verging to ſcarlet; wings and tail duſky; the outer edges of the quills fringed with orange, and the ends of the prime ones black; tail even at the end; legs black. Inhabits the Sandwich iſlands.

79. Fringilla punicea, the red-breaſted finch: bill white; cheeks, throat, fore part of the neck, and breaſt, of a rich crimſon; crown, upper part of the neck, back, wings, and tail, black; wing-coverts croſſed with two lines of white; legs black. Found by our late voyagers at Sandy Hook.

80. Fringilla ferruginea, the ferruginous finch: ſize of the hedge-ſparrow; bill duſky; upper parts of the plumage, quills, and tail, dark brown, edged with reddiſh brown; the under parts, from the breaſt, light-coloured, marked with dark long ſpots on the breaſt; about the eyes white; legs browniſh fleſh-colour. Inhabits Pennſylvania, and other parts of North America.

81. Fringilla albicollis, the white-throated ſparrow: ſize of the mountain-ſparrow; bill duſky; irides hazel; from the corner of the mouth through the eye a duſky ſtreak, and above the eye one of an orange-colour; the upper parts of the plumage are reddiſh-brown; the throat white; cheeks, and the under parts, cinereous-white; edge of the upper part of the wing pale yellow; legs fleſh-colour. Inhabits Pennſylvania. They are ſeen in ſmall flocks round New York, in January, and are met with in ſummer at Newfoundland. Shewn in the Plate, at fig. 2.

82. Fringilla faſciata, the faſciated finch: crown, hind part of the neck, and back, ferruginous, ſpotted with black, the ſpots largeſt on the back; wings plain ferruginous; primaries duſky, edged with white; under parts of the body white, marked with ſtreaks of black, pointing downwards; tail brown, croſſed with numerous duſky bars. Inhabits the country about New York.

83. Fringilla graminea, the graſs finch: head, upper part of the neck, and back, cinereous and black; cheeks brown; leſſer wing-coverts bright bay; the others black, edged with white; primaries duſky, with white edges;

lower

lower part of the neck and ſides white, marked with ſmall ſtreaks; belly of a pure white; tail duſky. Inhabits New York, where it ſtays all the winter, and is known by the name of graſs-bird.

84. Fringilla cinerea, the cinereous finch: bill duſky; head, and upper parts of the body, deep cinereous brown, edged with obſcure ruſt-colour; at the corner of the upper mandible a light grey line; on the cheeks, beneath, a ſecond band, bounded by a duſky one; throat of a light grey; under ſide of the neck pale aſh-colour, varied with whitiſh marks; legs duſky. Inhabits Oonalaſhka, from whence it was brought by ſir Joſeph Banks.

85. Fringilla Nortonienſis, the Norton finch: head, upper part of the neck, and ſecondaries, black, edged with bright bay; the middle croſſed with a white line; primaries duſky; belly and ſides white; ſides of the neck, and fore part, ſpotted down the middle of each feather with ruſt-colour; tail duſky, edged with white; along the middle of the outer feather a pure white line, ending at the tip. Inhabits Norton Sound.

86. Fringilla hiemalis, the winter finch: head, neck, and breaſt, light brown, mottled with black; fore part of the neck, breaſt, and ſides, white, marked with ſmall brown ſpots; belly plain white; wing-coverts and primaries brown, edged with white. Found at New York in the winter.

87. Fringilla ſtriata, the ſtriated finch: length five inches and a half; bill lead-colour; between that and the eye, and the forehead, yellow; on the head three black ſtripes; behind the eye another; ſides of the head whitiſh; chin white; all the upper parts like the linnet in colour; middle of each feather very dark; wing-coverts and tail plain brown; quills duſky; the breaſt blue grey; belly very pale; legs brown. Found at New York, in May.

88. Fringilla purpurea, the purple finch: ſize of a chaffinch; colour of the plumage violet; the quills brown within; the belly white; the tail forked. The female is all over brown, except the breaſt, which is ſpotted with white like a thruſh. Theſe are found in Carolina, appearing firſt in November; aſſemble in ſmall flocks, and retire on the approach of winter; during their ſtay they live on the juniper-berries; and alſo deſtroy the buds of fruit-trees.

89. Fringilla roſea, the roſeate finch: ſize of the mountain finch; the plumage is moſtly of a fine roſeate colour; front ſilvery white; back with browniſh grey ſtripes; wings and tail blackiſh; tail-feathers roſy on the outer edge. Inhabits Siberia.

There are two varieties of this bird: 1. Reddiſh aſh, beneath white; feathers of the head, rump, and throat, tipt with fine red; quill and tail-feathers brown, edged with pale yellow. Female above yellowiſh-aſh; chin white. Inhabits the woods of Siberia: hardly five inches long. 2. Blackiſh, feathers edged with red; head and breaſt ſcarlet, the firſt with brown ſpots; belly fleſh-colour. Appears in April round New York.

90. Fringilla iliaca, the iliac finch: ſize of a thruſh; the feathers of the upper part of the body ſteel-blue at the baſe, olive in the middle and tipt with brown, beneath white, a few tipt with cheſnut; tail-feathers, and coverts, above rufous; bill yellow, with a brown ridge and tip; temples white; lower wing-coverts cinereous, edged and tipt with white, the upper rufous; quill-feathers blackiſh brown, the outer edge rufous; legs yellow. Inhabits North America.

91. Fringilla tricolor, the tri-coloured finch: forehead, temples, and throat, blue; region of the noſtrils, and back, greeniſh black; ſhoulders green; under parts yellowiſh white; quills greeniſh black; the prime ones deep green on the outer edge; tail black. Inhabits Surinam.

92. Fringilla cyanomela, the blue-headed finch: ſize of the greater redpole; bill brown; head and neck blue; acroſs the forehead a narrow black line; chin and throat black; acroſs the upper part of the back a ſemicircle of black; wing-coverts, lower part of the back, and rump, blue; breaſt, belly, and vent, blue; quills blackiſh brown, edged with blue, appearing green in ſome lights; tail dark brown; legs brown.

93. Fringilla picta, the azure-headed finch: length four inches; bill red; crown of the head pale blue; hind part of the neck, throat, breaſt, and under tail-coverts, red; belly pale aſh-colour; back, and leſſer wing-coverts, purpliſh; greater coverts green; lower part of the back, and rump, yellow; quills and tail blue; legs red. Inhabits China.

94. Fringilla cyanocephala, the blue-crowned finch: this is a large ſpecies; length ſeven inches; bill duſky; crown of the head blue, bounded behind with red; round the eye white; hind part of the neck, and back, pale reddiſh brown; lower part of the back, and rump, pale blue; under parts of the body yellow; thighs and vent white; middle and greater coverts margined with white; quills and tail black; legs pale brown. Inhabits Senegal.

95. Fringilla torquata, the lunar finch: length ſix inches and a half; bill ſlender, duſky black; head, neck, and back, reddiſh; the laſt inclining to brown; rump pale blue; acroſs the throat a narrow creſcent of black, bounded below with yellow; quills black, the ends of them blue, with a white ſpot at the tip of each: tail and legs black. Inhabits the Eaſt Indies.

96. Fringilla multicolor, the many-coloured finch: bill blueiſh; head, hind part of the neck, upper part of the back, and tail, black; cheeks, chin, and the reſt of the under parts, light yellow; vent yellow; wings black; on the coverts a white ſpot; the ſecondaries croſſed at the ends with white; lower part of the back, and thighs, green; legs grey. From Ceylon.

97. Fringilla maia, the Cuba finch: length only three inches three quarters; bill grey; head, neck, and under parts of the body, blackiſh; back, and upper parts, purpliſh cheſnut, brighteſt on the rump; acroſs the breaſt a cheſnut band; tail of the ſame colour; quills brown, edged with cheſnut; legs lead-colour. The female differs; in her the bill is whitiſh; head, neck, and upper parts, fulvous; throat purpliſh cheſnut; on each ſide of the breaſt a ſpot of the ſame colour; the reſt of the under parts dirty yellowiſh white; quills and tail fulvous; legs grey. Inhabits the iſland of Cuba, where the natives give it the name of *maia*. It is likewiſe found in the Eaſt Indies. It is a gregarious bird; flies in innumerable flocks, and is very hurtful to the rice fields, which it is a very great deſtroyer of, and, in all probability, may be found wherever that grain is cultivated. The fleſh is good and wholeſome food.

98. Fringilla domeſtica, the domeſtic or houſe ſparrow: this bird, every where well-known, is called in Greek στρουθος: moſt tranſlators and naturaliſts have made it to be στρουθος: the fact is, that this laſt name is generic, and applicable to all the ſparrows; in Italian, *paſſera*, or *paſſere caſaringo*; in Spaniſh, *pardal*; in German, *hauſs ſpar*, *haus-ſperling*; in Swediſh, *taelting*, *grawparf*. They occur in all the European climates, and in more diſtant regions, being found in Egypt, Senegal, and other parts of Africa and Aſia, &c. But in whatever country the ſparrow is ſettled, it never is found in deſert places, or at a diſtance from the reſidence of man. It likes neither woods nor vaſt plains; nor is it ſeen in the hamlets or farms that are buried in the depth of foreſts; it follows ſociety, to live at their expence; ſparrows are alſo extremely deſtructive; whence they are in many places proſcribed, and a price ſet on their heads. None of the feathered race are more crafty and artful; they eaſily diſtinguiſh the ſnares laid for them, and wear out the patience of thoſe who try to catch them; and even when the ſport ſucceeds, little impreſſion can be made on a ſpecies which breeds thrice a-year. Their neſt conſiſts of hay, lined with feathers. If you deſtroy it, they will in twenty-four hours build another; if you plunder the eggs,

which are five or ſix, they will in the courſe of a few days lay others; if you drive them from the trees or the houſes, they will reſort in great numbers to your granaries. Perſons who have kept them in cages aſſure us, that a ſingle pair of ſparrows conſume near twenty pounds of corn annually. We may judge from their numbers what prodigious deſtruction they muſt make in our fields; for though they feed their young with inſects, and eat many themſelves, they principally ſubſiſt on our beſt grain. They follow the labourer in ſeed-time, and the reaper in harveſt. They attend the threſhers at the barns, and the poulterer when he ſcatters grain to his fowls. They viſit the pigeon-houſes, and even pierce the craw of the young pigeons to extract the food. They eat bees, and are thus diſpoſed to deſtroy almoſt the only inſects uſeful to man; whence it ſeems the cordial wiſh of all men that ſome method could be deviſed for deſtroying them. There are two ſeaſons in the year when they aſſemble, not to fly in flocks, but to chirp together, in autumn on the willows by the river ſide, and in ſpring on the firs and other evergreens. They meet in the evening, and in mild weather. They ſpend the night on the trees, but in winter they are found either alone, or with their females in a hole of the wall, or beneath the roofs of houſes, &c. The males fight obſtinately for the poſſeſſion of their females, and in the violence of their ſtruggle they often fall to the ground. Few birds are ſo ardent, or ſo vigorous in their love. They will embrace twenty times in ſucceſſion with the ſame fire, and the ſame expreſſions of rapture. Some houſe-ſparrows, more indolent or bolder than the reſt, do not give themſelves the trouble of building, but drive off the martins, and poſſeſs their neſts. Sometimes they fight the pigeons, and eſtabliſh themſelves in their holes. This little tribe exhibit therefore habits and inſtincts more varied and perfect than moſt other birds; which reſults undoubtedly from their living in ſociety. They enjoy the benefits of the domeſtic ſtate without ſurrendering any portion of their independence. Their fleſh is by many perſons reckoned good food; and in ſome countries ſmall poſts are erected before the houſes, for theſe birds to build in, for the ſake of their young.

There are ſeveral varieties of this ſpecies, viz. 1. The *white houſe-ſparrow*, which has a yellow bill and irides, and the plumage wholly white. Specimens of theſe are to be ſeen both in the Britiſh and Leverian Muſeums, but the laſt contained many mixed varieties; one brown above; beneath dirty white. Another, marked as in common, but very pale, and ſome of the quills white. A third, the upper parts almoſt white; the under parts brown. Another, every where pure white, except a rudiment of black on the throat, ſhewing it to be a male. A fifth pure white, with a ſpot on the crown; the nape of the neck, and the back, brown. One like this is alſo in the Britiſh Muſeum. 2. The *yellow houſe-ſparrow*, with a tinge of cheſnut on the upper parts. There was one of theſe in the Leverian Muſeum, wholly of a yellow cream-colour. 3. The *black houſe-ſparrow*; the bill of a deep yellow. This variety is full as common as the white one. All theſe have been ſhot at large, and therefore could not be the effect of keeping in a cage, on improper food.

99. Fringilla montana, the mountain ſparrow: this beautiful bird is a ſize leſs than the houſe-ſparrow; bill black; irides greyiſh hazel; the head, and nape, cheſnut; the chin black; on each ſide of the head, behind the eye, a ſpot of the ſame; the upper parts of the body rufous brown, ſpotted with black, inclining to greeniſh towards the rump; ſides of the neck, the breaſt, and under parts, duſky white; wing-coverts rufous, edged with black, and croſſed with two bars of white; the greater coverts black, with ferruginous edges; quills blackiſh, with rufous edges; tail rufous brown; legs pale yellow. The female is duller in colour, and wants the black on the ears and throat.

This ſpecies is found in England, particularly in Lancaſhire, Lincolnſhire, and Yorkſhire, but not further to the north of England or Scotland. It is obſerved always to build on trees, and not in buildings like the houſe-ſparrow. It is much more common on many parts of the European continent than in England; as in Italy, France, Germany, Ruſſia, and the eaſtern part of Siberia, where it is more plentiful than the houſe-ſparrow. It is ſaid to viſit Hudſon's bay in April, and to depart in September; though Mr. Hutchins ſeems not certain but it may be the *mountain finch*. Dr. Forſter mentions a bird of this kind in Canada, ſix inches and a half in length, which has no black under the throat and eyes, and no white collar; the bill and legs black. This arrives at the ſettlements at Severn in May, and goes further north to breed, and returns in autumn. The mountain-ſparrow, though more reſtleſs than the houſe-ſparrow, is not ſo petulant, ſo familiar, or ſo voracious. It is more innocent, and not ſo deſtructive to the crops. It prefers fruits, wild ſeeds, particularly thoſe of the thiſtle, and alſo eats inſects. It avoids meeting the houſe-ſparrow, which is ſtronger and more miſchievous. It can be raiſed in a cage, and fed like a goldfinch; it lives five or ſix years; its ſong is very poor, but quite different from the harſh chirp of the houſe-ſparrow; but though more gentle, it is remarked not to be ſo docile. This is owing to its living more out of the ſociety of man.

100. Fringilla pinetorum, the pine finch: plumage above reddiſh teſtaceous, beneath yellow; breaſt with a tranſverſe ferruginous band. Inhabits the pine groves of Siberia.

101. Fringilla ſylvatica, the wood finch: head barred; body above varied with black and grey; breaſt and belly hoary. Inhabits alſo the pine foreſts of Siberia.

102. Fringilla Hudſonia, the Hudſon's-bay finch: the plumage above is black, beneath white; outmoſt tail-feathers white. Inhabits Hudſon's bay.

103. Fringilla flavicollis, the yellow-throated finch: bill and legs blueiſh grey; head and upper parts of the body cinereous; primaries duſky, edged with pale brown; chin white; on the throat a pale yellow ſpot; belly dull white. Inhabits New York.

104. Fringilla criſtata, the creſted ſparrow: nearly as large as the houſe-ſparrow; bill red; upper parts of the plumage, wings, and tail, reddiſh brown; the under parts, and rump, crimſon; the top of the head is creſted, and of the ſame colour; ſides of the head, under the creſt, black; legs brown. The female has the top of the head, round the eyes, and chin, black; neck, as far as the breaſt, crimſon; the upper parts brown; wings and tail pale brown; the quills black; on the breaſt a bar of black; the reſt of the under parts white, mixed with a little black at the thighs; legs brown. Inhabit Cayenne, and are alſo met with in Carolina.

105. Fringilla Carolinenſis, the Carolina black-faced finch: five inches and a half long; red-brown; belly white; face and pectoral band black; throat and rump ſcarlet; bill and legs browniſh; wings black; tail ſhort. Inhabits Carolina.

106. Fringilla bicolor, the two-coloured finch: length four inches; bill black; head, throat, and breaſt, the ſame; the reſt of the bird dull green. Found in the woods of Bahama, where it ſits perched on the tops of trees, and ſings not unlike the chaffinch. This bird varies in colour; one in the Britiſh Muſeum has an aſh-coloured belly, and the vent tinged with red; brought from Jamaica.

107. Fringilla Abyſſinica, the Abyſſinian finch: ſize and ſhape of the canary-bird; bill black; ſides of the head beneath the eyes, the throat, fore part of the neck, breaſt, and upper part of the belly, black; upper part of the head, the reſt of the body, and lower part of the belly, yellow; at the back of the neck a collar of black, which meets the black on the fore part; the wing-coverts, and quills black, with pale edges; tail black, edged with greeniſh yellow; legs pale brown. This inhabits Abyſſinia,

ſinia, where it is met with in flocks, and is known by the name of *worabée*. It feeds on the ſeed of a plant called *nuk*, which has a yellow flower, and the ſeed produces an oil, in much uſe with the monks.

108. Fringilla ultramarina, the ultramarine finch: ſize of a canary, but has a rounder head; bill white; plumage wholly of a fine deep ultramarine blue; legs red. The young birds and females are grey. The males get the blue plumage in the ſpring of the ſecond year; but the female ever remains of a ſimple grey colour. This alſo inhabits Abyſſinia, and is ſaid to have a fine ſong.

109. Fringilla Syriaca, the Syrian finch: a ſize larger than the linnet; bill thick, ſhort, and of a lead-colour; top of the head fine bright red; cheeks, throat, and fore-part of the neck, black, mixed with brown; the reſt of the neck, breaſt, upper parts of the body, and leſſer wing-coverts, brown, duſky, and yellow, mixed; the greater wing-coverts deep aſh-colour, edged with paler; quills and tail the ſame, but edged with bright orange; belly and vent dirty white, marked with obſcure yellow and duſky ſpots; legs lead-colour. This ſpecies is found about Tripoli, in Syria; it is a bird of paſſage, and ſings very finely. We are indebted for theſe three laſt ſpecies to the late celebrated Abyſſinian traveller, Mr. Bruce.

110. Fringilla criſpa, the frizzled ſparrow: ſize of a chaffinch; bill white; the head and neck black; the upper parts of the body, wings, and tail, deep olive; the under parts yellow; legs brown; the feathers of the body all frizzled, as is ſometimes ſeen in poultry. This ſpecies inhabits Angola and Braſil. The Portugeuſe call it *beco de prata*.

111. Fringilla Indica, the Indian finch: length five inches and three-quarters; bill and head black; round the bill and eyes, and the throat, white, paſſing round the neck as a collar; on the lower part of the neck before, a black bar; the reſt of the under parts are rufous white; the upper parts cinereous brown, paleſt on the rump; the wing-coverts are black, fringed with gloſſy rufous; greater quills black; tail and legs cinereous brown. Inhabits India.

112. Fringilla ochracea, the oker finch: ſize of a chaffinch; bill and legs yellow; general colour of the plumage white, except the head, fore part of the neck, breaſt, and wing-coverts, which are more or leſs of the colour of yellow oker. This was deſcribed from a living ſpecimen in an aviary, ſaid to have been caught in Auſtria.

113. Fringilla teſtacea, the teſtaceous finch: length five inches and a half; bill pale red; irides black; head, neck, and back, ferruginous, mottled with black; breaſt and belly the ſame, but paler; wings and tail brown; legs fleſh-colour. Native of Luſitania.

114. Fringilla imperialis, the imperial finch: ſize of the Amadavad finch; length three inches and a half; bill duſky red; crown, and all the under parts of the body, yellow; the upper parts pale ferruginous roſe-colour; quills and tail duſky; legs pale duſky red. Inhabits China.

115. Fringilla Auſtralis, the ruſty-collared finch: general colour of the plumage brown, with a ferruginous or ruſty grey collar. Inhabits Terra del Fuego.

FRI'O, a ſmall iſland on the coaſt of the Brazils, ſituated in 32° 2′ ſouth lat. and 41° 31′ 45″ weſt lon. The land of Frio is high, with a hollow in the middle, which gives it, at a diſtance, the reſemblance of two ſeparate iſlands. The paſſage between the iſland and the continent is about a mile broad, and ſeemed to ſir Eraſmus Gower to be clear from ſhoals.

FRI'O, a river of Spain, in the province of Grenada, which runs into the ſea, near Toros.

FRIP'PERER, *ſ.* [from *frippier*, Fr.] One who deals in old things vamped up.

FRIP'PERY, *ſ.* [*fripperie*, Fr. *fripperia*, Ital.] The place where old clothes are ſold.—Lurana is a *frippery* of bankrupts, who fly thither from Druina to play their after-game. *Howel.*—Old clothes; caſt dreſſes; tattered rags.—Ragfair is a place near the Tower of London, where old clothes and *frippery* are ſold. *Pope.*

The fighting-place now ſeamens rage ſupply,
And all the tackling is a *frippery*. *Donne.*

FRISCH (John Leonard), a writer in natural hiſtory and lexicography, born at Sulzbach, in the Upper Palatinate, in 1666, and ſtudied at Altdorff, Jena, and Salzburg. After travelling through France and Swiſſerland, he ſucceeded the evangelical preacher, Elias Breithorn, at Neuſol in Hungary, but was driven thence by perſecution, and became an interpreter during the Turkiſh war. From Hungary he went to Venice and other parts of Italy; and in 1693 was ſuperintendent of a nobleman's eſtate near Nuremberg. He next viſited Holland, after which he ſettled at Berlin, where he was appointed rector of the Grey Convent Gymnaſium in 1726. By the recommendation of Leibnitz, whom he inſtructed in the Ruſſian language, he was choſen a member of the royal academy of ſciences, and of the imperial academy of the ſearches into nature. He died at Berlin on the 21ſt of March, 1743. Friſch has perpetuated his name by being the founder of the ſilk manufactory in the marche of Brandenburg, about the beginning of the laſt century: he was the firſt perſon who cultivated mulberry-trees in the neighbourhood of Berlin, where he formed a plantation of them, his own property, which was attended with the beſt ſucceſs. He conceived an idea alſo that the church-yards in the city and adjacent villages might be planted with theſe trees to great advantage; and this plan was recommended, in 1718, by Frederic-William I. He rendered great ſervice to the German language by his dictionary. He wrote alſo in his native tongue a deſcription of all the inſects of Germany, of which thirteen parts were publiſhed, and which ſtill merits the approbation of naturaliſts. The principal works of this author are: 1. *Deutſch-lateiniſches Worterbuch, &c.* a German and Latin Dictionary, with the Etymology of the Words partly eſtabliſhed, and partly conjectural, and critical Annotations, Berlin, 1741, 2 vols. 4to. 2. *Dictionnaire nouveau des Paſſagers, François-Allemand, & Allemand-François*, Leipſic, 1712, 8vo. This uſeful book has gone through a great many editions. 3. *Beſchreibung von allerley Inſekten in Deutſchland, &c.* Deſcription of all the German Inſects, with Obſervations, and the neceſſary Figures, &c. thirteen parts, Berlin, 1720–1738, 4to. with 273 plates, making two quarto volumes. A new edition was publiſhed, at Berlin, 1766–1779, 4to. with plates. 4. *Vorſtellung der Vögel in Deutſchland, und beiläufig auch einger fremden, &c.* Repreſentation of the Birds of Germany, with a few of foreign Countries, coloured after Nature, &c. This work was publiſhed at Berlin by the author's ſon; and is eſteemed by connoiſſeurs, on account of the accuracy with which the plates are coloured. It contains twelve grand claſſes, which occupy 255 plates and 179 pages of deſcription. Friſch wrote the deſcriptions of the four firſt claſſes only.

FRISCH HAFF, a gulf, or arm of the ſea, on the coaſt of Pruſſian Pomerania, ſouth of the Baltic; about twenty-five miles in length from eaſt to weſt, and eight from north to ſouth. The Oder paſſes through it at the eaſtern extremity.

FRISCH HAFF, a bay, or arm of the ſea, between Konigſberg and Elbing, ſeparated from the Baltic by a tongue of land, called *Friſch Nerung*; about eighteen leagues in length, and hardly two in breadth. It communicates with the Baltic by a narrow paſſage, near Pillaw.

FRISCH NE'RUNG, a narrow ſlip of land, in Pruſſia, which lies between the Baltic and the Friſch Haff: twenty-ſix miles long, and hardly two wide.

FRISCH'BACH AL'LEN, a mountain of Stiria: ten miles eaſt of Pruck.

To FRISE, or FRIZZLE, *v. a.* [*friſer*, Fr.] To dreſs by criſping. This is confined to the hair of the head.

FRISEUR', *ſ.* [French.] Hair-dreſſer.—Let your man learn of the beſt *friſeur* to do your hair well, for that is a very material part of your dreſs. *Cheſterfield.*

FRISCH'LIN (Nicodemus), a learned German, born in 1547, at Balingen in the duchy of Wirtemberg. His father, who was a miniſter, educated him with great care; and ſuch was his early progreſs at the univerſity of Tubingen, that he became a verſifier in Greek and Latin at the age of thirteen. He taught the belles-lettres at that ſeminary, and employed a new method of inſtructing his ſcholars in grammar. Not content with this, he declared war againſt all former grammarians, in a work entitled *Strigil Grammatica*, which involved him in ſome angry controverſy with others of the profeſſion. In a commentary which he publiſhed on the Bucolics and Georgics of Virgil, he indulged ſuch an acrimony of ſtyle in declaiming upon the compariſon between the innocence of a country life, and the corrupt manners of the great, that he was compelled to quit his native country, and wander through the towns of Germany. He poſſeſſed a wonderful facility in poetical compoſition, and there are numbered among his works ſixteen books of elegies, ſeven comedies, two tragedies, odes, anagrams, and heroic verſes in abundance. That this facility was accompanied with mediocrity, may be ſafely concluded; his comedy of Rebecca, however, obtained for him the golden laurel and the title of *crowned poet* from the hands of the emperor Rodolph. He was leſs fortunate in pleaſing his ſovereign, the duke of Wirtemberg, though he wrote ſeven books of heroics on his marriage. For having, from his retreat at Mentz, made a fruitleſs application for a pecuniary remittance, he wrote back a remonſtrance ſo full of abuſe, that he was arreſted, and carried to the priſon of Aurach, in the duchy. Attempting to eſcape thence by cutting his ſheets into ſlips, and letting himſelf down from a window, his weight broke the ſupport, and he was killed in the fall. This melancholy cataſtrophe happened in November, 1590, when he was forty-three years of age. Beſides the works above-mentioned, he left Commentaries upon the Epiſtles of Horace and the Satires of Perſius, and tranſlations of Oppian, Ariſtophanes, Callimachus, and Heliodorus.

FRISCH'MUTH (John), a learned German, born at Wertheim, in Franconia, in 1619. He became rector, and afterwards profeſſor of languages in the univerſity of Jena, where he died in 1687. He was the author of Illuſtrations of many difficult paſſages in the ſacred writings, which are frequently ſucceſsful and valuable; and of more than ſeventy Diſſertations, philological and theological, on curious and intereſting ſubjects, which abound in erudition.

FRIS'II, or FRISO'NES, in ancient geography, a people of Germany, ſo called either from their ardent love of freedom, or from the freſh and unbroken lands they occupied, contradiſtinguiſhed from the old lands. Tacitus divides them, from their extent of power and territory, into the Majores, ſituated on the coaſt between the Rhine and the Ems; and into the Minores, occupying the parts about the lakes lying between the channels of the Rhine.

FRI'SIUS (John), a learned Swiſs divine in the ſixteenth century, born at Gryffenſee, in the canton of Zurich, in 1505. After he had gone through a proper courſe of ſtudy, he was admitted to the profeſſion of the miniſtry, and was invited to take that office upon him in the city of Zurich. In 1545 he went into Italy, where he embraced the opportunity of making himſelf maſter of the Hebrew language, under the inſtructions of the learned Jews who then reſided at Venice. On his return home he proved ſucceſsful, conjointly with his brother-in-law Pellicanus, in introducing a taſte for Oriental learning among the ſtudents at Zurich. For twenty-ſeven years he preſided over the college in that city, with eminent reputation and ſucceſs, and in requital for the ſervices which he rendered to his country, and to the intereſts of literature, he was made a burgher of the city. He tranſlated ſeveral books of the ſacred writings from Hebrew into German, and alſo publiſhed a Latin and German Dictionary. He died in 1665. He left two ſons: John-James, who was profeſſor of philoſophy and theology from 1576 till about 1610, and wrote many works in philoſophy, philology, and theology; and John, who was admitted to the degree of M. A. at Marpurg, and proved the learned and worthy ſucceſſor of his father in his profeſſional labours at Zurich. This John died of the plague in 1611.

FRI'SIUS (Henry), a deſcendant of the preceding, who ſpent ten years in foreign countries, to improve himſelf in ſcience and literature. Upon his return to his native country, the firſt appointment which he obtained was that of catechiſt, in 1676; after which he was created profeſſor of eloquence in 1681, and profeſſor of the languages in the lower college at Zurich in 1684. He died in 1718. He was the author of ſeveral ingenious and learned treatiſes; ſuch as 1. *De Sede Animæ rationalis.* 2. *De Communione Sanctorum.* 3. *De Unione Sanctorum.* 4. *Explicatio Articuli de ſacra Cœna.* 5. *Oratio de Quietiſmo, &c.*

FRI'SOIT, a town of Germany, in the circle of Weſtphalia, and biſhopric of Munſter: fourteen miles ſouth-weſt of Oldenburg, and ſeventy north of Munſter. Lat. 55. 1. N. lon. 25. 4. E. Ferro.

FRIT, or FRITT, *ſ.* in the glaſs manufacture, is the matter or ingredients whereof glaſs is made, when they have been calcined or baked in a furnace. A ſalt drawn from the aſhes of kali, fern, or other plants, mixed with ſand or flint, and baked together, makes an opaque maſs called by glaſs-men *frit*; probably from the Italian *frittare*, to fry; or becauſe the frit, when melted, runs into lumps, like fritters, called by the Italians *fritelli*. By the ancients, *frit* was called *ammonitrum*, of ἄμμος, ſand, and νίτρον, nitre; under which name it is deſcribed by Pliny thus: "Fine ſand from the Volturnian ſea, mixed with three times the quantity of nitre, and melted, makes a maſs called *ammonitrum*; which being rebaked makes pure glaſs." Neri obſerves, that frit is only the calx of the materials which make glaſs; which, though they might be melted, and glaſs be made, without thus calcining them, yet it would take up much more time. The calcining, or making of frit, ſerves to mix and incorporate the materials together, and to evaporate all the ſuperfluous humidity. The frit, once made, is readily fuſed, and turned into glaſs. There are three kinds of frits. The firſt, for cryſtal glaſs, is made with ſalt of pulverine and ſand. The ſecond, or ordinary frit, is made of the bare aſhes of pulverine or barilla, without extracting the ſalt from them: this makes the common crown glaſs. The third is frit for green glaſſes, made of common aſhes, without any preparation. The materials in each are to be finely powdered, waſhed, and ſearced; then equally mixed, and frequently ſtirred together in the melting pot. See the article GLASS.

FRITH (John), one of the earlieſt Engliſh martyrs to the principles of the reformation, the ſon of an innkeeper at Sevenoaks in Kent, born at that place towards the beginning of the ſixteenth century. After he had been qualified by a preparatory-ſchool education, he was ſent to King's college in the univerſity of Cambridge. In that ſeminary he diſtinguiſhed himſelf by his application and proficiency; and when he was admitted to the degree of bachelor of arts, had the reputation of being a firſt-rate linguiſt, and well-informed general ſcholar. On this account he was put down in the liſt of thoſe whom cardinal Wolſey brought from Cambridge, to his new inſtitution of Cardinal (now Chriſt-church) college, in the univerſity of Oxford, of which he was made one of the junior canons. In 1525 he was incorporated at Oxford in the ſame degree which he had taken at Cambridge. Before this, however, he had become acquainted with William Tyndale, a zealous Lutheran, with whom he held frequent conferences on religious ſubjects; the reſult of which was his conviction of the corruptions and errors

errors of popery, and his adoption of the principles of the reformers. After a wandering life ſpent for ſome years on the continent, and in England, he came to London, where, while he was endeavouring to make proſelytes, he was ſeized by the order of ſir Thomas More, then lord-chancellor, and committed priſoner to the Tower, in 1533. Beſides his different converſations for the purpoſe of propagating the principles of the reformers, Frith had drawn up ſeveral writings againſt the leading tenets of popery, copies of which were privately circulated among the converts to the reformed faith. While he was priſoner in the Tower, Frith held ſeveral diſputes with ſir Thomas More and others, who found themſelves incapable of producing any change in his opinions. At length he was brought before an epiſcopal commiſſion at St. Paul's cathedral, where he was interrogated on the ſubjects of tranſubſtantiation and purgatory, and many efforts were made to perſuade, or intimidate, him to renounce the notions which he entertained reſpecting thoſe doctrines, and to conform to the creed of the catholic church. When he was found to remain unmoved by their arguments or threatenings, and to perſiſt in a declaration that he could not be induced to believe that theſe were articles of Chriſtian faith; with much affected ſorrow and pity the biſhop of London pronounced ſentence of condemnation upon him, as an obſtinate heretic; and he was delivered over to the ſecular power. In purſuance of this ſentence a writ was iſſued out for his execution, and he was burnt at Smithfield not many days after his condemnation, maintaining his fortitude to the laſt, and charitably extending his forgiveneſs to a bigotted prieſt, who endeavoured to perſuade the people that they ought no more to pray for him than for a dog. He was the author of, 1. A Treatiſe on Purgatory. 2. An Anſwer to Raſtall's Dialogues on Purgatory. 3. An Anſwer to Sir Thomas More's Dialogues concerning Hereſies. 4. An Anſwer to John Fiſher, Biſhop of Rocheſter, on the Subject of the Corporal Preſence. 5. An Antitheſis between Chriſt and the Pope: and other controverſial and practical treatiſes, which were ſeparately printed at different periods, and collected together in a folio volume, publiſhed in 1573.

FRITH, *ſ.* [*fretum*, Lat.] A ſtrait of the ſea where the water being confined is rough:

What deſp'rate madman then would venture o'er
The *frith*, or haul his cables from the ſhore? *Dryden.*

A kind of net.—The Wear is a *frith*, reaching through the Ouſe, from the land to low-water mark, and having in it a bunt or cod with an eye hook; where the fiſh entering, upon their coming back with the ebb, are ſtopt from iſſuing out again. *Carew.*

FRITH, *ſ.* [Saxon.] A wood; a ſacred wood.

FRITH'BREACH, *ſ.* [from the Sax. ꝼꝛıꝺ, peace, and ꝼꝛıcc, a breach] A breach of the peace.

FRITH'BURG, *ſ.* A ſurety for the peace. *Phillips.*

FRITH'GAR, *ſ.* [Sax. ꝼꝛıꝺ, peace, and ȝeaꝛ, a year.] The year of jubilee.

FRITH'GILD, *ſ.* In old records, a fine for breach of the peace. *Scott.*

FRITH'SOKE, FRITH'SOKEN, *ſ.* Law terms: the right or liberty of frank pledge. *Obſolete.*

FRITH'WALD, [Saxon] A man's name.

FRITILLA'RIA, *ſ.* [from *fritillus*, a cheſs or draught board, like which the petals of the common fritillary are checquered. *Fritillus*, however, is not the board, but the dice-box.—*Movet arma fritillo.* Juv.] In botany, a genus of the claſs hexandria, order monogynia, natural order coronariæ, (lilia, *Juſſ.*). The generic characters are—Calyx: none. Corolla: ſix-petalled, bell-ſhaped, ſpreading at the baſe; petals oblong, parallel; nectary, an excavation or pit in the baſe of each petal. Stamina: filaments ſix, ſubulate, approximating to the ſtyle, the length of the corolla; antheræ quadrangular, oblong, erect. Piſtillum: germ oblong, three-cornered, obtuſe; ſtyle ſimple, longer than the ſtamens; ſtigma triple, ſpreading, blunt; (ſtyle triſid, with three ſtigmas.) Pericarpium: capſule oblong, obtuſe, three-lobed, three-celled, three-valved, (ſuperior, *Gærtner.*) Seeds: very many, flat, ſemiorbicular on the outſide, in a double row.—*Eſſential Character.* Corolla, ſix-petalled, bell-ſhaped, with a nectareous cavity above the claws; ſtamina, the length of the corolla.

Species. 1. Fritillaria imperialis, imperial fritillary, or crown imperial: flowers in a raceme, with a coma over them, but naked below; leaves quite entire. See Botany Plate VII. fig. 8. The crown imperial has a large round ſcaly root of a yellow colour, and a ſtrong odour of a fox; the ſtalk riſes to the height of four feet or upwards; it is ſtrong, ſucculent, and garniſhed two-thirds of the length on every ſide, with long narrow leaves ending in points, which are ſmooth and entire; the upper part of the ſtalk is naked, a foot in length; then the flowers come out all round the ſtalk upon ſhort foot-ſtalks, which turn downward, each ſuſtaining one large flower. Above theſe riſes a ſpreading tuft of green leaves, which are erect, and called the *coma*. This plant flowers the beginning of April, and the ſeeds are ripe in July. Being one of the earlieſt tall flowers of the ſpring, it makes a fine appearance in the middle of large borders, at a ſeaſon when ſuch flowers are much wanted to decorate the pleaſure-garden; but the rank fox-like odour which they emit is too ſtrong for moſt people, and renders the flowers leſs valuable than they would otherwiſe be. The beauty, however, of the plant, and the ſplendour of the magnificent pendulous flowers, will ever ſecure this a place in large gardens and plantations. The ſingular nectary cannot but engage the attention of the curious obſerver: it is a white glandular cavity at the baſe of each petal, and has a drop of limpid nectareous juice ſtanding in it when the flower is in vigour. Another of the wonders of nature may be obſerved in the peduncles, which bend down whilſt the plant is in flower, but become upright as the ſeed ripens. This circumſtance, however, is by no means peculiar to this plant, but common to it with many others.

Varieties. 1. Common crown imperial, of a dirty red colour. 2. Yellow crown imperial, of a bright yellow. 3. Bright red crown imperial, called *fuſai*. 4. The pale yellow crown imperial. 5. The yellow ſtriped crown imperial. 6. The large flowering crown imperial. 7. The broad-leaved late red crown imperial. 8. The double and triple crowned imperial crown. 9. The double red crown imperial. 10. The double yellow crown imperial. 11. The ſilver ſtriped leaved crown imperial. 12. The yellow ſtriped leaved crown imperial. There are ſome few other varieties which are mentioned in the catalogues of the Dutch floriſts, but their diſtinctions are ſo minute that they are not diſtinguiſhable. The variety with yellow flowers, that with large flowers, and thoſe with double flowers, are the moſt valuable; but that which has two or three whorls of flowers above each other, makes the fineſt appearance; though this ſeldom produces its flowers after this manner the firſt year after removing, but the ſecond and third year after planting, the ſtalks will be taller, and frequently have three tier of flowers, one above another, which is called the *triple crown*. The ſtalks of this ſort frequently run flat and broad, when they produce a greater number of flowers than uſual; but this is only a luxuriancy of nature, not conſtant, though many of the writers have mentioned it as a particular variety.

2. Fritillaria Perſica, the Perſian fritillary, or Perſian lily: raceme almoſt naked; leaves oblique. The Perſian lily has a large round root; ſtem three feet high, the lower part cloſely garniſhed on every ſide with leaves, which are three inches long, and half an inch broad, of a grey colour, and twiſted obliquely; flowers in a looſe ſpike at the top, forming a pyramid: they are ſhorter than the other ſorts, ſpread wider at the brim, and are

not bent down; they are of a dark purple colour, and appear in May, but ſeldom produce ſeeds in England; the loweſt leaves grow in pairs, three or four together, oppoſite, in whirls; root the ſize of an orange, of a taſte extremely bitter, but without any remarkable ſmell. Suppoſed to be a native of Perſia; and to have appeared in Europe in 1573. Gmelin found it in Ruſſia. Cultivated here in Gerarde's garden, in 1596. In his Herbal he ſays that it is a denizon in ſome few of our London gardens. Parkinſon, 1629, informs us that it was ſent unto us by the means of divers Turkey merchants from Conſtantinople; and eſpecially by the procurement of Mr. Nicholas Lete, a worthy merchant, and a lover of all fair flowers.

β. The ſmall Perſian lily, (which Mr. Miller makes a diſtinct ſpecies,) has a much ſhorter ſtem, and ſmaller leaves; the ſtem branches out at the top into ſeveral ſmall peduncles, each ſuſtaining one dark-coloured flower.

3. Fritillaria Pyrenaica, or black fritillary: loweſt leaves oppoſite; ſome of the flowers having a leaf interpoſed between them. The leaves of this are broader, and of a deeper green, than the common fritillary; the lower leaves are oppoſite, but thoſe above alternate; ſtem a foot and half high, terminated by two flowers of an obſcure yellow colour, and ſpreading more at the brim than thoſe of the common fritillary, but turned downwards in the ſame manner; it flowers three weeks after that. It is a native of France and Ruſſia.

4. Fritillaria meleagris, common fritillary, or checquered lily: all the leaves alternate; ſtem one-flowered. Root a ſolid bulb or tuber, about the ſize of a hazel-nut, white or yelloviſh-white, roundiſh, compreſſed, diviſible into ſeveral, incloſed by the withered wrinkled bulb of the preceding year, as in a caſe; ſtem from ſix to twelve, fifteen, and even eighteen, inches in height, advancing conſiderably in length after flowering; it comes out from the ſide of the root, is ſimple, upright, round, ſmooth, glaucous, and not unfrequently purpliſh; leaves three or four, ſometimes five or ſix, graſs-like, diſtantly alternate, half embracing, round on the under, and hollow on the upper, ſide, ſomewhat twiſted and glaucous. See the Botany Plate X. fig. 26. Flower uſually ſingle, ſometimes two, or even three, on the top of the ſtem, large, pendulous, at firſt ſomewhat pyramidal, but afterwards bell-ſhaped; petals checquered with purple and white, or purple and greeniſh yellow; in our wild ones the colour is a dull red checquered with a deeper, but without mixtures of either green or yellow. Native of the ſouthern countries of Europe. Found alſo in a wild ſtate near Upſala in Sweden, but eſcaped from a garden. In England it was firſt mentioned by Mr. Blackſtone to grow in Mawde fields near Riſlip common, Middleſex, and to have been obſerved there by Mr. Aſhby, of Breakſpears, above forty years. It has ſince been found between Mortlake and Kew; near Enfield; in a wood near Bromley in Kent; near Bury St. Edmunds, and between Laxfield and Stirrup-ſtreet, in Suffolk; Weſtthoe near Linton in Cambridgeſhire; near Leiceſter; and in a meadow near Blymhill in Staffordſhire. It flowers in April and May, and if the ſeaſon be mild, at the beginning of the former month, or even the end of March.

The common fritillary is named in German, *kiebitzey*; in Dutch, *kievitſbloem*; in Daniſh, *vibeæg*; in Swediſh, *vipaägg*; in French, *la fritillaire meleagre*, or *Panachee*, *le Damier*; in Italian, *fritillaria*, *giglio variegato*, *meleagride*, *fritillaria ſcaccheggiata*; in Spaniſh, *la fritillaria*, *el meleagro*. Gerarde calls it *turkey-hen* or *guinea-hen flower*, and *checquered daffodill*. The curious and painful herbaliſt of Paris, John Robin, ſent him many plants for his garden, where they proſpered (as he informs us), as in their own native country; and were then greatly eſteemed for the beautifying of our gardens, and the boſoms of the beautiful. Some call it, ſays Parkinſon, *Narciſſus Caparonius*, from the firſt finder, Noel Caparon, an apothecary then dwelling at Orleans, but ſhortly after murdered in the maſſacre of France. He leaves it to every one's will, to call it in Engliſh either *fritillaria*, as it is called of moſt, or *checquered daffodil* or *guinea-hen flower*; or, as he does, *checquered lilly*. Lobel makes it a kind of tulip. The country people about Riſlip call the flowers *ſnakes'-heads*.

Many varieties have been ſent from Spain, Portugal, Italy, &c. Many others have been raiſed from ſeed by the floriſts, which differ in the ſize and colour of their flowers: theſe amount to a conſiderable number in the catalogues of the Dutch floriſts; but as new varieties may be continually produced, and ſince theſe flowers are no longer in ſuch eſteem as they were formerly, it would be to little purpoſe to enumerate them.

5. Fritillaria Cantonienſis, or Cochinchina fritillaria: leaves three-nerved, the upper ones oppoſite; flowers in pairs, axillary. Stem annual, quite ſimple, hard, ſlender, round, upright, a foot and half high; leaves ſmooth, quite entire, rounded at the baſe, then conical, with a long point; flowers pendulous, the whole duſky purple, and without ſmell; corolla thick, ſix-cornered, almoſt cloſed; ſtyle trifid, with ſimple ſtigmas. Cultivated about Canton in China.

Propagation and Culture. The firſt ſpecies may be propagated by ſeeds, or offsets from the root; the former method is too tedious for moſt of the Engliſh floriſts, becauſe the plants ſo raiſed are ſix or ſeven years before they flower; but the Dutch and Flemiſh gardeners, who have more patience, frequently raiſe them from ſeeds, and ſo get ſome new varieties, which reward their labour. The method of propagating theſe flowers from ſeeds being nearly the ſame as for the tulip, *Tulipa*, the reader is deſired to turn to that article, where there are full directions for performing it. But the common method of propagating them here, is by offsets ſent out from the old roots, which will flower ſtrong the ſecond year after they are taken from the roots; in order to have plenty of theſe, the roots ſhould not be tranſplanted oftener than every third year, by which time each root will have put out ſeveral offsets, ſome of which will be large enough to flower the following year, ſo may be planted in the borders of the flower-garden, where they are to remain; and the ſmaller roots may be planted in a nurſery-bed, to grow a year or two, according to their ſize; therefore they ſhould be ſorted, and the ſmalleſt roots planted in a bed together, which ſhould remain there two years, and the larger by themſelves to ſtand one year, by which time they will have acquired ſtrength enough to flower, ſo may then be removed into the pleaſure-garden. The time for taking up theſe roots is in the beginning of July, when their ſtalks will be decayed; and they may be kept out of the ground two months, but they ſhould be laid ſingle in a dry ſhady room, but not in heaps, or in a moiſt place, which will cauſe them to grow mouldy, and rot. The offsets ſhould be firſt planted, for as theſe are ſmall, they will be apt to ſhrink if they are kept long out of the ground. As the roots are large, they muſt not be planted too near other flowers; and when they are planted in beds by themſelves, they ſhould not be nearer than a foot and a half in the rows, and two feet row from row; they ſhould be planted ſix inches deep at leaſt, eſpecially the ſtrong roots: they delight in a light ſoil, not too wet, nor very full of dung; therefore if any dung is laid upon the borders where they are planted, it ſhould be buried pretty deep, ſo as to be two or three inches below the roots.

2, 3, 4. Theſe plants are propagated either by ſeeds, or offsets from the old roots; by the firſt of which methods new varieties will be obtained, as alſo a larger ſtock of roots in three years, than can be obtained in twenty or thirty years in the latter method: we ſhall therefore firſt treat of their propagation by ſeeds. Having provided yourſelf with ſome good ſeeds, ſaved from the faireſt flowers, you muſt procure ſome ſhallow pans or boxes, which muſt have holes in their bottoms to let out the moiſture; theſe you ſhould fill with light

freſh

freſh earth, laying a few potſheards over the holes, to prevent the earth from ſtopping them; then, having laid the earth very level in the boxes, &c. you muſt ſow the ſeeds thereon pretty thick, covering it with fine ſifted earth a quarter of an inch thick. The time for ſowing the ſeed is about the beginning of Auguſt; for if it be kept much longer out of the ground, it will not grow; then place the boxes or pans where they may have the morning ſun until eleven o'clock, obſerving, if the ſeaſon proves dry, to water them gently, as alſo to pull up all weeds as ſoon as they appear; for if they are ſuffered to remain until they have taken deep root into the earth, they will draw the ſeeds out of the ground whenever they are pulled up. Toward the latter end of September, you ſhould remove the boxes, &c. into a warmer ſituation, placing them cloſe to a hedge or wall expoſed to the ſouth; if they are ſown in pots, theſe ſhould be plunged into the ground; but they are beſt in tubs; theſe ſhould be covered in ſevere froſt. In this ſituation they may remain until the middle of March, by which time the plants will be come up an inch high; you muſt therefore remove the boxes, as the weather becomes hot, into a more ſhady ſituation; for while the plants are young, they are liable to ſuffer by being too much expoſed to the ſun; and in this ſhady ſituation they may remain during the heat of the ſummer, obſerving to keep them clear from weeds, and to refreſh them now and then with a little moiſture; but be careful not to give them much water after their leaves are decayed, which would rot their roots. About the beginning of Auguſt, if the roots are very thick in the boxes, you ſhould prepare a bed of good light freſh earth, which muſt be levelled very even, upon which you ſhould ſpread the earth in the boxes in which the ſmall roots are contained, equally covering it about one-fourth of an inch thick with the ſame freſh earth: this bed ſhould be ſituated in a warm poſition, but not too cloſe to hedges, walls, or pales, which would cauſe their leaves to be long and ſlender, and make the roots weaker than if placed in a more open expoſure. In this bed they may remain until they flower, which is generally the third year from ſowing; at which time you ſhould put down a mark to the roots of all ſuch as produce fair flowers, that at the time of taking them out of the ground, which ought to be ſoon after their green leaves are decayed, they may be ſelected into a bed amongſt your old roots of this flower, which, for their beauty, are preſerved in the beſt gardens; but the other leſs valuable flowers may be planted in the borders of the parterre-garden for their variety, where, being intermixed with other flowers of different ſeaſons, they will make a good appearance.

The fine ſorts of this flower ſhould remain undiſturbed three years, by which time they will have produced many offſets; and ſhould be taken up when their leaves are decayed, and planted into a freſh bed, taking ſuch of their offſets as are large enough to produce flowers to plant in the flower garden; but the ſmaller roots may be planted into a nurſery-bed until they have obtained ſtrength enough to flower; but you muſt never ſuffer theſe roots to lay out of the ground when you remove them, but plant them again immediately, otherwiſe they will periſh, During theſe three years, the ſurface of the earth ſhould be ſtirred every autumn with a trowel, obſerving not to go ſo deep as to bruiſe the root, and at the ſame time lay a thin cover of very rotten dung or tanner's bark upon the ſurface of the beds; which, being waſhed into the ground, will cauſe the flowers to be larger, as alſo the roots to make a greater increaſe: you muſt alſo obſerve to keep them conſtantly clear from weeds; and thoſe roots which you would preſerve with care, ſhould not be ſuffered to ſeed. When a ſtock of good flowers are obtained, they may be preſerved and increaſed in the ſame manner as other bulbous rooted flowers, which is by offſets ſent out from their roots, which ſhould be taken off every other year from the fineſt ſorts; but the ordinary flowers may remain three years undiſturbed, in which time they will have multiplied ſo much, as that each root will have formed a cluſter; ſo that if they are left longer together, the roots will be ſmall, and the flowers very weak; therefore, if theſe are taken up every other year, the roots will be the ſtronger. Theſe roots may be treated in the ſame manner as tulips, and other bulbous-rooted flowers, with this difference only, that the roots will not bear to be kept out of the ground ſo long; therefore, if there ſhould be a neceſſity for keeping them out of the ground any time, it will be beſt to put the roots into ſand, to prevent their ſhrinking.

As theſe flowers come out early in the ſpring, they make a pretty appearance in the borders of the pleaſure garden, where they are planted in ſmall clumps; for, when they ſtand ſingle in the borders, they make but a poor figure. See STAPELIA.

FRITIL'LUS, *ſ.* [Latin.] A box out of which dice are caſt. *Cole.* *Not uſed.*

FRI'TINANCY, *ſ.* [from *fritinnio*, Lat.] The ſcream of an inſect, as the cricket or cicada.—The note or *fritinancy* thereof is far more ſhrill than that of the locuſt, and its life ſhort. *Brown.*

FRIT'TER, *ſ.* [*friture*, Fr.] A ſmall piece cut to be fried:

Maids, *fritters* and pancakes ynow ſee ye make;
Let Slut have one pancake for company ſake. *Tuſſer.*

A fragment: a ſmall piece:

The ancient errant knights
Won all their ladies hearts in fights;
And cut whole giants into *fritters*,
To put them into amorous twitters. *Hudibras.*

A cheeſecake; a wig. *Ainſworth.*

To FRIT'TER, *v. a.* To cut meat into ſmall pieces to be fried. To break into ſmall particles or fragments:

Joy to great chaos! let diviſion reign!
My racks and tortures ſoon ſhall drive them hence,
Break all their nerves, and *fritter* all their ſenſe. *Dunciad.*

How prologues into prefaces decay,
And theſe to notes are *fritter'd* quite away. *Pope.*

FRITZ'LAR, a town of Germany, in the circle of the Lower Rhine, and principality of Lower Heſſe, ſituated on the Eder. In 1232, Conrad landgrave of Thuringia ſacked it, ſlaughtered the inhabitants, ſet it on fire, and deſtroyed the walls. In 1631, it was taken by the landgrave of Heſſe, and retaken ſoon after by general Tilly. It contains two colleges and a convent: thirteen miles ſouth-ſouth-weſt of Caſſel. Lat. 50. N. lon. 26. 41. E. Ferro.

FRIU'LI, a province of Italy, which extends from the mouth of the Tagliamento to Pontieba, on the frontiers of Carinthia, and from the Livenza to the Liſonzo, namely, fifty-five miles in length and ſixty-five in breadth, and about 263 in circumference. The Friuli is bounded by the Tyrol and Carinthia on the north, by Carniola and Gradiſca on the eaſt, by the Adriatic ſea on the ſouth, and by the Marca Trevigiana on the weſt. The ſoil is partly flat, and partly mountainous; and its hilly part, ſituated towards Germany, is the moſt ſterile and uninhabited: for the mountains Montaſio and Chiarima, at the moſt northern end of the province, form a part of the Julian Alps which ſeparate Italy from Germany; but the mountain of Mariana, which parts it from Carinthia, is a part of the Noric Alps; and on the other ſide, this country is alſo covered by another ridge of mountains. The roads and paſſes which conduct through theſe terrific mountains to Germany, are, in part, ſo very narrow, that it is extremely dangerous to travel on them, either on foot or horſeback; and only the paſſes Chiuſa di Venzone, Tolmino, and Lubiana, can be paſſed by waggons and artillery. The flat part of the Friuli is very fertile; and the country produces, in general, a quantity of timber

ber and fire-wood, game, all kinds of grain, fruit, particularly good wine, among which is the famous piccoli. The breeding of cattle is very flouriſhing; and the culture of ſilk ſo very extenſive, that it produces yearly 1000 hundred-weight of ſilk, which is deemed ſome of the fineſt in Italy. The principal rivers are, the Tagliamento, which runs through the middle of the country, the Meduna, Cellina, Stella, Torre, and the Natiſone. The inhabitants, called *Furlani*, ſpeak a dialect much reſembling that of the ancient French language, widely differing from either the Italian or German idiom. The whole province, which is divided into the dioceſes of Udine and Concordia, contained in the year 1581 no more than 196,510 inhabitants; but in 1755 their number amounted to 342,158; and in 1795, to 365,512, who live in four cities, twenty ſmall towns and boroughs, and ſix hundred villages. This country was a duchy in the time of the Lombards; in the tenth century it devolved to the patriarch of Aquileia; and from 1420 to 1445 it came under the dominion of the Venetians, partly by force of arms, partly by compulſory treaties, and at laſt by voluntary ſubmiſſion: in the ſixteenth century, part of it was ſeized upon by the houſe of Auſtria; and the whole of it was confirmed to that houſe by the treaty of Campo Formio in 1797, as part of Maritime Auſtria; but by the treaty of Preſburgh in 1806, it becomes a part of the newly-erected kingdom of Italy. Udine is the capital.

FRIU'LI, or CITTA DI FRIULI, a town of Italy, in a country of the ſame name; the ſee of a biſhop, ſuffragan of Aquileia: 185 miles eaſt-north-eaſt of Milan, and thirty-two north-north-weſt of Trieſte. Lat. 46. 15. N. lon. 31. E. Ferro.

FRIVO'LITY, *ſ.* Inſignificancy.—The admiral was no ſtranger to the *frivolity*, as well as falſehood, of what he urged in his defence. *Robertſon.*

FRIV'OLOUS, *adj.* [*frivolus*, Lat. *frivole*, Fr.] Slight; trifling; of no moment.—I will not defend any miſtake, and do not think myſelf obliged to anſwer every *frivolous* objection. *Arbuthnot.*

She tam'd the brinded lioneſs,
And ſpotted mountain pard; but ſet at nought
The *frivolous* bolt of Cupid. *Milton.*

FRIV'OLOUSLY, *adv.* Triflingly; wanting weight.—Such a fellow is troubleſomely active, *frivolouſly* buſy, fooliſhly lively. *Cheſterfield.*

FRIV'OLOUSNESS, *ſ.* Want of importance; trifling neſs.—Nothing can prove more fully the innocence of Suffolk, than the *frivolouſneſs* of the articles, which his enemies thought proper to object againſt him. *Hume.*

To FRIZ'LE, *v. a.* [*friſer*, Fr.] To curl in ſhort curls like nap of frieze.—They *frizled* and curled their hair with hot irons. *Hakewill.*

I doff'd my ſhoe, and ſwear
Therein I ſpy'd this yellow *frizled* hair. *Gay.*

The operation of the workman in raiſing or friezing the nap of cloth.

FRI'ZON (Peter), a French eccleſiaſtic of the ſeventeenth century, born in the dioceſe of Rheims. For ſome time he was a member of the ſociety of Jeſuits, and was employed to inſtruct their pupils in claſſical learning. Afterwards he officiated as penitentiary in the church of Rheims, and was promoted to a canonry in that cathedral. In 1632 he was choſen coadjutor to the grand-maſter of the college of Navarre, at Paris; and ſoon ſucceeded to the ſtation of grand-maſter himſelf, which he retained until the year 1635. Being then deſirous of a more tranquil life, he reſigned his poſt, and ſpent the remainder of his days in literary labours. He was admitted to the degree of doctor by the faculty of the Sorbonne. He died in 1651. In 1621 he publiſhed an edition, in folio, of The Holy Bible, in French, tranſlated by the divines of the univerſity of Louvain. In 1629 he publiſhed a hiſtory of the French cardinals, under the title of *Gallia purpurata*; of which he gave a ſecond edition in 1638, folio, augmented by a Hiſtory of the Grand Almoners of France. This work was held in high eſtimation, until its credit was leſſened by M. Baluze's expoſure of its errors, in his *Anti-Frizonius*, publiſhed in 1652, and afterwards in his Hiſtory of the Popes of Avignon. M. de Launoi informs us, that he carried on Henry de Sponde's Continuation of the Annals of Baronius, from 1622 to 1630. He was alſo the author of The Life of Henry de Sponde, prefixed to his Continuation of the Eccleſiaſtical Annals, publiſhed at Paris in 1659.

FRO, *adv.* [ꝼꝛa, Sax.] Backward; regreſſively. It is only uſed in oppoſition to the word *to*; *to* and *fro*, backward and forward, *to* and *from*:

As when a heap of gather'd thorns is caſt,
Now to, now *fro*, before th' autumnal blaſt,
Together clung, it rolls around the field. *Pope.*

It is a contraction of *from*. *Not now uſed.*

They turn round like grindleſtones,
Which they dig out *fro'* the delves,
For their bairns' bread, wives, and ſelves. *Ben Jonſon.*

FRO'BEN (John), an eminent printer, born at Hammelburg in Franconia. He was liberally educated, and acquired much reputation at the univerſity of Baſil. As the buſineſs of a printer was at that time connected with the profeſſion of letters, Froben was induced to learn it, and to ſet up a preſs in the city of Baſil. He became not only eminent in the practice of his art, but he ſupported its dignity and utility by a ſcrupulous choice in the authors he printed. Such was his reputation, that the advantage of having his works printed by Froben, was the chief inducement to Eraſmus for taking up his reſidence at Baſil. Among the numerous productions of the Frobenian preſs, were the works of Eraſmus, in nine volumes folio, and alſo thoſe of St. Jerom and St. Auguſtine, on which he beſtowed his reviſion. Theſe are reckoned the moſt correct of Froben's editions. He had an intention of printing the Greek fathers, but was prevented by his death, which happened in 1527. Eraſmus, who ſincerely lamented him, honoured his memory with a Greek and a Latin epitaph. He himſelf died in the houſe of Jerom Froben, ſon of the former, and his ſucceſſor in the printing-office jointly with his ſon-in-law Nicholas Epiſcopius. They carried into effect the deſign of printing the Greek fathers. A catalogue of the works printed at this office was publiſhed in 1564.

FRO'BISHER (ſir Martin), an eminent navigator, born near Doncaſter in Yorkſhire. He was brought up to the ſea, and acquired great ſkill in the art of navigation. The diſcovery of a north-weſt paſſage to the Indies was an object which excited his zeal, and during many years he made fruitleſs endeavours among the merchants to procure the means for that attempt. At length, by application to the miniſters of queen Elizabeth, he was enabled to fit out a private adventure for this purpoſe: but his equipment amounted to no more than two barks of twenty-five tons burthen each, and a pinnace of ten tons. With this ſlender force he ſailed from Deptford on June 8, 1576, and on July 28 made the coaſt of New Greenland, about lat. 62. After ſome time ſpent in exploring, Frobiſher entered the ſtrait which has ever ſince borne his name, lat. 62. 50. and ſailed up it the length of ſixty leagues. This is an inlet on the eaſtern ſide of the continent of New Greenland, which terminates further to the ſouth at Cape Farewell. He had ſome communication with the natives of this diſmal region, and took formal poſſeſſion of it in the name of his ſovereign. He then returned, bringing with him a piece of black ſtone, by way of ſample of the country. This mineral, which was probably a kind of pyrite, was ſuppoſed to give tokens of containing gold; and it is aſſerted that, upon being aſſayed, it was found to be rich in that metal. No mineralogiſt will now doubt that the ſuppoſition

ſition muſt have originated in fraud or ignorance; however, ſuch were its effects, that the nation thought of nothing but a new Peru or Mexico, and a ſecond voyage was determined upon the next ſpring. For this purpoſe, the queen lent Frobiſher a ſhip of the royal navy of two hundred tons, to which he added two ſmall barks. Numbers of volunteers ſolicited to accompany him, ſeveral of them gentlemen of family; and by his reſtriction to the number of one hundred and forty, many were diſappointed. His commiſſion for this voyage directed him "*only to ſearch for ore, and to remit diſcovery to another time;*" whence the character of that ſpirit of adventure which diſtinguiſhed this period may be eſtimated. He ſailed in May, 1577, and proceeding to his former ſtrait, explored its coaſts and bays, and landed on ſeveral iſlands, where the crews furniſhed themſelves with a quantity of the ſuppoſed golden ore. He returned to England in September with his ſhips and cargo, which laſt, upon the examination of commiſſioners, was judged to promiſe great riches. And ſo completely was the deluſion kept up, that another expedition was reſolved upon for the next year, accompanied by miners, refiners, and ſoldiers to guard the treaſure. The adventurers offered to paſs a winter in that rigorous climate, and materials were taken out for the conſtruction of a wooden fort, and other neceſſary buildings. Frobiſher ſailed upon his third voyage in May, 1578; and ſo much was the public expectation raiſed, that beſides three ſhips particularly devoted to diſcovery, twelve more were fitted out for the purpoſe of being laden with the riches of the country. In this voyage they traced more of the coaſts and iſlands of Greenland, and diſcovered a new ſtrait; but meeting with ſtorms, which retarded them and deſtroyed part of their fort, they agreed to return without leaving any perſons to winter. They brought back ſome more ladings of the precious mineral, but it is probable that its true nature was now detected, ſince we hear of no renewal of theſe ſingular expeditions. The original map of Frobiſher's voyages, according to Pennant, is a remarkable ſketch of erroneous ſuppoſition. He makes his ſtraits reach to the icy ſea, oppoſite to what he calls Cathaya, juſt to the north of what is made to reſemble the new-diſcovered ſtraits of Bering. Indeed, theſe voyages ſeem to be among thoſe that were the leaſt conducive to the improvement of geography; but no attempts of this kind are entirely uſeleſs, ſince they at leaſt render future ones leſs erroneous.

Frobiſher, after this time, appears only as a gallant naval commander. In 1585 he accompanied ſir Francis Drake to the Weſt Indies as captain of the Aid. He had a ſhare of the glorious defence of the country againſt the Spaniſh armada in 1588, commanding the Triumph, one of the three largeſt ſhips in the Engliſh fleet. For his ſervices on this important occaſion he received the honour of knighthood. He commanded ſquadrons againſt the Spaniards in 1590 and 1592, and took two rich prizes. In 1594 he was ſent with four ſhips of war to the aſſiſtance of Henry IV. of France againſt the Spaniards and Leaguers, when, in an attack upon a fort near Breſt, he received a ſhot, of which he died after he had brought his ſquadron home. Sir Martin Frobiſher is ſaid to have partaken of the native roughneſs which long characteriſed his profeſſion; but is allowed to have been a brave and able commander.

FRO'BISHER's STRAITS, or FORBISHER's STRAITS, a narrow ſea on the weſt of Davis's Strait, to the ſouth of Cape Walſingham of Frobiſher. Lat. 61. 50. to 63. 20. N. lon. 65. to 70. W. Greenwich.

FROCK, *ſ.* [*froc*, Fr.] A dreſs: a coat:

That monſter, cuſtom, is angel yet in this,
That to the uſe of actions fair and good,
He likewiſe gives a *frock* or livery,
That aptly is put on. *Shakeſpeare.*

A kind of cloſe coat for men.—I ſtrip my body of my ſhepherd's *frock*. *Dryden.*—A kind of gown for children.

FROD'LINGHAM, a ſmall town in the county of York, in the Eaſt Riding, ſituated on a branch of the Hull, with a weekly market on Thurſdays. It is twelve miles north of Beverly, and 194 north from London.

FROD'MORTEL, *ſ.* An old law term: an immunity or free pardon for murder or manſlaughter.

FROD'SHAM, a genteel and pleaſant town in Cheſhire, diſtant from London 182 miles, Cheſter ten, and Warrington ten. It is ſuppoſed to derive its name from a ford over the river Weaver, at the eaſt end of the town, before the erection of the bridge, which conſiſts of four arches, handſomely built of hewn ſtone. By means of the late inland navigation, it has communication with the rivers Dee, Ribble, Ouſe, Trent, Darwent, Severn, Humber, Thames, Avon, &c. which navigation, including its windings, extends above five hundred miles. The town is a mile in length from eaſt to weſt; the ſtreet is ſpacious and well-paved; another ſtreet, interſecting at right angles about the middle of the town, leads to the pariſh-church, which is ſituated on a lofty hill called Frodſham-hill, the higheſt in the county. The church is a large handſome building, dedicated to St. Lawrence; it is a vicarage, in the gift of Chriſtchurch college, Oxford. The pariſh is in circumference about thirty-one miles, bordering upon the great foreſt of Delamere, conſiſting of ten ſmall villages, beſides Frodſham. The manor belongs to the right hon. George James earl of Cholmondeley. At the weſt end of the town ſtood a caſtle called Maurice Caſtle, anciently the ſeat of the Savages earls Rivers, but was burnt down in 1652. Here is a free grammar-ſchool, with a good ſchool-houſe, endowed with lands, &c. to the value of ſixty pounds per annum. The principal trade of the place is a ſalt-refinery, erected in 1772, where is manufactured from ſix to ſeven thouſand tons of ſalt annually. A graving dock and yard have lately been made for building and repairing veſſels. A cotton manufactory has alſo been newly eſtabliſhed.

Above the town is Beacon-hill, on which was formerly placed a beacon, as a ſignal in caſe of an invaſion. This hill is cut out in walks gradually and gently aſcending to the ſummit, and carried round the face of it, from whence there is a delicious *coup d'œil* of a fine large extended plain, with the junction of two large rivers; the Merſey, navigable to Manchester, and the Weaver, in Winsford, near Middlewich: both theſe rivers empty themſelves into the Iriſh ſea below Liverpool. This hill commands an extenſive proſpect of the counties of Stafford, Salop, Derby, Lancaſter, York, Denbigh, Flint, Carnarvon, and Merioneth. It is a great thoroughfare from the counties north to Wales and Ireland. At the weſt end of the town is an excellent cold bath, which diſcharges 1700 gallons of water in a minute. The town is well ſupplied with many excellent ſprings of good water; one in particular, called Pearl of Wiggan, which diſtils from the face of a rock in drops from every vein, reſembling the pureſt gems. The town and pariſh contain about four thouſand inhabitants. It has a good market on Thurſdays; and two fairs for cattle, &c. on the 15th of May, and 21ſt of Auguſt.

FRŒ'LICH (Eraſmus), a learned Jeſuit, born at Gratz in Styria, in 1700. He entered the ſociety in 1716, and became profeſſor of mathematics and the belles-lettres at Vienna. He there alſo purſued the medallic ſcience, to which he was much attached. He died in 1758. His works are, 1. *Quatuor Tentamina in Re Nummaria*, 4to. 1737 & 1750. 2. *Annales Rerum et Regum Syriæ*, folio, 1751. 3. *De Figura Telluris*, 4to. 1757: and various diſſertations on particular medals.

FRŒLICH'IA, *ſ.* in botany, a genus of the claſs triandria, order monogynia. The generic characters are—Calyx ſuperior, four-toothed; corolla tubular; berry one-ſeeded, juiceleſs; ſeed arillate.

Frœlichia paniculata, a ſingle ſpecies. It is a ſhrub with ſquare branches. Leaves oppoſite, elliptic-lanceolate, pointed, glabous, entire; panicle terminal. Inhabits Trinidad.

FROG, *ſ.* [ꝼnogga, Sax.] A well-known amphibious animal; for the various ſpecies and natural hiſtory of which, ſee the article RANA.—The hollow part of a horſe's foot.

FROG, *artificial*, for horſes feet. See the article FARRIERY, vol. vii. p. 262.

FROG-BIT, *ſ.* in botany. See HYDROCHARIS.

FROG-FISH, *ſ.* See RANA PARADOXA.

FROG-LAKE, a lake of North America. Lat. 53. 15. N. lon. 91. 50. W. Greenwich.

FROG-POINT, a neck of land, in Weſt Cheſter county, New York, on the coaſt of Long-Iſland Sound, nine miles from Harlem Heights, in North America.

FRO'GES, a town of France, in the department of the Iſere, and chief place of a canton, in the diſtrict of Grenoble: three leagues north-north-weſt of Grenoble.

FROGO'ZA, a town of Portugal, in the province of Entre Duero e Minho: one league and a half north of Barcelos.

FROH'BURG, a town of Germany, in the circle of Upper Saxony, and circle of Leipſic, ſituated on the Wichra. The inhabitants have a manufacture of ſtuff and earthen-ware: five miles ſouth-ſouth-eaſt of Borna.

FRO'HENS-LE-GRAND, a town of France, in the department of the Somme, and chief place of a canton, in the diſtrict of Doulens: two leagues north-weſt of Doulens.

FROHNS'DORF, a town of Germany, in the circle of Upper Saxony, and circle of Thuringia: ſeven miles ſouth-eaſt of Weiſſenſee.

FROHNS'PURG, a town of Germany, in the archduchy of Auſtria: one mile ſouth of Hardegg.

FRO'JAN, a town of Spain, in the province of Galicia: twenty-two miles north-north-eaſt of Orenſe.

FROID'MONT (Libert), an eccleſiaſtic of the biſhopric of Liege, born near Maeſtricht, in 1587. He taught philoſophy in the univerſity of Louvain, and in 1633 was preferred to the deanery of St. Peter's, in that city. Afterwards he was admitted to the degree of doctor of divinity, and, upon the nomination of the celebrated Janſenius to the biſhopric of Ypres, was appointed his ſucceſſor in the chair of interpreter of the Sacred Scriptures in the univerſity. He was well verſed in the learned languages, particularly the Greek and Hebrew, and had alſo made conſiderable progreſs in mathematical learning. He died in 1653, at ſixty-ſix years of age. He was the author of, 1. *Diſſertatio de Cometa Anni* 1618. 2. *Meteorologicorum Libri V.* 3. *Brevis Anatomia Hominis.* 4. *Querimonia Jacobi Regis.* 5. *Chryſippus, ſive de libero Arbitrio*, 1644. 6. *In Actus Apoſtolorum Commentarii.* 7. A Latin Commentary on the Epiſtles of St. Paul, in two volumes, folio, 1670; &c. The work laſt-mentioned is in a conſiderable degree an abridgment of the Commentary of Eſtius, and is held in high eſtimation.

FRO'JERED, a town of Sweden, in the province of Weſt Gothland: ſeventy miles eaſt of Uddevalla.

FROISE, *ſ.* [from the French *froiſſer.*] A kind of food made by frying bacon incloſed in a pancake.

FROIS'SART (John), a French hiſtorian and poet, born at Valenciennes in 1337. He is aſſerted to have commenced a writer of hiſtory at the age of twenty; and it cannot be doubted that his poetical talent diſplayed itſelf at leaſt as early. To divert his chagrin from an amorous diſappointment, he paid a viſit to England, where he was kindly received by his country-woman Philippa of Hainault, queen of Edward III. He became ſecretary to queen Philippa in 1361, and continued five years in her ſervice. During that period he viſited Scotland, and was entertained for ſome time by William earl of Douglas. He was in Gaſcony in 1366 with Edward the Black Prince; and afterwards viſited ſeveral of the Italian courts. In 1369 he loſt his patroneſs Philippa; and retiring to his own country, obtained the benefice of Leſtines in the dioceſe of Cambray. Froiſſart, however, not being of a diſpoſition to devote himſelf to the cloiſter, entered into the ſervice of the duke of Brabant, who was alſo a poet. From the compoſitions of his maſter, joined with ſome of his own, he formed a kind of romance, entitled Meliador, relating to love and chivalry. After the duke's death, in 1384, he acquired the patronage of Guy earl of Blois. He then travelled to the brilliant court of Gaſton earl of Foix, who received him with great cordiality, and liſtened with intereſt to the recital of his poems. Here he met with much uſeful information from ſome knights of Arragon and England in the retinue of the duke of Lancaſter. After his travels in France and the Low-countries, he returned home, and finiſhed the third book of his hiſtory. He paid another viſit to England in 1395, and was introduced to the young king Richard II. to whom he preſented a ſplendid copy of his Meliador, which was graciouſly received. Here he obtained freſh materials for his hiſtory, beſides other favours. He returned to his own country, and fixed his reſidence at Chimay, where he poſſeſſed the benefice of canon and treaſurer of the collegiate church. The year of his death is uncertain; but he muſt have lived beyond 1400, as his Chronicle extends to that date.

Though Froiſſart was the author of thirty thouſand verſes, his poetical character is ſunk into oblivion, and he is only known in the republic of letters as an hiſtorian. In this capacity, as writing of his own times, and with all the artleſſneſs and minuteneſs of narration belonging to his age, he is highly valued by thoſe who ſtudy ancient manners from original draughts. His Chronicle, divided into four books, comprehends the period from 1326 to 1400. It relates the events which took place not only in France, but in Flanders, England, Scotland, and Ireland, with many details reſpecting the papal courts of Rome and Avignon, and collateral particulars of the tranſactions in the reſt of Europe, and even in Turkey and Africa. The beſt edition of his Chronicle is that of Lyons, four volumes, folio, 1559. A tranſlation of the Chronicles of Froiſſart into Engliſh, has been recently made by Thomas Johnes, eſq.

FROIS'SY, a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Breteuil: five miles ſouth-ſouth-weſt of Breteuil.

FRO'LIC, *adj.* [*vrolijck*, Dut.] Gay; full of levity; full of pranks.—The gay, the *frolic*, and the loud. *Waller.*

Whether, as ſome ſages ſing,
The *frolic* wind that breathes the ſpring,
Zephyr with Aurora playing,
As he met her once a Maying;
There on beds of violets blue,
And freſh-blown roſes waſh'd in dew,
Fill'd her with thee a daughter fair,
So buxom, blithe, and debonnair. *Milton.*

FRO'LIC, *ſ.* A wild prank; a flight of whim and levity:

He would be at his *frolic* once again,
And his pretenſions to divinity. *Roſcommon.*

While rain depends, the penſive cat gives o'er
Her *frolics*, and purſues her tail no more. *Swift.*

To FRO'LIC, *v. n.* To play wild pranks; to play tricks of levity and gaiety.—Manly ſpirit and genius plays not tricks with words, nor *frolics* with the caprices of a frothy imagination. *Glanville.*

Then to her new love let her go,
And deck her in golden array;
Be fineſt at every fine ſhow,
And *frolic* it all the long day. *Rowe.*

FRO'LICLY, *adv.* Gaily; wildly.

FRO'LICSOME, *adj.* Full of wild gaiety.

FRO'LICSOMELY, *adv.* With wild gaiety.

FRO'LICSOMENESS, *ſ.* Wildneſs of gaiety; pranks.

FRO'LOIS, a town of France, in the department of the Cote-d'Or, and chief place of a canton, in the diſtrict of Semur: ſeven leagues north-weſt of Dijon.

FROM,

FROM, *prep.* [ꝼꝛam, Saxon and Scottiſh.] Away; noting privation:

Your flighting Zulema, this very hour
Will take ten thouſand ſubjects *from* your power. *Dryd.*

Noting reception.—What time would ſpare *from* ſteel receives its date. *Pope.*—Noting proceſſion, deſcent, or birth.—The ſong began *from* Jove. *Dryden.*

Thus the hard and ſtubborn race of man
From animated rock and flint began. *Blackmore.*

Noting tranſmiſſion.—The meſſengers *from* our ſiſter and the king. *Shakeſpeare.*—Noting abſtraction or vacation:

I ſhall find time
From this enormous ſtate, and ſeek to give
Loſſes their remedies. *Shakeſpeare.*

With *to* following; noting ſucceſſion.—He bid her *from* time *to* time be comforted. *Addiſon.*—Theſe motions we muſt examine *from* firſt *to* laſt, to find out what was the form of the earth. *Burnet.*—Out of; noting emiſſion:

When the moſt high
Eternal Father, *from* his ſecret cloud
Amidſt, in thunder utter'd thus his voice. *Milton.*

Noting progreſs from premiſſes to inferences.—This is evident *from* that high and refined morality, which ſhined forth in ſome of the ancient heathens. *South.*—Noting the place or perſon from whom a meſſage is brought.—The king is coming, and I muſt ſpeak with him *from* the bridge.—How now, Fluellan, cam'ſt thou *from* the bridge? *Shakeſpeare.*—Out of: noting extraction:

From high Meonia's rocky ſhores I came,
Of poor deſcent; Acætes is my name. *Addiſon.*

Becauſe of. Noting the reaſon or motive of an act or effect.—David celebrates the glory of God *from* the conſideration of the greatneſs of his works. *Tillotſon.*

You are good, but from a nobler cauſe;
From your own knowledge, not *from* nature's laws. *Dryd.*

Out of. Noting the ground or cauſe of any thing.—They who believe that the praiſes which ariſe *from* valour are ſuperior to thoſe which proceed *from* any other virtues, have not conſidered. *Dryden.*

By the ſacred radiance of the ſun,
The myſteries of Hecate, and the night;
By all the operations of the orbs,
From whom we do exiſt, and ceaſe to be,
Here I diſclaim all my paternal care. *Shakeſpeare.*

Not near to; noting diſtance:

His regiment lies half a mile at leaſt
South *from* the mighty power of the king. *Shakeſpeare.*

Noting ſeparation or receſſion:

Haſt thou beheld when *from* the goal they ſtart,
The youthful charioteers with heaving heart,
Ruſh to the race, and, panting, ſcarcely bear
Th' extremes of fev'riſh hope and chilling fear. *Dryden.*

Noting exemption or deliverance:

From jealouſy's tormenting ſtrife,
For ever be thy boſom free'd. *Prior.*

Noting abſence:

Our father he hath writ, ſo hath our ſiſter,
Of diff'rences which I beſt thought it fit
To anſwer *from* our home. *Shakeſpeare.*

Noting derivation:

I lay the deep foundations of a wall,
And Enos, nam'd *from* me, the city call. *Dryden.*

Since. Noting diſtance from the paſt.—The other had been trained up *from* his youth in the war of Flanders. *Clarendon.*

The milk of tygers was his infant food,
Taught *from* his tender years the taſte of blood. *Dryden.*

Contrary to. *Not in uſe.*—Any thing ſo overdone is *from* the purpoſe of playing; whoſe end, both at the firſt and now, was and is to hold, as 'twere, the mirror up to nature. *Shakeſpeare.*

Did you draw bonds to forfeit? Sign, to break?
Or muſt we read you quite *from* what we ſpeak,
And find the truth out the wrong way? *Donne.*

Noting removal.—Thrice *from* the ground ſhe leap'd. *Dryden.*

FROM is very frequently joined by an ellipſis with adverbs: as, *from above*, *from* the parts *above*; *from below*, *from* the places *below*; of which the following are examples:

FROM *above.*—He which gave them *from above* ſuch power, for miraculous confirmation of that which they taught, endued them alſo with wiſdom *from above*, to teach that which they ſo did confirm. *Hooker.*

No ſooner were his eyes in ſlumber bound,
When, *from above*, a more than mortal ſound
Invades his ears. *Dryden.*

FROM *afar.*—Light demi-lances *from afar* they throw. *Dryden.*

FROM *beneath:*

An arm ariſes out of Stygian flood,
Which, breaking *from beneath* with bellowing ſound,
Whirls the black waves and rattling ſtones around. *Dryd.*

FROM *behind:*

See, to their baſe reſtor'd, earth, ſeas, and air,
And joyful ages *from behind*, in crowding ranks appear.
Dryden.

FROM *far:*

Their train proceeding on their way,
From far the town and lofty tow'rs ſurvey. *Dryden.*

FROM *high.*—Then heav'ns imperious queen ſhot down *from high. Dryden.*

FROM *thence.* Here *from* is ſuperfluous.—In the neceſſary differences which ariſe *from thence*, they rather break into ſeveral diviſions than join in any one public intereſt; and *from hence* have always riſen the moſt dangerous factions, which have ruined the peace of nations. *Clarendon.*

FROM *whence. From* is here ſuperfluous:

While future realms his wand'ring thoughts delight,
His daily viſion and his dream by night,
Forbidden Thebes appears before his eye,
From whence he ſees his abſent brother fly. *Pope.*

FROM *where:*

From where high Ithaca o'erlooks the floods,
Brown with o'erarching ſhades and pendent woods,
Us to theſe ſhores our filial duty draws. *Pope.*

FROM *without.*—When the plantation grows to ſtrength, then it is time to plant it with women as well as with men, that it may ſpread into generations, and not be pierced *from without. Bacon.*

If native power prevail not, ſhall I doubt
To ſeek for needful ſuccour *from without.* *Dryden.*

From is ſometimes followed by another prepoſition, with its proper caſe.

FROM *amidſt:*

Thou too ſhalt fall by time or barb'rous foes,
Whoſe circling walls the ſev'n fam'd hills encloſe;
And thou, whoſe rival tow'rs invade the ſkies,
And *from amidſt* the waves with equal glory riſe. *Addiſon.*

FROM *among:*

Here had new begun
My wand'ring, had not he, who was my guide,
Up hither *from among* the trees appear'd,
Preſence divine! *Milton.*

FROM

FROM *beneath*:

My worthy wife our arms miſlaid,
And *from beneath* my head my ſword convey'd. *Dryden.*

FROM *beyond*.—There followed him great multitudes of people from Galilee, and *from beyond* Jordan. *Mat.* iv. 25.

FROM *forth*:

Young Aretus, *from forth* his bridal pow'r,
Brought the full laver o'er their hands to pour. *Pope.*

FROM *off*.—The ſea being conſtrained to withdraw *from off* certain tracts of lands, which lay till then at the bottom of it. *Woodward.*

Knights, unhors'd, may riſe *from off* the plain,
And fight on foot, their honour to regain. *Dryden.*

FROM *out*:

Strong god of iron, whoſe iron ſceptre ſways
The freezing north and hyperborean ſeas,
Terror is thine, and wild amazement, flung
From out thy chariot, withers ev'n the ſtrong. *Dryden.*

FROM *out of*.—Whatſoever ſuch principle there is, it was at the firſt found out by diſcourſe, and drawn *from out of* the very bowels of heaven and earth. *Hooker.*

FROM *under*:

He, though blind of ſight,
Deſpis'd and thought extinguiſh'd quite,
With inward eyes illuminated,
His fiery virtue rous'd
From under aſhes into ſudden flame. *Milton's Agoniſtes.*

FROM *within*:

From within
The broken bowels and the bloated ſkin,
A buzzing noiſe of bees his ears alarms. *Dryden.*

FROMA'GE (Peter), a French Jeſuit, born at Laon, in 1678. He commenced his noviciate at Nancy in 1693; and on account of his proficiency was ſelected by his ſuperiors to preſide over the claſſical ſtudies of their younger pupils. When he had completed his courſe of theology, he offered his ſervices as a miſſionary to the Levant; and being approved of, was firſt ſent into Egypt, where he ſpent ſome years in acquiring a knowledge of the Arabic tongue, and in different employments to which he was appointed. Afterwards he was ſent into Syria, where he ſpent the remainder of his life. He there formed the plan, which, by his perſeverance, was carried into execution, of eſtabliſhing a printing-preſs for the Arabic language, in the monaſtery of St. John the Baptiſt near Antura, a village in the chain of mountains diſtinguiſhed by the name of Antilibanus. Having procured the proper types from Rome, and the neceſſary workmen, he printed in Arabic a great number of theological and devotional pieces, which were diſperſed, with conſiderable benefit, among the inhabitants of the country. Fromage was preſent at a ſynod of the Maronites held in 1736, and pronounced a diſcourſe at its opening, which is publiſhed, together with his account of the proceedings of the ſynod, in the eighth volume of the New Memoirs of the Miſſions of the Society of Jeſus in the Levant, 12mo. 1745. He died in 1740, in his ſixty-third year.

FROMAGEAU' (Germain), a French eccleſiaſtic, born at Paris, and admitted into the houſe and ſociety of the Sorbonne in 1661. He has the character of a learned and able divine, and particularly famous for his knowledge of caſuiſtical divinity. On this account he was looked up to as the proper ſucceſſor of M. Delamet, for reſolving difficult caſes of conſcience; and to his determination the clergy frequently had recourſe on nice points relative to eccleſiaſtical diſcipline. He was repeatedly offered dignities in the church; but he conſtantly refuſed them, as he had inherited from his father a fortune equal to his utmoſt wiſhes. His benevolence and humanity not only ſhone forth in numerous acts of charity, but in ſubmitting, for ſome years, to the painful office of viſiting, and preparing for their laſt moments, perſons who were convicted of capital crimes. He died at the Sorbonne in 1705. He left behind him reſolutions of numerous caſes of conſcience, ſome of which were publiſhed in the ſame volume with thoſe of M. Delamet, which appeared in 1714, and the reſt in the ſucceeding volumes of the ſame collection.

FROME, a river of England, in the county of Somerſet, which joins the Avon about five miles ſouth-eaſt of Bath.

FROME, a river of England, which runs into the Lug, near Hereford.

FROME, a river of England, in the county of Dorſet, which paſſes by Dorcheſter, &c. and runs into the ſea in Poole harbour, a little below Wareham.

FROME, a river of England, in the county of Glouceſter, which joins the Avon at Briſtol.

FROME, a river of England, which runs into the Severn, near Berkeley, in Glouceſterſhire.

FROME, or FROME-SELWOOD, a large, rich, and populous, market-town, ſituated in the ancient foreſt of Selwood, in Somerſetſhire; diſtant 106 miles from London, fifteen from Wells, and thirteen from Bath. The ſituation of Frome is extremely pleaſant; the ſurrounding country being agreeably diverſified with hills, valleys, large incloſures, and fine woods; and having the ſeats of many of the nobility and gentry. The ſtreets are narrow and irregular; the houſes are built of ſtone, and covered with ſtone tile, dug on the ſpot. Here is a large handſome church, 150 feet long, and fifty-four broad; compriſing a nave, chancel, north and ſouth aiſles, four chapels, and a veſtry-room; it has a very handſome altar-piece; alſo a ſquare embattled tower, and octagonal ſpire 120 feet high. The river Frome paſſes through the lower part of the town, under a ſtone bridge of five arches; near which ſtands a free-ſchool for clothing and educating twenty boys, and an almſhouſe for widows, a large handſome building erected by ſubſcription about the year 1720. A large market is held here on Wedneſdays for cattle, pigs, corn, &c. Fairs, St. Matthias's and St. Catharine's days, for cattle, cheeſe, toys, &c.

Frome is a place of conſiderable antiquity.—Aldhelm, a monk of Malmſbury, and biſhop of Sherborne, built here a monaſtery in honour of St. John the Baptiſt, about the beginning of the eighth century. Here were alſo a priory, a nunnery, a cell, and an hermitage. It was formerly a royal demeſne, but never obtained a charter of incorporation. The civil police of the town is maintained by the neighbouring magiſtrates, and by conſtables annually choſen at the courts leet of the marquis of Bath and the earl of Cork and Orrery, lords of the ſeveral manors here. It was governed formerly by a bailiff. The inhabitants, after having ſhewn their zeal for the revolution, endeavoured in the reign of king William to obtain a charter of incorporation, but in vain.

Frome has for many years been famous for working Spaniſh and Engliſh wool into broad-cloths and kerſeymeres; in 1789, 348,000 pounds weight of wool were wrought here into 160,000 yards of broad-cloth and kerſeymere, of which quantity the former article compoſed about four-fifths; a buſineſs that employed 233 ſcribblers, and 223 ſhearmen. The quantity of wool manufactured here is ſince conſiderably increaſed, but the number of people employed is diminiſhed, the introduction of machines having leſſened, in a prodigious proportion, the call for manual labour. At preſent there are in the town of Frome twenty-ſeven manufacturers of cloth, who make of broad, narrow, and kerſeymere, about two hundred pieces weekly, of twenty-eight yards each; or, calculating by a different meaſure, about 160 miles of cloth, in length, every year. The following ſketch will ſhew the proceſs purſued in this branch of Britiſh manufactories, and, at the ſame time, give an idea of the number of people to whom we are obliged for every

every coat we wear:—The Engliſh fleece is ſorted, and the ſhort and fine mixed with the Spaniſh. It is then carried to the dye-houſe, and when cleanſed from its impurities, (by ſcouring it in a furnace of hot water,) dyed, and returned to the manufacturer; afterwards ſcribbled, carded, and ſpun into yarn by machinery; twiſted, woven in the loom; burled, by nipping off its knots and burs; milled by the fuller, dubbed with cards of teazle, ſtretched on the tenter hooks, dreſſed, ſheared, preſſed between heated planks and preſs paper, and then packed for the markets.

From a late ſurvey, this town, including hamlets, was found to contain in all, 1684 families, and 8105 inhabitants. The woodlands around the church are now the only part of the ancient foreſt of Selwood, which bears any reſemblance to its former ſtate; and have been within the memory of man the notorious aſylum of a deſperate clan of banditti, whoſe depredations were a terror to the ſurrounding pariſhes. One of their practices, and which perhaps was far from being the worſt, was that of coining money; but the cutting down large tracts of woods, eſtabliſhing ſmall farms, and *building the church*, were the means of deſtroying their haunts, and obliging the poſſeſſors to ſeek ſubſiſtence in honeſt and uſeful labour. The church here mentioned is ſaid to have been erected by lord Weymouth, in 1712.

FROM'ERIES, a town of France, in the department of the Somme: ſeven miles ſouth-weſt of Poix.

FROMIGUE'RE, a town of France, in the department of the Eaſt Pyrenees, and chief place of a canton, in the diſtrict of Prades: ſeven miles north of Montlouis.

FROMIS'TA, a town of Spain, in the province of Leon: eighteen miles north of Palencia.

FROM'WARD, *prep.* [ꝼnam and peapꝺ, Sax.] Away from; the contrary to the word *towards*. *Not now in uſe.*—The horizontal needle is continually varying towards eaſt and weſt; and ſo the dipping or inclining needle is varying up and down, towards or *fromwards* the zenith. *Cheyne.*

FROND, *ſ.* [*frons*, Lat. from *βεvω*, *pullulo*, to germinate or bud.] In botany, a term applied by Linnæus to the peculiar leafing of palms and ferns. He defines it to be a kind of trunk or ſtem, which has the branch united with the leaf, and frequently with the fructification. See BOTANY, vol. iii.

FRONDA'TION, *ſ.* [from the Lat. *frons*, the leaf of a tree.] The act of ſtripping off the leaves. *Scott. Not much uſed.*

FROND'ATED, *adj.* Having leaves; bearing leaves.

FRON'DENBERG, a town of Germany, in the circle of Weſtphalia, and county of Marck: two miles weſt of Unna.

FRON'DENT, *adj.* [*frondeo*, Lat. to bear leaves.] Bearing leaves.

FRONDESCEN'TIA, *ſ.* In botany, the leafing ſeaſon, or time of the year when plants firſt unfold their leaves.

FRONDI'FEROUS, *adj.* [*frondifer*, Lat.] Bearing frond-leaves.

FROND'OSE, *adj.* [*frons*, Lat. a leaf.] In botany; full of leaves; bearing leaves.

FRONDO'SENESS, *ſ.* Plenty of leaves; full of leaves. *Scott. Not much uſed.*

FRONDOS'ITY, *ſ.* The quality of having leaves; the leafy part of a plant. *Scott. Not much uſed.*

FRONS, *ſ.* [from *fero*, Lat. to bear, becauſe the indications of the mind are borne upon it; or from *φρονὶς*, Gr. thought, it being the ſeat of thought.] In anatomy, the fore part of the head; the frontal, or forehead. Linnæus, in his botanical ſyſtem, applies this term to the leaves of all the genera of plants in the order cryptogamia, becauſe, from the frond alone, all the other parts of the plant, with its fructification, are ſucceſſively evolved and put forth. See BOTANY, vol. iii. p. 279, under *Cryptogamia*.

FRON'SAC, a town of France, in the department of the Gironde, and chief place of a canton, in the diſtrict of Libourne, on the Ille: two miles north-weſt of Libourne.

FRONT, *ſ.* [*frons*, Lat. *front*, Fr.] The face.—His *front* yet threatens, and his frowns command. *Prior.*

The patriot virtues that diſtend thy thought,
Spread on thy *front*, and in thy boſom glow. *Thomſon.*

The face, in a ſenſe of cenſure or diſlike: as, a hardened *front*; a fierce *front*. This is the uſual ſenſe:

That dar'ſt, though grim and terrible, advance
Thy mis-created *front* athwart my way. *Milton.*

The face as oppoſed to an enemy:

His forward hand, inur'd to wounds, makes way
Upon the ſharpeſt *fronts* of the moſt fierce. *Daniel.*

The part or place oppoſed to the face.—The acceſs of the town was only by a neck of land: our men had ſhot that thundered upon them from the rampier in *front*, and from the gallies that lay at ſea in flank. *Bacon.*—The van of an army:

'Twixt hoſt and hoſt but narrow ſpace was left,
A dreadful interval! and *front* to *front*
Preſented, ſtood in terrible array. *Milton.*

The forepart of any thing, as of a building.—Palladius adviſeth the *front* of his edifice ſhould ſo reſpect the ſouth, that in its firſt angle it receive the riſing rays of the winter ſun, and decline a little from the winter ſetting thereof. *Brown.*

The prince approach'd the door,
Poſſeſs'd the porch, and on the *front* above
He fix'd the fatal bough. *Dryden.*

The moſt conſpicuous part or particular:

The very head and *front* of my offending
Hath this extent, no more. *Shakeſpeare.*

To FRONT, *v. a.* To oppoſe directly, or face to face; to encounter.—You four ſhall *front* them in the narrow lane; we will walk lower: if they 'ſcape from your encounter, then they light on us. *Shakeſpeare.*

I ſhall *front* thee, like ſome ſtaring ghoſt,
With all my wrongs about me. *Dryden.*

To ſtand oppoſed or overagainſt any place or thing.—The ſquare will be one of the moſt beautiful in Italy when this ſtatue is erected, and a town houſe built at one end to *front* the church that ſtands at the other. *Addiſon.*

To FRONT, *v. n.* To ſtand foremoſt:

I *front* but in that file,
Where others tell ſteps with me. *Shakeſpeare.*

FRONT'AL, *ſ.* [*frontale*, Lat. *frontal*, Fr.] Any external form of medicine to be applied to the forehead, generally compoſed amongſt the ancients of coolers and hypnotics.—The torpedo, alive, ſtupifies at a diſtance; but after death produceth no ſuch effect; which had they retained, they might have ſupplied opium, and ſerved as *frontales* in phrenſies. *Brown.*—The face part of a bridle. In architecture, a *fronton*, a pediment.

FRONT'AL, *adj.* Belonging to the bone of the forehead.

FRONT'ALE, *ſ.* With phyſicians, an external medicine applied to the forehead; one of the muſcles of the forehead.

FRONTA'NA, a town of Spain, in the province of Catalonia: twenty-five miles ſouth-eaſt of Urgel.

FRON'TATED, *adj.* [from *frons*, Lat.] In botany, the *frontated* leaf of a flower grows broader and broader, and at laſt perhaps terminates in a right line: uſed in oppoſition to cuſpated, which is, when the leaves of a flower end in a point. *Quincy.*

FRONT'BOX, *ſ.* The box in the playhouſe from which there is a direct view to the ſtage:

How vain are all theſe glories, all our pains,
Unleſs good ſenſe preſerve what beauty gains!

That men may ſay, when we the *frontbox* grace,
Behold the firſt in virtue, as in face. *Pope.*

FRON'TE, a town of Piedmont, in the marquiſate of Ivrea, on the Marlon: five miles north-eaſt of Lanzo, and eleven north of Turin.

FRONTEAU' (John), canon regular of St. Genevieve, and chancellor of the univerſity of Paris, born at Angers in 1614. He was educated in the college of the fathers of the oratory at Angers, whence he was removed to the college of La Flêche, where he went through an extenſive courſe of philoſophy. After he had finiſhed his theological ſtudies, he was called by the ſuperior-general of the congregation to Paris, where he was appointed to teach philoſophy at St. Genevieve. In 1639 he was appointed profeſſor of divinity, which he taught for twelve years with diſtinguiſhed reputation. He adhered to the principles of Aquinas both in his theology and in his philoſophy. In 1648, he was appointed chancellor of the univerſity of Paris; and in 1654 he ſucceeded to the priory of Benay, in the dioceſe of Angers. In 1662 he was nominated to the priory of St. Magdalen of Montargis, where he died not many days after he had taken poſſeſſion of his benefice, in the forty-eighth year of his age. Beſides Latin and Greek, he was maſter of the Hebrew, Chaldee, Syriac, Arabic, Italian, and Spaniſh, languages. In his works he knew how to adorn his ſubject with intereſting paſſages out of Greek and Latin authors, and with curious hiſtorical notices. Among other works which he publiſhed was 1. an edition of The Philoſophy of Alamandus, with a Supplement. 2. *Quæſtionum de Prædeſtinatione et Gratia Concordia*; intended to reconcile the Janſeniſts and Jeſuits. 3. *Antitheſes Auguſtini et Calvini*; comparing the paſſages of St. Auguſtine and Calvin on the ſubject of grace. 4. *De Diebus Feſtivis*, folio, 1652, being an ancient calendar of the Roman church, illuſtrated with a learned preface and notes, and accompanied with diſſertations. After the author's death a collection of his ſelect letters was publiſhed at Liege, in 1677, 12mo. in which, beſides particular points of doctrine and diſcipline, ſome very curious queſtions in eccleſiaſtical antiquities are diſcuſſed.

FRON'TED, *adj.* [*frons*, Lat.] Formed with a front.—Part *fronted* brigades form. *Milton.*

FRONTEI'RA, a town of Portugal, in the province of Alentejo; remarkable for a victory which the Portugueſe, under the command of the duke of Schomberg, obtained over the Spaniards, in 1663: ten miles north of Eſtremos.

FRONTEIT'TEN, a town of Germany, in the duchy of Stiria: fourteen miles north-north-weſt of Graz.

FRON'TENHAUSEN, a town of Germany, in the circle of Lower Bavaria: five miles ſouth of Dingelfingen, and fourteen eaſt of Landſhut.

FRON'TIER, *ſ.* [*frontiere*, Fr.] The marches; the limit; the utmoſt verge of any territory; the border; properly that which terminates not at the ſea, but fronts another country.—Draw all the inhabitants of thoſe borders away, or plant garriſons upon all thoſe *frontiers* about him. *Spenſer.*

I upon my *frontiers* here keep reſidence,
That little which is left ſo to defend. *Milton.*

FRON'TIER, *adj.* Bordering; conterminous:

A place there lies on Gallia's utmoſt bounds,
Where riſing ſeas inſult the *frontier* grounds. *Addiſon.*

FRON'TIERED, *adj.* Guarded on the frontier.—Now that is no more a border, nor *frontiered* with enemies. *Spenſ.*

FRONTIGNAC'. See FRONTIGNAN.

FRON'TIGNAC-FO'RT, a fortreſs in Canada, ſituated at the head of a fine bay or harbour, on the north-weſt ſide of the outlet of Lake Ontario, where all ſorts of veſſels may ride in ſafety. It is a league from the mouth of the lake, and only a ſhort diſtance ſouth of Kingſton, and about 300 miles from Quebec. The winter at this place is much ſhorter than at Quebec; and the ſoil is ſo well cultivated as to produce all ſorts of European and Indian corn, and fruits. Here is one of the moſt charming proſpects in the world, during ſpring and ſummer. The river St. Lawrence and the mouth of Lake Ontario, contain a number of beautiful and fertile iſlands of different magnitudes, well wooded; and the bay often preſents to the view veſſels at anchor, and others paſſing to and from the lake. But the misfortune is, that the advantageous communication between this lake, Montreal, and Quebec, is ſomewhat difficult and dangerous, on account of the river being full of rocks and water-falls. This, together with the ambuſcades of the Iroquois Indians, induced the French to abandon and deſtroy the ſtrong works they had formerly erected here. This happened in 1689. At length the Britiſh, under colonel Bradſtreet, took it in 1759, to whom it was confirmed at the peace in 1763. A river has lately been opened here by the deputy ſurveyor general of Canada, from its entrance into the lake at Kenty, near Cadaraqui, to its ſource in lake St. Clie; from which there is an eaſy and ſhort portage acroſs north-weſt to the north-eaſt angle of Lake Huron, and another that is neither long nor difficult, to the ſouthward, to the old ſettlement of Toronto. This is a ſhort route from Fort Frontenac to Michillimackinack. See KINGSTON.

FRONTIGNAN', a town of France, in the department of the Herault, and chief place of a canton, in the diſtrict of Montpellier; celebrated for its excellent wine, generally called *Frontigniac*: four leagues ſouth-ſouth-weſt of Montpellier, and one and a half north-eaſt of Cette.

FRONTIN'IAC, *adj.* [a town of France.] Denoting a kind of grape.—Miſtreſs and woman differ no otherwiſe, than *Frontiniac* and ordinary grapes. *Suckling.*

FRONTI'NUS (Sextus-Julius), an eminent Roman, and the city-prætor under Veſpaſian, A. D. 70. He was afterwards conſul, but probably only *ſuffectus*, or ſupplementary, ſince his name does not appear in the conſular ſeries. He ſucceeded Cerialis as commander in Britain, where he diſtinguiſhed his military talents, and reduced the nation of the Silures. Under Nerva he was appointed to the ſuperintendance of the waters, and he brought the water of the Anio to Rome by means of a ſplendid aqueduct. He wrote two books on the conſtruction of theſe works by that emperor's order. Frontinus is mentioned with honour by ſeveral writers, particularly by the younger Pliny, who ſucceeded him in the dignity of augur. When he died, he forbade the erection of a monument to his memory, ſaying that it was a ſuperfluous expence, for that his name would ſurvive, if by his actions he had merited it. Beſides the work upon aqueducts above-mentioned, he wrote Military Stratagems, ſtill extant. A treatiſe upon agriculture, under the name of Frontinus, was moſt probably compoſed by a later writer. The works of Frontinus *De Aquæductibus*, and *Stratagemata*, were edited with the notes of Steweckius, *L. Bat.* 1607, 4to. The *Stratagemata* are printed with the *Autores de Re Militari*, *Rom.* 1487, and have alſo been edited ſeparately. The beſt edition is the *Variorum*, *L. Bat.* 1731, and 1779, 8vo.

FRON'TISPIECE, *ſ.* [*frontiſpicium*, *id quod in fronte conſpicitur*; *frontiſpice*, Fr.] That part of any building or other body that directly meets the eye.—The *frontiſpiece* of the town houſe has pillars of a beautiful black marble, ſtreaked with white. *Addiſon.*

With *frontiſpiece* of diamond and gold
Embelliſh'd, thick with ſparkling orient gems
The portal ſhone. *Milton.*

The print or engraving which often fronts the title of a book.

FRONTISTE'RIUM, *ſ.* [Latin, from φροντιστηριον, Gr.] Learned ſeminary:

'Twill be the great gymnaſium of the realm,
The *frontiſterium* of Great Brittany. *Randolph.*

FRONT'LESS,

FRONT'LESS, *f.* Not bluſhing; wanting ſhame; void of diffidence.—Strike a bluſh through *frontleſs* flattery. *Pope.*

For vice, though *frontleſs*, and of harden'd face,
Is daunted at the ſight of awful grace. *Dryden.*

FRONT'LET, *f.* [from *frons*, Lat; *fronteau*, Fr.] A bandage worn upon the fore forehead.—They ſhall be as *frontlets* between thine eyes. *Deut.* vi. 8.—To the forehead *frontlets* were applied, to reſtrain and intercept the influx. *Wiſeman.*

FRON'TO (Marcus-Cornelius), an eminent Roman orator, who attained the higheſt rank in his profeſſion in the age wherein he lived. He was maſter of rhetoric to Marcus Aurelius and Lucius Verus, and was rewarded for his ſervices with the honours of the conſulate and a ſtatue. A. Gellius ſpeaks of him as a perſon replete with erudition, and particularly ſkilled in the delicacies of the Latin language. His reputation for eloquence was ſo high, that he is mentioned as one of the heads of a ſect among orators; and Macrobius calls the kind in which he excelled the *dry (ſiccum)*, which others more favourably characteriſe as the *grave* and *weighty*. No relics of his compoſitions remain. He muſt be diſtinguiſhed from Fronto, the conſul under Nerva.

FRON'TON, *f.* In architecture; a pediment, a little ornament over a door or window.

FRON'TON, a town of France, in the department of the Upper Garonne: five leagues north of Toulouſe, and ſix ſouth-eaſt of Caſtle Saraſin.

FRONT'ROOM, *f.* An apartment in the forepart of the houſe.—If your ſhop ſtands in an eminent ſtreet, the *frontrooms* are commonly more airy than the backrooms; and it will be inconvenient to make the *frontroom* ſhallow. *Moxon.*

FRONT'STALL, *f.* The fore part of a bridle. *Bailey.*

FROO'GARDE, a town of Norway, in the dioceſe of Drontheim: ſixty miles ſouth-ſouth-eaſt of Drontheim.

FROOME. See FROME.

FRORE, *adj.* [*bevrozen*, Dut. frozen.] Frozen. This word is not uſed ſince the time of *Milton.*

The parching air
Burns *frore*, and cold performs th' effect of fire. *Milton.*

FRORNE, *adj.* [*bevrozen*, frozen, Dut.] Frozen; congealed with cold. *Obſolete.*

O, my heart-blood is well nigh *frorne* I feele,
And my galage grown faſt to my heele. *Spenſer.*

FRO'RY, *adj.* Frozen:

Her up betwixt his rugged hands he rear'd,
And with his *frory* lips full ſoftly kiſt. *Spenſer.*

Covered with a froth reſembling hoar froſt:

She us'd with tender hand
The foaming ſteed with *frory* bit to ſteer. *Fairfax.*

FROSE, a town of Germany, in the circle of Upper Saxony, and duchy of Magdeburg: ten miles ſouth of Magdeburg.

FROSSAS'CO, a town of Italy, in the principality of Piedmont: thirteen miles ſouth-weſt of Turin, and three north of Pignerola.

FROSSAY', a town of France, in the department of the Lower Loire, and chief place of a canton, in the diſtrict of Painbœuf: one league and a half ſouth-eaſt of Painbœuf.

FROST, *f.* [ꝼꝛoꝛꝺ, Sax.] The laſt effect of cold; the power or act of congelation.—When the *froſt* ſeiſes upon wine, only the more wateriſh parts are congealed: there is a mighty ſpirit which can retreat into itſelf, and within its own compaſs lie ſecure from the freezing impreſſion. *South.*

This is the ſtate of man: to day he puts forth
The tender leaves of hopes, to-morrow bloſſoms,
And bears his bluſhing honours thick upon him;
The third day comes a *froſt*, a killing *froſt*,
And when he thinks, good eaſy man, full ſurely
His greatneſs is a ripening, nips his root,
And then he falls. *Shakeſpeare.*

The appearance of plants and trees ſparkling with congelation of dew:

Behold the groves that ſhine with ſilver *froſt*,
Their beauty wither'd, and their verdure loſt. *Pope.*

The nature and effects of froſt in different countries, are full of intereſt and curious enquiry. In the more northern parts of the world, even ſolid bodies are affected by froſt, though this is only or chiefly in conſequence of the moiſture they contain, which being frozen into ice, and ſo expanding as water is known to do when frozen, it burſts and rends any thing in which it is contained, as plants, trees, ſtones, and large rocks. Some fluids expand by froſt, as water, which expands about $\frac{1}{10}$th part, for which reaſon ice floats in water; but others again contract, as quickſilver, and hence frozen quickſilver ſinks in the fluid metal. See the article FREEZING, p. 29. of this volume.

Froſt, being derived from the atmoſphere, naturally proceeds from the upper parts of bodies downwards, as the water and the earth: ſo, the longer a froſt is continued, the thicker the ice becomes upon the water in ponds, and the deeper into the earth the ground is frozen. In about ſixteen or ſeventeen days froſt, Mr. Boyle found it had penetrated fourteen inches into the ground. At Moſcow, in a hard ſeaſon, the froſt will penetrate two feet deep in the ground; and captain James found it penetrated ten feet deep in Charlton iſland, and the water in the ſame iſland was frozen to the depth of ſix feet. Scheffer aſſures us, that in Sweden, the froſt pierces two cubits or Swediſh ells into the earth, and turns what moiſture is found there into a whitiſh ſubſtance like ice; and ſtanding waters to three ells, or more. The ſame author alſo mentions ſudden cracks or rifts in the ice of the lakes of Sweden, nine or ten feet deep, and many leagues long; the rupture being made with a noiſe not leſs loud than if many guns were diſcharged together. By ſuch means however the fiſhes are furniſhed with air; ſo that they are rarely found dead.

The natural hiſtories of froſts furniſh very extraordinary effects of them upon all kinds of ſubſtances. The trees are often ſcorched, and burnt up, as with the moſt exceſſive heat; and ſplit or ſhattered. In the great froſt in 1683, the trunks of oak, aſh, walnut, &c. were ſplit and cleft, ſo that they might be ſeen through, and the cracks were often attended with dreadful noiſes like the exploſion of fire arms. Philoſ. Tranſ. No. 165. The cloſe of the year 1708, and the beginning of 1709, were remarkable, throughout the greateſt part of Europe, for a ſevere froſt. Dr. Derham ſays, it was the greateſt in degree, if not the moſt univerſal, in the memory of man; extending through moſt parts of Europe, though ſcarcely felt in Scotland or Ireland.

In very cold countries, meat may be preſerved by the froſt ſix or ſeven months, and prove tender and good; as was experienced by captain Middleton in Hudſon's bay. In that climate the froſt ſeems never out of the ground, it having been found hard frozen in the two ſummer months. Brandy and ſpirit of wine, ſet out in the open air, freeze to ſolid ice in three or four hours. Lakes and ſtanding waters, not above ten or twelve feet deep, are frozen to the ground in winter, and all their fiſh periſh. But in rivers, where the current of the tide is ſtrong, the ice does not reach ſo deep, and the fiſh are preſerved.

In Ruſſia, the natives avail themſelves of hard and ſevere froſts in order to *cure* their proviſions by *freezing*. As ſoon as the winter is fairly ſet in, the farmers kill all but their breeding ſtock of cattle, pigs and poultry, and place it in the air to freeze. Fiſh and game they alſo freeze in great abundance. This circumſtance is particularly favourable to Ruſſia, as by it they ſave all the expence of winter feeding, and have cheaper and better carriage for bringing

bringing it to market. It is brought from the remoteſt provinces, and large ſupplies arrive at St. Peterſburg, even from the frozen ocean in the north, and from the borders of the Caſpian ſea, in the ſouth. The great market at St. Peterſburg begins juſt before the Chriſtmas holydays; the frozen proviſions are upon an average about thirty per cent. cheaper than if freſh killed; and it would be difficult even for a nice epicure to perceive the difference. Pork, fiſh, and game, appear to ſuffer leaſt by freezing. In keeping, great care is requiſite not to expoſe it to any warmth; and juſt before cooking, they thaw it in cold water. The market for frozen proviſions covers ſeveral acres of ground; and from the piles of animals, birds, and fiſh, with their ſeveral ſkins, feathers, and ſcales, on, preſents a moſt curious and ſingular appearance. A market of this kind can only exiſt in countries in which the winters are remarkably cold: but it is ſurpriſing that, when we are ſo well acquainted with the effects of congelation in retarding animal putrefaction, more ice-houſes (which are cheap edifices) are not erected; for what utility in the midſt of ſummer might not be derived from a ſtock of ice in preſerving meat freſh, and in preventing the produce of the dairy from becoming rancid; what benefit would it be to the farmer to be able to cool the atmoſphere of his dairy, by throwing in quantities of ice; and how eaſily would he convey it in a perfect ſtate to the greateſt diſtance, by packing it up in frozen water! a circumſtance which, in this age of improvement and luxury, cannot, we imagine, be long overlooked.

The great power of froſt on vegetables is a thing ſufficiently known; but the differences between the froſts of a ſevere winter, and thoſe which happen in the ſpring mornings, in their effects on plants and trees, were never perfectly explained, till by Meſſ. Du Hamel and Buffon, in the Memoirs of the Paris academy. The froſts of ſevere winters are therein ſhewn to be much more terrible than thoſe of the ſpring, as they bring on a privation of all the products of the tenderer part of the vegetable world; but then they are not frequent, ſuch winters happening perhaps but once in an age; while the froſts of the ſpring are in reality greater injuries to us than theſe, becauſe they are every year repeated. In regard to trees, the great difference is this, that the froſts of ſevere winters affect even their wood, their trunks and large branches; whereas thoſe of the ſpring have only power to deſtroy the buds. The winter froſts happening at a time when moſt of the trees in our gardens have neither leaves, flowers, nor fruits, upon them, and have their buds ſo hard as to be proof againſt ſlight injuries of weather, eſpecially if the preceding ſummer has not been too wet; in this ſtate, if there are no unlucky circumſtances attending, the generality of trees bear moderate winters very well; but hard froſts, which happen late in the winter, cauſe very great injuries even to thoſe trees which they do not utterly deſtroy.

Froſt, as is well known in Scotland, is particularly deſtructive to the bloſſom of fruit-trees; and the following method of ſecuring ſuch trees from being damaged by early froſts may be acceptable to many of our readers. A rope is to be interwoven among the branches of the tree, and one end of it brought down ſo as to be immerſed in a bucket of water. The rope, it is ſaid, will act as a conductor, and convey the effects of the froſt from the tree to the water. This idea is not new; for the following paſſage may be found in Colerus: "If you dig a trench around the root of a tree, and fill it with water, or keep the roots moiſt till it has bloomed, it will not be injured by the froſt. Or, in ſpring, ſuſpend a veſſel filled with water from the tree. If you wiſh to preſerve the bloom from being hurt by the froſt, place a veſſel of water below it, and the froſt will fall into it." *Phil. Mag.* No. 11.

Remarkable inſtances of ſevere froſts in Europe, and chiefly in England, are as follow: In the

Year 220, Froſt in Britain that laſted five months.
259, The Thames frozen nine weeks.
291, Moſt rivers in Britain frozen ſix weeks.
359, Severe froſt in Scotland for fourteen weeks.
401, The Euxine Sea frozen over for twenty days.
508, The rivers in Britain frozen for two months.
558, The Danube quite frozen over.
695, Thames frozen ſix weeks; booths built on it.
759, Froſt from Oct. 1 till Feb. 26, 760.
763, Froſt at Conſtantinople, where the two ſeas were frozen over for upwards of a hundred miles.
827, Froſt in England for nine weeks.
859, Carriages uſed on the Adriatic ſea, which was completely frozen over.
908, Moſt rivers in England frozen for two months.
923, The Thames frozen thirteen weeks.
987, Froſt laſted 120 days: began Dec. 22.
998, The Thames frozen five weeks.
1035, Severe froſt on June 24: the corn and fruits nearly all deſtroyed.
1063, The Thames frozen fourteen weeks.
1076, Froſt in England from November till April.
1114, Several wooden bridges carried away by ice.
1205, Froſt from January 14 till March 22.
1407, Froſt that laſted fifteen weeks, accompanied with a deep ſnow, and killed almoſt all the ſmall birds.
1434, From November 24 till February 10. The Thames was frozen down to Graveſend, and ſeveral miles below; during which all merchandiſe was obliged to be brought to London through Kent and Eſſex, by land-carriage.
1683, Froſt for thirteen weeks, Thames froze over.
1709, Severe froſt for many weeks, with deep ſnow.
1715, The ſame for many weeks.
1739, Froze for nine weeks, began December 24. This is generally called the hard froſt of 1740, when all ſorts of carriages went upon the Thames, and all manner of perſons were carried on upon the ice.
1742, Severe froſt for many weeks.
1747, Severe froſt in Ruſſia, and the north of Europe.
1754, Severe one in England.
1760, The ſame in Germany.
1776, The ſame in England.
1788, Thames frozen below bridge; with booths and a fair on it.

FROST'BITTEN, *adj.* Nipped or withered by the froſt.—The leaves are apt to be too much *froſtbitten*. *Mortimer.*

In the human ſubject, particularly in cold countries, ſometimes the whole limb, but more commonly the extremities, become froſt-bitten, and apparently dead. Perſons thus affected are compared to cataleptic patients, but ſtill there is much difference between a catalepſy and a *froſt-bitten* caſe. Cold braces up the body when applied to it in a certain degree; upon this conſtriction being increaſed, the humours are carried in a larger quantity to the internal parts, and are principally accumulated in the head; they ſtagnate in the veſſels of the brain, and diſtend them; hence they produce a ſtricture in, or a compreſſion on, the nerves that ariſe from the brain, which is the origin of a catalepſis, attended with an abolition of the ſenſes. The cold continuing, with its effects juſt mentioned, at length there is an extravaſation of the blood or ſerum in the head, by which the cerebellum is compreſſed, whence death enſues, which is uſhered in by a lethargy, ending in apoplexy.

When a man is pierced with cold, ſo as to be benumbed, if he attempts to warm himſelf by the fire, pains are preſently produced in the part expoſed to the heat, and a mortification is too often the conſequence; juſt as is ſeen in frozen fruit, which if put into cold water that is near freezing, it recovers, but if put into warm water, or in a warm place, it ſoon rots; and if men, when too ſeverely

affected

affected with cold, would firſt put the frozen part into cold water, or cover it with ſnow, until a ſenſe of warmth is perceived, or ſome degree of motion returns, at which time a little warm wine, mixed with camomile tea, might be drunk, or either of theſe alone, and then proceed gradually to allow of warmth, a mortification would be avoided.

When travellers begin to be drowſy in the cold, they ſhould redouble their ſpeed to extricate themſelves from danger: for though their ſleepineſs is eaſy, it is often fatal. The heat of our bodies, when in health, exceeds that of the ambient air, even in the hotteſt weather; whence a conſiderable degree of cold is required to freeze the ſoft parts of our bodies: it is becauſe our extremities are the coldeſt parts, that froſt always affects them ſooneſt. And when a mortification from cold approaches, Van Swieten obſerves, that the part affected by it is firſt pale, then red; this redneſs is attended with a troubleſome pain, and a violent itching: after this the colour becomes almoſt purple, and at laſt black.

That ſudden heat, applied after extreme cold, ſhould produce the ſame ſymptoms and conſequences, will be readily underſtood by what follows. As water cools, it condenſes, until it comes to the freezing point; but in the act of congelation it expands with a violence that nothing can reſiſt. When a perſon goes into the cold air, his fluids are gradually condenſed, the veſſels collapſe, and the ſkin is pale, the circulation again puſhes the blood into the arteries, whoſe contracted extremities allow it only to paſs ſlowly, and make the ſkin look red; alſo produces an itching, becauſe of the obſtruction that it meets with; the blood being puſhed from behind, whilſt the obſtruction is increaſed before, a livid colour is produced, and a tingling pain; at laſt the circulation being ſtopped, a gangrenous black finiſhes the ſcene, with a loſs of all ſenſation, the veſſels being ſtretched far beyond their natural dimenſions by the congealed fluids. In this caſe, applying of cold water diſſolves the frozen juices, and condenſes them; thus the veſſels have room to contract, and are aſſiſted in ſo doing by the coldneſs of the water: after this, if warm diluting liquor is drunk, a diaphoreſis is produced, and all danger is overcome; if warmth be applied at the firſt, the outer parts are quickly thawed, but the inner veſſels, ſtill obſtructed, ſoon burſt by the rarefaction of their contents, and deſtruction to the part is inſtantly produced. Van Swieten's Com. Med. Muſ. vol. i. p. 71.

Mr. Eaton, in his "Preſent State of Surgery in Turkey," gives the following intereſting account of an eaſy and infallible method of reſtoring froſt-bidden patients in that country, as practiſed not by the ſurgeons, but by the common people: "After Ochakof was taken, I received into my ſubterranean lodging as many priſoners as it would contain, all of whom were either wounded or had a limb frozen. Among them were two children, one about ſix and the other about fourteen years of age; the latter had one of her feet frozen to the ancle, the other all the toes and the ſole of one of her feet. The ſecond day the parts appeared black. The French ſurgeon, whom prince Potemkin had ſent for purpoſely from Paris, and who was a man of note, ordered them to be conſtantly bathed with warm camphorated ſpirits: the elder was removed to the hoſpital, when a mortification began; the younger I kept, and as we removed into winter quarters, I carried the child along with me. The mortified parts ſeparated, the bones of the toes came off, and, after a conſiderable time, the ſores healed. I ſhould have ſaid, the ſurgeon was for immediately amputating both the limbs.

"In a ſubterranean room, not far from mine, were ſeveral women whoſe feet had been in a like manner frozen; but as no ſurgeon attended them, the Ruſſian ſoldiers and waggoners undertook the cure. It was alſo the ſecond day when they applied their remedy, and the parts were perfectly black. This remedy was gooſe-greaſe, with which the parts were ſmeared warm, and the operation often repeated; their directions were, never to let the parts be dry, but always covered with greaſe. The conſequence was, that by degrees the circulation extended lower down, and the blackneſs decreaſed, till, laſt of all, the toes were only diſcoloured, and at length circulation was reſtored to them.

"I can account for this no otherwiſe, than that the fat kept the pores ſhut, and prevented the air from promoting putrefaction; in the mean time the veſſels were continually abſorbing part of the ſtagnated blood, till by degrees the whole circulation was reſtored. It is known that extravaſated and ſtagnated blood will remain a long time in the body without putrifying, if it be not expoſed to the air. I conclude alſo, that in theſe caſes of froſt, the mortification firſt begins on the ſurface, which is in contact with the air. I only mean, however, to relate facts, and leave it to others to account for them. This is a general practice of the peaſants throughout all Ruſſia; but if a part is diſcovered to be frozen, *before the perſon comes into a warm room*, they extract the froſt by plunging the part into cold water, or rubbing it with ſnow till the circulation returns."

FROST'ED, *adj.* Laid on in inequalities like thoſe of the hoar froſt upon plants:

The rich brocaded ſilk unfold,
Where riſing flow'rs grow ſtiff with *froſted* gold. *Gay.*

FROST'ILY, *adv.* With froſt; with exceſſive cold. Without warmth of affection:

Courtling, I rather thou ſhould'ſt utterly
Diſpraiſe my work, than praiſe it *froſtily*. *Ben Johnſon.*

FROSTI'NESS, *ſ.* Cold; freezing cold.

FROST'NAIL, *ſ.* A nail with a prominent head driven into the horſe's ſhoes, that it may pierce the ice. —The claws are ſtraight only to take hold, for better progreſſion; as a horſe that is ſhod with *froſt-nails*. *Crew.*

FROST'WORK, *ſ.* Work in which the ſubſtance is laid on with inequalities, like the dew congealed upon ſhrubs:

By nature ſhap'd to various figures, thoſe
The fruitful rain, and theſe the hail compoſe;
The ſnowy fleece and curious *froſtwork* theſe
Produce the dew, and thoſe the gentle breeze. *Blackmore.*

FROS'TY, *adj.* Having the power of congelation; exceſſive cold.—The air, if very cold, irritateth the flame, and maketh it burn more fiercely; as fire ſcorcheth in *froſty* weather. *Bacon.*

For all my blood in Rome's great quarrel ſhed,
For all the *froſty* nights that I have watch'd,
Be pitiful to my condemned ſons. *Shakeſpeare.*

Chill in affection; without warmth of kindneſs or courage.—What a *froſty*-ſpirited rogue is this! *Shakeſpeare.*

Hoary; grey-haired; reſembling froſt:

Where is loyalty?
If it be baniſh'd from the *froſty* head,
Where ſhall it find a harbour in the earth? *Shakeſpeare.*

FROTH, *ſ.* [*froe*, Daniſh and Scottiſh.] Spume; foam; the bubbles cauſed in liquors by agitation.—When wind expireth from under the ſea, as it cauſeth ſome reſounding of the water, ſo it cauſeth ſome light motions of bubbles, and white circles of *froth*. *Bacon.*—The uſeleſs *froth* ſwims on the ſurface, but the pearl lies covered deep with a maſs of waters. *Glanville.*

Surging waves againſt a ſolid rock,
Though all to ſhivers daſh'd, th' aſſault renew;
Vain batt'ry, and in *froth* or bubbles end. *Milton.*

They were the *froth* my raging folly mov'd
When it boil'd up; I knew not then I lov'd,
Yet then lov'd moſt. *Dryden.*

Any empty or senseless show of wit or eloquence. Any thing not hard, solid, or substantial:

Who eateth his veal, pig, and lamb, being *froth*,
Shall twice in a week go to bed without broth. *Tusser.*

To FROTH, *v. n.* To foam; to throw out spume; to generate spume.—Excess muddies the best wit, and only makes it flutter and *froth* high. *Grew.*

He frets within, *froths* treason at his mouth,
And churns it through his teeth. *Dryden.*

FROTHI'LY, *adv.* With foam; with spume. In an empty trifling manner.

FROTH'INESS, *s.* The state of being frothy, lightness, want of solidity.

FROTH'SPIT, *s.* The froth which is frequently found on plants in the spring with a little insect in it. *Ash.*

FROTH'Y, *adj.* Full of foam, froth, or spume.—The sap of trees is of differing natures; some watery and clear, as vines, beeches, pears: some thick, as apples; some gummy, as cherries; and some *frothy*, as elms. *Bacon.*

Behold a *frothy* substance rise;
Be cautious, or your bottle flies. *Swift.*

Soft; not solid; wasting.—Their bodies are so solid and hard as you need not fear that bathing should make them *frothy*. *Bacon.*—Vain; empty; trifling.—What's a voluptuous dinner, and the *frothy* vanity of discourse that commonly attends these pompous entertainments? What is it but a mortification to a man of sense and virtue? *L'Estrange.*

FROU'ARD, a town of France, in the department of the Meurte, and chief place of a canton, in the district of Nancy, situated on the Moselle: one league and three quarters north-north-west of Nancy, and three and a half north-east of Toul.

FROU'LAY-TESSE', a town of France, in the department of the Orne: seven miles south-east of Domfront.

FROUNCE, *s.* A word used by falconers for a distemper, in which white spittle gathers about the hawk's bill. *Skinner.*

To FROUNCE, *v. a.* To frizzle or curl the hair about the face. This word was at first probably used in contempt.—Some warlike sign must be used; either a slovenly buskin, or an overstaring *frounced* head. *Ascham.*

Some *frounce* their curled hair in courtly guise,
Some prank their ruffs, and others timely dight
Their gay attire. *Fairy Queen.*

FROUQUI'E, a small island in the English channel: about one mile from the west coast of the island of Jersey.

FROU'ZY, *adj.* Fœtid; musty. *A cant word.*—Petticoats in *frouzy* heaps. *Swift.*—Dim; cloudy:

When first Diana leaves her bed,
Vapours and steams her looks disgrace;
A *frouzy* dirty-coloured red
Sits on her cloudy wrinkled face. *Swift.*

FROW, *s.* [from the German *fraw.*] A Dutch or German woman. *A low word.*

FRO'WARD, *adj.* [ƿiampeapd, Sax.] Peevish; ungovernable; angry; perverse; the contrary to *toward.*—Whose ways are crooked, and they *froward* in their paths. *Prov.* ii. 15.—'Tis with *froward* men, and *froward* factions too, as 'tis with *froward* children; they'll be sooner quieted by fear than by any sense of duty. *L'Estrange.*

She's not *froward*, but modest as the dove:
She is not hot, but temperate as the morn. *Shakespeare.*

FRO'WARDLY, *adj.* Peevishly; perversely.—I hid me and was wroth, and he went *frowardly* in the way of his heart. *Isaiah*, lvii. 17.

FRO'WARDNESS, *s.* Peevishness; perverseness.—How many *frowardnesses* of ours does he smother? how many indignities does he pass by? how many affronts does he put up at our hands! *South.*

We'll mutually forget
The warmth of youth, and *frowardness* of age. *Addison.*

FROWDE (Philip), a minor English poet, whose father was post-master in the reign of queen Anne. He was sent to the university of Oxford, where he had the honour of being distinguished by Addison, who took him under his protection. While he remained there, he became the author of several pieces of poetry, some of which in Latin were elegant enough to intitle them to a place in the *Musæ Anglicanæ*. He likewise wrote two tragedies: The Fall of Saguntum, dedicated to sir Robert Walpole; and Philotas, addressed to the earl of Chesterfield. He died in Cecil-street in the Strand, in 1738. His biographer concludes with the following eulogium: "Though the elegance of Mr. Frowde's writings has recommended him to general esteem, the politeness of his genius is the least amiable part of his character; he considered the talents of wit and learning only as they were conducive to the excitement and practice of honour and humanity. With a soul cheerful, benevolent, and virtuous, he was in conversation delightful, in friendship sincere, in death religiously resigned."

FROW'ER, *s.* [among woodmen.] A cleaving tool:

A *frower* of iron for cleaving of lath,
With roll for a sawpit, good husbandry hath. *Tusser.*

FROW'EY, *adj.* With carpenters, having the grain even, void of knots.

To FROWN, *v. a.* [*frogner*, old French, to wrinkle. *Skinner.*] To express displeasure by contracting the face to wrinkles; to look stern.—Heroes in animated marble *frown*. *Pope.*

Say, that she *frowns*; I'll say, she looks as clear
As morning roses newly wash'd with dew. *Shakespeare.*

The wood,
Whose shady horrors on a rising brow
Wav'd high, and *frown'd* upon the stream below. *Pope.*

FROWN, *s.* A wrinkled look; a look of displeasure.—Patiently endure that *frown* of fortune, and by some notable exploit win again her favour. *Knolles.*

In his half-clos'd eyes
Stern vengeance yet and hostile terror stand;
His front yet threatens, and his *frowns* command. *Prior.*

FROW'SACK, the channel or gut of Canso, a strait between Nova-Scotia and Cape Breton, five French leagues long, and one broad.

FROWN'INGLY, *adv.* Sternly; with a look of displeasure:

What, look'd he *frowningly*?
A countenance more in sorrow than in anger. *Shakespeare.*

FROW'Y, *adj.* Musty; mossy. This word is now not used; but instead of it *frouzy*:

But if they with thy gotes should yede,
They soon might be corrupted;
Or like not of the *frowy* fede,
Or with the weeds be glutted. *Spenser.*

FRO'YEN, an island in the North Sea, near the coast of Norway, about thirty-five miles in circumference. Lat. 63. 45. N. lon. 9. E. Greenwich.

FRO'ZEN, [*part. pass.* of *freeze.*] Congealed with cold:

What was the waste of war, what fierce alarms
Shook Asia's crown with European arms?
Ev'n such have heard, if any such there be,
Whose earth is bounded by the *frozen* sea. *Dryden.*

Chill in affection:

Be not ever *frozen*, coy,
One beam of love will soon destroy
And melt that ice to floods of joy. *Carew.*

Void

Void of heat or appetite:
Even here, where *frozen* chaſtity retires,
Love finds an altar for forbidden fires. *Pope.*

FROZEN O'CEAN, the ſeas of ice which are ſuppoſed to ſurround the two poles of the world; called the Arctic Sea, or North Frozen Ocean; and the Antarctic Sea, or South Frozen Ocean. The former is more generally known among ſeamen by the name of the "Greenland Seas."

F.R.S. *Fellow* of the *Royal Society*:

Who *virtû* profeſs
Shine in the dignity of *F. R. S.* *Pope.*

FRO'ZES, a town of France, in the department of the Vienne: five miles weſt of Poitiers.

FRUCTESCEN'TIA, *ſ.* in botany, the fruiting ſeaſon; or the time when vegetables begin to ſcatter their ripe ſeeds.

FRUCTIF'EROUS, *adj.* [*fructifer*, Lat.] Bearing fruit. *Ainſworth.*

FRUCTIFICA'TION, *ſ.* The act of cauſing or of bearing fruit; fecundation; fertility.—That the ſap doth powerfully riſe in the ſpring, to put the plant in a capacity of *fructification*, he that hath beheld how many gallons of water may be drawn from a birch-tree, hath ſlender reaſon to doubt. *Brown.*

In botany, *fructification*, or fruiting, denotes a temporary part of vegetables, which is appropriated to generation, by terminating the old, and beginning the new, vegetable. The eſſence of it conſiſts in the flower and fruit; and there can be no fructification without *anther*, *ſtigma*, and *ſeed*. When perfect, it conſiſts of ſeven parts: 1. Calyx. 2. Corolla. 3. Stamen. 4. Piſtillum. 5. Pericarp. 6. Seed. 7. Receptacle. Of theſe, the four firſt belong to the flower; the two next to the fruit; and the laſt is common to both. For a diſplay of theſe parts, ſee the article BOTANY, vol. iii. p. 263–289; and plates 10 to 15.

To FRUC'TIFY, *v. a.* [*fructifier*, Fr.] To make fruitful; to fertiliſe.—The legal levies the ſovereign raiſes are as vapours which the ſun exhales, which fall down in ſweet ſhowers to *fructify* the earth. *Howell.*

Wheree'er ſhe looks, behold ſome ſudden birth,
Adorns the trees, and *fructifies* the earth. *Granville.*

To FRUC'TIFY, *v. n.* To bear fruit.—It watereth the heart, to the end it may *fructify*; maketh the virtuous in trouble, full of magnanimity and courage; and ſerveth as a moſt approved remedy againſt all doleful and heavy accidents which befal men in this preſent life. *Hooker.*

FRUCT'IST, *ſ.* [from the Lat. *fructus*, fruit.] A botaniſt who endeavours to diſtinguiſh the ſeveral kinds of plants by the fruit or ſeeds which they produce.

FRUC'TUOUS, *adj.* [*fructueux*, Fr. from *fructify*.] Fruitful; fertile; impregnating with fertility:

Apples of price, and plenteous ſheaves of corn
Oft interlac'd occur; and both imbibe
Fitting congenial juice, ſo rich the ſoil,
So much does *fructuous* moiſture o'er abound. *Philips.*

FRU'GAL, *adj.* [*frugalis*, Lat. *frugal*, Fr.] Thrifty; ſparing; parſimonious: not prodigal; not profuſe; not laviſh:

And wing'd purveyors his ſharp hunger fed
With *frugal* ſcraps of fleſh and maſlin bread. *Harte.*

If through miſts he ſhoots his ſullen beams,
Frugal of light, in looſe and ſtraggling ſtreams,
Suſpect a driſling day. *Dryden.*

FRU'GALLY, *adv.* Parſimoniouſly; ſparingly; thriftily:

Mean time young Parſimond his marriage preſs'd,
And *frugally* reſolv'd, the charge to ſhun,
To join his brother's bridal with his own. *Dryden.*

FRUGAL'ITY, *ſ.* [*frugalité*, Fr. *frugalitas*, Lat.] Thrift; parſimony; good huſbandry.—As for the general ſort of men, *frugality* may be the cauſe of drinking water; for that is no ſmall ſaving, to pay nothing for one's drink. *Bacon.*

Frugality and bounty too,
Thoſe diff'ring virtues meet in you. *Waller.*

FRU'GES, a town of France, in the department of the Straits of Calais, and chief place of a canton, in the diſtrict of Montreuil: three leagues north of Heſdin, and four ſouth-weſt of Arras.

FRUGO'NI (Carlo-Innocenzo), a celebrated Italian poet, born of a noble family at Genoa in 1692. He was one of thoſe ſacrifices ſo frequent among the younger children of the Italian nobility, and at the age of ſixteen was perſuaded, much againſt his inclination, to take the monaſtic vows in the congregation of Sommaſchi. "I was, (ſays he,) ready to die with chagrin and indignation, in a condition not made for me;" a ſituation, doubtleſs, too common among theſe "captives of the cloiſter," as he terms them. He taught claſſical literature with ſucceſs for ſome years in ſeveral of the cities of Italy; and at length, at the age of thirty-five, through the intereſt of cardinal Bentivoglio, he was liberated from his vows by pope Clement XII. retaining only the ſecular prieſthood. At this time he had obtained the patronage of the houſe of Farneſe, who gave him an honourable aſylum in Parma. When the duke eſtabliſhed in that capital an academy for the fine arts, Frugoni was employed to draw up its ſtatutes, and was made its perpetual ſecretary. To this office were joined thoſe of court-poet and inſpector of theatrical exhibitions; and penſions and honours were liberally beſtowed upon him. His poetical compoſitions ſpread his fame throughout Italy; and he preſerved the fire and vivacity of his genius to an advanced age, dying at Parma in December, 1768. His works conſiſt of ſonnets, odes, canzoni, elegies, ſatires, eclogues, and epiſtles. As well in ſerious as in ſportive writings he had a ſtyle peculiar to himſelf, diſtinguiſhed by warmth, energy, and facility. He is judged to have diſplayed moſt merit and originality in lyric poetry, in which he attained a ſublimity ſcarcely ſurpaſſed by any of his countrymen. He poſſeſſed the imagination of a true poet; and one of his panegyriſts terms him "*il principe dello ſtile fantaſtico*," at the head of the fanciful or figurative ſtyle. He attempted the drama, but did not ſucceed in it, though he had tranſlated ſuperiorly the Rhadamiſtus and Zenobia of Crebillon. His collected works were publiſhed at Parma, in 9 volumes 8vo. 1779.

FRUHITAN', an iſland in the Atlantic, near the weſtern coaſt of Ireland: three miles weſt of Maſa Point.

FRUGIF'ERENT, *adj.* [from the Lat. *frux*, fruit, and *fero*, to bear.] Bearing fruit. *Scott.*

FRUGIF'EROUS, *adj.* [*frugifer*, Lat.] Bearing fruit. *Ainſworth.*

FRUGIF'EROUSNESS, *ſ.* Fruitfulneſs, fertility. *Scott.*

FRUGIV'OROUS, *adj.* [from the Lat. *frux*, fruit, and *voro*, to devour.] Devouring fruits.

FRUGIV'OROUSNESS, *ſ.* The quality of devouring fruits. *Scott.*

FRUIT, *ſ.* [*fructus*, Lat. *frwyth*, Welſh; *fruit*, Fr.] The product of a tree or plant in which the ſeeds are contained:

The ſtrawberry grows underneath the nettle,
And wholeſome berries thrive and ripen beſt,
Neighbour'd by *fruit* of baſer quality. *Shakeſpeare.*

That part of a plant which is taken for food:

By taſting of that *fruit* forbid,
Where they ſought knowledge, they did error find.
Davies.

See how the riſing *fruits* the gardens crown,
Imbibe the ſun, and make his light their own. *Blackmore.*

Production.—The *fruit* of the ſpirit is in all goodneſs, and righte-

righteousness, and truth. *Ephes.* v. 9.—The offspring of the womb; the young of any animal:

Can'st thou their reck'nings keep? the time compute,
When their swol'n bellies shall enlarge the *fruit*. *Sandys.*

Advantage gained by any enterprise or conduct.—What is become of all the king of Sweden's victories? Where are the *fruits* of them at this day? Or of what benefit will they be to posterity? *Swift.*—The effect or consequence of any action.—They shall eat of the *fruit* of their own way. *Prov.*

By 4 Geo. II. c. 32. to steal fruit growing against walls, or to rob orchards or gardens of fruit growing therein, may be punished by fine, whipping, &c. and by 1 Geo. I. c. 48. fine and imprisonment may be inflicted on persons destroying fruit-trees. See LARCENY.

FRUIT-TIME, *s.* The autumn; the time for gathering fruit.

FRUIT-TREE, *s.* A tree of that kind whose principal value arises from the fruit produced by it. For the various kinds, management, and cultivation, see the article HORTICULTURE.

Lady, by yonder blessed moon I vow,
That tips with silver all these *fruit-tree* tops. *Shakespeare.*

All with a border of rich *fruit-trees* crown'd,
Whose loaded branches hide the lofty mound. *Waller.*

FRUIT'AGE, *s.* [*fruitage*, Fr.] Fruit collectively; various fruits.—What is more ordinary with them than the taking in flowers and *fruitage* for the garnishing of their work? *More.*

In heav'n the trees
Of life ambrosial *fruitage* bear, and vines
Yield nectar. *Milton.*

FRUIT'BEARER, *s.* That which produces fruit.—Trees, especially *fruitbearers*, are often infected with the measles. *Mortimer.*

FRUIT'BEARING, *adj.* Having the quality of producing fruit.—By this way graft trees of different kinds one on another, as *fruitbearing* trees on those that bear not. *Mortimer.*

FRUIT'ERER, *s.* [*fruitier*, Fr.] One who trades in fruit:

Walnuts the *fruit'rer's* hand in autumn stain;
Blue plumbs and juicy pears augment his gain. *Gay.*

FRUIT'ERY, *s.* [*fruiterie*, Fr.] Fruit collectively taken:

Oft, notwithstanding all thy care
To help thy plants, on the small *fruitery*
Exempt from ills, an oriental blast
Disastrous flies. *Philips.*

A fruit-loft; a repository for fruit.

FRUIT'FUL, *adj.* Fertile; abundantly productive; liberal of vegetable product.—If he continued cruel, he could no more sustain his life than the earth remain *fruitful* in the sun's continual absence. *Sidney.*—Actually bearing fruit:

Adonis' gardens,
That one day bloom'd, and *fruitful* were the next. *Shakes.*

Prolific; childbearing; not barren.—I have copied nature, making the youths amorous and the damsels *fruitful*. *Gay.*

Male he created thee, but thy consort
Female for race; then bless'd mankind, and said,
Be *fruitful*, multiply, and fill the earth;
Subdue it, and throughout dominion hold. *Milton.*

Plenteous; abounding in any thing:

While you, my lord, the rural shades admire,
And from Britannia's public posts retire,
Me into foreign realms my fate conveys,
Through nations *fruitful* of immortal lays. *Addison.*

FRUIT'FULLY, *adv.* In such a manner as to be prolific:

How sacred seeds of sea, and air, and earth,
And purer fire through universal night,
And empty space did *fruitfully* unite. *Roscommon.*

Plenteously; abundantly.—You have many opportunities to cut him off: if your will want not, time and place will be *fruitfully* offered. *Shakespeare.*

FRUIT'FULNESS, *s.* Fertility; fecundity; plentiful production.—Neither can we ascribe the fame *fruitfulness* to any part of the earth, nor the fame virtue to any plant thereon growing, that they had before the flood. *Raleigh.*—The quality of being prolific, or bearing many children:

The goddess, present at the match she made,
So bless'd the bed, such *fruitfulness* convey'd,
That ere ten moons had sharpen'd either horn,
To crown their bliss, a lovely boy was born. *Dryden.*

Exuberant abundance.—The remedy of *fruitfulness* is easy, but no labour will help the contrary. *Ben Johnson.*

FRUIT'GROVES, *s.* Shades, or close plantations of fruit trees:

The faithful slave,
Whom to my nuptial train Icarius gave,
To tend the *fruitgroves*. *Pope.*

FRUI'TION, *s.* [*fruor*, Lat.] Enjoyment; possession; pleasure given by possession or use.—Man doth not seem to rest satisfied either with *fruition* of that wherewith his life is preserved, or with performance of such actions as advance him most deservedly in estimation. *Hooker.*

God riches and renown to men imparts,
Ev'n all they wish; and yet their narrow hearts
Cannot so great a fluency receive,
But their *fruition* to a stranger leave. *Sandys.*

FRUIT'IVE, *adj.* Enjoying; possessing; having the power of enjoyment. A word not legitimate.—To whet our longings for *fruitive* or experimental knowledge, it is reserved among the prerogatives of being in heaven, to know how happy we shall be, when there. *Boyle.*

FRUIT'LESS, *adj.* Barren of fruit; not bearing of fruit.—The Spaniards of Mexico, for the first forty years, could not make our kind of wheat bear seed; but it grew up as high as the trees, and was *fruitless*. *Raleigh.*—Vain; productive of no advantage; idle; unprofitable.—The other is for entirely waving all searches into antiquity, in relation to this controversy, as being either needless or *fruitless*. *Waterland.*

O! let me not, quoth he, return again
Back to the world, whose joys so *fruitless* are:
But let me here for ay in peace remain,
Or straightway on that last long voyage fare. *Spenser.*

Having no offspring:

Upon my head they plac'd a *fruitless* crown,
And put a barren sceptre in my gripe;
No son of mine succeeding. *Shakespeare.*

FRUIT'LESSLY, *adv.* Vainly; idly; unprofitably.—After this fruit curiosity *fruitlessly* enquireth, and confidence blindly determineth. *Brown.*

Walking they talk'd, and *fruitlessly* divin'd
What friend the priestess by those words design'd. *Dryd.*

FRUMENTA'CIOUS, *adj.* [*frumentum*, Lat.] Made of grain.

FRUMENTA'RII, *s.* a kind of soldiers or archers under the western empire. They first occur in the reign of Adrian, who made use of them to inform himself of whatever passed. They were not a particular corps, but a certain number of them was incorporated in each Roman legion. It is supposed, that they were at first a number of young persons, disposed by Augustus throughout the provinces, to acquaint the emperor with every thing that

happened. Afterwards they were incorporated into the troops, where they ſtill retained their ancient name. As their principal office was the giving intelligence, they were often joined with the curioſi, with whom they agreed in this part of their office. Their name of *frumentarii* is derived from their being alſo a ſort of purveyors to the armies, cities, &c. collecting all the corn from the ſeveral provinces to furniſh the common-wealth.

FRUMENTA'RIOUS, *adj.* Belonging to corn.

FRUMENTA'TION, *ſ.* in Roman antiquity, a largeſs of corn beſtowed on the people. The practice of giving corn to the people was very ancient among the Romans, and frequently uſed to ſoothe the turbulent humour of the populace. At firſt the number of thoſe to whom this largeſs was given was indeterminate, till Auguſtus fixed it at 200,000.

FRUMEN'TIUS, a ſaint in the Romiſh calendar, and native of Tyre, who flouriſhed in the fourth century. He was educated under Meropius, a chriſtian philoſopher, who ſet out on a voyage to India towards the beginning of the fourth century, accompanied by Frumentius, and another of his ſcholars named Ædeſius. In the courſe of their voyage they had the misfortune to touch on the coaſt of Ethiopia, where Meropius was cruelly murdered by the natives; but his two ſcholars had their lives ſpared; and being found to be youths of a beautiful appearance, were ſent to the emperor of the country. That prince was ſo pleaſed with them, that he placed Frumentius in his ſecretary's office, and Ædeſius in that of his butler. As long as he lived he ſhewed them marks of his favour, and a little before his death granted them their liberty. When, after that event, they were about to avail themſelves of their freedom, and to return home, they were importunately requeſted by the queen-regent to remain ſome time longer in the country, and to undertake the tutelage of her ſon till he ſhould be of age. Having conſented to her requeſt, they appear to have obtained liberty for the Roman merchants reſiding in the ports of Ethiopia, who were Chriſtians, to aſſemble together for the worſhip of God; and they alſo ſucceeded in making many converts to the chriſtian faith among the courtiers. When their pupil had taken the adminiſtration of the government upon himſelf, they both deſired leave to return home, and obtained it, but not without much difficulty. Ædeſius went to Tyre, where he was afterwards ordained a preſbyter, and related the foregoing particulars to Ruffinus, who recorded them in the ninth chapter of the firſt book of his Eccleſiaſtical Hiſtory; but Frumentius repaired to Alexandria, and acquainted Athanaſius, who was then biſhop of that city, with the progreſs he had made in introducing Chriſtianity into Ethiopia, and the fair proſpect there was of farther ſucceſs. Athanaſius, after conſulting with his clergy, perſuaded Frumentius to be conſecrated a biſhop, and to return to Ethiopia in that character, for the accompliſhment of the work which he had ſo happily begun. He was accordingly conſecrated in 331, and, returning to Ethiopia, entered on his miſſion at Axuma, the capital of the country. His labours are ſaid to have been ſo ſucceſsful, that in a ſhort time the emperor, and the great body of the people, were converted to the chriſtian faith, and numerous churches were eſtabliſhed throughout the empire. Frumentius lived to the year 356.

FRUMENTO'SE, *adj.* Full of corn. *Scott.*

FRU'MENTY, *ſ.* [*frumentum*, Lat. corn.] Food made of wheat boiled in milk.

FRUM'GYLD, *ſ.* [Saxon.] In the ancient law, the firſt payment made to the kindred of a perſon ſlain, towards the recompence of his murder.

To FRUMP, *v. a.* To mock; to browbeat. *Ainſworth.*

FRUMP, *ſ.* A woman, in deriſion; generally an old woman.

To FRUSH, *v. a.* [*froiſſer*, Fr.] To break, bruiſe, or cruſh. *Hanmer.*

I like thy armour well;
I'll *fruſh* it, and unlock the rivets all,
But I'll be maſter of it. *Shakeſpeare.*

FRUSH, *ſ.* A ſort of tender horn in a horſe's foot, that grows in the middle of the ſole, and at ſome diſtance from the toe: it divides into two branches, running towards the heel, in the form of a fork.

FRUSI'NO, in ancient geography, a town of the Volſci on one of the branches of the Liris. *Juvenal.*

FRUSTRANE'A, *ſ.* [*fruſtra*, Lat. vain, or barren.] In botany, the name of the third order in the claſs *Syngeneſia* of Linneus's Artificial Syſtem; comprehending ſuch compound flowers as have perfect florets in the diſk, producing ſeed; but imperfect florets in the ray, which for want of a ſtigma are barren.

FRUSTRA'NEOUS. *adj.* [*fruſtra*, Lat.] Vain; uſeleſs; unprofitable; without advantage.—He timely withdraws his *fruſtraneous* baffled kindneſſes, and ſees the folly of endeavouring to ſtroke a tiger into a lamb, or to court an Ethiopian out of his colour. *South.*

To FRUS'TRATE, *v. a.* [*fruſtror*, Lat. *fruſtrer*, Fr.] To defeat; to diſappoint; to baulk.—It is an axiom of nature, that natural deſire cannot utterly be *fruſtrate.* *Hooker.*

I ſurvive,
To mock the expectations of the world,
To *fruſtrate* prophecies, and to raze out
Rotten opinion. *Shakeſpeare.*

To make null; to nullify.—The act of parliament which gave all his lands to the queen, did cut off and *fruſtrate* all ſuch conveyances. *Spenſer.*

Now thou haſt aveng'd
Supplanted Adam; and by vanquiſhing
Temptation, haſt regain'd loſt paradiſe,
And *fruſtrated* the conqueſt fraudulent. *Milton.*

FRUS'TRATE, *participial adj.* Vain; ineffectual; uſeleſs; unprofitable:

He is drown'd
Whom thus we ſtray to find, and the ſea mocks
Our *fruſtrate* ſearch on land. *Shakeſpeare.*

Null; void. Few things are ſo reſtrained to any one end or purpoſe, that, the ſame being extinct, they ſhould forthwith utterly become *fruſtrate.* *Hooker.*

FRUSTRA'TION, *ſ.* [*fruſtratio*, Lat.] Diſappointment; defeat.—In ſtates notoriouſly irreligious, a ſecret and irreſiſtible power countermands their deepeſt projects, ſplits their counſels, and ſmites their moſt refined policies with *fruſtration* and a curſe. *South.*

FRUS'TRATIVE, *adj.* Fallacious; diſappointing. *Ainſworth.*

FRUS'TRATORY, *adj.* That which makes any procedure void; that which vacates any former proceſs.—Bartolus reſtrains this to a *fruſtratory* appeal. *Ayliffe.*

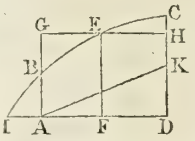
FRUS'TUM, *ſ.* [Latin.] In geometry, is the part of a ſolid next the baſe, left by cutting off the top, or ſegment, by a plane parallel to the baſe: as the fruſtum of a pyramid, of a cone, of a conoid, of a ſpheroid, or of a ſphere, which is any part compriſed between two parallel circular ſections; and the middle fruſtum of a ſphere, is that whoſe ends are equal circles, having the centre of the ſphere in the middle of it, and equally diſtant from both ends.

For the ſolid content of the fruſtum of a cone, or of any pyramid, whatever figure the baſe may have. Add into one ſum, the areas of the two ends and the mean proportional between them; then $\frac{1}{3}$ of that ſum will be a mean area, or the area of an equal priſm, of the ſame altitude with the fruſtum; and conſequently that mean area being multiplied by the height of the fruſtum, the product will be the ſolid content of it.

That is, if A denote the area of the greater end,
a that of the leſs, and h the height;
then $\overline{A + a + \sqrt{Aa}} + \frac{1}{3}h$ is the ſolidity.

The curve ſurface of the zone or fruſtum of a ſphere, is obtained by multiplying the circumference of the ſphere by the height of the fruſtum. *And the ſolidity of the ſame fruſtum is found*, by adding together the ſquares of the radii of the two ends, and $\frac{1}{3}$ of the ſquare of the height of the fruſtum, then multiplying the ſum by the ſaid height and by the number 1·5708. That is, $\overline{R^2 + r^2 + \frac{1}{3}h^2} + \frac{1}{2}ph$ is the ſolid content of the ſpheric fruſtum, whoſe height is h, and the radii of its ends R and r, p being $=$ 3·1416.

Concerning the fruſtum of a ſphere, cone, ſpheroid, or conoid, terminated by parallel planes, when compared with a cylinder of the ſame altitude, on a baſe equal to the middle ſection of the fruſtum made by a parallel plane, Dr. Hutton remarks as follows: The difference between the fruſtum and the cylinder is always the ſame quantity, in different parts of the ſame, or of ſimilar ſolids, or whatever the magnitude of the two parallel ends may be; the inclination of thoſe ends to the axis, and the altitude of the fruſtum being given; and the ſaid conſtant difference is $\frac{1}{4}$ part of a cone of the ſame altitude with the fruſtum, and the radius of its baſe is to that altitude, as the fixed axis is to the revolving axis of the fruſtum. Thus, if BEC be any conic ſection, or a right line, or a circle, whoſe axis, or a part of it, is AD; AB and CD the extreme ordinates, FE the middle ordinate, AF being $=$ FD; then taking, as AD to DK, ſo is the whole fixed axis, of which AD is a part, to its conjugate axis; and completing the parallelogram AGHD: then if the whole figure revolve about the axis AD, the line BEC will generate the fruſtum of the cone or conoid, according as it is a right line or a conic ſection, or it will generate the whole ſolid when AB vaniſhes, or A and B meet in the ſame point; likewiſe AGHD will generate a cylinder, and ADK a cone: then is the 4th part of this cone always equal to the difference between the ſaid cylinder generated by AGHD and the ſolid or fruſtum generated by ABECD; having all the ſame altitude or axis AD.



In the parabolic conoid, this difference and the cone vaniſh, and the fruſtum, or whole conoid ABECD, is always equal to the cylinder AGHD, of the ſame altitude. In the ſphere, or ſpheroid, the fruſtum ABECD is *leſs* than the cylinder AGHD, by $\frac{1}{4}$ of the cone AKD. And, in the cone or hyperboloid, that fruſtum is *greater* than the cylinder, by $\frac{1}{4}$ of the ſaid cone AKD, which is ſimilar to the other cone IBCD. The ſame relations are true, whether the ends of the fruſtum are perpendicular or oblique to the axis. And the ſame will hold for the fruſtum of any pyramid, whether right or oblique; and ſuch a fruſtum of a pyramid will exceed the priſm, of the ſame altitude, and upon the middle ſection of the fruſtum, by $\frac{1}{4}$ of the ſame cone.

It has been obſerved, that the difference, or $\frac{1}{4}$ of the cone AKD, is the ſame, or conſtant, when the altitude and inclination of the ends of the fruſtum remain the ſame. But when the inclination of the ends varies, the altitude being conſtant; then the ſaid difference varies ſo as to be always reciprocally as the cube of the conjugate to the diameter AD. And when both the altitude and inclination of the ends vary, the differential cone is as the cube of the altitude directly, and the cube of the ſaid conjugate diameter reciprocally: but if they vary ſo, as that the altitude is always reciprocally as that diameter, then the difference is a conſtant quantity.

Another general theorem for fruſtums, is this. In the fruſtum of any ſolid, generated by the revolution of any conic ſection about its axis, if to the ſum of the two ends be added four times the middle ſection, $\frac{1}{6}$ of the laſt ſum will be a mean area, and being drawn into the altitude of the ſolid, will produce the content. That is, $\overline{AE + DC + 4FE} \times \frac{1}{6}$ AD is the content of ABCD. This theorem is general for all fruſtums, as well as the complete ſolids, whether right or oblique to the axis, and not only of the ſolids generated from the circle or conic ſections, but alſo of all pyramids, cones, and in ſhort of any ſolid whoſe parallel ſections are ſimilar figures. The ſame theorem alſo holds good for any parabolic *area* ABECD, and is very *nearly true* for the area of any other curve whatever, or for the content of any other ſolid than thoſe above-mentioned.

FRUTES'CENT, *adj.* [*frutex*, Lat.] In botany, ſhrubby, full of ſmall ſhoots.

FRU'TEX, *ſ.* In botany, a ſhrub.

FRUTIC'OSE, *adj.* In botany, hard, woody, fit to bear fruit. *Scott.*

FRUTIFICA'TION, *ſ.* In botany, the young ſhoots of a tree or plant. *Scott. Not much uſed.*

FRY, *ſ.* [*froe*, *foam*, Dan. *Skinner.*] The ſwarm of little fiſhes juſt evolved from the ſpawn.—The angler had the hap to draw up a very little fiſh from among the *fry*. *L'Eſtrange.*

They come to us, but as love draws;
He ſwallows us and never chaws;
By him, as by chain'd ſhot, whole ranks to die;
He is the tyrant pike, and we the *fry*. *Donne.*

So cloſe behind ſome promontory lie
The huge leviathans, t' attend their prey;
And give no chace, but ſwallow in the *fry*,
Which through their gaping jaws miſtake the way.
Dryden.

Any ſwarm of animals; or young people in contempt.—Out of the *fry* of theſe horſeboys, growing up in knavery and villainy, are their kern continually ſupplied and maintained. *Spenſer.*

Draw me no conſtellations there,
Nor dog nor goat, nor bull, nor bear;
Nor any of that monſtrous *fry*
Of animals that ſtock the ſky. *Oldham.*

FRY, *ſ.* A kind of ſieve.—He dreſſed the duſt from malt by running it through a fan or *fry*. *Mortimer.*

To FRY, *v. a.* [*frigo*, Lat. *ffrio*, Welſh; *frijch*, Erſe.] To dreſs food in a pan on the fire.

To FRY, *v. n.* To be cooked in a pan on the fire. To ſuffer the action of fire:

So when with crackling flames a cauldron *fries*,
The bubbling waters from the bottom riſe;
Above the brims they force their fiery way,
Black vapours climb aloft, and cloud the day. *Dryden.*

To melt with heat:

Spices and gums about them melting *fry*,
And phenix like, in that rich neſt they die. *Waller.*

To be agitated like liquor in the pan on the fire.—Oil of ſweet almonds, newly drawn with ſugar, and a little ſpice, ſpread upon bread toaſted, is an excellent nouriſher; and then, to keep the oil from *frying* in the ſtomach, drink mild beer after it. *Bacon.*

Where no ford he finds, no water *fries*,
Nor billows with unequal murmurs roar,
But ſmoothly ſlide along, and ſwell the ſhore,
That courſe he ſteer'd. *Dryden.*

FRY, *ſ.* A diſh of things fried.

FRY'S BAY, a bay on the ſouth-weſt coaſt of the iſland of Antigua: one mile and a half ſouth of Reed Point.

FRY'BERG, a town of Bohemia, in the circle of Prachatiz: nine miles weſt of Roſenberg.

FRYDUF'FRIN, a townſhip of the American States, in Cheſter county, Pennſylvania.

FRY'INGPAN, *ſ.* The veſſel in which meat is cooked on the fire.—We underſtand by out of the *fryingpan* into the fire, that things go from bad to worſe. *L'Eſtrange.*

—A free-

—A freeman of London has the privilege of diſturbing a whole ſtreet with the twanking of a braſs kettle, or a *fryingpan*. *Addiſon*.

"Out of the FRYINGPAN into the fire."—The French ſay, *Tomber de fievre en chaud mal*; To fall from a common into a burning fever. Or, *Tomber de la poële dans la braiſe*. This proverb is applied to perſons, who, impatient under trivial inconveniencies, and raſhly endeavouring to extricate themſelves, for want of prudence and caution, often intangle themſelves in difficulties and perplexities greater than they were in before: *Incidit in Scyllam cupiens evitare Charybdim*, ſay the Latins; and Εις το πυρ εκ καπνε, the Greeks. The Italians ſay as the French, *Cader della padella nelle bragie*. The Germans, *Born regin in a bach kommen*; To come out of the rain into the brook. The Spaniards, *Del lódo, en el arrbyo*.

FRY'INGPAN, a dangerous ſhoal in America, ſo called from its form. It lies at the entrance of Cape Fear river in North Carolina; the ſouth part of it is in north lat. 83. 32. ſix miles from Cape Fear pitch, and twenty-four ſouth-eaſt by ſouth, from the light-houſe on Bald Head.

FRYS'BURGH, or FRYBURG, a townſhip of the American States, pleaſantly ſituated in York county, in the diſtrict of Maine, in a bow formed by the north branch of Great Oſſipee river. It was incorporated in 1777, has a flouriſhing academy, and in 1796 contained 447 inhabitants. This is the ancient Indian village Peckwalket, through which the upper part of Saco meanders; ſixty miles from the ſea, and 120 north by eaſt of Boſton. Lat. 44. 2. N. lon. 70. 47. 30. W.

FRYTH, *ſ.* A plain between woods. *Termes de la Ley* and *Camden's Remains*.

FU'AGE, an ancient tax of 12d. levied for every fire. Edward the black prince, having Acquitain granted him, laid an impoſition of ſuage upon the ſubjects of that dukedom. And it is probable, that the hearth money impoſed anno 16 Car. II. took its original from hence. See FUMAGE.

To FUB, *v. a.* To put off; to delay by falſe pretences; to cheat. It is generally written *fob*. See FOB.—A hundred mark is a long loan for a poor lone woman to bear! and I have borne, and borne, and borne, and have been *fubb'd* off and *fubb'd* off from this day to that day, that it is a ſhame to be thought on. *Shakeſpeare*.

FUB, *ſ.* A plump chubby boy. *Ainſworth*.

FU'CA, *Straits of Juan de*, on the north-weſt coaſt of North America. The entrance lies between Cape Flattery on the ſouth ſide, in north lat. 48. 25. weſt lon. 124. 52. to the oppoſite coaſt of the Quadras iſles, in north lat. 48. 53. 30. It communicates with Pintard's ſound, and thus forms Quadras iſles; in the ſouth-eaſtern coaſt of which lies Nootka ſound. The Spaniards jealous of their right to the American coaſt, eſtabliſhed a ſettlement at this place.

To FU'CATE, *v. a.* [from the Lat. *fuco*, to colour.] To paint the face, to put on falſe colouring. *Bailey*.

FU'CATED, *adj.* [*fucatus*, Lat.] Painted; diſguiſed with paint. Diſguiſed by falſe ſhow.

FUCA'TION, *ſ.* The act of painting the face, the act of diſguiſing by a falſe ſhew; a falſe colouring.

FUCA'TOR, *ſ.* One that paints the face, one that diſguiſes with paint.

FUCEC'CHIO, a town of Italy, in the duchy of Tuſcany: eighteen miles ſouth-ſouth-weſt of Piſtoia.

FUCHS (Leonard), an eminent German phyſician, born in 1501, at Wembding in Bavaria. He early diſtinguiſhed himſelf by his literary attainments; and having, in 1519, viſited the univerſity of Ingolſtadt, he became a convert to the opinions of Luther. He devoted his ſtudies to phyſic, in which he graduated at Ingolſtadt in 1521. For the practice of his art he removed to Munich, where he married; but he left that city to undertake the medical profeſſorſhip at Ingolſtadt. Thence, on account of religion, he removed to Onoltzbach, and was appointed firſt phyſician to the margrave of Brandenburg. In 1535 he was invited to Tubingen, at which place he occupied the chairs of phyſic and anatomy as long as he lived. He was ennobled by the emperor Charles V. and Coſmo, grand-duke of Florence, was deſirous of engaging him by a large ſalary to ſettle at Piſa, but he declined the offer. He was the firſt German phyſician whoſe name became celebrated in foreign countries. He died in 1565. Among his works are tranſlations of various books of Hippocrates and Galen, with commentaries. His *Medendi Methodus*, and *Inſtitutiones Medicæ*, are almoſt entirely founded upon the fathers of medicine above-mentioned. His *Paradoxorum Medicinæ*, Lib. III. contain much invective againſt the Arabians, and correction of their errors, both theoretical and practical. In his work *De Corporis humani Fabrica*, he copies his anatomical deſcriptions from Galen and Veſalius. He ranks among the earlier botaniſts, on account of his *Hiſtoria Plantarum*, folio, Baſil, 1542, which has been frequently reprinted, and tranſlated into ſeveral modern languages.

FUCH'SIA, *ſ.* [ſo named in honour of *Leonard Fuchs*, mentioned above.] In botany, a genus of the claſs octandria, order monogynia, natural order onagræ, *Juſſ.* The generic characters are—Calyx: perianthium one-leafed, funnel-form, coloured, ſuperior, deciduous; tube ovate at the baſe, contracted above it, then gradually widening, patulous, angular; border ſhort, four-parted; parts ovate, acuminate, ſpreading. Corolla: petals four, ovate, acuminate, ſeſſile, ſpreading, the ſame length with the parts of the calyx. Stamina: filaments four, (or eight) filiform, erect, inſerted into the tube of the calyx below the middle, and a little longer than the tube; antheræ twin. Piſtillum: germ inferior, ovate, below the inſertion of the calyx conſtricted; ſtyle ſimple, the length of the ſtamens; ſtigma obtuſe, (club-ſhaped?) Pericarpium: berry ovate, four-grooved, four-celled. Seeds: many, ovate, fixed in a double row to a columnar receptacle in the middle of the berry.—*Eſſential Character*. Calyx, one-leafed, coloured, bearing the corolla, very large; petals, four, ſmall; berry, inferior, four celled, with many ſeeds.

Species. 1. Fuchſia triphylla, or three-leaved fuchſia: peduncles one-flowered; leaves by threes. Root woody, branched, reddiſh; ſtem herbaceous, upright, quite ſimple, reddiſh green, leafy, two feet high at moſt; leaves lanceolate, entire, pale green, a little firm or coriaceous, ſeſſile, diſpoſed in threes; peduncles one-flowered, ſcattered, and forming a ſtraight terminating raceme; flowers large, very fine, of a very bright ſcarlet, having eight ſtamens, not projecting beyond the flower; and the berry is a little larger than an olive, fleſhy, ſoft, reddiſh-black, ſomewhat pubeſcent, of a very pleaſant taſte; the ſeeds are ſmall and brown. Plumier obſerved this plant in St. Domingo; and it was afterwards found by Dr. Houſtoun at Carthagena in New Spain, whence he ſent the ſeeds into England: it muſt have been cultivated here, therefore, by Mr. Miller before 1733, in which year Dr. Houſtoun died.

2. Fuchſia coccinea, or ſcarlet-flowered fuchſia: leaves oppoſite, ovate, toothletted; petals obovate, obtuſe. This is a ſhrub, growing to the height of ſix or ſeven feet; the leaves are commonly oppoſite, on ſhort petioles, of a fine green, having the veins tinged with red, with a fine down on them; peduncles axillary, one-flowered, longer than the leaves; flowers pendulous, bright ſcarlet, with a four-parted calyx, four petals, and eight ſtamens. It is a plant of peculiar beauty, producing its rich pendant bloſſoms through moſt part of the ſummer: the petals in the centre of the flower are particularly deſerving of notice; they ſomewhat reſemble a ſmall roll of the richeſt purple-coloured ribband. Native of Chili, and flowers from May to July. Mr. Lee, of Hammerſmith, is ſaid to have had this plant firſt for ſale.

3. Fuchſia multiflora: peduncles many-flowered. This was found in South America, by Mutis.

4. Fuchſia

4. Fuchſia excortica: peduncles axillary, one-flowered; leaves ovate, alternate. This is a very ſmooth tree; leaves on long petioles, hoary underneath, very finely ſerrate; flowers pendulous, very large; corolla funnel-ſhaped; but, according to Forſter, there is no corolla, except four nectaries, which are ovate-lanceolate, erect, interpoſed between the ſegments of the calyx, and only one-third of their ſize. Others call theſe the petals. Native of New Zealand. Forſter gave it the name of *Skinnera* from Mr. Skinner of Oxford—*acutiſſimo oculatiſſimoque botanico Oxonienſi*, as he expreſſes it.

5. Fuchſia involucrata: flowers involucred. Native of Jamaica.

Propagation and Culture. This is propagated by ſeeds, which muſt be ſown in pots filled with rich light earth, and plunged into a hot-bed of tanners' bark, and treated in the ſame way as other ſeeds from warm countries. In about a month or ſix weeks after the ſeeds are ſown, the plants will begin to appear, when they ſhould be carefully cleared from weeds, and frequently refreſhed with water to promote their growth; and when they are about two inches high, they ſhould be taken out of the pot, and ſeparated carefully; then plant each into a ſmall pot filled with light rich earth, and plunge them again into a hot-bed of tanners' bark, being careful to ſcreen them from the ſun until they have taken new root: after which time they muſt have freſh air admitted to them every day in proportion to the warmth of the ſeaſon, and ſhould be frequently watered. As the ſeaſon advances and becomes warm, the glaſſes of the hot-bed ſhould be raiſed higher, to admit a greater ſhare of air to the plants, to prevent their drawing up weak; and when the plants are grown ſo tall as to reach the glaſſes, they ſhould be removed into the bark-ſtove, and plunged into the tan-bed. In winter theſe plants require to be kept very warm, and at that ſeaſon they muſt not have much water, but in ſummer it muſt be often repeated. Theſe plants are too tender to thrive in the open air in this country, even in the hotteſt part of the year; therefore they ſhould conſtantly remain in the ſtove, obſerving to let in a large ſhare of freſh air in ſummer, but in winter they muſt be kept warm; with this management the plants will produce their flowers, and make a beautiful appearance in the ſtove, amongſt other tender exotic plants.

FUCHSWINKL, a town of Sileſia, in the principality of Nieſſe: two miles and a half ſouth of Patſchkau.

FUCI'NUS, in ancient geography, a lake of Italy in the country of the Marſi; now *Lago di Celano*, from a cognominal citadel, lying in the ſouth of the Abruzzo Ultra, in the kingdom of Naples, near the Apennine. This lake was under the protection of a god of the ſame denomination, whoſe temple ſtood on its banks. According to the teſtimony of ancient authors, it was ſubject to extraordinary riſings and decreaſings. The actual circumference is forty-ſeven miles: the breadth in the wideſt part is ten, in the narroweſt four; its depth twelve feet upon an average. But all theſe have varied prodigiouſly. Two miles up the plain, behind Avezzano, the fragments of boats, ſhells, and other marks of its ancient extent, have been caſually diſcovered; and, on the contrary, there are people who remember when it did not flow nearer than within two miles of Avezzano. An immenſe tract of excellent land is loſt at every increaſe of its level. All round this noble piece of water riſes a circle of grand mountains, ſome of them the higheſt in Italy, if we except the Alps, and many of them covered with ſnow; and at the foot of them are numerous villages, with rich and well-cultivated farms. The environs of the lake, and the ſides of the hills, are covered with fine woods; its waters abound with fiſh of various kinds, and thither repair at ſtated ſeaſons innumerable flights of wild-fowl. As the ſwelling of the lake was attended with incredible damage, the Marſi had often petitioned the ſenate to drain it: Julius Cæſar would have attempted it, had he lived longer. His ſucceſſors were averſe to the project; till Claudius, who delighted in expenſive enterprizes, undertook it. During the ſpace of eleven years he employed 30,000 men in digging a paſſage through the mountain; and when every thing was ready for letting off the water, he exhibited a ſuperb naval ſpectacle on the lake. A great number of condemned criminals were obliged to act the parts of Rhodians and Sicilians in ſeparate fleets, to engage in earneſt, and to deſtroy one another for the entertainment of the court and the multitude of ſpectators that covered the hills. A line of well-armed veſſels and rafts loaded with ſoldiers ſurrounded the ſcene of action, in order to prevent any of the condemned wretches from eſcaping; but it was with great difficulty and many threats that they could be brought to an engagement. When this ſavage diverſion was ended, the operations for opening the outlet commenced, and the emperor was very near being ſwept away and drowned, by the ſudden ruſhing of the waters towards its vent. However, either through the ignorance or negligence of the engineers, the attempt did not anſwer; and Claudius did not live to ſee this great work completed. Nero abandoned the ſcheme through envy. Adrian is ſaid to have let off the waters of the Fucinus; but none now eſcape except through hidden channels formed by nature, which are probably ſubject to be obſtructed, and thus occaſion a ſuperabundance of water in the lake, till ſome unknown or accidental cauſe removes the obſtruction, and again gives a free paſſage.

Sir William Hamilton, who viſited the Fucinus in 1785, ſays, "it is the moſt beautiful lake he ever ſaw, and would be complete if the neighbouring mountains were better wooded." It furniſhes abundance of fiſh, though not of the beſt quality. Claudius's channel he deſcribes as ſtill entire, though filled up with earth and rubbiſh in many parts. He went into it with torches as far as he could. It is a covered underground canal three miles long, part of it cut through a hard rock, and other parts are ſupported by maſon work, with wells to give light. Sir William Hamilton is of opinion, that if the canal were cleared and repaired, it would anſwer the purpoſe, and thereby reſtore a great deal of rich land for cultivation.

FU'CUS, *ſ.* [φυκος, Gr. from פד, *fuka*, Heb. becauſe it was uſed in painting the cheeks.] The ancients gave the name of *fucus* to a purple dye of a moſt beautiful colour, obtained from a ſea-plant; and the women of thoſe times alſo uſed a *fucus* to ſtain their cheeks red; from whence many have ſuppoſed that the ſame ſubſtance was uſed on both occaſions. But, on a ſtrict enquiry, this proves not to be the caſe. The Greeks called every thing *fucus*, that would ſtain or paint the fleſh. This peculiar ſubſtance uſed by the women to paint their cheeks, was diſtinguiſhed from the others by the name of *rizion*, and was a root brought from Syria into Greece. The Latins, in imitation of the Greek name, called this root *radicula*, and Pliny very erroneouſly confounds the plant with the *radix lunaria*, or *ſtruthion* of the Greeks.

The word *fucus* was in thoſe times become ſuch an univerſal name for paint, that the Greeks and Romans had a *fucus metallicus*, which was the ceruſe uſed for painting the neck and arms white; after which they uſed the *purpuriſſem*, or red fucus of the *rizium*, to give the colour to the cheeks. In after-times they alſo uſed a peculiar *fucus* or paint for the purpoſe, prepared of the *Creta argentaria*, or ſilver-chalk, and ſome of the rich purple dyes that were in uſe at that time: and this ſeems to have been very little different from our roſe-pink; a colour now commonly ſold at the milliner's, and uſed on like occaſions.—Thoſe who paint for debauchery ſhould have the *fucus* pulled off, and the coarſeneſs underneath diſcovered. *Collier.*

Women chat
Of *fucus* this and *fucus* that. *Ben Jonſon.*

FU'CUS, *ſ.* [from *fucare*, Lat. to dye or paint; ſome of

1. The Serrated Fucus. 2. Bladder Fucus. 3. Gigartine Fucus. 4. Necklace Fucus. 5. Kaliform Fucus.

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of the *fuci* or ſea-weeds being uſed for this purpoſe.] In botany, a genus of the claſs cryptogamia, order algæ; comprehending moſt of thoſe plants known by the name of SEA-WEEDS. The generic characters are—Seeds produced in cluſtered tubercles, which burſt at their ſummits.—Of this genus, fifty-eight ſpecies are enumerated in the fourteenth edition of *Syſtema Vegetabilium*. Sixty-eight Britiſh ſpecies, beſides many varieties, are enumerated in Dr. Withering's Botanical Arrangements; and ſeventy-two have been more recently deſcribed by Dr. Goodenough and Mr. Woodward, in the Linnæan Tranſactions, vol. iii. Turton, collecting from the reſearches of all botaniſts, gives a catalogue of one hundred and forty-nine ſpecies. A great deal of uncertainty and doubt is ſtill attached to this genus of plants, concerning the fructification, and peculiar mode of propagation. See the article BOTANY, vol. iii. p. 283–288, wherein this ſubject has been already diſcuſſed. We ſhall however add, in this place, the ingenious obſervations of Dr. Goodenough and Mr. Woodward:

"In many *fuci*, two ſorts of fructification are to be ſeen—one warty tubercles, and the other numerous ſingle grains. The obſervation of theſe has led young botaniſts to imagine that they are the differences of ſex. Undoubtedly both theſe appearances are of the female flower, i. e. ſeminal. We have obſerved them occaſionally in F. alatus, vermicularis, and hypogloſſon, ſcattered along the rib or nerve, or on the membrane on each ſide of it. Some few of theſe grains we have obſerved ſwelling apparently into a tubercle, and the others diſappearing. Whether this be the mode of perfecting the fructification, and that ſuch of theſe grains as are impregnated ſwell into ſeminiferous tubercles, whilſt the reſt are abortive and decay; or, whether theſe grains may not be real ſeeds eſcaped from a tubercle, the coats of which are burſt, and adhering to the frond, it were to be wiſhed that naturaliſts reſident on the ſea-ſide would examine and endeavour to determine. The tubercles of the greater part of the fuci open at the point, are imbedded in the ſubſtance and become ſwollen, as in F. ſerratus, ſpiralis, &c. or aſſume a broad warty form, as in laceratus and ſome others; are imbedded, ſmooth, and veſiculiform, as in criſpus, &c. project very much from the frons, as in confervoides; or are ſituated in a pedunculated capſular proceſs, as in filiquoſus, pedunculatus, &c.

"It has been the general opinion of naturaliſts, that the root of fuci is an organ of adheſion only, and not of nutrition. It ſeems ſo admirably calculated for the former of theſe purpoſes, that probably this idea has precluded all conſideration of the latter. How the vegetation is carried on, cannot be preciſely aſcertained; and although it does not ſeem likely, that the root ſhould draw nouriſhment from the rock, ſtone, or other body to which it is affixed, in the ſame manner as the roots of terreſtrial plants from the earth in which they grow; yet it would be difficult to aſſert and bring proofs, that while it fixes, it does not alſo aſſiſt to nouriſh.—They are principles by no means incompatible. It is very poſſible, that the element in which theſe plants grow, may be imbibed at numberleſs minute pores on the ſurface of the frons, imperceptible to our ſight, and that theſe pores may be common to the root with the reſt of the plant; and thus the divine will may be accompliſhed.

"All fuci appear to proceed from a thin, round, entire or fiſſile, glutinous, coriaceous ſubſtance: this will appear to any one who will watch the growth of F. loreus. In ſome few this ſubſtance is fiſſile, and imitates the fibres of land plants: but each fibre attaches itſelf by its extremity, which immediately becomes a flat diſk, to ſome rock, and, if the rock be ſmooth, longitudinally alſo. Gmelin's idea of the root does not accord with this fact. He ſays, that thoſe ſpecies which are thin and papyraceous, have never ſhewn any appearance of root. Never was there a more palpable miſtake. The root in all of them is a flat dilated diſk, more or leſs in proportion to the ſize and ſubſtance of the plant. One of the thinneſt and moſt tender productions, F. laceratus *var.* laciniatus, has not only this kind of root, but ſometimes for the ſpace of two or three lines, has a roundiſh ſtalk before it is diſſolved into its thin laminæ or branches. The root is either purely fibrous, as in ſaccharinus, or between ſolid and fibrous, as in ſerratus, where a tendency to fibrous diviſion is obſervable; but the fibres, which are ſomewhat prominent upon the ſurface, are webbed as it were, or connected by a thick membrane or the intervening part of the diſk; or laſtly, which is by far the moſt numerous, an entire ſolid diſk. There are different modifications of this laſt ſort of root. Sometimes, as in filiquoſus, it becomes in its more advanced age a ſolid woody cone; ſometimes a plant having ſprung from its diſk, conſtantly throws out from its very baſe cluſters of little ſurculi, which accidentally touching the rock form a callus, by which as by a new diſk it adheres, and thence becomes the parent of a new plant. Its original, from a ſmall diſk, is thus ſo covered over and obſcured, that it is not to be diſcerned. This takes place particularly in F. purpuraſcens, which hence is generally deſcribed with a fibrous root, as ſhewn in the Engraving. From this ſurloſity at the baſe, and the ſurculi occaſionally forming new diſks and new plants, ſome fuci appear to have creeping roots.

"The F. natans is deſcribed by Linnæus, *libere natans nec radicatus*. Theſe words muſt be underſtood to mean *floating at large, and not faſtened by any root*. He never could mean, *having no root*; for his own ſpecimen in the herbarium has one, which is a *diſcus explanatus*, and appears to have a very ſlight power of adheſion. It may be preſumed that it is an inhabitant of the deep waters, beyond the reach of human ſight. Storms and tempeſts, diſlodging it from its native bed, bear it in their uncontrollable violence to all the ſhores of the known world. F. bulboſus is a plant *ſui generis*; the diſk immediately aſſumes an inflated bulbous form, the bulb becomes covered with numerous excreſcences, which require very minute inveſtigation. The aſcertainment of its œconomy in this particular, as alſo of its fructification, would be a ſubject of very curious enquiry. All plants produced from thoſe rudiments of new branches obſervable on the ſurface of *mammilloſus*, *rubens*, &c. muſt neceſſarily have a plain diſcoid root, that being the cauſe of their firſt adheſion.

"Great variations in the ſame ſpecies of fucus, will often ariſe from two cauſes, from the mutilations which they ſuffer from the violence of the waves, or other injuries, and their growing nearer, or more remote from, the deflux of freſh water. A very frequent effect of external injury is the proliferous or reproductive tendency which is thereby occaſioned, and which often ſo alters the natural appearance of the plant, as to entirely diſguiſe it to the eye of an unpractiſed obſerver. This is extremely frequent in F. ſinuoſus, when the membranous parts are deſtroyed, and only the nerves or fibres remain, from which young leaves are frequently ſeen to ſhoot in great abundance, giving it an appearance ſo entirely different from that which it at firſt had, that it might eaſily be ſuppoſed a different ſpecies, did not the frequency of this plant afford us an opportunity of ſeeing it in all its varying forms. The F. rubens perhaps owes ſome of its appearances to this cauſe; for the young plants are at firſt entire, and thoſe of a more advanced growth ſhew ſometimes much leſs appearance of this proliferous tendency than others: but we cannot, in this ſpecies, attribute the whole of the particular habit to theſe accidental cauſes. Injuries done to the hardier ſpecies may be more readily traced in their effects; F. inflatus is one inſtance of this, which is probably nothing more than *veſiculoſus*, with a branch inflated or ſwollen by the injury of ſome inſect or outward violence. The *veſiculoſus* var. *foliaceous*, affords one of the moſt remarkable inſtances of reproduction occaſioned by external violence. This was firſt noticed by Major Vel-

ley in Withering's Bot. Arr. vol. iii. p. 241: 'If the F. veſiculoſus receives an injury or fracture in any part of the leaf, provided it be in a healthy vegetating ſtate, it conſtantly throws out abundance of young leaves from the injured part. If even a ſmall aperture be made in the middle of it, a new leaf on either ſide will be found to ſhoot out.' Without this explanation it would appear extraordinary, that, where a branch is broken off, not only a cluſter of new leaves ſhould ſhoot from the fractured end, but that alſo numerous ſimilar ones ſhould be produced from the ſides of the broken branch; which we have obſerved to take place. This will alſo account for the frequent appearance of theſe new leaves on the ſurface of the root itſelf, even whilſt the plant is apparently in a perfectly uninjured ſtate.

"The ſoil, or their growing near freſh water, or altogether diſtant from it, makes a great difference in the ſize and texture of theſe plants. On the more inland banks of the Severn, and in the extenſive æſtuary in the north of Lancaſhire, formed by the influx of the Ken, Leven, and other ſtreams, F. canaliculatus is ſometimes found remarkably luxuriant. At Ilfracombe, where there is a very trifling influx of freſh water, F. faſtigiatus grows ſo ſlender and compact, that no inexperienced perſon would think it the ſame as the large *interceptus*. We ſuppoſe theſe things principally occaſioned by the vicinity or abſence of freſh ſtreams. At Ilfracombe, F. fibroſus grows ſcarcely more than a foot high; but we have ſeen it thrown up on the ſhore at Weymouth after a violent ſtorm, literally appearing to us at firſt ſight to be the root of ſome great tree. The different appearances of *multifidus* are occaſioned by differences of ſoil, ſituation, or growth; as are thoſe of *nodoſus* alſo.

"Some attention ought to be paid to the colour and opacity of Fuci. If plants have lain long in the water, and been left by the reflux of the tide on the ſhore, where they are neceſſarily expoſed to the power of the wind and ſun, the natural colour is oftentimes all diſcharged; they become white or black, &c. according to circumſtances. In drying Fuci, green and red colours retain their proper appearance, but the olivaceous colours uſually appear black. Where the change has been effected by drying only, the original colour may generally be detected by holding up the plant to a ſtronglight of a candle or lamp. Fuci are alſo more or leſs opake from a variety of cauſes. Our variety of *faſtigiatus* called *interceptus* is in general opake: but the new branches produced beyond the rings at the extremity of the frons, that is after injury received, are green and ſomewhat pellucid; for in almoſt all plants the parts repaired are of a ſubſtance and texture weaker and ſofter than the ſound parts. The F. palmatus is a remarkable inſtance of the difference of opacity; ſome ſpecimens being thin as paper and pellucid, and others of a perfectly horny or leathery ſubſtance when dried. All Fuci are more or leſs pellucid and thin in their firſt beginnings.

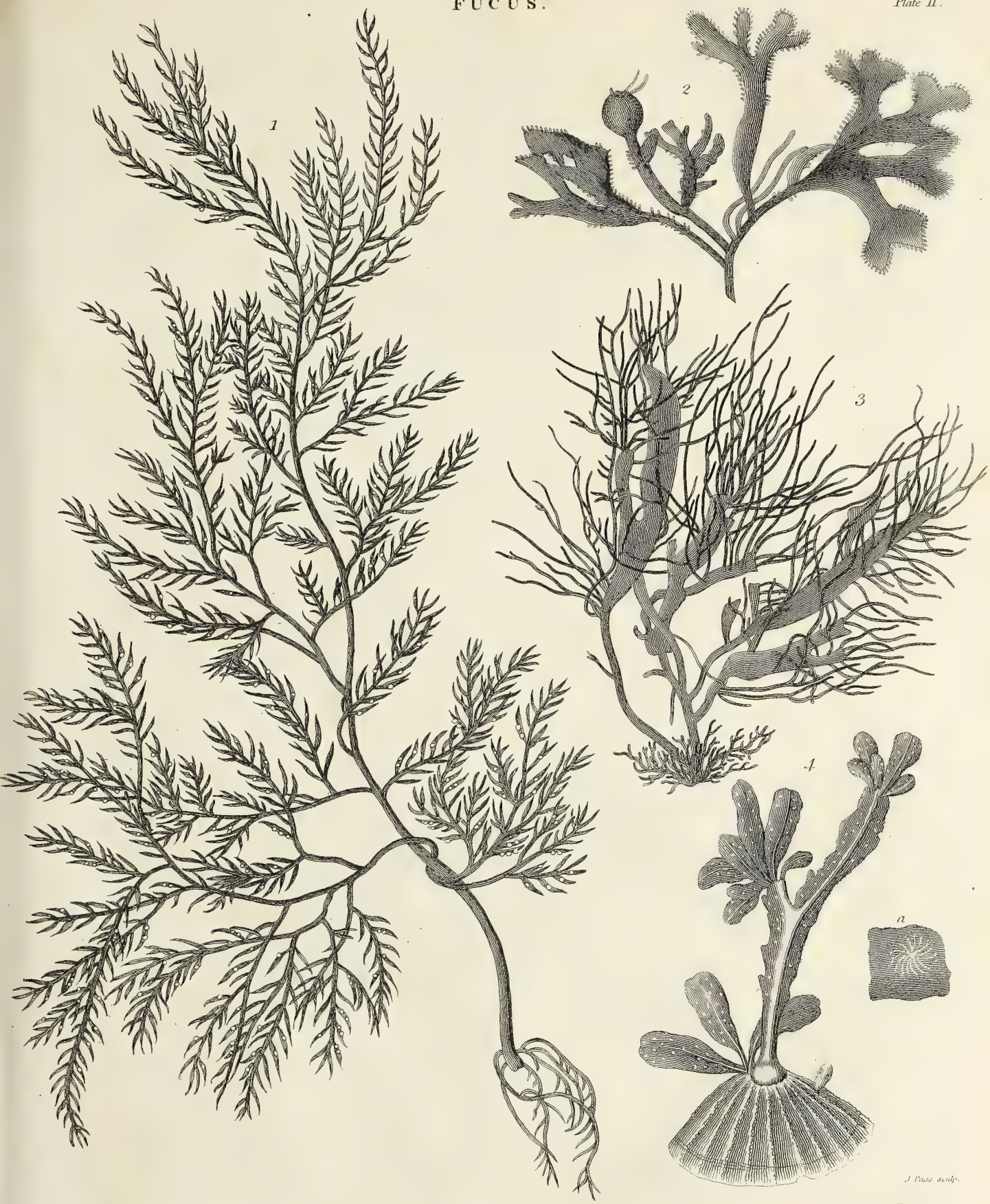
"The ſtructure of the Fuci is ſo very ſingular, that were they not affixed by their baſe to the rocks, as terreſtrial plants are by their roots to the ground, we ſhould be at a loſs how to trace any kind of analogy between them; and yet it has been a favourite employment with all writers; and it countenanced Reaumur in his hypotheſis of Fuci being provided with *male* and *female* flowers. They are formed of one continued ſubſtance, of various texture, from the moſt tender and membranaceous to the moſt firm and thick; numerous beyond deſcription, capable of being turned to the uſe of man in many ways, both as to food and other conveniences, and affording protection and ſupport to myriads of the ſubmarine inhabitants. All this marks the goodneſs of the ever-bleſſed Godhead, 'by whom they are and were created.' That part in creation is not to be found, where ſome principle does not invariably act beneficial to man."

1. Fucus ſerratus, the ſerrated fucus or ſea wrack. The ſerratures on the margin render this ſpecies very diſtinct. The nerve in the centre of the frond, frequently acquires the ſtem-like form. The ſummits in their ripened ſtate are tough, ſolid, and not inflated, neither do they contain any woolly ſubſtance. The tubercles or pericarps are nearly of an ovate form, and at firſt ſeem ſcarcely attached to the ſides of the ſummit; although in maturity ſeveral of them are found cloſely united to minute perforations in the exterior ſurface of the fucus. Theſe veſſels conſiſt of a callous ſubſtance, not much darker than that in which they are imbedded. The middle nerve appears to terminate preciſely at the part where the fructifications commence. The colour of the plant varies through ſeveral ſhades of olive and yelloviſh-brown. In the Fucus Plate I. at fig. 1. is ſhewn a branch of the ſerrated fucus; *a*, tranſverſe ſection of a piece of the branch, magnified, to exhibit the ſeeds; *b*, the external covering.

2. Fucus nodoſus, or bladder fucus. This ſpecies is ſo well known, that any long deſcription of it would be unneceſſary: the large elliptical veſſels or air-bladders, which form its moſt conſpicuous character, and from which its trivial name is taken, ſufficiently diſtinguiſh it from all other Britiſh ſpecies. Theſe veſicles are ſolitary, diſtant from each other, wider than the ſtalk, and decreaſe regularly in ſize from the loweſt to the uppermoſt on each frond or branch. The lower part of the frond is uſually deſtitute of veſicles as well as leaves; but there is always a ſmall veſicle above the uppermoſt leaves, from which the branch continues again naked to the ſummit, which is obtuſe. The diſtichous leaves in an advanced ſtate are ſwelled, replete with mucus, and contain numerous tubercles, each having a correſponding opening on the ſurface of the leaf. It is common on every part of the Britiſh coaſt, on the rocks, and alſo on the piles and other wood-work of the harbours, and is often adorned with large tufts of *Conferva polymorpha*, which appears particularly to attach itſelf to this plant, as ſhewn at *a a*, fig. 2. Plate I. The veſicles vary in ſize from the bigneſs of a pea to that of a crow's egg, and ſome are even larger.

3. Fucus gigartinus. This is readily diſtinguiſhed by the ſharp thorny appearance of the plant, and by its ſeſſile globoſe ſmooth tubercles. Murray, who firſt gave a deſcription of this plant, mentions the tubercle as ſuſtained by a ſhort footſtalk, which ſubtends and is longer than the tubercle. No dependance however can be placed upon this remark. The fructification is always ſeſſile at the baſe or axilla of a little branch. In its perfect form this little branch projects beyond the tubercle; but it is rarely found with any regularity in this ſtate; for, in conſequence of the agitation of the ſea, the branch is often broken off; whence the tubercle appears in its true ſituation, always ſeſſile, ſometimes ſingle on a main branch, ſometimes double or treble on a little one, and not unfrequently terminal. The frond appears ſometimes to have roundiſh branches; but they are generally compreſſed, the upper ones always ſo in a greater or leſs degree, as exhibited in the engraving at fig. 3; *c*, a ſmall branch magnified, to ſhow the globules.

4. Fucus concatenatus, or necklace fucus. The frond extends to half a foot or more in length, riſing from a tough clubbed baſe, which frequently produces three or four obtuſe excreſcences, from the ſides of which the branches originate in the form of linear ſhoots; and theſe throw out in various directions ſhort round ſubulate leaves. The latter, as the plant advances towards maturity, extend in proportion, forming ſecondary branches, which frequently produce others. Theſe branches ſoon loſe their former habit by becoming ſwollen and contracted nearly at equal diſtances, ſo as to form a concatenation of oblong veſicles, having the appearance of pods or ſeed-veſſels. They contain nothing more than a clear gelatinous ſubſtance. A great number of ſeeds crowded together in ſuch a manner as to reſemble minute warts, appear in every direction beneath the ſurface of the branches; when magnified, they ſeem to be fixed in an annular form; leaving a ſmall portion in the centre ſomewhat tranſparent. In maturity they become rather prominent, while



1. The Purple Fucus. 2. Membrane-leaved Fucus. 3. Ciliated Fucus. 4 Vesiculated Fucus.

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the central ſpace is reduced to a kind of puncture; which probably may be deſigned for the ſeed to eſcape. The branches, when young, are very ſlender and filiform: in their mature and diſtended ſtate they are furniſhed with very ſhort and tender ſpinules; and when diſſected are found to be in part hollow. This fucus and its deſcription ſeem to agree with the F. concatenatus of Lightfoot. Whether it may be the fucus which Linnæus has deſcribed under that name, remains a more doubtful circumſtance. The colour of this fucus varies from a darkiſh olive to a blackiſh chocolate, inclining to a very deep red when recent. See a ſprig of this ſpecies in its early ſtate, at fig. 4.

5. Fucus kaliformis, the kaliform fucus. This elegant ſpecies approaches very near to the *verticillatus* of Lightfoot, but appears to differ in ſubſtance, in colour, and in the form and diſpoſition of the branches. The ſubſtance of it is tender, and approaching to gelatinous. The branches which divide directly from the root are filiform, and tubular. They vary extremely in ſize; plants found on the coaſt of Cornwall exceeding the thickneſs of a crow's quill, whilſt ſuch as have been found on the beach at Yarmouth ſcarcely equal that of the ſparrow. The ſecondary branches vary extremely in their manner of proceeding from the primary: ſome are oppoſite, others alternate, but much the larger part appear to grow without any order. The extreme ramuli, which are ſhort, ſubulate, and terminate rather obtuſely, are very often verticillate, generally three or four in a whorl, and, when not regularly ſo, have always a viſible tendency to that diſpoſition. The fructification conſiſts of globular tubercles ſeſſile on the ſides of the ſmaller branches, ſo minute as ſcarcely to be diſtinguiſhed by the naked eye, bright red, and when filled with ſeeds, nearly black. The colour of the plant is a pale delicate red; ſomewhat mixed with green; a change which is obſervable in moſt of the gelatinous ſpecies. This is delineated in Plate I. fig. 5.

6. Fucus purpuraſcens, the purple fucus. This ſpecies differs from all its affinities by its fructification, which conſiſts of roundiſh, or ſometimes oval, ſwellings, placed at ſome diſtance from each other on the ſmalleſt branches, and which, when the plant is mature, are filled with blackiſh purple ſeeds. The fructification is truly an innate tubercle, which occupies the central part of the branch, and, as it ſwells, cauſes that to dilate, and to form a gouty knot which is then externally obſervable. The ſubſtance of the branch is no ways altered by this proceſs, but retains a conſiderable degree of tranſparency. The ſubſtance of the plant, though cartilaginous, is tender, and in ſome ſpecimens very much approaching to gelatinous. The principal ſtem is continued throughout, and is generally naked for a ſmall ſpace at the baſe, after which it is thickly clothed with branches, of which thoſe below the middle are longeſt, and the upper very ſhort, giving a taſty lanceolate outline to the whole frond. The main ſtem terminates obtuſely at the baſe, from whence it throws out ſeveral inverted radicles, as if for claſping more firmly the object to which it is attached. The primary branches are ſometimes oppoſite and ſometimes alternate, but much more frequently grow without order; theſe are again once or twice branched, and the terminal ones are not unfrequently crowded. The colour is wholly purple, yet frequently mixed with green: and the more the plant approaches to being gelatinous, the leſs purple is to be obſerved in it. It is found adhering to the ſub-marine rocks and ſtones on almoſt every part of the Britiſh coaſt. See a figure of this beautiful ſpecies in the Fucus Plate II. fig. 1.

7. Fucus membranifolius, the membrane-leafed fucus. Of this there are four varieties, growing on the coaſt of Norfolk, on the iſle of Portland, and generally on the rocky ſhores of England. The *cilia* on the edges of the variety exhibited in the Fucus Plate II. fig. 2, appear to be the rudiments of leaves or membranes, and to have no concern in the production of any thing relating to the fructification. In all the varieties the fructification is produced on the branches, and is ſupported by a very ſhort pedunclé. The colour varies; ſometimes it is of a light red; ſometimes it appears herbaceous and green; at other times it is found of a parchment colour, and even white, owing to its having been expoſed to the ſun when caſt upon the ſhore. In the figure given in the engraving, the baſe of the leaves and terminal membrane keeps its colour of blood or raw fleſh in all expoſures.

8. Fucus ciliatus, the ciliated fucus. This ſpecies, as it puts on different appearances, has formed three of Gmelin: his *ciliatus*, *ligulatus*, and *holoſetaceus*. The frond is at firſt membranaceous, divided almoſt immediately from the root, the branches one half or three fourths of an inch broad, the margins fringed with numerous *cilia*. This is Gmelin's *ciliatus*. In ſome ſpecimens many *ligulæ* are interſperſed among the *cilia*, which are nothing more than young branches. This is the *ligulatus* of Gmelin. When the plant is arrived at maturity it acquires a thicker ſubſtance, and becomes almoſt cartilaginous; and in this ſtate each ſurface of the frond is frequently rough, with numerous round ſpines from half a line to a line in length, of which ſome are bifid. Some of theſe bear globular tubercles filled with ſeeds, and are certainly no other than the peduncles of theſe tubercles, though many of them are abortive. This is Gmelin's *holoſetaceus*. The marginal *cilia* are always ſimple; ſuch as appear otherwiſe being in fact *ligulæ*, about to form young branches; theſe ſometimes, but rarely, bear tubercles. It adheres firmly to the rocks by its fibrous baſe, and when taken out of the water is generally of a pale fleſh colour, but, on being expoſed to the air, ſoon acquires a full red; but ſometimes it is found of a bright red colour whilſt in a growing ſtate. Found frequently on the Britiſh coaſt. A figure of it is given in Plate II. fig. 3.

9. Fucus veſiculoſus, the veſiculated fucus, or ſea oak. Of this fucus, the various authors who have written on the ſubject, have divided the ſix varieties included in the denomination *veſiculoſus*, into ſix diſtinct ſpecies; but nature has ſhewn the true limit: the appearance of veſicles or bladders in the frond is its unerring characteriſtic. In the firſt variety the veſicles are ranged on each ſide of the rib throughout the frond, and alſo at the axillæ. The frond itſelf varies in having its branches from a quarter of an inch to a full inch in breadth, with edges either plane or undulated, as in *ſpiralis*. The ends of the branches when in fructification are ſwollen and ſomewhat acute. A figure of this variety is given under BOTANY, Plate XV. with the parts of fructification delineated and explained, in vol. iii. p. 287. The ſecond variety, or *divaricatus*, is remarkable for having the bladders in ſome of the axillæ (for it is by no means conſtant in all) extremely dilated, as if two veſicles had been confluent into one; in conſequence the branches fork off wider than uſual, and become divaricated. This variety is found in Southampton river, often ſomewhat twiſted. The third variety, *inflatus*, ſeems to be occaſioned by a diſeaſe. By ſome means or other a body of air is introduced between the two coats of the frond, and thus gives it a bladder-like appearance. That it is accidental is evident, from its not happening uſually in more than one or two branches in any given plant. The fourth variety, *acutus*, is ſo called from the lanceolate terminations of its branches. The ſame plant, however, occaſionally furniſhes lanceolate terminations, and others bluntiſh. The fifth variety, *foliaceus*, is merely a plant which, in the vigour of its growth having been broken off by ſome accident, endeavours to repair itſelf in an irregular manner, producing cluſters of new branches reſembling obovate leaves. Theſe are principally from the broken extremities; but they are alſo found on the ſides, and even upon the expanded root. This is ſhewn in the Fucus Plate II. fig. 4. growing on a ſhell; and at *a*, is exhibited a ſmall part of the frond magnified, to ſhew the fine hairs which Reaumur miſtook for male flowers.

ers. The fixth variety, is the *volubilis* of Mr. Hudſon. It cannot however be called a diſtinct ſpecies; for its form is the ſame nearly as the firſt, only it is extremely twiſted.

10. Fucus canaliculatus, the channeled or furrowed fucus. The diſtinguiſhing character of this fucus, is a channel or furrow, paſſing through every branch on one ſide, in a longitudinal direction. The frond is from two to ſix inches in extent, and has a compact coriaceous baſe, from whence ſeveral branches ſuddenly originate; each one producing ſtems, in a dichotomous ſeries, which in their turn alſo are ſubdivided, and frequently terminate with bifid ſummits. The plant has in general a faſtigiate appearance. The fructification is fixed in the interior part of the ſwollen ſummit, conſiſting of tough elaſtic globular tubercles. In ſome of theſe, when perfectly mature, an appearance like a puncture, cloſely fitted to the perforation in the ſurface of the frond, may ſometimes be obſerved, which ſeems deſigned to facilitate the diſperſion of the ſeeds. Each tubercle contains ſeveral grains, either more or leſs in number. Theſe latter, notwithſtanding their minuteneſs, vary as to their form, which is ſometimes more or leſs ovate. The colour of the grains is a bright cheſnut; and on ſome ſhores, a light olive-green. The fucus, when freſh from the ſea, has a yelloviſh hue, which afterwards turns to a black. A branch of this ſpecies is given in the Fulica Plate, at fig. 3.

11. Fucus obtuſus, the obtuſe fucus. The frond of this fucus is doubly-pinnate, and from three to five inches in length. The ſtems proceed from a compact glutinous baſe, and are ſubdivided into lateral branches, which produce a third ſeries, conſiſting of the obtuſe ſegments. The latter, as well as the branchlets on which they grow, become gradually contracted in length, as they approach the ſummit of the frond: and they both ſeem to obſerve rather an alternate or dichotomous mode of growth. This fucus frequently grows in a more ſimple ſtate upon the edge of the Fucus filum, or on other plants. The frond only conſiſts of a ſmall ſingle ſtem, an inch and half in length, with a few dichotomous lateral ſhoots. In the more luxuriant plants, the ſtems are as large as common packthread, and reſemble iſinglaſs in colour: but the cuticle, which ſurrounds the ſecondary branches and the ſegments, has a beautiful pink colour. The interior ſubſtance of the plant is tender: and, when the fucus is freſh, it has a kind of elaſticity. It may always be diſtinguiſhed by the obtuſe terminations of the ſegments, and frequently by a powerful perfume which it imparts, not unlike that of violets. The fructification conſiſts of oblong-ovate grains or ſeeds, fixed in the interior part of the ſegments. In a ſtate of maturity, they appear like minute opaque warts upon the ſurface. See a figure of this plant in the Fulica Plate, fig. 4.

12. Fucus bracteatus, the thin-leaf fucus. See a figure of this in the Fulica Plate, fig. 5.

13 Fucus ſinuoſus. Stem round: leaves oblong, undulate, ſinuate-pinnatifid, ciliate on the margin; fringe linear-lanceolate, compreſſed, ſeminiferous.

14. Fucus polypodioides. Stem roundiſh, flexuous, branched: leaves membranous, nerveleſs, alternately pinnate, obtuſe entire.

15. Fucus Koelreuteri. Membrano-cartilaginous: ſtem very ſhort, round, branched: fronds entire, linear; younger ones warty.

16. Fucus ſanguineus. Stem round, branched: leaves petioled, ſimple, elliptic, undulate, entire: tubercles peduncled, globular, mucronate.

17. Fucus volubilis. Frond flat, ſpiral, perfoliate, repand toothed.

18. Fucus venoſus. Frond flat, oblong, painted with warty veins.

19. Fucus contortus. Fronds flat, nerveleſs, proliferous towards the top, a little twiſted at the axils, denticulate on the margin, ſomewhat undulate both ſides.

20. Fucus ruſcifolius. Stem branched, winged; leaves oblong-oval, obtuſe, flat, entire, proliferous with pellucid concatenate veins: tubercles globular, ſeſſile.

21. Fucus hyplogoſſum. Branched, winged: leaves linear-lanceolate, flat, entire, proliferous, with reticulate veins: tubercles globular, ſeſſile.

22. Fucus palmetta. Stem round ſimple; the tips expanded into nerveleſs many-cleft leaves: fertile tubercles on the extreme ſegments.

23. Fucas ovalis. Frond filiform, a little compreſſed with uniform vague branches: leaves oval-oblong, fleſhy, entire; upper ones crowded.

24. Fucus lendigerus. Stem filiform, branched: leaves lanceolate, ſerrate: veſicles racemed, ſiliculous, tubercled.

25. Fucus tenuiſſimus. Frond filiform, much branched; branches alternate, capillary, acute: leaves tapering to both ends, bearing ovate-oblong tubercles.

26. Fucus daſyphyllus. Frond round, filiform, branched; branches nearly ſimple: leaves cylindrical, tapering to the baſe, ſcattered, proliferous.

27. Fucus natans. Filiform, compreſſed, pinnate: leaves oblong-lanceolate, ſerrate: veſicles globular, peduncled, ſcattered, on flat dilated peduncles.

28. Fucus acinarius. Filiform, branched: leaves linear, very entire: veſicles globular, peduncled.

29. Fucus ſalicifolius. Stem ſimple, flattiſh: leaves lance-linear, very entire: veſicles globular, axillary, ſeſſile.

30. Fucus turbinatus. Filiform, ſlightly branched: veſicles racemed, one of them turbinate, peltate, with a heart-ſhaped crenate leaf.

31. Fucus bacciferus. Round, filiform, rigid, much branched: leaves linear-lanceolate, ſerrate: veſicles globular, very numerous, on round peduncles.

32. Fucus ſiliquoſus. Compreſſed, branched: leaves two-rowed, alternate, entire: veſicles peduncled, oblong, hollow; pods lanceolate, ſolid.

33. Fucus filiculoſus. Filiform-compreſſed: leaves alternate, ſlightly ſerrate: veſicles nearly globular, peduncled, mucronate.

34. Fucus ſubrepandus. Compreſſed; branches alternate: leaves linear-lanceolate, ſomewhat repand-toothed: veſicles peduncled.

35. Fucus roſa marina. Round, fleſhy, branched: leaves perfoliate, about three in a whorl, marked with a ring in the middle.

36. Fucus ſpermophorus. Membranous, compreſſed, forked, capillary: leaves linear, many-cleft: globules peduncled, lateral.

37. Fucus abrotanifolius. Filiform, compreſſed, doubly pinnate; extreme branchlets veſicular: veſicles innate, elliptic, ending in many-parted tubercled leaflets.

38. Fucus diſcors. Round, branched: leaves linear-lanceolate, ſerrate, alternately pinnatifid; upper ones capillary, many-cleft ovate and tubercled at their tips.

39. Fucus marginalis. Somewhat cartilaginous: frond filiform, round, compreſſed, much branched, beſet on the lateral margin above with umbilicate tubercles.

40. Fucus muſciformis. Membranous, filiform, much branched; branches ſetaceous; margins of the ſtem and branches ciliate.

41. Fucus mucronatus. Round, much branched; branches filiform, ſpinous, the extreme ones veſicular: veſicles innate, lanceolate, filiform, ending in a ſimple tubercled point.

42. Fucus barbatus. Round, much branched, unarmed; branches filiform, tubercled at top: tubercles cluſtered into an ovate cuſpidate pod.

43. Fucus ſelagnoides. Round, much branched; branches panicled, with alternate ſubulate ſomewhat tetraſtichous ſpines tubercled at the baſe; upper ones cloſely imbricate.

44. Fucus tamariſcifolius. Round, much branched; branches filiform, ſpinous, the extreme ones veſicular: veſicles

FUCUS, FULICA, AND FURIA.

1. The purple Gallinule or Sultana Hen. 2. The crested Coot. 3. Fucus canaliculatus.
4. Fucus obtusus. 5. Fucus bracteatus. 6. The Furia infurnalis.

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veſicles roundiſh, innate, ending in ſubulate ſpines tubercled at the baſe.

45. Fucus fibroſus. Round, unarmed, much branched: veſicles roundiſh, moniliform, innate: leaves entire, lower ones linear-lanceolate, uper ones ſetaceous.

46. Fucus ligulatus. Somewhat cartilaginous, flat, veinleſs, bipinnate-ligulate; ligules oppoſite, two-rowed, the extreme ones linear-lanceolate and ſpinous-toothed.

47. Fucus eſculentus. Simple, undivided, enſiform, on a pinnate ſtalk; diviſions two-rowed, oblong, veinleſs.

48. Fucus ceranoides. Somewhat forked, linear, entire, ſcatteredly pinnate; diviſions many-cleft, ſomewhat radiate, tubercled linear-lanceolate rather tumid and pointed at their tips.

49. Fucus membranaceus. Linear, forked, membranous, dotted, diaphanous, very tender, with an undulate nerve ſcatteredly proliferous.

50. Fucus alatus. Membranous, very tender, ſomewhat forked, with alternate decurrent ſegments: tubercles globular, ſeſſile.

51. Fucus dentatus. Membranous, branched, almoſt nerveleſs, alternately pinnatifid; branchlets linear, cut at top, with acute ſegments: fruit racemed.

52. Fucus laceratus. Membranous, very tender, ſlightly veined, with linear obtuſe branches, undulate and curled-laciniate on their margins: tubercles immerſed.

53. Fucus laciniatus. Membranous, branched, veinleſs; branches dilated, palmate, obtuſe with flat margins: tubercles in the marginal fringe.

54. Fucus bifidus. Membranous, dilated, cloven, with divaricate obtuſe ſegments: tubercles marginal, ſcattered.

55. Fucus polyphyllus. Cartilaginous; ſtem roundiſh, flat and toothed towards the top: leaves gradually dilated, entire.

56. Fucus flagellum. Stem ſimple, leafleſs, ſubcoriaceous.

57. Fucus aceroſus. Leafleſs: ſtems round, branched; branches two-rowed, crowded, every where beſet with filiform ſpreading briſtles.

58. Fucus fragilis. Stems filiform, forked, brittle, flat-topped, leafleſs.

59. Fucus debilis. Stems round, branched, ſomewhat flat-topped, tubular weak, leafleſs.

60. Fucus cuneiformis. Leafleſs; branches alternate, three-ſided, jointed; joints wedge-form; angles ſubulate, toothed.

61. Fucus viſcidus. Stems round, forked, flat-topped, branched, two-horned at top.

62. Fucus prolifer. Frondeſcent, green, with ovate flat proliferous joints.

63. Fucus hypnoides. Stem and branches vaguely ſcattered, filiform, round-compreſſed, cartilaginous, pinnate, with ſubulate ſegments.

64. Fucus flavus. Spongy: branches erect, ſomewhat five-angled, laciniate-toothed, areolate, poliſhed.

65. Fucus ciliatus. Membranous, tough, pinnate, clothed and fringed with ſcattered ſubulate moſtly ſimple proceſſes bearing the ſeeds in a globular tubercle.

66. Fucus palmatus. Membranous, glabrous both ſides, palmate; ſegments oblong, nearly ſimple.

67. Fucus edulis. Fleſhy, wedge form, nearly ſimple, glabrous both ſides, rounded at top, entire at the margin.

68. Fucus angulatus. Stem flattiſh: branches divaricate, forked, cloven at top: tubercles lateral and axillaſcattered, minute, opake.

69. Fucus faſcia. Somewhat leathery, ſimple, linear, tapering to both ends, undulate, entire, without ſtem.

70. Fucus phyllitis. Membranous, thin, ſimple, linear-lanceolate, entire, on a ſhort compreſſed ſtem.

71. Fucus ſaccharinus. Leathery, ſimple, ſword-ſhaped, on a round rigid ſtem.

72. Fucus digitatus. Cartilaginous, palmate, with ſword-ſhaped ſegments, on a round ſtalk: root fibrous.

73. Fucus bicornis. Membranous, powdery, dilated, cloven at top.

74. Fucus ſerrulatus. Stems round, branched: leaves linear, ſimple, ſerrulate.

75. Fucus linearis. Flat, linear, forked, taper, acute.

76. Fucus plumaris. Stem round, creeping, branched upwards; branches feather-like, leafy.

77. Fucus folifer. Fronds flat, gradually dilated, forked; the extreme ones warty, with a linear lanceolate entire leaf at the margin and top.

78. Fucus truncatus. Membranous, three and four-forked, with truncate ſegments crenate-curled at top.

79. Fucus glacialis. Flat, linear, forked, many-cleft, much branched, with a very fine fringe.

80. Fucus filicinus. Leathery, nearly cylindrical, much branched; branches ſpread into an orb, with frondoſe ſegments near the tip.

81. Fucus fruticuloſus. Leathery, round, filiform, decompoundly branched above; branches nearly ſetaceous, with alternate lax branchlets, and ſmall pinnate denticulate ſubdiviſions.

82. Fucus bulboſus. Palmate, with enſiform ſegments: ſtem flat, undulate on the margins below; root bulbous, rough.

83. Fucus rubens. Somewhat membranous, forked, proliferous in a chain-like manner; branches elliptic; branchlets dilated and cloven at top.

84. Fucus Norvegicus. Cartilaginous, forked: branches linear, entire, rounded at top: tubercles hemiſphærical, ſeated on the diſk.

85. Fucus criſpus. Cartilaginous, forked, curled-undulate: branches dilated, entire: tubercles ſolitary, ſcattered, immerſed, concave on one ſide.

86. Fucus mamilloſus. Cartilaginous, forked, channelled on one ſide: branches dilated, entire, clothed on both ſides with mamillary tubercles.

87. Fucus geniculatus. Stem and branches jointed: frond forked, pellucid, equal: veſicles terminal.

88. Fucus lortus. Forked, linear, acute, tubercled on all ſides, with a cup-like baſe.

89. Fucus triqueter. Frond, two-edged, branched: leaves petioled, denticulate: veſicles immerſed, oblong, three-ſided.

90. Fucus racemoſus. Stem round, creeping-branched, leafleſs: veſicles obovate, in crowded racemes.

91. Fucus trinodis. Stem round, branched; branches with three inflected veſicles, ſubulate at top.

92. Fucus ſeticuloſus. Round, branched, ſcatteredly warty; branches dilated at the baſe into a papillous veſicle.

93. Fucus pyriferus. Filiform, forked: leaves enſiform, ſolitary, ſerrate; terminal-ones inflated, petioled.

94. Fucus pygmæus. Cartilaginous, forked, dilated and palmate at top: tubercles globular, terminal perforated at top.

95. Fucus burſa-paſtoris. Branched above; branches pinnate-branched: branchlets denticulate, with kidney-form winged ſeſſile mucronate ſcales at the top of the extreme ones.

96. Fucus triangularis. Stem and branches linear, three-ſided, ſerrate, imbricate three-ways with ſpreading two-pointed denticles: globules ſerrate, ſeſſile.

97. Fucus capitatus. Stem round-depreſſed; branches round, ſubulate, alternate, much crowded; veſicles racemed.

98. Fucus corymbiferus. Linear, flat, forked, long, black: leaves alternate, diſtant, ending in denticles: globules terminal, crowded.

99. Fucus dentatus. Membranous, nerveleſs, red, ſomewhat pinnate, with denticulate thickly dotted ſegments.

100. Fucus pilularia. Flat, with alternate branches: frond pinnatifid, with lanceolate ſerrate mucronate ſegments: globules ſolitary and in pairs, ſeſſile and pedunced.

101. Fucus hirſutus. Filiform, round, forked every where clothed with thick hair.

102. Fucus ericoides. Filiform, much branched, hairy.

103. Fucus aculeatus. Cartilaginous, filiform, much branched: branches linear, with marginal ſubulate erect ſpines.

104. Fucus pinnatifidus. Cartilaginous, branched; branches nearly alternate, doubly pinnatifid; ſegments obtuſe, callous, with ovate ſeſſile tubercles.

105. Fucus corneus. Somewhat horny, much branched; branches tapering to both ends, nearly doubly pinnatifid; ſegments oppoſite, ſpread, obtuſe, tubercled at top.

106. Fucus cartilagineus. Cartilaginous, repeatedly pinnate, naked below; ſubdiviſions alternate, compreſſed, nearly linear; ultimate ones ſhort, obtuſe, tubercled at top.

107. Fucus coronopifolius. Cartilaginous, much branched; branches much divided, obſcurely veined, dilated when barren: tubercles globular, on ſhort two-rowed forked or pointed ſtalks.

108. Fucus coccineus. Somewhat cartilaginous, much branched; ultimate branches ſubulate, alternately pectinate on one ſide; tubercles globular, ſeſſile. See Botany Plate X. fig. 26.

109. Fucus crinitus. Cartilaginous, flat, much branched; branchlets with ſimple and forked teeth: tubercles ſcattered.

110. Fucus ſpinuloſus. Cartilaginous, much branched, depreſſed below; branches flattened, ſpread; branchlets nearly oppoſite, pinnately ſetiferous each ſide: briſtles ſubulate, thickened at top.

111. Fucus vermicularis. Soft, pellucid: ſtems round, branched: fronds round, alternately pinnate, petioled, very ſhort, tumid at top.

112. Fucus ſpinoſus. Cartilaginous, leafleſs, branched, with whorled denticles three together.

113. Fucus ſpermophorus. Membranous, forked, compreſſed, capillary: tubercles peduncled, lateral: leaves linear, many-cleft.

114. Fucus cæſpitoſus. Round, branched, with crowded warts tapering to both ends ſimple and branched.

115. Fucus papilloſus. Round, branched, every where clothed with ſpiral rows of warts many-lobed at top.

116. Fucus uvifer. Round, with ſcattered branches, and crowned ovate tubercles.

117. Fucus plumoſus. Rather cartilaginous, repeatedly branched; branches doubly pinnate; ultimate ſegments oppoſite ſubulate, ending in tubercles which are four-cleft when ripe.

118. Fucus tomentoſus. Roundiſh, equal, downy, forked, obtuſe.

119. Fucus tuberculatus. Filiform, forked, unequal in length; angles of the forks rather obtuſe; tips oblong, obtuſe, fruiting.

120. Fucus rotundus. Filiform, forked, flat topped; angles of the forks roundiſh; tips forked, acute, with lateral deformed warts.

121. Fucus faſtigiatus. Filiform, forked, much branched, obtuſe.

122. Fucus lanoſus. Capillary, forked, much branched, rough.

123. Fucus lumbricalis. Filiform, forked, flat-topped; angles of the forks acute; tips fruiting, linear-lanceolate, round.

124. Fucus plicatus. Somewhat horny, filiform, equal, much branched; branchlets rather leaning to one ſide, entangled: tubercles lateral and terminal.

125. Fucus confervoides. Filiform, much branched; branches and branchlets rather leaning one ſide, tapering to both ends: tubercles hemiſphærical, lateral, ſeſſile.

126. Fucus flagelliformis. Filiform, ſlippery, branched; branches, two-rowed, moſtly alternate, long, ſimple or divided, obtuſe.

127. Fucus Filum. Slippery, ſomewhat cartilaginous, filiform, tapering to both ends, tubular, ſomewhat jointed within.

128. Fucus Lycopodioides. Filiform, branched, every where clothed with prominent briſtles: branches moſtly ſimple.

129. Fucus pinaſtroides. Filiform, branched, every where clothed with ſubulate ſimple briſtles rather leaning to one ſide; branches involute at top.

130. Fucus ſubfuſcus. Filiform, much branched; branchlets moſtly alternate, ſubulate, ſhort: fruit axillary, in ſmall oblong pointed cluſtered pods.

131. Fucus coralloides. Stems ſomewhat three-ſided: branches alternately ſpread; branchlets denticulate each ſide, forked at top.

132. Fucus plicatus. Capillary, uniform, much branched, entangled, nearly tranſparent.

133. Fucus rudis. Roundiſh, much branched; branchlets alternate, faſcicled, very ſhort, tubercled, rough.

134. Fucus aphyllanthos. Cartilaginous, round, entangled: ultimate branches ſubulate, thickened at top, or divaricate two ways, with tranſparent tubercles at the divarications.

135. Fucus Serra. Cartilaginous, ſimple, proſtrate, beſet with ſubulate briſtles oppoſite by pairs.

136. Fucus ſertularioides. Cartilaginous, erect, depreſſed, very thin, branched; fronds briſtle-like, imbricate, pinnate; diviſions numerous, incurved, entire.

137. Fucus Wigghii. Filiform, tender, much branched; branchlets ſetaceous, nearly ſimple, ſcattered, with lanceolate pointed tubercles at their tips.

138. Fucus aſparagoides. Filiform, tender, much branched; branchlets ſetaceous, oppoſite, alternately tipt with globular tubercles.

139. Fucus pedunculatus. Filiform, pinnately branched; branches capillary, clothed with obovate ſlightly-peduncled tubercles, filamentous at top.

140. Fucus Bailloviana. Stem flattiſh above, branched; filaments pencil-form, very minute, crowded, lax, floating.

141. Fucus Baſtera. Stem round, branched at top: tubercles one-ſeeded, ovate, alternate.

142. Fucus capillaris. Filiform, alternately much branched; branchlets ſomewhat two-rowed, ſubulate, ſhort.

143. Fucus Thrix. Filiform, tubular, unbranched, capillary, many threads from the ſame baſe. Probably a Conferva.

144. Fucus clavelloſus. Filiform, tender, tubular, much branched; branches and branchlets ſomewhat alternate and two rowed: tubercles lateral cup-ſhaped.

145. Fucus articulatus. Tubular, concatenately jointed, with ovate-cylindrical joints: branches uniform, forked and whorled.

146. Fucus Opuntia. Somewhat compreſſed, ſolid, jointed, much branched; joints obſoletely lanceolate: branches horizontal, pointed.

147. Fucus amphibius. Capillary, much branched: branches and branchlets alternate, involute at their tips.

148. Fucus fruticuloſus. Filiform, branched; branches alternately repeatedly pinnate; ultimate branchlets many-cleft, ſetaceous; tubercles ſeſſile, ovate.

149. Fucus viridis. Repeatedly pinnate, with all the diviſions oppoſite and capillary.

Several of the ſpecies which appear in Gmelin have been removed to other genera. See ULVA, TREMELA, LEPRARIA, CONFERVA, LICHEN, RUPPIA, TREMELLA, ULVA, ZOSTERA, and RHIZOPHORA.

To FUD'DLE, *v.a.* [Of unknown etymology.] To make drunk:

The table floating round,
And pavement faithleſs to the *fuddled* feet. *Thomſon.*

To FUD'DLE, *v.n.* To drink to exceſs.—Men will be *fuddling* ſtill. *L'Eſtrange.*

FU'DIA, a ſmall mountainous iſland of Scotland: two miles north of Barra.

FUE'GO,

FUE'GO, or TERRA DEL FUEGO, a large iſland, ſeparated from the ſouthern extremity of America by a narrow ſea, called the *Straits of Magellan*; and ſo named from the volcanoes obſerved on it. The aſpect of the country is repreſented as dreary and uncomfortable, conſiſting of a chain of ſtupendous rocks, and continually covered with ſnow. Along the coaſts are a great number of inlets, or harbours, for the largeſt ſhips, with rocks near the ſhore, which, however, may be diſcovered by ſounding. The inhabitants are ſaid to be naturally as fair as Europeans, but that they go naked, and paint their bodies with the moſt gorgeous colours. Thoſe on the ſouth ſide are ſaid to be uncivilized, treacherous, and barbarous; while thoſe on the oppoſite ſide are ſimple, affable, and perfectly harmleſs. The ſkins of wild animals are ſometimes uſed to cover their bodies, upon occaſions of extraordinary pomp; and their tents are made of poles, diſpoſed in a conical form, covered with ſkins, or the bark or leaves of trees. Sir Joſeph Banks, Dr. Solander, and ſome others, landed here in the month of January, 1768, which is the time of ſummer in that part of the globe, notwithſtanding which two of the company died of the cold only by ſleeping one night, and Dr. Solander himſelf hardly eſcaped. Lat. 52. 30. to 55. 35. S. lon. 51. 20. to 58. W. Ferro.

FUE'GO, or FOGO, or St. PHILIP, one of the Cape Verd iſlands. The former name it received from a volcano, and the laſt from being diſcovered on St. Philip's day. The volcano iſſues from a lofty mountain, and throws out flames, which may be ſeen at a great diſtance in the night, clouds of aſhes, which ſuffocate cattle, pumice-ſtones, which float on the ſea, and torrents of ſulphur. The iſland is without rivers, almoſt without freſh water; nevertheleſs, it is fertile in maize, gourds, water melons, wild figs, oranges, and apples. There is a great number of goats, which run wild upon the mountains; but the profit on their ſkins is a revenue of the crown. They export alſo the ſkins of cattle, horſes, aſſes, and hogs. The iſland is about five leagues in length. Lat. 15. 10. N. lon. 24. 20. W. Greenwich.

FU'EL, *ſ.* [from *feu*, fire, Fr.] The matter or aliment of fire.—This ſhall be with burning and *fuel* of fire. *Iſa.* ix. 5.

Mov'd by my charms, with them your love may ceaſe;
And as the *fuel* ſinks the flame decreaſe. *Prior.*

To FU'EL, *v. a.* To feed fire with combuſtible matter.—The *fuel'd* chimney blazes wide. *Thomſon.*

And yet ſhe cannot waſte by this,
Nor long endure this torturing wrong;
For more corruption needleſs is,
To *fuel* ſuch a fever long. *Donne.*

To ſtore with firing.—Some are plainly œconomical, as that the ſeat be well watered, and well *fuelled*. *Wotton.*—If any perſon ſhall ſell billet-wood or faggots for *fuel* under the aſſize, &c. on preſentment thereof upon oath by ſix perſons ſworn by a juſtice of peace, the party may be ſet on the pillory in the next market town, with a faggot, &c. bound to ſome part of his body. None are to buy *fuel* but ſuch as will burn it, or retail it to thoſe who do, on pain to forfeit the treble value; alſo no perſon may alter any mark or *aſſiſe of fuel*, on the like forfeiture. 7 *Edw.* VI. c. 7: 43 *Eliz.* c. 14. See the article BILLET-WOOD, vol. iii. p. 39.

FU'ELOE, one of the Faroe Iſlands, in the North Sea.

FUEILLEMO'RTE, *ſ.* [French.] Corruptly pronounced and written *philomot*.—*Fueillemorte* colour ſignifies the colour of withered leaves in autumn.

FU'EN, a river of China, which runs into the Hoang, in the province of Chan-ſi. Lat. 35. 29. N. lon. 128. E. Ferro.

FU'EN-HO'A, a city of China, in the province of Petcheli, celebrated for its extent and the number of its inhabitants, as well as for the beauty of its ſtreets and triumphal arches. It is ſituated near the great wall, amidſt mountains; and has under its juriſdiction, beſides two cities of the ſecond and eight of the third claſs, a great number of fortreſſes, which bar the entrance of China againſt the Tartars.

FUENCALIEN'TE, a town of Spain, in Old Caſtile, near the ſource of the Xalon: three leagues north of Siguenca.

FUENSA'LIDA, a town of Spain, in New Caſtile: eighteen miles north-north-weſt of Toledo.

FUEN-TCHEOU', a city of China, of the firſt rank, in the province of Chan-ſi, ſituated on the river Fuen; celebrated for its hot baths: 280 miles ſouth-weſt of Peking. Lat. 37. 20. N. lon. 129. 6. E. Ferro.

FU'EN-SI', a town of China, of the third rank, in the province of Chan-ſi: twelve miles weſt-north-weſt of Tcho.

FUEN'TE (La), a town of Spain, in the province of Auſtria: twenty miles ſouth-weſt of Santillana.

FUEN'TE-DUEN'NA, a town of Spain, in New Caſtile, ſituated on the Tagus: twenty-four miles ſouth-eaſt of Madrid.

FUEN'TE GINAL'DO, a town of Spain, in the province of Eſtremadura, uſed in the war of ſucceſſion by the Spaniards as a depot of corn and cattle. In 1734, it was taken and plundered by the Portugueſe, under the conduct of the marquis das Minas: ſixteen miles north-weſt of Coria.

FUEN'TE EL OL'MO, a town of Spain, in Old Caſtile, between Segovia and Aranda de Duero.

FUEN'TE-OVEJU'NA, a town of Spain, in the province of Cordova: thirty-two miles north-weſt of Cordova.

FUEN'TE DE LA PIE'DRA, a village of Spain, in the province of Grenada, in which is a medicinal ſpring, whoſe virtues were known to the ancients, and celebrated for curing ſeveral diſorders, particularly the gravel: two leagues from Antequera.

FUEN'TE DEL SABU'CO, or FUENTE de SABURRO, a town of Spain, in the kingdom of Leon: ſixteen miles from Salamanca.

FUENTEL'SO, a town of Spain, in Old Caſtile: thirty-two miles north of Avila.

FUEN'TES, a town of Spain, with a Carthuſian monaſtery, in the kingdom of Aragon, on the Ebro: twenty miles ſouth-ſouth-eaſt of Saragoſſa.

FUEN'TES, a town of Spain, in the province of Leon: thirteen miles north-weſt of Palencia.

FUEN'TES-DE-ONO'RO, a town of Spain, in the province of Leon: thirteen miles weſt of Civdad Rodrigo.

FUR'SBRUNN, a town of Germany, in the archduchy of Auſtria: two miles north-eaſt of Haderſtorf.

FUES'SEN, or FUSSEN, a town of Germany, in the circle of Swabia, and biſhopric of Augſburg, ſituated on the Lech: and a frontier town to Bavaria and the Tyrolese, with a Benedictine abbey and convent of Franciſcans. In 1745, a peace between Auſtria and Bavaria was ſettled in this town: forty-ſeven miles ſouth of Augſburg, and ſixty-five eaſt of Conſtance. Lat. 47. 34. N. lon. 28. 25. E. Ferro.

FU'ESSLY (John-Gaſpard), an ingenious artiſt and writer, born at Zurich in 1706. Having ſtudied the principles of the graphic art under his father, he left his native country in his eighteenth year, and proceeded to Vienna, unfriended and without ſupport. In this city he ſoon attracted the notice of the principal nobility, and it is probable he would have ſpent his whole life there, had not the prince of Schwarzenberg prevailed on him to accept an invitation to go to Raſtadt. At this place he was a favourite with the court; and received every mark of reſpect. From hence he removed to Nuremberg, where he formed an intimate friendſhip with the celebrated Rupezki, under whom he ſtudied with a view to improve himſelf in his profeſſion. At the end of eighteen months he reſolved to pay a viſit to Augſburg and Munich, and then to return to Swiſſerland, where he arrived in the thirty-

thirty-fourth year of his age, and ſoon after married. In conſequence of his talents, he was highly reſpected by moſt of the eminent artiſts. Mengs made him a preſent of a manuſcript treatiſe On the Beautiful, which Fueſsly publiſhed, with a preface; and Winkelman lived with him in habits of the cloſeſt intimacy. He had as much taſte for the beauties of poetry as for thoſe of painting, and maintained an epiſtolary correſpondence with Kleiſt, Klopſtock, Wieland, Bodmer, and Breitinger. Perſons of the higheſt rank, among whom were cardinal Koth and count Firmian of Milan, thought him worthy of their friendſhip. In 1740, and 1742, he loſt two of his beſt friends, Rupezki and Rugendas, both men of the firſt eminence in the art, and whom he highly loved and eſteemed. Being deſirous that their talents and virtues might not remain unknown to poſterity, he wrote a biographical account of them, and as this firſt eſſay in the department of literature met with a favourable reception, he conceived a ſtrong deſire of reſcuing from oblivion ſome of his meritorious countrymen, by publiſhing as complete a hiſtory as poſſible of the artiſts of Swiſſerland. In this work, which he completed with great labour and patience, he ſhewed himſelf a good writer and a ſound critic in the arts. He died at Zurich on the 6th of May, 1782.

FU'ESSLY (John Gaſpar), ſon of the former, a bookſeller at Zurich, who died in the month of April, 1786, has made himſelf known by his works on entomology. Theſe are: 1. *Magazin für die Liebhaber der Entomologie*, Magazine for the Lovers of Entomology, 2 vols. Zurich and Winterthour, 1778, 1779, with coloured plates, 8vo. 2. *Neur Magazin für die Liebhaber der Entomologie*, New Magazine for the Lovers of Entomology, 3 vols. 1786. 3. *Archiv der Inſekten Geſchichte*, Archives of the Natural Hiſtory of Inſects, Zurich and Winterthour, 1781, 1786, in eight numbers, 4to, with many coloured and uncoloured plates. A French tranſlation of this work was publiſhed at Winterthour in 1794.

FUGA'CIOUS, *adj.* [*fugax, fugacis*, Lat.] Volatile.—Its beauties are not of the *fugacious* kind. *Warton on Pope.*

FUGA'CIOUSNESS, *ſ.* [*fugax*, Lat.] Volatility; the quality of flying away.

FUGA'CITY, *ſ.* [*fugax*, Lat.] Volatility; quality of flying away.—Spirits and ſalts, which, by their *fugacity*, colour, ſmell, taſte, and divers experiments that I purpoſely made to examine them, were like the ſalt and ſpirit of urine and ſoot. *Boyle.*—Uncertainty; inſtability.

FUGA'LIA, in Roman antiquity, a feaſt ſuppoſed to be the ſame with the *refugium*, held on the 24th of February, in memory of the expulſion of the kings and the aboliſhing of monarchical government. Others diſtinguiſh the fugalia from the regifuge. And others again think, that the fugalia was the ſame with the *poplifugia*, or the feaſt of Fugia, the goddeſs of joy, occaſioned by the rout of an enemy, which was the reaſon the people abandoned themſelves to riot and debauchery.

FU'GAM FE'CIT, in law, is where it is found by inquiſition, that a perſon *fled* for felony, &c. And if *flight* and felony be found on an indictment for felony, or before the coroner, where a murder is committed, the offender ſhall forfeit all his goods, and the iſſues of his lands, till he is acquitted or pardoned: and it is held, that when one indicted of any capital crime, before juſtices of *Oyer, &c.* is acquitted at his trial, but found to have fled, he ſhall, notwithſtanding his acquittal, forfeit his goods: but not the iſſues of his lands, becauſe by acquittal the land is diſcharged, and conſequently the iſſues. 3 *Inſt.* 218. The party may in all caſes, except that of the coroner's inqueſt, traverſe the finding of a *fugam fecit*; and the particulars of the goods found to be forfeited, may be always traverſed; alſo whenever the indictment againſt a man is inſufficient, the finding of a *fugam fecit* will not hurt him. 2 *Hawk. P. C.* c. 49. Making default in appearance or indictment, &c. whereby *outlawry* is awarded, is a *flight in law*. See the article OUTLAWRY.

FU'GAS, a river of Africa, which runs into the Indian Sea, near Jubo, on the coaſt of Zanguebar.

FUGA'TION, *ſ.* [*fugo*, Lat. to fly.] The act of putting to flight; the act of eſcaping by flight. *Scott. Not much uſed.*

FUGH, *interj.* [perhaps from φεῦ.] An expreſſion of abhorrence. Commonly *foh*.—A very filthy fellow: how odiouſly he ſmells of his country garlic! *fugh*, how he ſtinks of Spain! *Dryden.*

FU'GITIVE, *adj.* [*fugitif*, Fr. *fugitivus*, Lat.] Not tenable; not to be held or detained.—Our idea of infinity is a growing and *fugitive* idea, ſtill in a boundleſs progreſſion, that can ſtop no where. *Locke.*

Happineſs, object of that waking dream,
Which we call life, miſtaking; *fugitive* theme
Of my purſuing verſe, ideal ſhade,
Notional good, by fancy only made. *Prior.*

Unſteady; unſtable; not durable. Volatile; apt to fly away.—The more tender and *fugitive* parts, the leaves, of many of the more ſturdy vegetables, fall off for want of the ſupply from beneath: thoſe only which are more tenacious, making a ſhift to ſubſiſt without ſuch recruit. *Woodward.*—Flying; running from danger:

Whilſt yet with Parthian blood thy ſword is warm,
The *fugitive* Parthians follow. *Shakeſpeare.*

Flying from duty; falling off.—Can a *fugitive* daughter enjoy herſelf, while her parents are in tears? *Clariſſa.*—Wandering; runnagate; vagabond.—The moſt malicious ſurmiſe was countenanced by a libellous pamphlet of a *fugitive* phyſician. *Wotton.*

FU'GITIVE, *ſ.* One who runs from his ſtation or duty.—Unmarried men are beſt friends, beſt maſters, beſt ſervants, but not always beſt ſubjects; for they are light to run away, and almoſt all *fugitives* are of that condition. *Bacon.*

Back to thy puniſhment,
Falſe *fugitive!* and to thy ſpeed add wings,
Leſt with a whip of ſcorpions I purſue
Thy ling'ring. *Milton.*

One who takes ſhelter under under another power from puniſhment.—Your royal highneſs is too great and too juſt, either to want or to receive the homage of rebellious *fugitives*. *Dryden.*—One hard to be caught or detained:

What muſe but his can nature's beauties hit,
Or catch that airy *fugitive*, call'd wit. *Harte.*

FU'GITIVES *over Sea.* By two ancient ſtatutes, 6 Edw. III. c. 10: 5 Rich. II. ſt. 2. c. 2: to depart this realm over the ſea, without the king's licence, except it were great men and merchants, and the king's ſoldiers, incurred forfeiture of goods: and maſters of ſhips, &c. carrying ſuch perſons beyond ſea, forfeited their veſſels; alſo if any ſearcher of any port, negligently ſuffered any perſons to paſs, he ſhould be impriſoned.

FU'GITIVENESS, *ſ.* Volatility; fugacity.—That divers ſalts, emerging upon the analyſis of many concretes, are very volatile, is plain from the *fugitiveneſs* of ſalt and of hartſhorn attending in diſtillation. *Boyle.*—Inſtability; uncertainty.

FU'GUE, *ſ.* [French; from *fuga*, Lat. to chaſe.] In muſic, is when, according to the rules of harmony, the different parts of a muſical compoſition follow each other, each repeating in order what the firſt had performed. See the article MUSIC.—The ſkilful organiſt plies his grave and fancied deſcant in lofty *fugues*. *Milton.*

Long has a race of heroes fill'd the ſtage,
That rant by note, and through the gamut rage;
In ſongs and airs expreſs their martial fire,
Combat in trills, and in a *fugue* expire. *Addiſon.*

FUH-SA'NAH, a town of Africa, in the country of Tunis: 110 miles weſt-ſouth-weſt of Tunis.

FUH-SE', a river of Germany, in the circle of Lower Saxony, which runs into the Allier, near Zell.

FUH'ME, a river of Germany, which runs into the Mulda,

Mulda, two miles ſouth of Ragune, in the electorate of Saxony.

FUI'CHT, or WALDFUCHT, a town of Germany, in the circle of Weſtphalia: three miles eaſt of Sufteren.

FUILLE'E (La), a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Gournay: three leagues weſt of Gournay.

FUIRE'NA, *ſ.* [So named by Rotböll in memory of *George Fuiren*, a learned Dane.] In botany, a genus of the claſs triandria, order monogynia, natural order calamariæ, (cyperoideæ, *Juſſ.*) The generic characters are—Calyx: ament oblong, cylindric, imbricate; ſcales channelled, wedge-ſhaped, three-keeled, awned at the tip; awn cylindric, ſtraight, ſhorter than the glume; flowers between the ſcales, ſolitary, very ſmall, ſitting on a tubercle; glume, beſides the amentaceous ſcales, none. Corolla: glume three-valved; valves petal-ſhaped, obcordate, ſomewhat membranaceous, flat, quite entire, ending in an awn that is bent in. Stamina: filaments three, linear, inſerted into the receptacle between the corolline valves; antheræ linear, erect. Piſtillum: germ large, three-cornered; ſtyle filiform; ſtigmas two, revolute. Pericarpium: none, except the withered corolla, incloſing the ſeed. Seed: three-cornered, naked, without any villoſe hairs.—*Eſſential Character.* Ament imbricate, with awned ſcales; calyx none. Corolla, with three petal-ſhaped obcordate glumes, ending in a tendril.

Fuirena paniculata, a ſingle ſpecies. It is a lofty graſs. Leaves on the ſtem, with looſe, pitcher-ſhaped, hairy ſheaths; panicles terminating and axillary, compoſed of cylindric ſcabrous ſpikelets: theſe are oblong, about three lines in length, conglomerate, blackiſh, imbricate with obovate, concave, rigid ſcales, having three keels uniting at top into an awn. It has the appearance of a Scirpus. Native of Surinam, where it was obſerved by Rolander; and of Jamaica.

FU'LA, a ſmall iſland of Scotland, in the North Sea: twenty miles weſt from the larger Shetland iſland. Lat. 60. 8. N. lon. 0. 40. E. Edinburgh.

FUL'BERT, a learned prelate, by birth an Italian, who flouriſhed at the beginning of the eleventh century. He was a diſciple of the learned Gerbert, who aſcended the pontifical throne in 999, under the name of Sylveſter II. From Rome he journeyed to France, and delivered public lectures in the ſchools of the church of Chartres. His great reputation drew numerous ſcholars to him from all parts, who diffuſed the learning and information acquired under his inſtructions over France and Germany, and the other northern ſtates of Europe; ſo that he is entitled to be conſidered as one of the principal reſtorers of learning and of the ſciences in his time. In 1007, a vacancy taking place in the ſee of Chartres, Fulbert was appointed to that dignity, and governed his church with great vigilance and prudence for more than one-and-twenty years. He was alſo made treaſurer of St. Hilary, at Poitiers, which benefice he retained in conjunction with his biſhopric, and expended its profits in rebuilding the cathedral church. He died in 1028; leaving many Sermons, Hymns, and other pieces, in proſe and verſe. The moſt valuable of his works is a collection of Letters by himſelf and correſpondents, one hundred and thirty-four in number, which ſhew in what eſtimation his character was held by the greateſt men of his time, among whom were Robert king of France, Canute king of England, Richard II. duke of Normandy, William duke of Aquitaine, and other eminent princes and prelates. His works were collected together, and publiſhed in a ſeparate form at Paris, 1608, in 8vo. by Dr. Charles de Villiers; and they are alſo inſerted in the ſeventeenth volume of the *Bibliotheca Patrum*. A Letter of his concerning eccleſiaſtical revenues, not inſerted in his works, is to be met with in the ſecond volume of Dachery's *Specilegium*; and another, written againſt the practice of ſome of his brother prelates who aſſumed the character of warriors, in the firſt volume of D. Merſenne's *Theſaurus Anecdotum*.

To biſhop Fulbert alſo has been aſcribed, The Life of St. Aubert, biſhop of Cambray, of which a mutilated edition was publiſhed by Surius.

FUL'CIBLE, *adj.* [from the Lat. *fulcio*, to prop.] Capable of being propped. *Bailey. Not much uſed.*

FUL'CIMENT, *ſ.* [*fulcimen*, *fulcimentum*, Lat.] That on which a body reſts, which acts or is acted upon at each end, as a balance or a lever.—The power that equiponderates with any weight, muſt have the ſame proportion unto it, as there is betwixt their ſeveral diſtances from the centre or *fulciment*. *Wilkins.*

FU'LCRUM, *ſ.* [from פלך *falk*, a ſtaff, Heb.] A prop. In mechanics, it is the fixed point about which a lever turns and moves.

FUL'CRUM, *ſ.* [from *fultum*, of *fulcio*, Lat. a prop, or ſupport.] In botany, it means ſeveral minute parts, with which vegetables are armed or ſupported. They are of ſeven kinds.—1. Stipula, or ſtipule. 2. Bractea, or bracte. 3. Spina, or thorn. 4. Aculeus, or prickle. 5. Cirrus, claſper, or tendril. 6. Glandula, a gland. 7. Pilus, hairs, or pubeſcence. In Delin. Pl. theſe are otherwiſe enumerated. 1. Petiolus, the petiole, leaf-ſtalk or foot-ſtalk. 2. Stipula. 3. Cirrus. 4. Pubes. 5. Arma, arms or inſtruments of defence; comprehending prickles, thorns, and ſtings. 6. Bractea. 7. Pedunculus, the peduncle, flower-ſtalk, and fruit-ſtalk. Theſe terms are all explained in the article Botany, vol. iii. where figures are given.

FUL'DA, a biſhopric and principality of Germany, in the circle of the Upper Rhine; bounded on the north by Heſſe Caſſel, on the eaſt by the county of Henneberg, on the ſouth by the biſhopric of Wurzburg, and on the weſt by the principality of Iſenberg and Heſſe; about forty miles in length, and from ſeven to twenty-five in breadth. The country is mountainous and woody, with ſome rich arable lands, and ſome ſalt and medicinal ſprings. The aſſeſſment in the matricula of the empire is 250 florins monthly, and the tax for each chamber term 243 rix-dollars four kruitzers. The biſhopric owes its riſe to a cloiſter of benedictine monks, erected in 744, which was raiſed to a biſhopric, in the year 1752, by pope Benedict XIV.

FUL'DA, a town of Germany, and capital of the biſhopric of the ſame name, ſituated on the river Fulda, in the circle of the Upper Rhine. It was only a village before the year 1162, when it was made a town. The biſhop reſides here in a handſome palace. Beſides the cathedral, it has a collegiate church, an univerſity, founded in 1734, a college, an academy, and a convent of benedictines. It is ſituated nearly in the centre of the dioceſe. The chapter is compoſed of thirteen canons. The library contains a number of ancient and rare manuſcripts. Fulda was taken by the hereditary prince of Brunſwick, and prince Charles of Bevern, in 1759, with little loſs on their ſide: the duke of Wurtemberg was preparing a grand entertainment and ball on the very day, but decamped precipitately. The loſs of the enemy was very conſiderable, four battalions being killed, or much wounded, and near 1000 made priſoners: ſixty-three miles eaſt-north-eaſt of Mentz, and forty-three eaſt of Wetzlar. Lat. 50. 22. N. lon. 27. 21. E. Ferro.

FUL'DA, a river of Germany, in the circle of the Upper Rhine, which paſſes by the town of Fulda, and joining the Werra at Minden, they together form the Weſer.

FUL'DA (Charles-Frederic), an ingenious German writer on language and philology, born in 1724, at Wimpfen in Swabia. He received the principles of his education in the Gymnaſium of Stutgard, and at Tubingen; and in 1748 was appointed chaplain to a regiment in Holland. His regiment being afterwards diſbanded, he made a tour through various parts of Germany, and in 1749 completed his ſtudies at Gottingen. In 1751 he was chaplain to the garriſon of Aſperg; and in 1757 and 1758 he obtained ſettlements at Einzengen, and Mühlhauſen. His firſt production was a prize diſſertation on the two princi-

pal dialects of the German language, which was crowned by the royal ſociety of Gottingen. The principal facts and moſt ingenious ideas contained in this eſſay he introduced, ſome years after, in his Dictionary of the German Roots. If the German language was much indebted to Fulda for this work, in which he made the firſt attempt to illuſtrate the philoſophy of its elements, its antiquity, and richneſs, it was not a little improved by the *Sprachforſcher*, or Enquiry into Language, which he publiſhed in conjunction with Naſt, ſenior, of Stutgard. His ſervice to the German language was ſtill farther increaſed by his *Idiotikon*. His philoſophical acuteneſs, extenſive knowledge of language and the hiſtory of it, and his indefatigable diligence in ſearching all the documents that could tend to illuſtrate the object of his purſuit, appear not only in his larger works, but in his ſmaller eſſays and papers, which were publiſhed at different times. He did not, however, confine his reſearches to language alone, but extended them to hiſtory and antiquities in general. Of this he gave various proofs in ſingle diſſertations, which appeared in various collections: ſuch as, On the Origin of the Goths; On the Veroneſe and Vicentine Cimbri; On the Deities of the Germans, &c. But the principal monument of his extenſive and well arranged treaſure of hiſtorical knowledge, ingenuity, and inventive genius, is contained in his Chart of Hiſtory, publiſhed at Augſburg in 1783. In his younger years he was accuſtomed, according to the method of his preceptor Goritz of Stutgard, to render different objects of knowledge eaſier to be retained in the memory by graphic repreſentations. At a period of greater maturity, he exhibited in a ſort of genealogical tree, the connection of all the ſciences, profeſſions, arts, and handicrafts. In a ſimilar manner he repreſented, in 1787, all the organs of ſpeech, with the origin of human language and ideas. His Chart of Hiſtory, a ſketch of which was ready in 1756, aroſe from a ſimilar origin. He died at Einzigen on the 11th of December, 1788. Though the philoſophy of language ſeemed to be the principal field which he cultivated, and which he rendered fruitful with ſo much ſucceſs, his extenſive genius embraced every thing that belongs to the department of the ſciences. He exerciſed his ingenuity alſo in things which one could hardly expect from an abſtract thinker. All the window and bed curtains in the houſe were of his own making; and he not only invented implements for weaving the fringes, but worked them himſelf. The tables, chairs, and ſofas, were alſo of his own conſtruction.

To FULFIL', *v. a.* To fill till there is no room for more. This ſenſe is now not uſed:

Six gates i' th' city, with maſſy ſtaples,
And correſponſive and *fulfilling* bolts,
Sparre up the ſons of Troy. *Shakeſpeare.*

To anſwer any prophecy or promiſe by performance.—They knew him not, nor yet the voices of the prophets which are read every ſabbath-day, they have *fulfilled* them in condemning him. *Acts*, xiii. 27.

The fury bath'd them in each other's blood;
Then having fix'd the fight, exulting flies,
And bears *fulfill'd* her promiſe to the ſkies. *Dryden.*

To anſwer any purpoſe or deſign.—Here nature ſeems *fulfill'd* in all her ends. *Milton.*—To anſwer any deſire by compliance or gratification:

If on my wounded breaſt thou drop'ſt a tear,
Think for whoſe ſake my breaſt that wound did bear;
And faithfully my laſt deſires *fulfil*,
As I perform my cruel father's will. *Dryden.*

To anſwer any law by obedience.—Love worketh no ill to his neighbour, therefore love is the *fulfilling* of the law. *Rom.* xiii. 10.

This I my glory account,
My exaltation, and my whole delight,
That thou in me well-pleas'd declar'ſt thy will
Fulfill'd, which to *fulfill* is all my bliſs. *Milton.*

FUL'FRAUGHT, *adj.* Fully ſtored:

Thy fall hath left a kind of blot
To mark the *fulfraught* man, the beſt endu'd,
With ſome ſuſpicion. *Shakeſpeare.*

FUL'GENCY, *ſ.* [*fulgens*, Lat.] Splendour; glitter.

FUL'GENT, *adj.* [*fulgens*, Lat.] Shining; dazzling; exquiſitely bright.—The illumination is not ſo bright and *fulgent* as to obſcure or extinguiſh all perceptibility of reaſon. *More.*

As from a cloud his *fulgent* head,
And ſhape ſtar-bright, appear'd. *Milton.*

FULGEN'TIUS, a Romiſh ſaint, and African prelate in the ſixth century, born at Lepte in Byzacena, about the year 468. Having loſt his father when very young, he was placed by his mother under able tutors in the Latin and Greek languages, and made extraordinary proficiency in both. He alſo poſſeſſed ſo ſtrong a memory, that when he was a boy he could repeat the whole of Homer; and he could converſe in the Greek language with purity and fluency. Reſolving to embrace a religious life, he early took the vows, and placed himſelf under the diſcipline of Fauſtus, a catholic biſhop, who had eſtabliſhed a monaſtery in the vicinity of Lepte. In 490, the perſecutions of the Arians againſt Fauſtus diſperſed his community, and Fulgentius entered into another monaſtery in the ſame neighbourhood, where the high opinion entertained of his ſanctity and merits, occaſioned his being appointed co-abbot with Felix, the ſuperior of that inſtitution. Before a long time had intervened, the incurſions of the Moors having ſcattered the religious of this monaſtery, Fulgentius embarked for Egypt, with the deſign of aſſociating with the monks in that country; but having put into Syracuſe on his voyage, he was diſſuaded from proceeding by Eulalius, biſhop of that city, becauſe the Egyptian monks had ſeparated from the communion of the church of Rome. After ſpending ſome time in Syracuſe he went to Rome in the year 500, and, having offered his devotion at the ſepulchres of the apoſtles, returned to Africa, where he eſtabliſhed a new monaſtery in the province of Byzacena. At this time Africa was under the dominion of Thraſimond king of the Vandals, who was an Arian, and a bitter enemy to the Catholics. He had iſſued a decree, by which it was forbidden to ordain new catholic biſhops to ſupply the places of thoſe who ſhould die; but the African prelates had come to a determination to pay no reſpect to his tyrannical mandate. Upon a vacancy taking place in the ſee of Ruſpa, he was, though very unwillingly, ordained biſhop of that place, in 504, according to Baronius, but according to other hiſtorians in 508. It was not long after his ordination, that, by a decree of Thraſimond, he was baniſhed, in common with the other catholic biſhops of Africa, to the iſland of Sardinia. In this place of exile, though he was of junior rank among his brother prelates, yet his learning and talents cauſed him to be reſpected by them as their ableſt adviſer and advocate, and they made uſe of his pen in the writings which were circulated in their common name, to vindicate themſelves and their principles. By the treatiſes which he wrote, he acquired ſo high a reputation, that Thraſimond had the curioſity to ſee and hear him; and having ſent for him to Carthage, propoſed to him many difficulties, which, according to the catholic writers, he anſwered to the king's ſatisfaction. The opportunity, however, which he embraced during his reſidence at Carthage, of confirming the Catholics in their opinions, and of converting ſome Arians, having awakened the jealouſy of the arian biſhop, Thraſimond was perſuaded to ſend Fulgentius back to his place of exile in Sardinia. Upon the death of Thraſimond, about the year 522, his ſon Hilderic recalled the catholic biſhops; and Fulgentius, as well as his fellow-ſufferers, met with a joyful reception from the orthodox in Africa. He appears to have ſpent the remainder of his life in peace and tranquillity, diſcharging the duties of his epiſ-

copate

copate with diligence and prudence, and rendering himſelf a ſubject of veneration and eſteem by his piety, humility, and exemplary manners. He was frequently appointed to preſide at the ſynods which were held by his party. He died in 533, in the ſixty-fifth year of his age. He left behind him numerous treatiſes in theological controverſy, homilies, epiſtles, &c. many of which have been long ſince loſt. They have been frequently printed at Baſil, Cologne, Antwerp, Lyons, Paris, and other places; but the beſt edition of them is that publiſhed at Paris by Deſprez, in 1684, in one volume 4to. They are alſo inſerted in the ninth volume of the *Bibliotheca Patrum*. Fulgentius is highly praiſed by Iſiodorus, for the correctneſs and clearneſs of his ſtyle, and by ſome writers he is called the Auguſtine of his age; for he not only conformed to the doctrine of that father, but alſo imitated his diſcipline and auſterity.

FULGEN'TIUS-PLANCIADES (Fabius), ſometimes confounded with the preceding, as he flouriſhed about the year 520, and, according to ſome writers, was biſhop of Carthage. He was the author of three books On Mythology, addreſſed to a prieſt, named Catus. They were publiſhed in 1599, by Jerome Comelin, together with the mythological treatiſes of Hygynus, Julius Firmicus Maternus, and Alberic; and at Amſterdam in 1681, by Munker, in two volumes 8vo. with other treatiſes of a ſimilar nature, under the title of *Mythographi Latini*. This Fulgentius was alſo the author of a curious treatiſe *De primis vocabulis Latinis*, publiſhed at Paris in 1586, 4to. and to him has been attributed a diſſertation On the Allegories of Virgil, addreſſed to Charicles, a grammarian.

FUL'GID, *adj.* [*fulgidus*, Lat.] Shining; glittering; dazzling.

FULGID'ITY, *ſ.* [from *fulgid.*] Splendour; dazzling glitter.

FULGINA'TES, (ſing. *Fulginas*;) anciently a people of Umbria, whoſe chief town was Fulginum, now *Foligno*. *Pliny*.

FUL'GORA, *ſ.* [from *fulgeo*, Lat. to ſhine, lighten, or glitter.] In entomology, the LANTHORN FLY; a genus belonging to the order of hemiptera; the characters of which are: Head hollow, inflated, extended forward: antennæ ſhort, ſeated beneath the eyes, conſiſting of two joints, the outer one larger and globular; ſnout elongated, inflected, four-jointed; legs formed for walking. Twenty-five ſpecies have been aſcertained, viz.

1. Fulgora lanternaria: front or ſnout elongated, and ſtraight; wing-caſes richly variegated with a profuſion of colours; on each wing a large lucid ocellate ſpot. It inhabits Surinam, and all the warm parts of South America; and it emits ſo ſtrong a phoſphoric light from the hollow part of the head, that travellers are ſaid to be directed in their journey at night, by fixing one or two of them to the end of a ſtick. Of this magnificent inſect, madam Merian gives the following account, during her reſidence at Surinam. "On a pomegranate branch I obſerved the larva or beetle, repreſented at fig. 1, in the annexed engraving. It was naturally very ſluggiſh, and conſequently eaſily taken: under the forepart of their head they have a remarkable oblong proboſcis, which they ſtick into flowers when they ſuck their juices. On the 20th day after I had taken it, it became motionleſs, and the ſkin on its back breaking off, it produced a greeniſh fly, which made a ſound ſomewhat like a lute, for which reaſon the Dutch inhabitants called it the *harper*. It had the proboſcis the ſame as in the larva ſtate. The Indians informed me that theſe inſects came to be the flies which the Dutch call *lantaren dragers*, i. e. lanthorn bearer; which gives ſo great a light in the dark, that one may ſee to read and write by it. Having therefore collected a number of theſe flies, I obſerved their firſt metamorphoſis, in which the harper retained its form in every part, except the large tranſparent hood which grew out of the head; the Indians call the fly in this ſtate, the *mother of the lanthorn bearer*, as the beetle is called the *parent of the fly*. Fig. 2, in the engraving, ſhews how the harper is by degrees thus changed into the lanthern bearer. When the Indians had brought me a great many of theſe flies in their firſt or harper ſtate, I put them up in a box, not knowing yet that they ſhone in the dark; but one night an unuſual buzzing ſuddenly awaked and terrified me; I jumpt out of bed, and cauſed a light to be ſtruck, wondering what ſtrange humming was in the houſe, when we perceived that the noiſe proceeded from the box. We therefore pulled off the lid in great terror, and flung it on the ground; when we ſaw, as it were, a flame of fire come out, which again appeared at the flight of every inſect; but having for ſome time viewed them attentively, and they returning to us, we collected them, greatly admiring their ſplendour." The lanthorn fly, in its perfect or mature ſtate, is ſhewn in the engraving, at fig. 3.

2. Fulgora diadema: the head of this ſpecies, though not ſo reſplendent and luminous as the preceding, is nevertheleſs extremely curious. The hood is extended almoſt half an inch above the eyes, in the ſhape of a crown; whence its ſpecific name. It is decorated with many tubercles, like ſtudded horns, on the ſides, and trifid at the tip. The elytra, or wing-caſes, next the body, are of a greeniſh hue, with ſome duſky red patches irregularly placed; and towards the extremity is a large patch of a dark yellow colour. The internal wings are black, but next the body are red, with ſome red ſpots ſcattered over the centre of them. This is a native of India; is very common at Cayenne; and a correct repreſentation of it is given in the engraving at fig. 4.

3. Fulgora candelaria: the front or hood of this ſpecies is remarkably extended in the ſhape of a candle, whence proceeds a ſtrong phoſphoric light. The body and lower wings are of a rich orange colour, except the tips of the wings, which have a border of black. The upper wings or elytra are green, variegated and ſpotted with yellow. The head and front are of a deeper orange, inclining to red. It is a native of China; and is repreſented in the annexed engraving at fig. 5.

4. Fulgora ſerrata: front extended, aſcending, ſerrate four ways. Front with four rows of ſtrong ſharp teeth; wing-caſes brown; wings ocellate at the tip. Inhabits Surinam.

5. Fulgora phoſphorea: front ſubulate, extended, aſcending; body grey, glaucous. Inhabits Surinam.

6. Fulgora noctivida: front extended, aſcending, pointed; body green; wings hyaline. Inhabits Surinam.

7. Fulgora lucernea: front extended, body above greeniſh, beneath, yellow. Inhabits Surinam.

8. Fulgora flammea: front extended, aſcending, round, truncate. Inhabits South America.

9. Fulgora tenebroſa: front extended, ſtraight, truncate; wing-caſes rough, grey; head brown; front ſtraight, round, rufous and truncate; thorax and wing-caſes rough with raiſed brown dots: wings duſky. Inhabits Guinea.

10. Fulgora obſcurata: front extended, ſtraight, truncate; wing-caſes cinereous ſpotted with black; ſnout as long as the body, black with a white baſe, and marked with white dots and two white bands; front obliquely truncate; thorax brown; wings white; legs varied with white and black. Inhabits New Holland.

11. Fulgora adſcendens: front extended, ſubulate, aſcending; wing-caſes ruſty-brown, dotted with white. A ſmall ſpecies; the ſnout above, black, beneath, yellow; head beneath, yellow, with two oblique black ſtreaks, a black dorſal line above; wings hyaline; body, yellow; border of the abdomen black on the back. Inhabits Cayenne.

12. Fulgora faſciata: front extended, aſcending; wing-caſes, ruſty-brown, with two green bands and a green dot behind; head conic grooved, yellow with a brown back; thorax, brown; body, yellow; abdomen rufous above. Inhabits Cayenne.

13. Fulgora truncata: front ſomewhat obtuſe; wings, green truncate. Inhabits India.

14. Fulgora

14. Fulgora plana: front extended, flat, yellowiſh; thorax and wing-caſes ferruginous; head with a groove beneath; fore edge of the thorax, yellow; wing-caſes hyaline at the tip; body, yellow; abdomen ferruginous above. Inhabits Cayenne.

15. Fulgora pallipes: front extended, flat; wing-caſes green, hyaline at the tip; head, black, with a whitiſh edge all round; thorax greeniſh, with a black blotch on the fore-part; wing-caſes a little yellowiſh at the baſe, with a ſtreak of black ſpots before the tip; abdomen above fulvous, black at the tip, beneath, yellow; wings hyaline; legs pale. Inhabits Cayenne.

16. Fulgora folium: front extended, ſhort, ſtraight; body, yellow-green; wings very large, vertical, compreſſed. Inhabits America.

17. Fulgora hyalinata: front, conic, unequal; wing-caſes hyaline, with a black ſtreak. Front ſhort, conic, unequal above, grooved beneath, pale with black ſtreaks and ſpecks; eyes large, white globular; thorax pale, ſpeckled with black; wings hyaline with a black ſpot at the tip; larger than F. obſcurata. Inhabits Bengal

18. Fulgora feſtiva: front conic; wing-caſes, brown, the outer margin greeniſh, with black and fulvous dots; wings red at the baſe; head above, flat, brown, beneath yellowiſh, edged with black; thorax, brown; wings ſangineous tipt with brown. Inhabits Coromandel.

19. Fulgora Europæa: front, conic; body green; wings hyaline, reticulate. Inhabits Europe.

20. Fulgora minuta: front, conic; head and thorax, yellow, with a whitiſh dorſal line; wing-caſes whitiſh; ſmall; antennæ, thicker upwards. Inhabits Saxony.

21. Fulgora limbata: brown; wing-caſes hyaline, with two brown ſpots on the diſk and many on the border, the nerves punctured. Antennæ ſhort, thick, ſetaceous at the tip; wing-caſes longer than the body; wings hyaline immaculate; ſize of the laſt. Inhabits Saxony.

22. Fulgora pellucida: brown; wing-caſes white hyaline, immaculate; ſize of F. Europæa; legs teſtaceous. Inhabits Saxony.

23. Fulgora flaveſcens: yellowiſh; wing-caſes white hyaline, immaculate; ſmall. Antennæ thick, ſetaceous. Inhabits Saxony.

24. Fulgora ſtriata: head black, ſtriate; wing-caſes yellowiſh hyaline, immaculate. Head ſtriate with black and yellow; abdomen beneath, black at the baſe; ſize of the laſt. Inhabits Saxony.

25. Fulgora marginata: black; head, with yellowiſh ſtreaks; fore-edge of the thorax and legs yellowiſh; wing-caſes yellow hyaline. Antennæ duſky, thick; head, black with three-yellowiſh ſtreaks. Theſe five laſt ſmall ſpecies are probably not of this genus, as they differ in their habit and the ſhape of the antennæ. Inhabits Saxony.

FULGO'SIO (Raphael), a celebrated juriſt, a native of Placentia, though the Genoeſe writers claim him for their countryman. He appears to have been a profeſſor at Pavia in 1389, and at Placentia in 1399. He afterwards occupied the chair of law at Padua, where his appointments were finally raiſed to 1000 ducats. He was ſent as juriſconſult to the council of Conſtance, and was of great uſe to that aſſembly by his dexterity and profound knowledge. He was likewiſe frequently delegated on public buſineſs to Venice. He died in 1427, and a ſplendid monument was erected to his memory in the church of St. Antony at Padua. Fulgoſio was the author of ſeveral eſteemed works in his profeſſion, as Commentaries upon the Code and Digeſt, Counſels, &c. He introduced ſeveral new opinions into the ſchools of Italy; of which, that concerning males deſcending through females, which bore his name, was the occaſion of much controverſy even down to late times.

FUL'GOUR, *ſ.* [*fulgor*, Lat.] Splendour; dazzling brightneſs like that of lightning.—When I ſet my eyes on this ſide of things, there ſhines from them ſuch an intellectual *fulgour*, that methinks the very glory of the Deity becomes viſible through them. *More.*

FULGURA'TION, *ſ.* [*fulguratio*, Lat.] The act of lightning.

FUL'HAM, a conſiderable village of Middleſex, four miles weſt from London. The Danes, in 869, wintered at this place till they retired to the continent. It was in the conqueror's time held of the king by the canons of St. Paul. The biſhop of London has a palace here; and the demeſne has belonged to that dioceſe ever ſince the year 1067. From this place to Putney there is a bridge over the Thames, where not only horſes and carriages, but foot-paſſengers alſo, pay toll. The church is both a rectory and a vicarage.

FUL'HAM, *ſ.* A cant word for falſe dice. *Hanmer.*

Let vultures gripe thy guts, for gourd and *Fulham's* hold,
And high and low beguile the rich and poor. *Shakeſpeare.*

FU'LICA, *ſ.* [from *fuligo*, Lat. ſoot; ſo named by Linnæus, on account of its ſooty colour.] In ornithology, the Coot, Gallinule, &c. a genus belonging to the order of Grallæ; the characters of which are: Bill convex; the upper mandible vaulted at its margin over the under, which ſwells behind its tip; noſtrils oblong; front bald; feet four-toed, ſomewhat pinnated. This genus contains twenty-ſeven ſpecies now known, ranged in two ſub-diviſions; thoſe with cloven feet, correſponding to the gallinules or water-hens, amounting to twenty ſpecies; and thoſe with pinnated feet, correſponding to the coots, amounting to ſeven ſpecies. Theſe birds inhabit the water, and live upon worms, inſects, and ſmall fiſh. In the compreſſed form of their body, they reſemble the rails; their bill is thick, their tail and wings ſhort.

I. *Feet cloven.* 1. Fulica fuſca, the brown gallinule: ſpecific character, fron tyellowiſh, bracelets of the ſame colour, its body duſkiſh. Length one foot; bill one inch, olive green; irides red; eyelids white; the plumage above is olive brown; throat, and fore part of the neck, deep aſh-colour, with a tinge of olive; breaſt, belly, and thighs, aſh-colour, the feathers margined with white at the tips; under tail coverts black; bend of the wing white; quills duſky brown; the outer one edged with white; the tail is olive brown; the outer feather white, and a little rounded in ſhape; legs olive brown; garter round the knee yellow. This ſpecies inhabits France, and is a ſolitary bird, frequenting the ſame places with the common gallinules, but not mixing with that ſpecies; it feeds on the ſame food as that bird, and the fleſh is much like it in the taſte. In all probability this is the ſame with Aldrovandus's Italian rail, which is taken in the neighbourhood of Venice with great ceremony; ſeveral perſons wading among the marſhy places, and driving them from the buſhes and places where they lurk, while others being ready with hawks, let them off as ſoon as they take wing. They are ſaid to have been much eſteemed at the time of the above-mentioned author.

There is a variety larger than the preceding; length eighteen inches; bill two inches long; the baſe, and moſt part of the under mandible, yellow; the reſt of the length black; bare part on the fore-head yellow; the head and neck are blackiſh; the upper parts of the body and wings cheſnut; breaſt, belly, and ſides, dull aſh-colour, edged with white; lower belly and vent white; the thighs aſh-colour, croſſed with indiſtinct lines of white; tail rounded in ſhape; the colour cheſnut, except the two outer feathers, which are white; legs green. The female differs only in being paler in colour.

2. Fulica chloropus, the common gallinule, water-hen, or moor-hen: front tawny, bracelets red, body black; is compreſſed at the ſides, bill of a ſimilar form to that of the rail, but ſhorter; in this reſpect it is liker the gallinaceous tribe; its head too is bare, and covered with a thick membrane; a character of which veſtiges may be found in certain ſpecies of rails. It flies likewiſe with

FUCHSIA AND FULGORA.

1. The Lanthorn Fly in its pupa state. 2. The same about half evolved. 3. Its mature state. 4. The Fulgora diadema. 5. The Fulgora Candelaria. 6. The Fuchia coccinea Plant.

London, Published as the Act directs, Nov.r 2.d 1805, by J. Wilkes.

with its feet hanging down; its toes are extended in the ſame manner as thoſe of the rails, but are furniſhed their whole length with a membranous edging; and this is the intermediate ſhade between the birds with cloven feet and thoſe with webbed feet. The habits of the water-hen correſpond to its conformation: it is oftener in the water than the rail, though it does not ſwim much, but only croſſes from one ſide to another. It lurks the greateſt part of the day among the reeds, or under the roots of alders, willows, and oſiers, and leaves not its retreat until evening: it frequents leſs the marſhes and bogs than the rivers and pools. Its neſt is placed cloſe to the brink of the water, and conſtructed with a large heap of broken reeds and ruſhes interwoven. The mother quits her neſt every evening, having previouſly covered the eggs with herbs and ruſhes. The young run as ſoon as they are hatched, like thoſe of the rail, and in the ſame way are led by their dam to the water; and, no doubt, it is for this reaſon that the parents, conſulting future convenience, always build their neſt ſo near the ſurface. So well is the little family conducted and concealed, that it is difficult to rob it during the very ſhort term of its education; for the young ones are ſoon able to ſhift for themſelves, and leave their prolific mother ſufficient time to rear a ſecond brood. It is even averred that they ſometimes have three hatches in a year. Though the water-hen is not migratory, and is every where rather ſcarce, it has been planted by nature in moſt of the known regions of the world, even the remoteſt. Captain Cook found it in the iſle of Norfolk and in New Zealand; Adanſon, in an inlet at Senegal; Gmelin, in the plain of Mangaſea in Siberia, near the Jeniſea, where the ſpecies is very numerous. Nor are theſe birds leſs common in the Antilles, at Guadaloupe, at Jamaica, and in the iſle of Aves, though it contains no freſh water: many are found alſo in Canada, and other parts of North America. This is the moor-hen ſpecies, ſo common in England, frequenting every where the borders of rivers and ponds where weeds grow. The neſt, where and how made, is mentioned above. It lays ſeven eggs, almoſt two inches in length, of a yellowiſh white, marked with irregular reddiſh brown ſpots, which are not numerous, with a few minute ones interſperſed, and breeds, with us, twice in the ſeaſon. It flies awkwardly, and not far at a time, though it runs faſt; and, notwithſtanding it is not web-footed, it ſwims well, and dives to a conſiderable diſtance. Thoſe found in Europe are diſtinguiſhed by their ſize, being about the bulk of a pullet ſix months old; the length from the bill to the tail is a foot, and from the bill to the nails fourteen or fifteen inches; the bill is yellow at the point, and red at the baſe; the membranous ſpace on the front is alſo red, and ſo is the lower part of the thigh above the knee; the feet are greeniſh; all the plumage is of a dull iron grey, clouded with white under the body, and greeniſh brown grey above; a white line borders the wing; the tail, when raiſed, ſhews white on the lateral feathers of the inferior coverts; the plumage is thick, compact, and clothed with down. In the female, which is ſmaller, the colours are lighter; the white waves on the belly are more diſtinct, and the throat is white: the ſpace on the forehead is, in young ſubjects, covered with a down more like hair than feathers.

3. Fulica viridis, the green gallinule: length eleven inches and a half; bill of a greeniſh yellow, as is the bare part of the forehead; the upper parts of the body are of a dull green; the under white; legs of a greyiſh yellow; claws grey. This ſpecies ſeems peculiar to the Eaſt Indies.

4. Fulica melanocephala, the black-headed gallinule: this is wholly blue, except the head and neck, which are black; and there is a broad bare ſpace on the top of the head. The female is ſaid to have a deep fulvous crown; the upper parts of the body the ſame, ſtreaked with white on the ſcapulars; the wings greeniſh, with a fulvous tinge; quills greeniſh blue. It inhabits America.

5. Fulica alba, the white gallinule: this is a large ſpecies, not leſs than two feet in length. The plumage is entirely white; and the forehead, bill, and legs, red. It was found in Norfolk Iſland, by governor Phillip, in his voyage to the ſettlement of Botany-bay.

6. Fulica purpurea, the crowing gallinule: the bill of this is pale; irides fulvous; the plumage of a dark purple colour, with ſome white feathers intermixed; the legs greeniſh yellow. This inhabits Mexico; is a marſh bird, feeding on fiſh, and thought to be not ill-taſted meat. It is called by ſome *yacacintli*, and is ſaid to imitate the crowing of a cock.

7. Fulica flaviroſtris, the favourite gallinule: length twelve inches; bill yellow; upper parts of the plumage deep blue; ſides of the head and neck paler; fore part of the neck blueiſh white; belly, thighs, and rump, white; quills and tail brown, the laſt darkeſt; legs long, yellow; hind toe very long. Inhabits Cayenne.

8. Fulica porphyrio, the purple gallinule, or ſultana hen: front red, bracelets many; body green above, violet below; ſize of a common fowl; length one foot five inches; bill very ſtout at the baſe, compreſſed on the ſides, above an inch and a half in length, and of a deep red; irides fulvous; the forehead bare and red; the head and hind part of the neck, are gloſſy violet; cheeks, throat, and fore part of the neck, violet blue; back, rump, and ſcapulars, dull green, but gloſſy; quills the ſame, but brown within; the tail nearly the ſame, and rounded in ſhape; legs very ſtout, and the colour of the bill. The female is ſmaller than the male. This bird is more or leſs common in all the warmer parts of the globe. On the coaſts of Barbary they abound, as well as in ſome of the iſlands of the Mediterranean. In Sicily they are bred in plenty, and kept for their beauty. It is frequently met with in various parts of the ſouth of Ruſſia, and weſtern parts of Siberia, among reedy places; and in the neighbourhood of the Caſpian ſea not uncommon; but in the cultivated rice-grounds of Ghilar in Perſia, in great plenty and in high plumage. The female makes her neſt among the reeds in the middle of March; lays three or four eggs, and ſits from three to four weeks. That it is common in China the paper-hangings from thence will every where teſtify. It is alſo met with in the Eaſt Indies, the iſlands of Java, Madagaſcar, and many others. Our late navigators ſaw them at Tongataboo in vaſt numbers, as well as in the iſland of Tanna, and other parts. It is alſo common in the ſouthern parts of America. Both the Greeks and Romans, notwithſtanding their voracious luxury, abſtained from eating the porphyrio. They brought it from Lybia, from Comagene, and from the Balearic iſlands, to be placed in their palaces and temples, where it was left at liberty as a gueſt, whoſe noble aſpect, gentle diſpoſition, and elegant plumage, merited, as they thought, ſuch honours. In reſpect to its manners, it is a very docile bird, being eaſily tamed, and made to feed with the poultry, ſcratching the ground with the foot as the cock and hen. It will feed on many things, ſuch as fruit, roots of plants, and grain; but will eat fiſh with avidity, dipping them into the water before it ſwallows them: it will frequently ſtand on one leg, and lift the food to its mouth with the other, like a parrot. A pair of theſe, kept in an aviary, made a neſt of ſmall ſticks, mixed with a quantity of ſtraw, and laid ſix white eggs, perfectly round; but the hen was careleſs of them, and they came to nothing. The fleſh is ſaid to be exquiſite in taſte. See a correct figure of this bird in the annexed engraving.

9. Fulica violacea, the violet gallinule: body dark violet, blue beneath the neck, front and legs red; vent white. Inhabits as the laſt.

10. Fulica Carthagena, the Carthagena gallinule: this ſpecies is diſtinguiſhed by a bare or naked place on its forehead, which is of a fine blue colour. The body is wholly of a rufous brown; and it is about the ſize of the common coot. It inhabits the banks of the rivers and waters about Carthagena.

11. Fulica Cayenenſis, the Cayenne gallinule: this bird approaches the heron by the length of its neck, and removes from the water-hen by the length of its bill. It is the largeſt of the genus, being eighteen inches long; the neck and the head, the tail, the lower belly, and the thighs, are brown grey; the upper ſurface is dull olive; the ſtomach and the quills of the wings are rufous inclined to reddiſh. It is very common in the ſwamps of Guiana, and is ſeen even in the ditches of the town of Cayenne; it lives on ſmall fiſh and aquatic inſects; when young its plumage is entirely grey, which becomes reddiſh after moulting.

12. Fulica ruficollis, the black-bellied gallinule: length ſeventeen inches; bill two inches and a half; baſe red; end yellow; crown brown; hind part of the neck cinereous brown; back greeniſh brown; quills the ſame, with rufous margins: chin white; fore part of the neck and breaſt bright rufous; belly, thighs, vent, and rump, black; ſides and under wing-coverts tranſverſely barred with rufous and black; legs red, and pretty long. This is ſuppoſed to inhabit Cayenne, as it was brought among others from that place.

13. Fulica Maderaſpatana, the Madras gallinule: ſize of a duck; the bill and legs pretty long; forehead bare and white; the plumage on the upper parts of a fine aſh-colour; ſides of the head, and under parts, white; acroſs the lower part of the neck black ſpots in the ſhape of creſcents; quills aſh-colour, edged with black; the tail is ſhort. Found in the neighbourhood of Madras, where it is called *boollu-cory*; alſo at Malabar, and known there by the name of *caunangoly*.

14. Fulica Martinicenſis, the Martinico gallinule: leſs than the common gallinule, and the body more ſlender; length about twelve inches; bill thirteen lines long, yellow, with a red baſe; forehead bald and blue; irides red; the plumage is in general of a fine gloſſy green; but the head, neck, and under parts, are of a changeable blue; the vent white; quills and tail duſky, edged with green; legs yellow; toes very long, and ſlender. That deſcribed by Briſſon differs from the above in having the bare part of the forehead and legs red; and is ſaid to inhabit the Eaſt Indies, as well as America. Many of theſe birds have been brought both from Cayenne and the Weſt-India iſlands, all of which anſwered to the above deſcription, except one, which had the upper parts of the plumage blue-green, tinged with brown; the crown of the head brown; beneath white; a little mottled with black in the middle of the belly, and greatly ſo acroſs the lower part of the neck, juſt above the breaſt; chin quite white; legs brown. Theſe have been brought alive to England; but not ſo tame as to be at large. They lived on rice, bread, lettuce, and other ſuch food, and ſeemed to bear confinement tolerably well.

15. Fulica Novæboracenſis, the yellow-breaſted gallinule: this ſpecies is ſmaller than a quail; crown and hind part of the neck dark olivaceous brown, ſpotted with white; back plain brown; ſcapulars edged with yellowiſh white; breaſt dirty yellow; legs brown. Inhabits the province of New York.

16. Fulica nævia, the grinetta gallinule: length nine inches and three quarters; bill ten lines long; colour of it and the irides yellowiſh green; forehead bare and yellow; the feathers of the head and upper parts black, with rufous margins; thoſe of the back have the margins likewiſe fringed with white; over the eye a white ſtreak; the throat blueiſh aſh-colour; fore part of the neck and breaſt the ſame, with an olive tinge, and ſpotted with black; belly and thighs pale rufous; ſides tranſverſely barred black and white; wing coverts rufous, marked with tranſverſe, waved, or zigzag, lines; quills duſky brown, edged outwardly with white; tail the ſame, but the two middle feathers white on both margins, and rounded in ſhape; legs dirty green; toes very long. This ſpecies inhabits Italy, about Bologna, and known there by the name of *grinetta*, and at Milan called *gillerdine*.

17. Fulica maculata, the ſpeckled gallinule: length eleven inches; bill of a dull yellow; forehead bare, and of the ſame colour; the upper parts of the plumage rufous brown, marked with black and white ſpots on the wings; ſides of the head, throat, and fore part of the neck, white; from thence to the vent brown; the two middle tail feathers are black, tipped with white; the others brown; legs grey. This frequents the marſhes of Germany; and is called *matkneltzel*, and *matkern*.

18. Fulica flavipes, the yellow-legged gallinule: this is about the ſize of the common gallinule; bill yellow, with the end black; edges of the eyelids ſaffron-colour; forehead bare, and of a pale yellow; the reſt of the head, and upper parts of the bird, rufous, ſpotted with black; ſides of the head, and under parts, white; leſſer wing-coverts ſpotted with duſky, and a little brown; the edges reddiſh near the tips; the outer greater ones the ſame, but thoſe near the body white; quills black; tail rufous, ſpotted with black; legs of a pale yellow. Inhabits Germany, where it is called *ſchmirring*.

19. Fulica fiſtulans, the piping gallinule: the bill in this ſpecies is black; the forehead bare, and of a yellowiſh green; the plumage on the upper parts brown; ſides of the head, and under parts, white; and there is a little mixture of the ſame on the wing-coverts; quills and tail brown; legs yellowiſh grey; claws grey. Inhabits Germany, and frequents the banks of rivers and ponds, like moſt of the genus. It is known about Straſburg by the name of *glutt*, and has a ſhrill kind of note not unlike that of a ſmall flute or fife.

20. Fulica cinerea, the creſted gallinule: ſize of the coot; length eighteen inches; bill as in that bird; forehead and crown bare, and of a reddiſh colour, riſing at the back into a knob, not unlike that on the head of the Guinea pintado; the head and neck aſh-colour; chin mottled with white; body and wings greeniſh aſh-colour; outer edge of the laſt pale; under parts of the body pale aſh; middle of the belly white; legs very ſtout and brown. This is ſuppoſed to inhabit China.

II. *Feet pinnated.* 21. Fulica atra, the common coot: ſpecific character, front freſh-coloured, bracelets greeniſh yellow; body blackiſh. The coot, though its feet are not completely webbed, lives habitually on the water, and ſeems even more attached to that element than any fowl, except the diver. It is ſeldom ſeen on land, and is there ſo bewildered and defenceleſs, that it frequently ſuffers itſelf to be caught with the hand. It ſpends the whole day on the pools, which it prefers to the rivers; and, except in walking from one pool to another, it never ſets foot on ſhore; and if the interval be conſiderable, it has recourſe to its wings, and riſes very high; but commonly it flies only in the night. The coots, like many other water-fowl, ſee beſt in the duſk, and the older ones never ſeek their food but in the night. They lurk among the ruſhes the greater part of the day; and, when diſturbed in their retreat, they will bury themſelves in the mud rather than ſpring. They ſeem to make an effort in commencing the motion ſo natural to other birds; and, whether on water or on land, they riſe with difficulty. The young coots, leſs ſolitary or circumſpect, are ſeen at all hours of the day, bouncing with ſmall leaps out of the water, one fronting another. They ſuffer the fowler to approach, yet eye him ſteadily; and they plunge ſo nimbly, the inſtant they perceive the flaſh, that often they elude the ſhot. But in autumn, when theſe birds leave the ſmall pools, and aſſemble on the lakes in France, vaſt quantities are caught. For this purpoſe, as Buffon informs us, a number of ſkiffs are arranged in a line extending the breadth of the lake; this little fleet is rowed forward, and drives the coots into ſome inlet; the birds, then, urged by fear and neceſſity, riſe at once into the air, and, endeavouring to regain the open water, they

paſs

paſs over the heads of the fowlers, and receive a general and deſtructive fire. The ſame plan of operation is then conducted at the other end of the lake, where thoſe which eſcaped have alighted; and what is ſingular, neither the clamours of the ſportſmen, the report of the muſkets, the ſpectacle of the range of boats, nor the death of their companions, can urge theſe birds to diſtant flight. The coot and moor-hen, not being deemed *fleſh* by the canons of the church of Rome, were wont to be bought up with great avidity by the French people, who ate them as a luxury on days of abſtinence, however rank and fiſhy an Engliſh palate might deem them.

Theſe indolent birds have many foes: the moor-buzzard ſucks their eggs, and plunders their young; and to this deſtruction muſt be imputed the fewneſs of their number, conſidering that they are very prolific. The coot lays eighteen or twenty eggs, which are of a dirty white, and almoſt as large as a hen's; and if the firſt hatch be deſtroyed, the mother has often a ſecond, of ten or twelve eggs. She builds in deluged ſpots covered with dry reeds: ſhe ſelects a tuft, on which ſhe raiſes a ſtructure above the level of the water, and lines the cavity with little dry herbs and tops of reeds, forming a large ſhapeleſs neſt, diſtinguiſhable at a diſtance. She ſits twenty-two or twenty-three days, and as ſoon as the young are hatched they jump out of the neſt, and never return again. The mother cheriſhes them under her wings, and they ſleep round her beneath the reeds: ſhe leads them to the water, in which they ſwim and dive well, from the moment of their birth. They are covered at firſt with a ſmoky black down, and look very ugly; only the trace is to be ſeen of the white plate deſtined to ornament their front. It is then that the bird of prey aſſails them ſo cruelly, and often devours the dam and her brood. The old coots, which have repeatedly loſt their callow offſpring, grow cautious from misfortune, and conceal their neſts among the flags on the margin of the pools; and keep together their young among theſe thick coverts. Theſe alone perpetuate the ſpecies; for ſo great is the depopulation of the reſt, that a good obſerver, who has particularly ſtudied the œconomy of the coots, reckons that not above one-tenth eſcape the talons of the birds of prey, particularly thoſe of the moor-buzzard.

The coots breed early in the ſpring, and eggs are found in their body as ſoon as the end of winter. They reſide on the pools the greateſt part of the year, and in ſome places they are permanent ſettlers. Yet in autumn they generally leave the ſmall pools, and reſort to the large ones, where they aſſemble in a great flock: there they often remain till December; and when the ſnows, and eſpecially the froſts, drive them from the high and chill tracts, they deſcend into the plains, which enjoy a milder temperature; and the want of water, rather than the cold, conſtrains them to ſhift their haunts. M. Hebert ſaw them in a very ſevere winter on the lake of Nantau, which is late in freezing: he ſaw them alſo in the plains of Brie, though in ſmall numbers, in the depth of winter. But, moſt probably, the bulk of the ſpecies remove by degrees to the adjacent countries, which are warmer; for, as their flight is laborious and tardy, they cannot journey to any great diſtance; and indeed they appear again as early as February. The coots are ſpread through the whole of Europe, from Italy to Sweden: they are found, too, in Aſia. They occur in Greenland, if Egede rightly tranſlates two words in the language of the natives, by the great and little coot. In fact, the ſpecies conſiſts of two families, which live in the ſame lake without ever cohabiting, and are diſtinguiſhed from each other ſolely by their bulk, and not by the colour of the frontal plate, as ſome pretend; for in both, that is uſually white, and becomes red only in the ſeaſon of love.

This thick naked membrane, which covers the fore ſide of the head like an eſcutcheon, and which made the ancients give the coot the epithet of *bald*, ſeems to be a production of the upper layer of the ſubſtance of the bill, which is ſoft, and almoſt fleſhy near the root. The bill is faſhioned into a flat cone at the ſides, and is bluiſh white; when in the ſeaſon of incubation, the frontal plate aſſumes its vermilion tint. All the plumage is furniſhed with a thick down, covered with very cloſe feathers; it is of a leaden-black, full and deep on the head and neck, with a white ſtreak on the fold of the wing: no difference indicates the ſex. The coot is almoſt as large as a domeſtic hen, and its head and body are nearly of the ſame form; its toes are half-webbed, fringed fully on both ſides with a membrane, ſcalloped into feſtoons, whoſe knots correſpond to the joints of the phalanges: theſe membranes are, like the feet, of a leaden colour: above the knee a ſmall portion of the naked leg is circled with a garter of reddiſh yellow; the thighs are thick and fleſhy. Theſe birds live chiefly, as well as the water-hens, on aquatic inſects, ſmall fiſh, and leeches; yet they alſo gather ſeeds, and ſwallow pebbles; their fleſh is black, moſtly lean, and has a marſhy taſte. Dr. Turton has four varieties: 1. With the body black, and wings white. 2. Entirely black; breaſt and belly waved with ferruginous. 3. Brown; chin, belly, and primary quill-feathers, white; head ſpotted with white; upper mandible red. 4. White; head and wings with a few ſpots.

22. Fulica aterrima, the greater coot: front white; bracelets red; body blackiſh. This is of a larger ſize than the preceding, but differs not in the colour of the plumage, except that it is blacker. Briſſon diſtinguiſhes the two by the colour of the bare part of the forehead, which in this is white; and the garters, which are of a deep red. This bird is ſaid to be found in Lancaſhire and Scotland. It ſhould ſeem to be a mere variety of the former, did not authors join in advancing the contrary. They are more plentiful on the continent, being found in Ruſſia and the weſtern part of Siberia very common; and are alſo in plenty at Sologne and the neighbouring parts, where they call it *judelle*. The people eat them, like the former, on maigre days, and the fleſh is much eſteemed.

23. Fulica leucoryx, the Swediſh coot: this has the eyelids pale, and the whole of the wing white, but the ſhafts of the prime quills black; in other things it is like the common ſpecies. It was found dead in the park at Stockholm.

24. Fulica Æthiops, the ferruginous coot: ſize of the common one, and differs only in having the feathers of the breaſt and belly ferruginous, undulated with brown. It was diſcovered by Sparrman; but the place is not mentioned.

25. Fulica Americana, the cinereous coot: this is ſmaller than the common coot; bill pale green; bare place over the forehead ſmaller than in that ſpecies, and white; plumage above duſky aſh-colour; beneath the ſame, but paler; chin duſky white; down the middle of the belly the ſame; legs blue-black; the membranes on each ſide of the toes much narrower than in any other of the ſpecies. It is ſaid to inhabit North America.

26. Fulica Mexicana, the Mexican coot: ſize of the greater coot; bill red, with a yellow tip; forehead bare and red; head, neck, breaſt, belly, thighs, under wing and tail coverts, purple; back, rump, and wing coverts, pale green, varied with blue and fulvous; quills pale green. It inhabits Mexico.

27. Fulica criſtata, the creſted coot. (See the Engraving.) This is ſtill larger than F. aterrima; bill red at the baſe, and whitiſh the reſt of its length; the whole crown bare, of a deep red, and riſing into a bifid detached membrane like a creſt, as in ſome of the jacana ſpecies; the whole plumage blue black; legs duſky, and ſhaped like thoſe of the common ſpecies. It inhabits Madagaſcar, and probably China alſo; as it is ſeen in ſome Chineſe drawings. The garter above the knee is of three colours, red, green and yellow; and the Chineſe name of the bird is *tzing kye*.

FULIGINOUS, *ſ.* [*fuligineux, ſe*, Fr. *fuliginoſus*, Lat.] Sooty; ſmoky.—Burrage hath an excellent ſpirit to re-

preſs the *fuliginous* vapours of duſky melancholy, and to cure madneſs. *Bacon.*

Fuliginous vapours are ſuch as are replete with ſoot or other craſs matter, and have the property of fixing themſelves to ſurrounding bodies in the form of black powder. In the firſt fuſion of lead, there exhales a great deal of fuliginous vapour, which being retained and collected, makes what is called litharge. And lamp-black is what is gathered from the fuliginous vapours of pines, and other reſinous wood, when burnt.

FULI'GINOUSLY, *adv.* By being ſooty:

Or whence the joy 'mid columns, towers,
'Midſt all the city's artful trim,
To rear ſome breathleſs vapid flowers,
Or ſhrubs *fuliginouſly* grim. *Shenſtone.*

FULI'GO, *ſ.* in botany, a genus of the claſs cryptogamea, order fungi. The generic characters are, a cellular-fibrous bark; the fibres penetrating in a reticulate manner through the ſeminal maſs.

Species. 1. Fuligo ſeptica: yellow, lacinate. 2. Fuligo capitata: yellow, capitate. 3. Fuligo panicea: white, ſeſſile, grain-like.

FU'LIMART, *ſ.* [This word, of which *Skinner* obſerves that he found it only in this paſſage, ſeems to mean the ſame with *ſtoat*.] A kind of ſtinking ferret.—The fichat, the *fulimart*, and the ferret, live upon the face, and within the bowels of the earth. *Walton.* See MUSTELA.

FULKE (William), a learned Engliſh divine in the ſixteenth century, born in London, where he received the early part of his education; and in 1655 he was entered of St. John's college, Cambridge. He was choſen fellow of St. John's in 1664, and diſtinguiſhed himſelf by his proficiency in the different branches of academic learning, particularly mathematics and theology. In 1665, when he was M. A. of three years ſtanding, he was incorporated in the ſame degree in the univerſity of Oxford. Having formed an acquaintance with the learned Thomas Cartwright, lady Margaret's profeſſor of divinity, who was attached to puritan ſentiments, Mr. Fulke embraced the ſame opinions; and by his ſentiments he rendered himſelf ſo obnoxious, that he was expelled from his college, and reduced to maintain himſelf by delivering lectures in his private apartments. Afterwards he was patroniſed by the earl of Leiceſter, who in 1571 preſented him to the living of Warley in Eſſex, and in 1573 to that of Didington in Suſſex. Soon afterwards he went to France in the capacity of chaplain to the Engliſh embaſſy. After his return to his native country, he was made maſter of Pembroke-hall in the univerſity of Cambridge, and was alſo appointed lady Margaret's profeſſor. He died in 1589. He is ſpoken of as a man of great merit, who, when young, ſuſtained the character of a good philoſopher, and when more advanced in life, that of a pious and ſolid divine. The moſt important of his works is his Comment upon the Rheims Teſtament, 1580, folio, which in 1617 was reprinted with the title, The Text of the New Teſtament of Jeſus Chriſt, tranſlated out of the vulgar Latin by the Papiſts of the traitorous Seminary at Rhemes; with Arguments of Books, Chapters, and Annotations, pretending to diſcover the Corruption of divers Tranſlations, &c. Whereunto is added the Tranſlation out of the original Greek, commonly uſed in the Church of England, with a Confutation of all ſuch Arguments, Gloſſes, &c. This work underwent ſeveral impreſſions, and was attacked with much fury by the catholic writers; to whoſe animadverſions the author replied in A Defence of the ſincere and true Tranſlation of the Holy Scriptures into the Engliſh Tongue, againſt the manifeſt Cavils, &c. of Gregorio Martin, &c. 1617, folio.

FULL, *adj.* [fulle, Sax. *vol*, Dut.] Replete; without vacuity; having no ſpace void.—Better is an handful with quietneſs, than both the hands *full* with travel and vexation of ſpirit. *Eccl.* iv. 6.—Gay religion's *full* of pomp and gold. *Milton.*—He is *full* of wants which he cannot ſupply, and compaſſed about with infirmities which he cannot remove. *Tillotſon.*

From yon bright heaven our author fetch'd his ire,
And paints the paſſions that your eyes inſpire;
Full of that flame, his tender ſcenes he warms,
And frames his goddeſs by your matchleſs charms.
Granville.

Stored with any thing; ſupplied with any thing:

Full of days was he;
Two ages paſt, he liv'd the third to ſee. *Tickel.*

Plump; ſaginated; fat.—A gentleman of a *full* body having broken his ſkin by a fall, the wound inflamed. *Wiſeman.*—Saturated; fated.—I am *full* of the burnt offerings of rams. *Iſa.* i. 11.—The alteration of ſcenes feeds and relieves the eye, before it be *full* of the ſame object. *Bacon.*—Crowded with regard to the imagination or memory.—Every one is *full* of the miracles done by cold baths on decayed and weak conſtitutions. *Locke.*—That which fills or makes full; large; great in effect.—Water digeſteth a *full* meal ſooner than any liquor. *Arbuthnot.*—Complete; ſuch as that nothing further is deſired or wanted.—The reſurrection of Jeſus from the dead hath given the world *full* aſſurance of another life. *Tillotſon.*

What remains, ye gods,
But up and enter now into *full* bliſs? *Milton.*

Complete without abatement; at the utmoſt degree.—At the end of two *full* years Pharaoh dreamed. *Geneſis.*—Containing the whole matter; expreſſing much.—Where my expreſſions are not ſo *full* as his, either our language or my art were defective; but where mine are *fuller* than his, they are but the impreſſions which the often reading of him have left upon my thoughts. *Denham.*—Strong; not faint; not attenuated.—I did never know ſo *full* a voice iſſue from ſo empty a heart; but the empty veſſel makes the greateſt ſound. *Shakeſpeare.*

Dryden taught to join
The varying verſe, the *full* reſounding line. *Pope.*

Mature; perfect.—In the ſultanry of the mamalukes, ſlaves reigned over families of free men; and much like were the caſe, if you ſuppoſe a nation, where the cuſtom were that after *full* age the ſons ſhould expulſe their fathers out of their poſſeſſions. *Bacon.*

So law appears imperfect, and but given
With purpoſe to reſign them in *full* time
Up to a better covenant. *Milton.*

[Applied to the moon.] Complete in its orb.—Towards the *full* moon, as he was coming home one morning, he felt his legs faulter. *Wiſeman.*—Not continuous, or a full ſtop.—Therewith he ended, making a *full* point of a hearty ſign. *Sidney.*—Spread to view in all dimenſions.—'Till about the end of the third century, I do not remember to have ſeen the head of a Roman emperor drawn with a *full* face: they always appear in profile. *Addiſon.*

FULL, *ſ.* Complete meaſure; freedom from deficiency.—We'll ſee thoſe things affected to the *full*. *Shakeſp.*

If where the rules not far enough extend,
Some lucky licence anſwer to the *full*
Th' intent propos'd, that licence is a rule. *Pope.*

The higheſt ſtate or degree:

The ſwan's down feather,
That ſtands upon the ſwell at *full* of tide,
Neither way inclines. *Shakeſpeare.*

The whole; the total:

The king hath won, and hath ſent out
A ſpeedy pow'r to encounter you, my lord:
This is the news at *full*. *Shakeſpeare.*

The ſtate of being ſatiated.—When I had fed them to the *full*. *Jer.* v. 7.—[Applied to the moon.] The time in which the moon makes a perfect orb.—Brains in rabbits,

woodcocks, and calves, are fulleſt in the *full* of the moon. *Bacon.*

FULL, *adv.* Without abatement or diminution.—The moſt judicious writer is ſometimes miſtaken after all his care; but the haſty critic, who judges on a view, is *full* as liable to be deceived. *Dryden.*

A modeſt bluſh ſhe wears, not form'd by art;
Free from deceit his face, and *full* as free his heart.
Dryden.

With the whole effect.—'Tis the pencil, thrown luckily *full* upon the horſe's mouth to expreſs the foam, which the painter, with all his ſkill, could not perform without it. *Dryden.*—Exactly:

Full in the centre of the ſacred wood,
An arm ariſeth of the Stygian flood. *Addiſon.*

Directly.—He met her *full*, but full of wareſulneſs. *Sidney.*

He then confronts the bull,
And on his ample forehead aiming *full*,
The deadly ſtroke deſcending pierc'd the ſkull. *Dryden.*

It is placed before adverbs and adjectives, to intend or ſtrength their ſignification:

Adam was all in tears, and to his guide
Lamenting turn'd *full* ſad. *Milton.*

Full well the god his ſiſter's envy knew,
And what her aims and what her arts purſue. *Dryden.*

FULL-A'CORNED, *adj.* Fed full with acorns.—Like a *full-acorn'd* boar. *Shakeſpeare.*

FULL-BLOWN, *adj.* Spread to the utmoſt extent, as a perfect bloſſom:

My glories are paſt danger; they're *full-blown*:
Things, that are blaſted, are but in the bud. *Denham.*

My *full-blown* youth already fades apace;
Of our ſhort being 'tis the ſhorteſt ſpace!

Stretched by the wind to the utmoſt extent:

He who with bold Cratinus is inſpir'd,
With zeal and equal indignation fir'd;
Who at enormous villainy turns pale,
And ſteers againſt it with a *full blown* ſail. *Dryden.*

FULL-BOT'TOM, *ſ.* A full-bottomed wig:

Adieu, ye bobs! ye bags, give place,
Full-bottoms come inſtead. *Shenſtone.*

FULL-BOT'TOMED, *adj.* Having a large bottom.—I was obliged to ſit at home in my morning-gown, having pawned a new ſuit of clothes and a *full-bottomed* wig for a ſum of money. *Guardian.*

FULL-EA'RED, *adj.* Having the heads full of grain:

As flames roll'd by the winds conſpiring force,
O'er *full-ear'd* corn, or torrents raging courſe. *Denham.*

FULL-EY'ED, *adj.* Having large prominent eyes.

FULL-FED, *adj.* Sated; fat; ſaginated:

All as a partridge plump, *full-fed* and fair,
She form'd this image of well-bodied air. *Pope.*

FULL-HEART'ED, *adj.* Full of courage.—The enemy *full-hearted*. *Shakeſpeare.*

FULL-LA'DEN, *adj.* Laden 'till there can be no more added.—It were unfit that ſo excellent a reward as the goſpel promiſes ſhould ſtoop down, like fruit upon a *full-laden* bough, to be plucked by every idle and wanton hand. *Tillotſon.*

FULL'-ORBED, *adj.* Like a full moon:

Twelve thouſand creſcents all ſhall ſwell
To *full-orb'd* pride, and fading die. *Maſon.*

FULL-SPRE'AD, *adj.* Spread to the utmoſt extent:

How eaſy 'tis, when deſtiny proves kind,
With *full-ſpread* ſails to run before the wind;
But thoſe that 'gainſt ſtiff gales laveering go,
Muſt be at once reſolv'd and ſkilful too. *Dryden.*

FULL-SUM'MED, *adj.* Complete in all its parts.—The cedar ſtretched forth his branches, and the king of birds neſted within his leaves, thick feathered, and with *full-ſummed* wings faſtening his talons eaſt and weſt; but now the eagle is become half naked. *Howel.*

FULL'-WINGED, *adj.* Having full wings:

And often to our comfort ſhall we find
The ſharded beetle in a ſafer hold,
Than is the *full-wing'd* eagle. *Shakeſpeare.*

To FULL, *v. a.* [*fullo*, Lat.] To cleanſe cloth from its oil and greaſe.

FULL'AGE, *ſ.* The money paid for fulling or cleanſing cloth.

FULL'ER, *ſ.* [*fullo*, Lat.] One whoſe trade is to cleanſe cloth.—His raiment became ſhining, exceeding white as ſnow; ſo as no *fuller* on earth can whiten them. *Mar.* ix. 3.

The clothiers have put off
The ſpinſters, carders, *fullers*, weavers. *Shakeſpeare.*

FUL'LER (Nicholas), a learned Engliſh divine in the latter end of the ſixteenth and beginning of the ſeventeenth century, born at Southampton, in 1557. He was educated in claſſical learning at the free-ſchool in that town, from whence he was taken into the family of Dr. Horne, biſhop of Wincheſter, and was made ſecretary to that prelate. The ſame poſt was filled by him under Dr. Watſon, the ſucceſſor of Dr. Horne; but upon his death within about three months after his advancement, Fuller determined to retire from that ſituation, and became tutor to the ſons of a knight in Hampſhire, two of whom he accompanied to Oxford in 1584, and was matriculated at the ſame time with them, as a member of St. John's college. Having taken both his degrees in arts, he left the univerſity, and retired to his native town; and ſoon afterwards he was admitted to orders, and preſented with the ſmall rectory of Allington, near Ambreſbury, in Wiltſhire. He was alſo made a prebendary of Saliſbury; and was afterwards preferred by the biſhop of Wincheſter to the valuable rectory of Biſhop's-Waltham, in Hampſhire, where he died in 1622–3, aged ſixty-five years. He was the author of *Miſcellanea Theologica*, lib. iii. firſt printed at Heidelberg, in 1612, in 8vo. and afterwards at Oxford, with the addition of a fourth book, in 1616, and at London in 1617. Theſe *Miſcellanea* having fallen into the hands of the celebrated Druſius, he accuſed the author of plagiariſm, in taking many of the beſt remarks in them out of his works, without making any acknowledgment of his obligations. Againſt this charge Fuller ſatisfactorily vindicated himſelf in his *Miſcellanea Sacra, cum Apologia contra V. Cl. Johan. Druſium*, publiſhed at Leyden in 1622, 4to. and conſiſting, beſides the author's defence of himſelf, of two additional books to his former work. Theſe *Miſcellanea* are inſerted in the ninth volume of the *Critici Sacri*, and diſperſed throughout the whole of Pool's *Synopſis Criticorum*. Fuller was alſo the author of an Expoſition of Rabbi Mordecai Nathan's Hebrew Roots, with Notes; and a Lexicon; both which remain in MS. in the Bodleian library at Oxford, and are honourable memorials of the author's erudition and induſtry.

FUL'LER (Nicholas), a contemporary of the preceding, who was educated at Emanuel college, Cambridge, to which he was a benefactor. He became a counſellor of ſome eminence, and a bencher of Gray's-inn, in London. He had the boldneſs to reſiſt, in his profeſſional character, the illegal and oppreſſive proceedings of archbiſhop Bancroft, and his brethren of the high-commiſſion court, againſt a miniſter of Yarmouth, and a merchant of that town, who were impriſoned for being preſent at a pretend-

ed conventicle. His pleading was however ineffectual for the releaſe of his clients; and by thus honeſtly diſcharging his duty, he drew down the vengeance of the commiſſioners upon himſelf. By a ſcandalous ſtretch of power he was ſhut up in cloſe confinement, whence neither the interceſſion of his friends nor his own petitions could obtain his releaſe to the day of his death. His Argument, in the caſe above-mentioned he gave to the public in 1607, in 4to. and it was afterwards reprinted in 1641.

FULLER (Thomas), an eminent Engliſh divine and hiſtorian in the ſeventeenth century, born at Aldwincle in Northamptonſhire, in 1608. He was inſtructed in grammar learning by his father, and made ſuch a rapid progreſs, that at twelve years of age he was ſent to Queen's college, Cambridge, of which his mother's brother, Dr. Davenant, afterwards biſhop of Saliſbury, was then maſter. To his academic exerciſes he applied with extraordinary diligence and ſucceſs, and took his degree of B. A. in 1624; and that of M. A. in 1628, with univerſal applauſe. Being prevented from obtaining a fellowſhip in his college, by a prohibition in the ſtatutes againſt the admiſſion of two fellows from the county of Northampton, he removed to Sidney college, and was choſen miniſter of St. Bennet's pariſh in Cambridge, and attracted numerous audiences by his admirable pulpit talents. In 1631, he obtained a fellowſhip in Sidney college, and was alſo collated to a prebend in the cathedral church of Saliſbury. In the ſame year he ſent his firſt publication into the world, which was of the poetical kind, entitled David's heinous Sin, heartie Repentance, and heavie Puniſhment, 8vo. He was afterwards preſented to the rectory of Broad-Windſor, in Dorſetſhire, where he exerciſed his miniſterial duties with great diligence and acceptability for ſeveral years. In 1635 he took his degree of bachelor of divinity; and about three years afterwards married a young gentlewoman, by whom he had one ſon, but loſt his wife about the year 1641. Before her death he publiſhed, in folio, his Hiſtory of the Holy War, which met with a favourable reception, and has gone through ſeveral editions. He was now induced by the ferment in the nation, which indicated an approaching civil war, to remove to London, where he expected to enjoy greater ſecurity than in his country reſidence, at the ſame time that he ſhould have more ready acceſs to the works and converſation of the learned. In the metropolis he ſoon acquired high fame as a preacher, and was choſen lecturer of the Savoy, in the Strand. When the parliament met in 1640, a convocation was alſo aſſembled in king Henry VIIth's chapel, of which Fuller was a member. When after the diſſolution of that parliament the convocation was commiſſioned to continue its ſitting, in order to draw up new canons for the better government of the church, he was one of the ſelect committee; but diſapproved of ſome of the ſteps taken by the convocation, which in the next parliament were voted to be contrary to the king's prerogative, to the eſtabliſhed laws and ſtatutes of the realm, to the rights of parliament, to the property and liberty of the ſubject, tending to ſedition, and of dangerous conſequence. His diſapprobation of them, however, did not ariſe from a want of zeal in his attachment to the king's cauſe. Of this he gave abundant evidence by his exertions, in public as well as private, to ſerve the royal intereſts. With this view, after the king had left London with a determination to commence hoſtilities againſt the parliament, Mr. Fuller, on the anniverſary of his majeſty's inauguration in 1642, preached at Weſtminſter-abbey from 2 Sam. xix. 30. "Yea, let them take all, ſo that my lord the king return in peace." His ſermon on this occaſion, which was printed, gave great offence to the parliament party, and brought the preacher into ſome danger. About this time he publiſhed his Holy State, in folio. In 1643, after finding that to prevent being ſilenced and ejected as other royaliſts had been, he muſt take an oath againſt which his conſcience proteſted, he withdrew to the king at Oxford. He obtained a letter of recommendation to ſir Ralph Hopton, and was received by him in the capacity of chaplain. The duties of that appointment he conſtantly exerciſed, as the army moved from place to place, omitting no opportunity, when favourable intervals offered, of purſuing his ſtudies, of making hiſtorical collections, and, particularly, of gathering materials for his Worthies of England. The aſſiduity with which he carried on his reſearches in this wandering kind of life, was aſtoniſhing; and he at the ſame time maintained a very extenſive correſpondence on the ſubjects of his enquiries. After the battle on Cheriton-down, in 1644, lord Hopton drew the remains of his army to Baſing-houſe, where he left his chaplain; who animated the garriſon to ſo vigorous a defence of that place, when it was ſoon afterwards beſieged by ſir William Waller, that the latter was obliged to abandon his enterpriſe, after his army had ſuſtained conſiderable loſs. When afterwards the king's army under lord Hopton was driven into Cornwall, Mr. Fuller had the leave of that nobleman to retire to Exeter, where he reſumed his ſtudies, and preached conſtantly with great ſatisfaction to the citizens. During his reſidence at Exeter he was appointed chaplain to the infant princeſs Henrietta Maria, who was born in that city in 1643; and ſoon afterwards received from the king a patent for his preſentation to the living of Dorcheſter, in Dorſetſhire. The offer of the living he declined, as inconſiſtent with his intention of ſettling in London when the war ſhould be terminated; but he continued his attendance upon the princeſs until Exeter was obliged to ſurrender to the parliament forces in 1646, when he was permitted by the general, ſir Thomas Fairfax, to remove to London. Upon his arrival, he met with but a cold reception from his former pariſhioners at the Savoy, probably on account of the part which he had taken in politics; and he found his lecture-ſhip filled by another perſon. It was not long, however, before he was choſen lecturer at St. Clement's-lane, in Lombard-ſtreet; whence he ſoon removed to St. Bride's church, in Fleet-ſtreet. Afterwards he appears to have been ſubjected to a temporary ſuſpenſion from the office of public preaching by the parliament party; but in 1648 that ſuſpenſion ſeems to have been withdrawn, and he was preſented to the rectory of Waltham-abbey, in Eſſex, by the earl of Carliſle. In that and the following year he employed ſome engravers to embelliſh with maps and other copper-plates his view of the Holy Land, entitled, A Piſgah Sight of Paleſtine, and the Confines thereof; with the Hiſtory of the Old and New Teſtament acted thereon, in folio, publiſhed in 1650. In the following year he publiſhed a collection of lives, ſome written by himſelf, and ſome by others, of religious reformers, martyrs, confeſſors, biſhops and other learned divines, foreign and domeſtic, under the title of Abel Redivivus, in 4to. After Mr. Fuller had lived above twelve years a widower, about the year 1654 he married one of the ſiſters of lord viſcount Baltinglaſs; by whom he had a ſon, who ſurvived him, together with his ſon by his former wife. In 1656 he publiſhed his Church Hiſtory of Britain, from the Birth of Chriſt to the year 1648; to which work are ſubjoined The Hiſtory of the Univerſity of Cambridge ſince the Conqueſt, and The Hiſtory of Waltham-abbey, in Eſſex, founded by King Harold; the whole forming a large folio volume. This Church Hiſtory was attacked with much aſperity by Dr. Peter Heylin, in his *Examen Hiſtoricum*, publiſhed in 1659; to whoſe ſtrictures Mr. Fuller replied with much mildneſs, ingenuity, and candour, in his Appeal of injured Innocence to the learned and impartial Reader, in Anſwer to ſome Animadverſions of Dr. Heylin's on his Church Hiſtory, publiſhed in the ſame year, in folio. A ſubſequent exchange of letters between theſe gentlemen, and ſome perſonal conferences, led to the termination of their controverſy. About this time Mr. Fuller was invited to another living in Eſſex, where he exerciſed his miniſterial labours till he was made chaplain to lord Berkeley, who

preſented him to the living of Cranford, in Middleſex. That patron he accompanied to the Hague, when he went to congratulate king Charles II. on his reſtoration. A ſhort time before that event Mr. Fuller had been re-admitted to his lecture in the Savoy, and after it had taken place was re-inſtated in his prebend of Saliſbury. Soon afterwards he was appointed chaplain to his majeſty; created doctor of divinity at Cambridge, and, had he lived a twelvemonth longer, would probably have been raiſed to a biſhopric. The laſt literary work on which his attention was employed, was his Hiſtory of the Worthies of England, part of which was printed during his life, and the reſt from his papers after his death. It was publiſhed in 1662, in folio. In 1661 Dr. Fuller took a journey to Saliſbury, on the buſineſs of his prebend; but on his return home was attacked by a fever, to which he fell a ſacrifice, in the fifty-fourth year of his age. Out of reſpect to his character, at leaſt two hundred of the clergy accompanied his remains to the place of interment. Though biſhop Nicholſon and Mr. Granger threw ſome reflections on his writings, yet his works deſerve to be commended as repoſitories of much valuable and uſeful information, which may be advantageouſly conſulted by the eccleſiaſtical hiſtorian, and by the biographer. Beſides the treatiſes already mentioned, he was the author of many ſermons, tracts, and other ſmall pieces.

FULLER's EARTH, *ſ.* [called *ſmectis*, in Latin, from σμηκω, Gr. to abſterge.] A ſpecies of argillaceous earth or clay, of a greyiſh or light greeniſh colour; found in many parts of England, but particularly in Hampſhire, and in the vicinity of Woburn in Bedfordſhire, which is ſaid to be the beſt in the world. It acquired the name of *fuller's earth*, from being of ſuch extenſive uſe to fullers in milling and cleanſing broad and narrow cloths. The ſuperiority of this mineral in England, is offered as one great reaſon why the Engliſh ſurpaſs all other nations in the woollen manufacture; and hence it is prohibited by law from exportation, under the penalty of one ſhilling for every pound weight. See the article MINERALOGY.

FUL'LER's THIS'TLE, or TEASEL, *ſ.* ſo called, becauſe it is uſed by fullers or clothiers for raiſing the nap on cloth. For its propagation and culture, ſee the article DIPSACUS, vol. v. p. 852. For a correct figure of this thiſtle, ſee Plate IX. fig. 2, in the article BOTANY, vol. iii. p. 252.

FUL'LERTON POINT, a cape on the weſt coaſt of the iſland of Antigua. Lat. 17. 13. N. lon. 61. 35. W. Greenwich.

FUL'LERY, *ſ.* The place where the trade or buſineſs of a fuller is carried on.

FUL'LING, *ſ.* the art of cleanſing, ſcouring, and felting, cloths, ſtuffs, &c. in order to render them ſtronger, cloſer, and firmer: called alſo *milling*. Pliny aſſerts that Nicias, the ſon of Hermias, was the firſt inventor of the art of fulling: and it appears by an inſcription, quoted by ſir G. Wheeler, in his Travels through Greece, that Nicias was a governor in Greece in the time of the Romans.

The fulling of cloths and ſtuffs is performed by a kind of water-mill, called a *fulling* or *ſcouring mill*; which, except as to the mill-ſtones and hopper, is nearly the ſame with corn-mills: and there are ſome of them which ſerve indifferently for either uſe; corn being ground, and cloths fulled, by the motion of the ſame wheel. Whence, in ſome parts of France, the fullers are called *millers*; as grinding corn and milling cloths at the ſame time.

It appears, from the reſearches of profeſſor Beckman, that before the invention of the fulling-mill, cloths were fulled by being *walked upon*, or ſtamped with the feet; ſomewhat ſimilar to the method of waſhing linen by barting and rinſing in the brook. He ſays that, "anciently the fullers received the cloth as it came from the loom, in order that it might be ſcoured, *walked*, and ſmoothed. It was walked by being ſtamped upon with the feet. The rough wool raiſed by this operation was cleaned off by the ſkin of a hedge-hog, leaving on the cloth only a ſoft nap. Sheering ſeems not then to have been known; and the caſe is the ſame with reſpect to the preſſes, which were not invented till the ſixteenth century. When the fulling-mill was firſt invented is not known; but we find it mentioned at the beginning of the thirteenth century. The ancients uſed the Cimolian, Chian, Lemnian, Umbrian, and Samian, earths, as ſimilar to our fuller's earth; and in greater quantities; for the modern fuller often ſubſtitutes oatmeal, barley-meal, and ſoap, for finiſhing the finer and more delicate cloths."

The fulling-mill gives motion to a tree or ſpindle, whoſe teeth communicate with a ſet of wooden hammers or mallets, called *ſtampers*, which fall alternately into a large wooden trough. In theſe troughs are laid the cloths, ſtuffs, &c. intended to be fulled: then, letting the current of water put the wheel in motion, the hammers are ſucceſſively let fall, and by their weight and velocity ſtamp and preſs the ſtuffs very ſtrongly, which by this means become thickened and condenſed.

The neceſſity and utility of fulling, will appear obvious from the following conſiderations: The aſperities with which the ſurface of wool is every where ſurrounded, and the diſpoſition which it has to aſſume a progreſſive motion towards the root, render the ſpinning of wool, and making it into cloth, difficult operations. In order to ſpin wool, and afterwards to weave it, we are obliged to cover its fibres with a coating of oil, which, filling the cavities, renders the aſperities leſs ſenſible; in the ſame way as oil, when rubbed over the ſurface of a very fine file, renders it ſtill leſs rough. When the piece of cloth is finiſhed, it muſt be cleanſed from this oil; which, beſides giving it a diſagreeable ſmell, would cauſe it to foil whatever it came in contact with, and would prevent its taking the colour which is intended to be given to it by the dyer. To deprive it of the oil, it is carried to the fulling-mill, where it is beat with the hammers in the trough full of water, in which ſome fuller's-earth, or ſoap, has been mixed; the fuller's-earth combines with the oil which it ſeparates from the cloth, and both together are waſhed away by the freſh water which is continually brought into it by the machine; and thus, after a certain time, the oil is entirely waſhed out of the cloth.

But the ſcouring of the cloth is not the only object in fulling it; the alternate preſſure given by the mallets to the piece of cloth occaſions, eſpecially when the ſcouring is pretty far advanced, an effect analogous to that which is produced upon hats by the hands of the felter; the fibres of wool which compoſe one of the threads, whether of the warp or the woof, aſſume a progreſſive movement, introduce themſelves among thoſe of the threads neareſt to them, then into thoſe which follow; and thus by degrees all the threads, both of the warp and the woof, become felted together. The cloth, after having, by the above means, become ſhortened in all its dimenſions, partakes both of the nature of cloth, and of that of felt; it may be cut without being ſubject to ravel, and, on that account, we are not obliged to hem the edges of the pieces of which clothes are made. Laſtly, as the threads of the warp and thoſe of the woof are no longer ſo diſtinct and ſeparated from each other, the cloth, which has acquired a greater degree of thickneſs, forms a warmer clothing. Knit worſted alſo is, by fulling, rendered leſs apt to run, in caſe a ſtitch ſhould drop in it.

FULL'ING-MILL, *ſ.* See FULLING.

FUL'LO (Peter), who derived his ſurname from the employment which he exerciſed in his monaſtic ſtate, was biſhop of Antioch in the fifth century, and a noted leader of the ſect of Monophyſites, or advocates for the doctrine of one nature in Chriſt. He entered into a monaſtery at Conſtantinople, from which he was expelled on account of his having become a convert to the eutychian doctrine. Afterwards he found means to recommend himſelf to the good graces of Zeno, the ſon-in-law of the emperor Leo; and when his patron was appointed count of the Eaſt, he accompanied him to Antioch, the capital of his government.

ment. In that city he entered into intrigues for the purpoſe of depriving Martyrius, the biſhop, of his dignity; and having procured accuſations to be brought againſt him as a Neſtorian, which obliged him to repair to Conſtantinople to anſwer to the charge, he uſurped his ſee in his abſence. He was afterwards depoſed from the epiſcopate, and condemned for the oppoſition which he made to the decrees of the council of Chalcedon. In 482, however, by the interpoſition of Zeno, and the favour of Acacius biſhop of Conſtantinople, he was re-inſtated in the poſſeſſion of his former dignity. No ſooner was he firmly fixed in his ſeat, than he introduced an alteration into a part of the devotional ſervice of the church, which proved a ſubject of bitter diſcord. To the famous hymn, which the Greeks call *Triſagium*, he ordered the following phraſe to be added in the eaſtern churches, "who has ſuffered for us upon the croſs." His deſign was, to fix more deeply in the minds of the people the doctrine of one nature in Chriſt. By his adverſaries, however, it was repreſented as intended to convey the notion that all the three perſons of the trinity were crucified: hence they gave the name of Theopaſchites to thoſe who approved of that addition. The conſequence was a violent controverſy between the Weſtern and Eaſtern Chriſtians; the former rejecting the addition inſerted by Fullo, as implying a blaſphemous hereſy; and the latter conſtantly uſing it after this period, becauſe they conſidered it as applying to Chriſt alone. To put an end to this controverſy, the emperor Zeno publiſhed, in 482, his *Henoticon*, or Decree of Union, which was intended to reconcile the contending parties. But inſtead of producing that effect it gave riſe to new conteſts and diviſions, which terminated in a formal ſchiſm between the Latin and the Oriental Chriſtians. Fullo retained the ſee of Antioch until his death, which took place in 486.

FUL'LY, *adv.* Without vacuity. Completely; without lack; without more to be deſired.—He *fully* poſſeſſed the entire revelation he had received from God, and had thoroughly digeſted it. *Locke.*

The goddeſs cry'd
It is enough, I'm *fully* ſatisfy'd. *Addiſon.*

FUL'MINANT, *adj.* [*fulminant*, Fr. *fulminans*, Lat.] Thundering; making a noiſe like thunder.

To FUL'MINATE, *v. n.* [*fulmino*, Lat. *fulminer*, Fr.] To thunder:

I cannot *fulminate* nor tonitruate words
To puzzle intellects; my ninth lap affords
No Lycophronian buſkins. *Randolph.*

To make a loud noiſe or crack.—In damps one is called the ſuffocating, and the other the *fulminating* damp. *Woodward.*—To iſſue out eccleſiaſtical cenſures.—All things in this his *fulminating* bull are not of ſo innoxious a tendency. *Burke.*

To FUL'MINATE, *v. a.* To throw out as an object of terror.—As excommunication is not greatly regarded here in England, as now *fulminated*; ſo this conſtitution is out of uſe among us in a great meaſure. *Ayliffe.*

FULMINA'TION, *ſ.* [*fulminatio*, Lat. *fulmination*, Fr.] The act of thundering. Denunciations of cenſure.—The *fulminations* from the vatican were turned into ridicule. *Ayliffe.*—In chemiſtry, *fulmination* is more commonly expreſſed by the word DETONATION, which ſee. This effect is produced by the chemical admixture and combination of various ingredients; the principal of which are *fulminating powder*, for which ſee CHEMISTRY, vol. iv. p. 237.—*Fulminating gold*, p. 242, 316; and *fulminating ſilver*, p. 311, of the ſame article.

FUL'MINATORY, *adj.* [*fulmineus*, Lat.] Thundering; ſtriking horror.

FULMIN'EOUS, *adj.* [from the Lat. *fulmen*, thunder.] Belonging to thunder. *Scott. Not much uſed.*

FUL'NEK, a town of Moravia, in the circle of Prerau: ten miles north-weſt of Freyburg.

FUL'NESS, *ſ.* The ſtate of being filled ſo as to have no part vacant.—Your heave-offering ſhall be reckoned the *fulneſs* of the wine-preſs. *Numb.* xviii. 27.—Let the ſea roar and the *fulneſs* thereof. *Deut.*—To the houſes I wiſhed nothing more than ſafety, *fulneſs*, and freedom. *King Charles.*—The ſtate of abounding in any quality good or bad. Completeneſs; ſuch as leaves nothing to be deſired.—Your enjoyments are ſo complete, I turn wiſhes into gratulations, and congratulating their *fulneſs* only wiſh their continuance. *South.*—Completeneſs from the coalition of many parts.—The king ſet forwards to London, receiving the acclamations and applauſes of the people as he went; which indeed were true and unfeigned, as might well appear in the very demonſtration and *fulneſs* of the cry. *Bacon.*—Completeneſs; freedom from deficiency.—In thy preſence is *fulneſs* of joy. *Pſalms.*

He is the half part of a bleſſed man,
Left to be finiſhed by ſuch as ſhe;
And ſhe a fair divided excellence,
Whoſe *fulneſs* of perfection lies in him. *Shakeſpeare.*

Repletion; ſatiety.—I need not inſtance in the habitual intemperance of rich tables, nor the evil accidents and effects of *fulneſs*, pride and luſt, wantonneſs and ſoftneſs. *Taylor.*—Plenty; wealth:

To lapſe in *fulneſs*
Is ſorer than to lie for need; and falſhood
Is worſe in kings than beggars. *Shakeſpeare.*

Struggling perturbation; ſwelling in the mind.—A principal fruit of friendſhip is the eaſe and diſcharge of the *fulneſs* of the heart, which paſſions of all kinds do cauſe and induce. *Bacon.*—Largeneſs; extent.—There wanted the *fulneſs* of a plot, and variety of characters to form it as it ought; and perhaps ſomething might have been added to the beauty of the ſtyle. *Dryden.*—Force of ſound, ſuch as fills the ear; vigour.—This ſort of paſtoral derives almoſt its whole beauty from a natural eaſe of thought and ſmoothneſs of verſe; whereas that of moſt other kinds conſiſts in the ſtrength and *fulneſs* of both. *Pope.*

FUL'SOME, *adj.* [from pulle, Sax. foul.] Naſeous; offenſive:

Now half the youth of Europe are in arms,
How *fulſome* muſt it be to ſtay behind,
And die of rank diſeaſes here at home! *Otway.*

Rank; groſs; to the ſmell.—White ſatyrion is of a dainty ſmell, if the plant puts forth white flowers only, and thoſe not thin or dry, they are commonly of rank and *fulſome* ſmell. *Bacon.*—Luſtful.—He ſtuck them up before the *fulſome* ewes. *Shakeſpeare.*—Tending to obſcenity.—A certain epigram, which is aſcribed to the emperor, is more *fulſome* than any paſſage I have met with in our poet. *Dryd.*

FUL'SOMELY, *adv.* Naſeouſly; rankly; obſcenely.

FUL'SOMENESS, *ſ.* Naſeouſneſs. Rank ſmell. Obſcenity.—No decency is conſidered, no *fulſomeneſs* is omitted, no venom is wanting, as far as dulneſs can ſupply it. *Dryden.*

FUL'VIA, a bold and ambitious woman, who married the tribune Clodius, and afterwards Curio, and at laſt M. Antony. She took a part in all the intrigues of her huſband's triumvirate, and ſhewed herſelf cruel as well as revengeful. When Cicero's head had been cut off by order of Antony, Fulvia ordered it to be brought to her, and with all the inſolence of barbarity, ſhe bored the orator's tongue with her golden bodkin. Antony divorced her to marry Cleopatra, upon which ſhe attempted to avenge her

her wrongs, by perſuading Auguſtus to take up arms againſt her huſband. When this ſcheme did not ſucceed, ſhe raiſed a faction againſt Auguſtus, in which ſhe engaged L. Antonius her brother-in-law; and when all her attempts proved fruitleſs, ſhe retired into the eaſt, where her huſband received her with great coldneſs and indifference. This unkindneſs totally broke her heart, and ſhe ſoon after died, about forty years before the chriſtian era. *Plutarch.*—A woman who diſcovered to Cicero the deſigns of Catiline upon his life.

FUL'VID, *adj.* [*fulvidus*, Lat.] Of a deep yellow colour.

FUL'VIUS, a Roman ſenator, intimate with Auguſtus. He diſcloſed the emperor's ſecrets to his wife, who made it public to all the Roman matrons, for which he received ſo ſevere a reprimand from Auguſtus, that he and his wife hanged themſelves in deſpair.—A friend of C. Gracchus who was killed in a ſedition with his ſon. His body was thrown into the river, and his widow was forbidden to put on mourning for his death. *Plutarch.*—Flaccus Cenſor, a Roman who plundered a marble temple of Juno, to finiſh the building of one which he had erected to Fortune. He was an example of miſery and unhappineſs after this ſacrilege. *Livy.*—Ser. Nobilior, a Roman conſul who went to Africa after the defeat of Regulus. After he had acquired much glory againſt the Carthaginians, he was ſhipwrecked at his return with 200 Roman ſhips. His grandſon Marcus was ſent to Spain, where he greatly ſignalized himſelf. He was afterwards rewarded with the conſulſhip.

FUL'VOUS, *adj.* [*fulvus*, Lat.] Ruddy, of a deep yellow.

FUMA'DO, *ſ.* [*fumus*, Lat.] Smoked or dried fiſh. Pilchards are ſo called in Spain and Italy, whither great quantities are exported from England.—Fiſh that ſerve for the hotter countries, they uſed at firſt to fume, by hanging them upon long ſticks one by one, drying them with the ſmoke of a ſoft and continual fire, from which they got the name of *fumadoes*. *Carew.*

FU'MAGE, [*fumagium*, Lat.] Dung for ſoil, or manuring of land. Chart. *Rich.* II. Pat. 5 *Edw.* IV. And this word has been uſed for *ſmoke-money*, or *hearth-money*, a cuſtomary payment for every houſe that had a chimney.

FUMA'NA, *ſ.* in botany. See GISTUS.

FUMA'NI (Adam), a writer in the ſixteenth century, and a native of Verona. He acquired an accurate knowledge of the Greek and Latin languages, and was intimate with the moſt eminent ſcholars of his time. He accompanied cardinal Pole in his legation to Flanders; and Navagero to the council of Trent, who procured for him the ſecretaryſhip to that aſſembly. He had a canonry at Verona, which he held till his death, in 1587. Fumani tranſlated from Greek into Latin the moral and aſcetic works of St. Baſil. He alſo compoſed poems, of which the moſt remarkable was, A Syſtem of Logic, in Latin heroics, in five books. This unpromiſing ſubject he treated with an elegance and eaſe which are altogether ſurpriſing, and prove at leaſt his facility in the management of verſe and language. It was printed for the firſt time in the ſecond Cominian edition of the works of Fracaſtorius, 1739, along with other poems, Greek, Latin, and Italian, of the ſame author.

FUMA'RIA, *ſ.* [Becauſe it affects the eyes, like ſmoke.] FUMITORY; in botany, a genus of the claſs diadelphia, order hexandria, natural order of corydales, (papaveraceæ, *Juſſ.*) The generic characters are—Calyx: perianth two-leafed; leaflets oppoſite, equal, lateral, erect, acute, ſmall, deciduous. Corolla: oblong, tubular, ringent; palate prominent, cloſing the throat; upper lip flat, obtuſe, emarginate, reflex; nectary the baſe of the upper lip prominent backward, obtuſe; lower lip entirely ſimilar to the upper, keeled towards the baſe; nectary the keeled baſe, but in this leſs prominent; throat four-cornered, obtuſe, perpendicularly bifid. Stamina: filaments two, equal, broad, one within each lip, incloſed, acuminate; antheræ three at the end of each filament. Piſtillum: germ oblong, compreſſed, acuminate; ſtyle ſhort; ſtigma orbiculate, erect, compreſſed. Pericarpium: filicle one-celled. Seeds: roundiſh.—*Eſſential Character.* Calyx: two-leaved corolla ringent; filaments two, membranaceous, with three antheræ on each.

Species. I. Corollas with two ſpurs. 1. Fumaria cucullaria, or naked-ſtalked fumitory: ſcape naked. Root ſcaly, the ſize of a large hazel nut; flower-ſtalk eight or nine inches high. Native of Virginia and Canada. Perennial. It flowers in June and July; and was cultivated by Mr. Miller in 1759.

2. Fumaria ſpectabilis: flowers two-lobed behind; ſtem leafy. This is a fine plant, with very large, handſome flowers. It has the air of F. bulboſa, but is bigger in all its parts. The branches proceed from the axils of the leaves, and are but few; ſtem erect. Native of Siberia.

3. Fumaria fungoſa, or ſpongy-flowered fumitory: flowers bigibbous at the baſe; ſiliques linear, ancipital, covered by an inflated fungous corolla; leaves climbing. Annual. Native of North America; flowers from June to September.

II. Corollas with one ſpur. 4. Fumaria nobilis, or great-flowered fumitory: ſtems ſimple; bractes ſhorter than the flower, undivided. Perennial; very like the next ſpecies, but much larger. Native of Siberia; and flowers in May.

5. Fumaria bulboſa, or bulbous fumitory: ſtem ſimple, bractes the length of the flowers. Theſe plants are united ſpecifically by a fleſhy, ſimple root. There are three varieties, which Linnæus informs us are all natives of Sweden, but in different provinces; the firſt in Scania, both with a red and a white flower; the ſecond in moſt of the woods of Upland; and the third on the coaſts of Roſlag and Finland. They may be thus diſtinguiſhed; α has a hollow root, and entire bractes; β a ſolid root, and entire bractes; γ a ſolid root, and gaſhed bractes. The hollow and ſolid rooted fumitory never are ſeen together, for they affect different ſoils; the former flowers fourteen days later, and the latter has entire bractes the firſt year. According to Curtis, the ſolid-rooted fumitory rarely exceeds three or four inches in height, and produces its ſpike of purple flowers in April; it does not vary much in colour. The hollow-rooted fumitory has a much larger root, hollow like a ſhell; the plant grows to twice the ſize of the other, and bears a foliage and flowers proportionably larger; the bractes, which in that aſſume a kind of fingered appearance, in this are entire, or but ſlightly indented; and it flowers about three weeks earlier. There are three principal varieties of it in point of colour; white, bluſh-coloured and purple. As this ſpecies is found in moſt parts of Europe from Sweden to Italy, Linnæus remarks, as a ſingularity, that it does not grow wild in England. In our gardens they appear early in April.

6. Fumaria ſempervirens, or glaucous fumitory: ſiliques linear, panicled; ſtem erect. Annual; ſtem upright, a foot and half high, round, and very ſmooth, ſending out ſeveral branches at top; leaves ſmooth, branching, pale, divided like the common ſort, but the leaflets larger and more obtuſe; flowers in looſe panicles from the ſides of the ſtem, and at the extremities of the branches, of a pale purple colour, with yellow chaps or lips; pods taper, narrow, an inch and half long, containing many ſmall black ſhining ſeeds. It flowers during ſummer. Native of North America.

7. Fumaria lutea, or yellow fumitory: ſiliques cylindric; ſtems diffuſed, angles obtuſe. This is very like the ninth ſpecies, but it is perennial. Miller adds, that the ſtalks of this have blunt angles, whereas thoſe of the ninth are acute; that they are of a purpliſh colour; and that the flowers grow in a looſer panicle, on longer pedicles; the root ſtrikes deep into the ground; ſtems many, ſucculent, diffuſed, about ſix inches high; leaves on

long branching petioles, compoſed of many irregular leaflets, trifid at the top; ſee Botany Plate VI. fig. 23. They continue green all the year, and the flowers in ſucceſſion from April to October; ſo that this ſpecies deſerves a place in every garden. It is peculiarly proper for rock-work, old walls and buildings, in which the ſeeds often lodge of themſelves, being thrown to a conſiderable diſtance by the elaſticity of the pods. It is a native of Barbary.

8. Fumaria Sibirica, or Siberian fumitory: ſiliques oval; ſtems patulous, leaflets oblong. Annual. Native of Siberia.

9. Fumaria capnoides, or white-flowered fumitory: ſiliques linear, four-cornered; ſtems diffuſed, acute-angled. Annual. It has a ſucceſſion of the flowers from May to October; and this, as well as the ſeventh, is proper for walls, old buildings and rock-work. Native of the ſouth of Europe.

10. Fumaria enneaphylla; leaves triternate, leaflets cordate. This has weak trailing ſtems, which are much divided, and leaflets divided into three parts, each of which has three heart-ſhaped lobes; the flowers are produced in ſmall looſe panicles from the ſide of the ſtalks; they are of a greeniſh white, and appear moſt of the ſummer months. Native of Spain and Italy, upon old walls and in rocky places.

11. Fumaria officinalis, or common fumitory: pericarps one-ſeeded, racemed; ſtem diffuſe. This is a common weed in corn fields, gardens, and on ditch banks; flowering from April to Auguſt, and even later. Kine and ſheep eat it; to the latter it is accounted ſalubrious; the leaves are ſucculent, ſaline, and bitter. The expreſſed juice in doſes of two or three ounces, with whey, is uſeful in hypochondriacal, ſcorbutic, and cachectic habits. It corrects acidity, and ſtrengthens the tone of the ſtomach. Hoffman prefers it to all other medicines as a ſweetener of the blood. There is no doubt of its utility in obſtructions of the viſcera, and the diſeaſes ariſing from them. The celebrated Boerhaave frequently preſcribed it in the black jaundice and bilious cholics. An infuſion of the leaves is uſed as a coſmetic to remove freckles, and clear the ſkin; and Dr. Cullen experienced its good effects in many cutaneous diſorders.

12. Fumaria capreolata, or ramping fumitory: pericarps one-ſeeded, racemed; leaves climbing, ſubcirrhoſe. This ſeems to be nothing more than a variety of the foregoing. Hudſon could perceive no difference except in the colour of the flowers, which in this is white with a purple tip; it climbs, not by tendrils, but by the bending or twiſting of the petioles; but Louis Gerard attributes this wholly to its ſituation in hedges or among buſhes. Dr. Stokes, however, has obſerved the ſtem ſometimes trailing, and interweaving its branches among the graſs, very much branched, ſometimes three feet long, the bloſſoms pale red; the ſtems are longer and weaker; the leaves more diſtant, and not ſo finely divided, the extreme diviſions broader and blunter than the foregoing; the ſpikes of flowers are on longer peduncles, but with fewer flowers on a ſpike. All theſe differences may alſo be owing to ſituation. Native of Provence, Sileſia, and Britain. Linnæus remarks, as a ſingularity, that this does not occur in Sweden, where the foregoing is very common, not only in corn fields, but among buſhes.

13. Fumaria ſpicata, or narrow-leaved fumitory: pericarps one-ſeeded, ſpiked; ſtem erect, leaflets filiform. Annual. The ſtalks more erect than in the common ſort; the leaves are very finely divided, and the flowers grow in a looſe ſpike; they are of a deep red colour, and appear about the ſame time; the flowers grow very cloſe together in the ſpike; and the leaves are glaucous, and ſmaller than in the other ſpecies, like camomile; thoſe that proceed from the root are on longer petioles, but the ſegments are ſhorter; thoſe on the ſtem have ſhorter petioles, but longer ſegments; both ſtems and leaves are covered with a glaucous bloom; there is little or no bitterneſs in the leaves. Linnæus ſuſpects that this may be a hybridous plant; and is of opinion, that whoever ſhall determine this and the following to be varieties of the 11th or common fumitory can hardly err; the fruit indicating that they are one and the ſame. Native of Spain, Portugal, Italy, and the ſouth of France. It flowers with us in July and Auguſt. Ray ſays it flowers in ſummer, whereas Linnæus aſſerts that the flowers are vernal.

14. Fumaria claviculata, or climbing fumitory: ſiliques linear; leaves tendril-bearing. Native of Denmark and Britain, in woods and moiſt hedges, boggy and rocky places in a ſandy ſoil, on the banks of lakes and rivers, and on the thatch of cottages; as on Blackheath and about Charlton and Greenwich; at Snareſbrook near Woodford, Eſſex; on the banks of the Trent near Ouſeley in Staffordſhire; in the hedges between Bala in Merionethſhire and Pimble-mere; above Great Malvern tower; about Birmingham; rocks of Stonehall near Rawdon, ſeven miles from Leeds; Thorpe near Norwich; in the quarries at Inner-Keith, in Scotland; near Whitwick in Leiceſterſhire; Kendal in Weſtmoreland: flowering from the end of May to the end of July.

15. Fumaria veſicaria, or bladdered fumitory: ſiliques globular, acute, inflated; leaves cirrhoſe. This is an annual plant, with trailing ſtalks, which are two or three feet long, dividing into many ſmaller ones, with ſmall branching leaves, like thoſe of common fumitory, but ending in tendrils; flowers in looſe panicles, from the ſide of the ſtalks, of a whitiſh yellow colour; the terminating leaflets are protracted into tendrils; peduncles oppoſite to the leaves, bearing one to four flowers. Native of the Cape of Good Hope. Cultivated in the Chelſea garden in 1696; it flowers in July.

Propagation and Culture. The firſt ſpecies is propagated by offsets from the root; it loves a ſhady ſituation and a light ſoil; the beſt time to tranſplant the roots is in autumn, when the leaves are decayed, for it ſhoots pretty early in the ſpring, therefore it would not be ſafe to remove them at that ſeaſon. The fourth and fifth are propagated by offsets, as other bulbous-rooted flowers; theſe are very pretty ornaments to borders in a ſmall flower-garden: they are extreme hardy, but do not increaſe very faſt, ſeldom producing ſeeds with us; and their bulbs do not multiply very much, eſpecially if they are often tranſplanted; they love a light ſandy ſoil, and ſhould be ſuffered to remain three years undiſturbed, in which time they will produce ſeveral offsets. The beſt ſeaſon for tranſplanting them is from May to Auguſt, when the leaves begin to die off; for if they are taken up when the leaves are freſh, it will greatly weaken their roots.

6, 7, 8, 9, 10, 12, 13, 14. If the ſeeds of theſe are permitted to ſcatter, the plants will come up without any trouble, and require no other care but to thin them where they are too cloſe, and to keep them clean from weeds. Theſe thrive beſt on old walls and buildings and on rocks; they ſcatter their ſeeds from their elaſtic pods, and require no care in the cultivation.

15. This is propagated by ſeeds, which ſhould be ſown upon a moderate hot-bed in the ſpring; and when the plants are fit to remove, they muſt be each planted in a ſmall pot filled with light earth, and plunged again into the hot-bed, where they muſt be ſhaded from the ſun till they have taken new root; after which they ſhould have a large ſhare of air admitted to them at all times in mild weather, to prevent their drawing up weak; and as ſoon as the ſeaſon is favourable, they ſhould be inured to bear the open air, to which they may be removed the beginning of June, when they may be ſhaken out of the pots, preſerving all the earth to their roots, and planted in a warm border, where their ſtalks ſhould be ſupported with ſticks to prevent their trailing on the ground; and in July the plants will flower, and continue a ſucceſſion of flowers till the froſt deſtroys the plants. The ſeeds ripen in autumn. See ADOXA.

FUMAY,

FUMAY', a town of France, in the department of the Ardennes, and chief place of a canton, in the diſtrict of Rocroy; the principal trade is in ſlates, of which there are quarries near the town: two poſts and three quarters ſouth of Givet, and one and three quarters north of Rocroy. Lat. 50. N. lon. 22. 20. E. Ferro.

To FUM'BLE, *v. n.* [*fommelen*, Dut.] To attempt any thing awkwardly or ungainly.—Our mechanic theiſts will have their atoms never once to have *fumbled* in theſe their notions, nor to have produced any inept ſyſtem. *Cudworth.*—To puzzle; to ſtrain in perplexity.—Am not I a friend to help you out? You would have been *fumbling* half an hour for this excuſe. *Dryden.*—To play childiſhly.—I ſaw him *fumble* with the ſheets, and play with flowers, and ſmile upon his finger's end. *Shakeſpeare.*

To FUM'BLE, *v. a.* To manage awkwardly:

As many farewels as be ſtars in heav'n,
With diſtinct breath and conſign'd kiſſes to them,
He *fumbles* up all in one looſe adieu. *Shakeſpeare.*

FUMB'LER, *ſ.* One who acts awkwardly.
FUMB'LINGLY, *adv.* In an awkward manner.
FUME, *ſ.* [*fumée*, Fr. *fumus*, Lat.] Smoke:

Thus fighting fires awhile themſelves conſume;
But ſtraight, like Turks, forc'd on to win or die,
They firſt lay tender bridges of their *fume*,
And o'er the breach in unctuous vapours fly. *Dryden.*

Vapour; any volatile parts flying away:

Love is a ſmoke rais'd with the *fume* of ſighs:
Being purg'd, a fire ſparkling in lovers' eyes. *Shakeſp.*

Exhalation from the ſtomach.—The *fumes* of drink diſcompoſe and ſtupify the brains of a man overcharged with it. *South.*

Pow'r, like new wine, does your weak brain ſurpriſe,
And its mad *fumes* in your diſcourſes riſe;
But time theſe yielding vapours will remove:
Meanwhile I'll taſte the ſober joys of love. *Dryden.*

Rage; heat of mind; paſſion.—The *fumes* of his paſſion do really intoxicate and confound his judging and diſcerning faculty. *South.*—Any thing unſubſtantial:

When Duncan is aſleep, his two chamberlains
Will I with wine and waſſel ſo convince,
That memory, the warder of the brain,
Shall be a *fume*. *Shakeſpeare.*

Idle conceit; vain imagination.—To lay aſide all that may ſeem to have a ſhew of *fumes* and fancies, and to ſpeak ſolids, a war with Spain is a mighty work. *Bacon.*

To FUME, *v. n.* [*fumer*, Fr. *fumo*, Lat.] To ſmoke:

From thence the *fuming* trail began to ſpread,
And lambent glories danc'd about her head. *Dryden.*

Strait hover round the fair her airy band;
Some, as ſhe ſipp'd, the *fuming* liquor fann'd. *Pope.*

To vapour; to yield exhalations, as by heat:

Thoſe conſtant cups lay *fuming* to his brain,
And always boil in each extended vein. *Roſcommon.*

To paſs away in vapours.—Their parts are kept from *fuming* away by their fixity, and alſo by the vaſt weight and denſity of the atmoſpheres incumbent upon them. *Cheyne.*

The firſt freſh dawn then wak'd the gladden'd race,
Of uncorrupted man, nor bluſh'd to ſee
The ſluggard ſleep beneath its ſacred beam;
For their light ſlumbers gentle *fum'd* away. *Thomſon.*

To be in a rage; to be hot with anger:

When he knew his rival free'd and gone,
He ſwells with wrath; he makes outrageous moan:
He frets, he *fumes*, he ſtares, he ſtamps the ground,
The hollow tow'r with clamours ring around. *Dryden.*

To FUME, *v. a.* To ſmoke; to dry in the ſmoke.—Thoſe that ſerve for hot countries they uſed at firſt to *fume*, by hanging them upon long ſticks one by one, and drying them with the ſmoke of a ſoft fire. *Carew.*—To perfume with odours in the fire.—The *fuming* of the holes with brimſtone, garlic, or other unſavory things, will drive moles out of the ground. *Mortimer.*

She *fum'd* the temples with an od'rous flame,
And oft before the ſacred altars came,
To pray for him who was an empty name. *Dryden.*

To diſperſe in vapours.—The heat will *fume* away moſt of the ſcent. *Mortimer.*

FUMEL, a town of France, in the department of the Lot and Garonne, and chief place of a canton, in the diſtrict of Monflanquin, ſituated on the Lot: three leagues eaſt ſouth eaſt of Monflanquin, and three north of Tournon.

FU'MET, *ſ.* The dung of the deer.

FUME'TTE, *ſ.* [French.] A word introduced by cooks, and the pupils of cooks, for the ſtink of meat:

A haunch of ven'ſon made her ſweat,
Unleſs it had the right *fumette*. *Swift.*

FU'MID, *adj.* [*fumidus*, Lat.] Smoky; vaporous.—A craſs and *fumid* exhalation is cauſed from the combat of the ſulphur and iron with the acid and nitrous ſpirits of aquafortis. *Brown.*

FUMI'DITY, *ſ.* Smokineſs; tendency to ſmoke.
FU'MIDNESS, *ſ.* Smokineſs. *Scott. Little uſed.*
FUMIF'EROUS, *adj.* [*fumus*, Lat. ſmoke, and *fero*, to bring.] Producing ſmoke. *Scott. Not much uſed.*
FUMIF'IC, *adj.* [*fumus*, Lat. ſmoke, and *facio*, to make.] Making ſmoke, producing fumes. *Scott. Little uſed.*
FUMIF'ICATE, *v.* To make a fume; to perfume. *Bailey. Not much uſed.*
FU'MIGANT, *adj.* Smoking, fuming.
To FU'MIGATE, *v. n.* [from *fumus*, Lat. *fumiger*, Fr.] To ſmoke; to perfume by ſmoke or vapour:

Would'ſt thou preſerve thy famiſh'd family,
With fragrant thyme the city *fumigate*,
And break the waxen walls to ſave the ſtate. *Dryden.*

To medicate or heal by vapours.
FUMIGA'TION, *ſ.* [*fumigatio*, Lat. *fumigation*, Fr.] Scents raiſed by fire.—*Fumigations*, often repeated, are very beneficial. *Arbuthnot.*

My *fumigation* is to Venus juſt
The ſouls of roſes, and red coral's duſt:
And, laſt, to make my *fumigation* good,
'Tis mixt with ſparrows brains and pigeons blood.
Dryden.

The application of medicines to the body in fumes, or of vapours to the air, for the purpoſe of eradicating miaſmata and contagion. By the ſubtle fumes that are inſpired as well as inhaled into our bodies, much benefit or prejudice may be produced, according to the nature of the matter, and the conſtitution into which it is received; as is evident from the palſies produced among workers in lead-mines, &c. and the benefits received in many caſes when putrid air is impregnated with ſalutary materials. A very ſatisfactory and intereſting proof of this fact was given by Dr. Carmichael Smyth, on board the Union hoſpital ſhip in 1795, as ſtated under the article CONTAGION, vol. v. p. 132; and ſince that by Mr. Cruickſhank, by ſimilar experiments made at Woolwich, with the ſame important views. Theſe laudable attempts of our countrymen to remove, by eaſy and obvious methods, the fatal effects of noxious and peſtilential effluvia, have been more recently purſued by M. Morveau, to a ſtill greater extent, and with additional intereſt. Conceiving it ſufficiently proved by experiment, that the mineral acids have the power of deſtroying contagious miaſmata, as well as the putrid odour which denotes their preſence, he inquires whether theſe acids all act in a ſimilar manner; if they exert the ſame affinities; if their effects are equally prompt and certain; if their action be increaſed by oxygen; if ammoniac makes a neceſſary part of theſe compounds;

pounds; whether they are always accompanied by carbonic acid gas; and, laſtly, whether the vegetable acids are capable of affecting decompoſition. Such are the points which this author undertakes to diſcuſs, and to determine by chemical experiment.

With this view, ſome pieces of raw beef were incloſed under a large glaſs bell filled with atmoſpheric air, and inverted over water, and left to putrefy in this ſtate. When the putrefaction was complete, the air contained in the glaſs was expoſed to different trials; and the following is the reſult in general terms. When the air was waſhed with lime-water, a copious precipitation took place, marking the preſence of carbonic acid gas. The air preſerved, nevertheleſs, its putrid ſmell. Another portion of the putrid air was agitated with a ſolution of nitrate of ſilver, which became inſtantly blackened, and a browniſh pellicle formed on the ſurface, part of which ſunk to the bottom of the veſſel. Nearly the ſame phenomena took place with the nitrates of mercury and copper, and with the acetite of lead.

The putrid gas being introduced into a bottle with a ſolution of ſulphur of lime, the latter ſoon grew turbid, and carbonate of lime was depoſited, but without any appearance of a black or brown precipitate, or the diſengagement of ammoniac. Nor did ſlips of paper, tinctured with different vegetable colours, or with nitrate of copper, undergo any change on expoſure to putrid gas, which indicated in any degree the preſence of ammoniac, or other alkali in a free ſtate. When, however, quicklime was added to the water which had been in contact with the putrid gas, and which had abſorbed ſufficient of this to give it an offenſive odour, a vapour was diſengaged from the water which ſenſibly evinced the preſence of ammoniac.

When the air was agitated with a ſolution of ſulphate of zinc, there was no trace of the white precipitate which ſulphurated hydrogen, and the hydro-ſulphures, occaſion in that liquor: nor was the putrid odour diminiſhed in any remarkable degree. The oxyds which are known to act moſt powerfully on the hydro-ſulphures, ſuch as the oxyd of zinc, the black oxyd of manganeſe, and the brown oxyd of lead, all reduced to fine powder, and ſlightly moiſtened with diſtilled water, were ſhut up in contact with the putrid gas: but, after twenty-four hours of expoſure in this way, no change in the colour of thoſe oxyds was perceptible, no trace of the diſengagement of ammoniac, nor any phenomenon indicating the preſence of ſulphur. The fetid odour merely appeared to be ſomewhat diminiſhed in the veſſel containing the oxyd of manganeſe, and the water acquired the property of precipitating, of a dirty grey colour, the ſolutions of nitrate of mercury and of the acetite of lead.

In the putrid air was next burnt a conſiderable quantity of gum benzoin; but the effect was merely to cover, in ſome degree, its offenſive odour, without at all deſtroying it. The effect was the ſame when the air was agitated with ſpirituous ſolutions of different aromatic gums and balſams. When the thieves' vinegar was employed in the ſame way, the putrid odour was modified merely, but not deſtroyed. The pyro-ligneous acid ſeemed to have rather more effect, as, after two hours, a ſlight degree only of offenſive ſmell was perceivable, combined with the empyreumatic odour of the acid. When gunpowder was repeatedly exploded in the gas, the offenſive odour diſappeared; but it ſeemed rather to be owing to the diſperſion of the gas than to its correction. The gaſes produced, indeed, during the exploſion of gunpowder, being merely carbonic acid and azotic gas, with a very conſiderable proportion of ſulphureous gas, could not be expected to act chemically on the putrid vapour. Good vinegar cauſed the putrid odour to diſappear; as did the vapour of diſtilled vinegar. When the acetic acid, or radical vinegar, was ſubſtituted for the two former, the effect was much more ſtriking, the fetid odour diſappearing inſtantly, without the agreeable pungency of the acid being ſenſibly diminiſhed.

The mineral acids were next examined, as to their power of deſtroying the contamination of putrid air. The vapour of ſulphureous acid, and the ſame in a ſtate of gas, let looſe during the combuſtion of ſulphur, were very effectual for the purpoſe. The ſulphuric acid, both concentrated and diluted with three times its bulk of water, completely deſtroyed the putrid ſmell when agitated with the air. When the nitric acid vapour was employed, in the manner recommended by Dr. Smyth, no traces of putridity remained, nor did the air occaſion any alteration of colour in the ſolutions of acetite of lead or of nitrate of mercury.

Whatever care was taken in the execution of the laſt experiment, the author always obſerved ſome ſlight traces of red vapours of nitrous gas during the proceſs: he proceeded, therefore, to aſcertain, by direct experiment, whether the opinion of Mr. Keir was well founded, that oxygen gas is given out during the proceſs, and thus the air meliorated by it. Probability, certainly, was againſt ſuch a ſuppoſition; for it would be ſurpriſing, if a diſtillation, the eſſential and rigorous condition of which is, that not a particle of acid is decompoſed, ſhould furniſh a ſenſible quantity of oxygen. But the author ſtill leſs expected to find, that, in oppoſition to Mr. Keir's aſſertion, inſtead of being meliorated by the proceſs, the air was rendered worſe by many degrees than before. This, however, was the fact.

The powerful action of the muriatic acid gas has been already mentioned. On repeating the experiments of Mr. Cruickſhank with the oxygenated muriatic acid gas, the author's reſults fully confirmed thoſe of that gentleman. The advantages of this proceſs, eſpecially when ſimplified in the way here adviſed, are clearly demonſtrated. Into a bottle, whoſe capacity was three centilitres (about $\frac{1}{2}$ oz.) were put four grammes (about $\mathfrak{Z}i\frac{1}{2}$) of black oxyd of manganeſe, groſsly powdered; the bottle then filled about two-thirds full with the nitro-muriatic acid (aqua regia). In a few minutes, on being agitated, the oxygenated muriatic acid gas was diſengaged with ſuch intenſity, that vegetable colours preſented to the mouth of the bottle were ſoon radically deſtroyed. The facility, and particularly the promptitude, with which, without the aid of a diſtilling apparatus, this powerful reagent is thus obtained, induced the author to give it the name of *extemporaneous oxy-muriatic acid*; and he afterwards diſcovered another property of this preparation, which may render it ſtill more generally uſeful. It is well known how difficult it is, even in the cloſeſt veſſels, to preſerve unchanged the oxygenated muriatic acid, as procured by the common proceſſes. A bottle prepared in the manner here indicated, after being laid aſide and forgotten for eight years, was found to have retained its priſtine pungency.

Having thus examined the power of the various ſubſtances employed for the deſtruction of contagion, the author gives a general view of the concluſions deducible from his experiments with reſpect to the comparative efficacy of the different means; and points out the beſt method of employing thoſe which are moſt deſerving of confidence. Water, cold or warm, employed in waſhing, may carry away infectious matter, but without decompoſing it: and it has been found that lye itſelf has not always deſtroyed the contagion in linen; but that this has afterwards communicated the infection, in the caſe of plague. Lime is only really uſeful for decompoſing animal matters before putrefaction begins, or for the abſorption of carbonic acid; for putrid air is not ſweetened by paſſing through lime water. Reſinous ſubſtances, even thoſe which give out a volatile acid on diſtillation, merely diſguiſe the putrid miaſmata, without at all deſtroying them, or changing their infectious nature. Fire occaſions currents of air, which may carry off and diſperſe putrid vapours,

vapours, when confined in a narrow ſpace; but beyond this it is rather hurtful than ſalutary. It can only decompoſe the putrid effluvia when carried to the degree of actual combuſtion. No advantage can be expected from burning different ſubſtances on live coals. Vinegar, thus employed, is rather burnt than evaporated. Nitre itſelf gives only irreſpirable gaſes, after having ſerved by its oxygen to augment the intenſity of the fire. It is the ſame with gunpowder, which merely exerts a mechanical action on the air.

With ſulphur it is otherwiſe, its combuſtion being never complete, and producing only the firſt ſtage of oxydation; whether lighted, or thrown on live coals, it emits a ſulphureous acid vapour, which acts powerfully on the miaſmata which it reaches; it, however, exerts its operation at no great diſtance, and is inadmiſſible in places that are inhabited. It may, nevertheleſs, be uſefully employed for the purification of goods and merchandiſe that are not readily ſpoiled, and of the air of narrow paſſages, as in hoſpitals. Common vinegar, or the acetous acid, may be reckoned amongſt the beſt purifiers for ſubſtances that admit of being immerſed in it, or which are capable of being well waſhed with it; but it is not ſufficiently volatile to be employed with advantage in fumigation. The pyroligneous acid has an action very analogous to that of vinegar, but leſs powerful.

With reſpect to the acetic acid, or radical vinegar, frequent fumigations with this could not be made in places at all ſpacious, without incurring a very heavy expence. Its action on infected matter is, however, more rapid and intenſe than that of common vinegar. Its quick and penetrating ſcent, which it emits at all temperatures, ſerves, in the author's opinion, not only to change the condition of the ſurrounding air, but affords, at the ſame time, a powerful ſtimulus to the organs of reſpiration, which ſupports the vital powers to a degree of energy capable of reſiſting the impreſſion of contagion. The acetic acid, therefore, may be carried about the perſon in times of contagion, and, when expoſure to it is unavoidable, with great advantage.

The mineral acids, in general, are anti-ſeptic, and check all fermentation, both animal and vegetable, and are capable of decompoſing contagious virus; they are not all, however, equally advantageous. The ſulphuric acid cannot, on account of its fixity, ſerve to purify the air. The ſulphureous, in a liquid ſtate, produces but little effect; its action, in the ſtate of vapour, as ariſing during the combuſtion of ſulphur, has been already mentioned. The nitrous acid acts only on the reſpirable portion of the atmoſphere, and the vapours which it exhales are highly ſuffocating. The nitric acid, diſengaged in Dr. Smyth's proceſs, deſtroys with great certainty putrid miaſmata; but it diffuſes itſelf to no great diſtance, is readily condenſed, and only acts as an oxygenant in giving out nitrous gas: a repetition of the proceſs, likewiſe, is requiſite, even in a ſmall apartment. The proceſs, beſides, is expenſive, and requires many cautions in its performance.

The muriatic acid offers here the greateſt advantages, on account of its prodigious expanſibility. The manner of employing it is as ſimple as it is cheap, and the proceſs is performed with leſs riſk of accidents from fire than that of Dr. Smyth; ſince no greater heat is required than what is produced by the mixture of the ingredients. By the addition of a little of the oxyd of manganeſe, the oxygenated muriatic acid gas is procured, which is the moſt certain preſervative, and which is recommended by the facility with which it may be applied in all caſes.

In the liſt of ſubſtances ſuſceptible of a quick evaporation, and capable of producing all the ſalutary effects of the moſt powerful ſuper-oxygenants, may be mentioned the oxygenated muriate of tin *(liquor fumans Libavii.)* The uſe of this was firſt ſuggeſted by M. Vic-d'Azyr. This is ſo extremely volatile, that the veſſel containing it cannot be opened for an inſtant without the diſengagement of the moſt pungent vapours: it is neceſſary, therefore, to preſerve it in veſſels very cloſely ſtopt. It is, however, liable to the inconvenience of cauſing the ſtopper often to adhere ſo tightly, as to be with difficulty withdrawn.

With reſpect to the muriatic acid fumigation, the following is recommended as the moſt ſimple method of performing the proceſs. In caſes where it is requiſite to purify the air of places that are not inhabited, a chafing diſh is to be placed in the centre, and on it an iron pot half filled with ſand or aſhes. On this is to be placed a large glaſs veſſel, or one of porcelain or ſtone ware, containing muriate of ſoda (common ſalt): when this begins to be heated, ſulphuric acid (oil of vitriol) is to be added, when the perſon officiating is to retire, keeping the doors and windows as cloſely ſhut as poſſible for ſix or eight hours. A ward or apartment containing twenty beds would require the following quantities of ingredients to anſwer the intended purpoſe: common ſalt, nine or ten ounces; oil of vitriol, about eight ounces.

In the purification of inhabited places, different precautions are required; very ſmall quantities only of the ingredients are to be employed at once; or, which is better, the ſalt ſhould be carried round the apartment, and the acid added by degrees only; by this means, the extrication of the acid vapours takes place at any point, and in any degree that may be judged neceſſary. The only apparatus requiſite for the purpoſe are, a bottle of ſulphuric acid (oil of vitriol), a large glaſs goblet, and ſome common ſalt. The goblet being placed on the ground, or on a table, in the middle of the room, a large ſpoonful of common ſalt is to be put in the glaſs, and a very ſmall liqueur glaſsful of the ſulphuric acid is to be added, but at two or three different times, and at intervals. At each affuſion of the acid a quantity of vapour is diſengaged and diffuſed around the apartment, without occaſioning any inconvenience to the aſſiſtants.

The fumigation with the oxygenated muriatic acid differs only from that above deſcribed, in the addition of a little of the black oxyd of manganeſe (commonly called *manganeſe* ſimply.) The proportions of the ingredients, however, ſhould not be exactly thoſe of Mr. Cruickſhank, but the following, in order to effect a complete ſaturation of principles, and to avoid waſte:

Common ſalt	10	decagrammes—about	3 oz.	2 dr. 10 grs.
Manganeſe	2		0 5	17
Water	4		1 2	33
Oil of vitriol	6		1 7	50

The ſalt and manganeſe in powder are to be firſt mixed together, and the mixture put into a glaſs or ſtone-ware veſſel, and the water added; laſtly the oil of vitriol, at once, or at different times, according as the diſengagement of vapour is required to be quick or gradual.

From the account that has now been given, the value of the treatiſe before us will be ſufficiently apparent. M. Morveau has ſucceeded in rendering the deſtruction of the contamination ariſing from putrefaction moſt ſimple and certain. That contagious miaſmata are always equally within our power, is not, from the nature of the ſubject, ſo readily demonſtrable: that uncertainty which attaches itſelf, unfortunately, to every thing medical, applies here. But although it cannot be proved that contagious miaſmata are one and the ſame with the particles iſſuing from putrefying ſubſtances, and which are ſufficiently obvious to the ſenſe of ſmell, there is great reaſon to ſuppoſe them intimately connected, and capable of being deſtroyed by ſimilar agents. If putrefaction, it has been properly obſerved, is not the cauſe of contagion, there can be no doubt that it is a frequent vehicle of it; and there are very ſatisfactory proofs of the latter having on different occaſions been effectually deſtroyed, by means adapted to the deſtruction of the former. Indeed, whatever be the nature of contagious particles, it is difficult

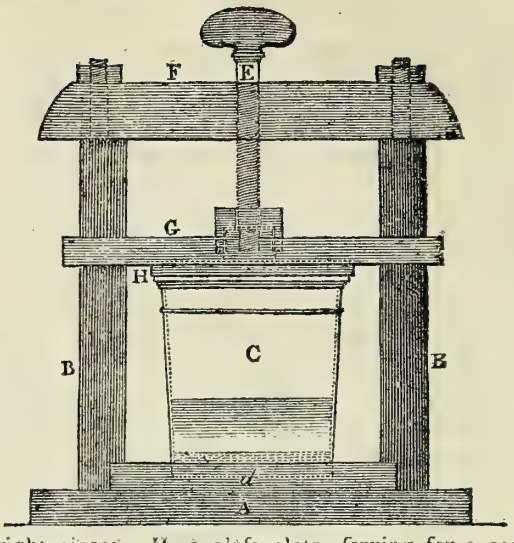
to conceive them ſo compounded, as to reſiſt the all-powerful chemical influence of the oxy-muriatic acid gas, or even the muriatic acid gas in its ſimple ſtate.

M. Guyton, in 1803, availing himſelf of the reſults of theſe experiments of M. Morveau, contrived the following apparatus for purifying the atmoſphere of hoſpitals, barracks, places of public reſort, &c.—Take a jar of very thick flint glaſs, that may be procured in any of the ſhops, of the capacity of about 35 cubic inches. The edge muſt be prepared to receive a cover formed of a flat plate of glaſs. The bottom of the jar is to be faſtened to a board, made to ſlide horizontally in the grooves of two ſide pieces. Theſe ſides ſupport a covering, through which paſſes a ſcrew that ſerves to lift off or put down the cover of the jar by means of a nut fixed to a moveable piece. The veſſel being thus diſpoſed, and admitting its capacity to be 35 cubic inches, there muſt be poured into it ſucceſſively ſix inches of nitric acid, at the degree of concentration above mentioned, and ſix inches of muriatic acid; to theſe muſt be added 600 grains of black oxyd of manganeſe pulveriſed, and the veſſel muſt be immediately cloſed by preſſing down the cover. Theſe proportions are given on account of the neceſſity of leaving at leaſt two thirds of it empty.

If the infection be very noxious, or if the places from which it proceeds are ſo numerous as to renew it from time to time, it would be adviſable to have two or three of theſe jars in different parts of the ward. In an apartment of leſs extent than that here ſuppoſed, for inſtance in one containing only ten or twelve beds, or in places of reſort, where the air is vitiated only by a momentary accumulation of animal effluvia, inſtead of the above veſſel, one of thoſe bottles, with a very wide neck, for the uſe of laboratories, may be employed.

By putting into one of theſe bottles $3\frac{1}{2}$ cubic inches of each of the two acids and 360 grains of black oxyd of manganeſe, a ſupply of anti-infectious gas is procured in the moſt ſimple manner. The only cauſe of apprehenſion here, and which is removed by the apparatus, is, that the ſtopper, being kept down only by its own weight, might be forced out by the expanſion of the gas; but, to prevent this accident, nothing more is neceſſary than to faſten a lump of lead to the ſtopper.

The only inſtruction to be given relative to the manner of uſing theſe reſervoirs of anti-infectious gas, is to open them when found proper, and to ſhut them as ſoon as thoſe neareſt them begin to be affected. The expanſion of the portion of gas emitted follows of courſe, and the effect is ſuch, that if the veſſel remains open only four or five minutes, thoſe who enter an hour afterwards at the fartheſt door from it will immediately perceive that there has been a diſengagement of oxygen gas.—It will doubtleſs be admitted, that of all the proceſſes for acid fumigations, at preſent known, this is the moſt ſimple, the leaſt liable to accident, and the beſt calculated for common uſe. Every one who conſiders that the gas thus produced is acknowledged to be the moſt efficacious even by thoſe who ſeemed to doubt its activity before the means of regulating it at pleaſure were diſcovered; in a word, every one who adopts the decided opinion of many philoſophical men, that this gas excels all others in the property of exciting the vital powers, muſt agree, that when petty paſſions are exhauſted in oppoſing the evidence of facts, the ſuperiority of the oxygenated muriatic acid gas, as a purifying and anti-contagious gas, will be eſtabliſhed, and that its extemporaneous preparation will be the common preſcription for the preſervation of health.—The form of the apparatus is given in the following figure: A, a flat piece of wood, on which are fixed the two uprights B, B. C, a glaſs jar, glued to a ſmall moveable board, *d*, which ſlides into the grooves of the two uprights. E, a wooden ſcrew, paſſing through the croſs-bar F, and faſtened at its extremity to the moveable horizontal piece G, which ſlides up and down the two



upright pieces. H, a glaſs plate, ſerving for a cover, and glued to the lower ſurface of the moveable piece G.

FU'MINGLY, *adv.* Angrily; in a rage.—That which we move from our better learning and inſtruction ſake, turneth unto anger and choler in them: they grow altogether out of quietneſs with it; they anſwer *fumingly*, that they are aſhamed to defile their pens with making anſwer to ſuch idle queſtions. *Hooker.*

FU'MITER, *ſ.* A plant; fumitory:

Why, he was met even now,
As mad as the vext ſea; ſinging aloud,
Crown'd with rank *fumiter* and furrow weeds. *Shakeſpeare.*

FU'MITORY, *ſ.* See FUMARIA and ADOXA.

FUMOS'ITY, *ſ.* Smokineſs. *Scott. Not much uſed.*

FU'MOUS, or FUMY, *adj.* [*fumeux, ſe*, Fr.] Producing fumes:

From dice and wine the youth retir'd to reſt,
And puff'd the *fumy* god from out his breaſt:
Ev'n then he dreamt of drink and lucky play;
More lucky had it laſted till the day. *Dryden.*

FUN, *ſ.* [A low word.] Sport; high merriment; frolicſome delight:

Don't mind me, though, for all my *fun* and jokes,
You bards may find us bloods good-natur'd folks. *More.*

FUNAMBULA'TION, *ſ.* [from the Lat. *funis*, a rope, and *ambulo*, to walk.] The act of walking or dancing on a rope.

FUNAM'BULUS, *ſ.* among the Romans, ſignified a rope-dancer; called by the Greeks *ſchænobates*. At Rome, the funambuli firſt appeared under the conſulate of Sulpicius Præticus and Licinius Stolo, who were the firſt introducers of the ſcenic repreſentations. It is added, that they were firſt exhibited in the iſland of the Tyber, and that the cenſors Meſſala and Caſſius afterwards promoted them to the theatre. In the Floralia, or *ludi Florales*, held under Galba, there were funambulatory elephants, as we are informed by Suetonius. Nero alſo ſhowed the like, in honour of his mother Agrippina. Vopiſcus relates the ſame in the times of Carinus and Numerianus.

FUNA'RIA, *ſ.* In botany, a genus of moſs; the ſame with Koelreutera of Hedwig. The generic characters are—Capſule obovate: fringe double; outer of ſixteen oblique wedge-form teeth, cohering at their tips; inner a membrane divided into ſixteen flat teeth: veil ſquare.

Species. 1. Funaria hygrometica: leaves ovate, acute, concave, entire, inflected; capſule ſwelling, drooping.

2. Funaria

2. Funaria muhlenbergii: leaves obovate, awned, concave, ferrulate, ſpread; capſule obovate, oblique.

3. Funaria anguſtata: leaves cloſely ſheathing; capſule narrowed at the baſe.

FUNCH, or FUNCIUS (John), a German lutheran divine in the ſixteenth century, born at Werden, near Nuremberg, in 1518. He married a daughter of Oſiander, profeſſor of divinity at Konigſberg, and became the ſecond to that fanciful divine in the diſputes which he introduced into the lutheran church. Funch was afterwards choſen court preacher to Albert duke of Pruſſia, and, unfortunately for himſelf, was perſuaded to turn politician, and engage in cabals unfavourable to the intereſts of the Poliſh nation. For this conduct he was proſecuted in the name of the province, and was condemned to be put to death as a diſturber of the public peace. He was beheaded at Konigſberg, in 1566, in the forty-ninth year of his age. He was the author of a Chronology, very favourably received by the learned world; in writing which he is ſaid to have been aſſiſted by his father-in-law Oſiander, who was no mean hiſtorian. The firſt part of it, reaching from Adam to the birth of Chriſt, was printed in 1544. In 1554 the whole of the Chronology was publiſhed, beginning with the creation of the world, and ending with the year of Chriſt 1552. In a third edition, he brought it down as far as the year 1560. He was alſo the author of Commentaries upon the Apocalypſe; the Life of Andrew Oſiander; the Life of Vitus Theodorus, &c.

FUNCHAL', or FUNCHIAL, a ſeaport town and capital of the iſland of Madeira, ſituated in a valley on the ſouth coaſt of the iſland: ſaid to be ſo called from the quantity of fennel (*funcha* in Portugueſe) which grew on the ſpot. The harbour is defended by ſeveral batteries, and a caſtle. It contains ſix pariſhes, ſeveral chapels, and ſix convents, with ſeveral hoſpitals. When Funchal was fortified, it would ſeem the engineer had nothing in view beſides rendering it ſtrong on the ſea ſide; for there all the works, except a ſingle wall, are directed. This was certainly a great overſight, as there are ſeveral bays not far diſtant from the land ſide, where an enemy might ſafely diſembark, and march to the very walls without oppoſition. The Portugueſe, though numerous, do not conſtitute the bulk of the inhabitants, the Engliſh and French Roman Catholics, who live in the Portugueſe manner, are juſtly ſuppoſed to exceed the others in number and wealth; beſides theſe, there is an infinity of mulatto and negro freemen. The ſtreets of Funchal are drawn by a line, all the houſes neat, and the windows faſhed with lath-work, but with openings wide enough for thoſe within to ſee and be ſeen. The principal trade of the inhabitants conſiſts in wine and ſweetmeats. Lat. 32. 32. N. lon. 16. 49. W. Greenwich.

On the night of the 9th of October, 1803, a torrent ruſhed down from the mountains on the town of Funchal, with irreſiſtible violence, bearing every thing before it in its paſſage to the ſea. The bed of the river, not being capable of containing this increaſe of water, overflowed on each ſide to a conſiderable extent, and ſwept away three of its bridges, and a magnificent church. Manſions, warehouſes, inhabitants, cattle, and effects of all ſorts, were indiſcriminately involved in this reſiſtleſs element, and hurried to the ocean. The ſtreets of two-thirds of the town were completely inundated: in moſt places the water reached to the firſt floor. The darkneſs of the night, the ruſh and roar of the waters, the cries of the ſufferers, the terror of all, formed ſuch a ſcene as mocks all powers of deſcription. Towards morning, however, the violence of the torrent abated, and towards the noon of next day had nearly ſubſided. The vaſt aggregate of water is conjectured to have been produced by the burſting of a water-ſpout in the mountains, (an accident not unfrequent;) for, although it had rained on the day of, and on that preceding, the event, yet the quantity which had fallen was not at all ſufficient to produce ſuch a flood. The village of Santa Cruz and Machico were more than half ſwept away. At the former three or four, and at the latter twenty-three, perſons periſhed. Two hundred perſons at leaſt loſt their lives in the iſland. The effects of this diſaſter extended to the north eaſt part of the iſland, but to the weſtward was not much felt beyond Magdalenar. Betwixt that place and Funchal the rivers did much damage, but only nine perſons were drowned. The friary at Serros de Deos was carried away, but the church ſtood.

FUN'CHEON, a river of Ireland, which runs into Blackwater river, five miles north Rathcormuck, in the county of Cork.

FUNC'TION, *ſ.* [*functio*, or *fungor*, Lat. to perform.] Diſcharge; performance.—There is hardly a greater difference between two things than there is between a repreſenting commoner in the function of his public calling, and the ſame perſon in common life. *Swift.*—Employment; office.—The miniſtry is not now bound to any one tribe: now none is ſecluded from that *function* of any degree, ſtate, or calling. *Whitgifte.*—Let not theſe indignities diſcourage us from aſſerting the juſt privileges and pre-eminence of our holy *function* and character. *Atterbury.*—Single act of any office.—They have ſeveral offices and prayers againſt fire, tempeſts, and eſpecially for the dead, in which *functions* they uſe ſacerdotal garments. *Stillingfleet.*—Trade; occupation.—Follow your *function*; go, and batten on cold bits. *Shakeſpeare.*—Office of any particular part of the body.—The bodies of men, and other animals, are excellently well fitted for life and motion; and the ſeveral parts of them well adapted to their particular *functions*. *Bentley.*—Power; faculty: either animal or intellectual.—Though every human conſtitution is morbid, yet are their diſeaſes conſiſtent with the common *functions* of life. *Arbuthnot.*

Whatever warms the heart, or fills the head,
As the mind opens, and its *functions* ſpread,
Imagination plies her dang'rous art,
And pours it all upon the peccant part. *Pope.*

FUNC'TION, in mathematics, a term uſed in analytics, for an algebraical expreſſion any how compounded of a certain letter or quantity with other quantities or numbers: and the expreſſion is ſaid to be a function of that letter or quantity. Thus, $a-4x$, or $ax+3x^2$, or $2x-a\sqrt{a^2-x^2}$, or x^c, or c^x, is each of them a function of the quantity x.

In a memoir inſerted in the Berlin Acts for the year 1772, M. La Grange, who has made many important diſcoveries in pure analyſis, and has contributed very largely to the preſent opulence of aſtronomical ſcience, aſſerted that the theory of the developement of functions contained the true principles of the differential calculus, freed from all conſideration of infinitely ſmall quantities, or of limits. To eſtabliſh this poſition more fully and particularly was the expreſs object of a treatiſe on the Theory of Analytical Functions, which he publiſhed at Paris in 1798, 4to. His definition of a function is as follows:—A function, of one or more quantities, is every expreſſion in which theſe quantities enter after any manner whatever, combined or not with other quantities of given or invariable values, while the quantities of the function may receive all poſſible values. Thus: fx deſignates a function of x; $f(x^2)$, $f(a+bx)$ functions of x^2 and $a+bx$. Let, then, fx deſignate a function of any variable quantity x. If, inſtead of x, $x+i$ be ſubſtituted, i being any indeterminate quantity, fx becomes $f(x+i)$; which, by the method of ſeries, may be expanded into this form: $fx+pi+qi^2+ri^3+$, &c. in which, p, q, r, &c. the coefficients of the powers of i, are new functions of x, derived from the primitive function fx, and independent of the quantity i.

Having eſtabliſhed the general form of the developement of the function $f(x+i)$, the author proceeds to examine more particularly in what this developement

conſiſts, and what each of its terms ſignifies. He remarks that it is evident that, if in this function we ſeek what is independent of i, we have only to make $i=o$, which reduces $f(x+i)$ to fx; thus fx is the part of $f(x+i)$ which remains by making $i=o$; hence $fx=f(x+i)$, added to a quantity which vaniſhes when $i=o$, and which ſhall be multiplied or may be ſuppoſed to be multiplied by a poſitive power of i: but it has been demonſtrated that, in the developement of $f(x+i)$, no fractional power of i can enter; therefore the quantity concerned can only be multiplied by ſome poſitive and whole power of i; it will then be of the form iP, P being a function of x and i, and which ſhall not be infinite when $i=o$. After ſome examples, M. La Grange demonſtrates this important theorem, that, in the ſeries $fx+pi+qi^2+$, &c. i may always be taken ſufficiently ſmall, ſo that any term whatever ſhall be greater than the ſum of all the ſucceeding terms.

In the ſecond part of his work, M. La Grange applies his theory to geometry and mechanics. The common and known methods in the fluxionary and differential calculus for determining tangents, radii of curvature, &c. are excellent, if we regard their ſimplicity and generality, but are deficient in that rigour of proof for which the ancient demonſtrations are celebrated. Such a deficiency in the theory of fluxions is ſupplied by that of functions; and the problems of tangents, of the curves of contact and oſculation, are in this work placed under a very perſpicuous point of view, and demonſtrated rigorouſly. The proofs of theſe problems depend on a form ſhewn in the firſt part to belong to the developement of $f(x+i)$; namely, $fx+if'x+\frac{i^2}{2}f''x+\frac{i^3}{2\,3}f'''(x+j)$ j being an indeterminate quantity, but contained between the limits of o and i;—and on a theorem, in which it is proved that i may always be taken ſufficiently ſmall, ſo that any term ſhall be greater than the ſum of all the preceding terms.

The problems of the maxima and minima of quantities are demonſtrated in a moſt ſatisfactory manner. It is ſhewn that, if the function fx be a maximum, or minimum, the prime function $f'x$ muſt $=o$; and that $f''x$ muſt be $<o$ in caſe of a maximum, or $>o$, in the caſe of a minimum: but that, if $f''x=o$, $f'''x$ likewiſe $=o$, and $f''''x$ is $<o$ or $>o$, according as the quantity is a maximum or minimum; in general, that, if the derived function of any even order diſappear, the function of the uneven order following diſappears likewiſe, and the function of the ſucceeding even order is negative for the maximum or poſitive for the minimum.

The author extends his theory to the determination of queſtions relative to curves of double curvature, and of thoſe problems which belong to that branch of analyſis called *Calcul des Variations*, firſt introduced by John Bernouilli in the ſolution of his famous problem of the curve of quickeſt deſcent, (brachyſtochrone,) and ſince perfected by Euler and the author of the work we are ſpeaking of.

In the application of the theory of functions to mechanics, the ſpace is conſidered as a function of the time, and is repreſented by the equation $x=ft$; hence at the end of a time $(t+\theta)$ the ſpace deſcribed will be $f(t+\theta)-ft$; or, by the form for the developement of functions, $\theta f't+\frac{\theta^2}{2}f''t+\frac{\theta^3}{2\,3}f'''(t+\lambda\theta)$ λ being an unknown coefficient, the value of which is compriſed between o and i. Now in this form the firſt term repreſents uniform motion, $f't$ the relation of the ſpace and time being the meaſure of that which is called *velocity*; the ſecond term repreſents motion uniformly accelerated where the quantity $\frac{f''t}{2}$ repreſents the accelerating force; the third term repreſents the total of the other motions; now θ may be taken ſo ſmall that the motion compoſed of the motions repreſented by the firſt two terms ſhall approach nearer to the true motion, than any other motion can, compoſed of an uniform motion and a motion uniformly accelerated. From the developement of the function $f(t+\theta)$, it appears that, in any rectilinear motion where the ſpace deſcribed is a given function of the time, the prime function of this function will repreſent the velocity, and the ſecond function the accelerating force in any inſtant: whence it appears that the prime and ſecond functions naturally preſent themſelves in mechanics, where they have a determinate value and ſignification; and it is this circumſtance which induced Newton to eſtabliſh fluxions on the conſideration of motion.

It has been ſaid that the true principles of any invention are moſt ſatisfactorily and truly explained by the inventors themſelves; yet it is at the diſtance of more than an hundred years from the diſcovery of the fluxionary calculus, that its principles are firſt clearly and rigorouſly eſtabliſhed. It has been reſerved for the mathematicians of theſe days, to effect what was denied to a Newton and a Leibnitz; and to ſupply to their theory that evidence and exactneſs, the want of which makes us attribute its invention rather to the felicity of the times in which they lived, than to the excellence of their genius. See the article FLUXIONS, vol. vii.

FUND, *ſ.* [*fond*, Fr. *fando*, Lat. a bag.] Stock; capital; that by which any expence is ſupported.—He touches the paſſions more delicately than Ovid, and performs all this out of his own *fund*, without diving into the arts and ſciences for a ſupply. *Dryden.*

Part muſt be left, a *fund* when foes invade,
And part employ'd to roll the watry tide. *Dryden.*

Stock or bank of money.—As my eſtate has been hitherto either toſt upon ſeas, or fluctuating in *funds*, it is now fixed in ſubſtantial acres. *Addiſon.*

The PUBLIC FUNDS *of* ENGLAND, are the taxes appropriated by parliament for the ſupport of civil government, and for the payment of the principal and intereſt of money borrowed for public ſervices. They are formed into four diviſions or claſſes, called the *Aggregate Fund*, the *South-Sea Fund*, the *General Fund*, and the *Sinking Fund*.

The *aggregate fund* was eſtabliſhed by an act of Geo. I. c. 12. in 1715. It had this name given it, becauſe it conſiſted of a great variety of taxes and ſurpluſſes of taxes and duties which were in that year conſolidated, and given as a ſecurity for the diſcharge of the intereſt and principal of debts due to the bank of England, and ſome other public debts; and alſo for the payment of 120,000l. per ann. to the civil liſt. Into this fund are brought the two thirds and one half ſubſidy of tonnage and poundage; half the inland duties on tea and coffee; the houſe-money granted by the 7th of Wm. III. the duty on hops; the duties on low wines, brandy, and Britiſh ſpirits; all arrears of land-taxes; all public monies not appropriated; the ſurpluſſes of the nine-penny exciſe, of the five-ſevenths of the bank nine-penny exciſe, of the revenues in the annuity acts of the 4th, 5th, and 6th, of queen Anne, &c. and by an act of the 1ſt of Geo. III. all the duties conſtituting the revenue of the civil liſt. The whole produce or income of this fund had been for ſome years about 2,600,000l. per ann.

The *South-Sea fund* was eſtabliſhed, by ſtat. 3 Geo. I. c. 9, in 1716; and is ſo called, becauſe appropriated to pay the intereſt of ſuch part of the national debt, as was advanced by that company and its annuitants. It conſiſts of a duty on candles, and certain impoſts on wines, vinegar, tobacco, and Eaſt-India goods.

The *general fund* was alſo eſtabliſhed, by ſtat. 3 Geo. I. c. 7. in 1716, and conſiſts of a ſubſidy on goods exported; a tax on hackney-coaches and chairs; duties on ſoap, hides, ſtamps, and policies of inſurance; 700l. per week letter-money; a moiety of the inland duties on tea and coffee; and 39,855l. per annum out of the hereditary exciſe on beer for bankers annuities. All theſe taxes and payments have for ſome years amounted to a little more than a million per ann. and are appropriated to the diſcharge

charge of the intereſt of 7,808,087l. originally 10,000,000l. capital ſtock of South-Sea annuities, together with charges of management.

All that remained of the produce of the taxes thus digeſted into theſe three funds, after ſatisfying the charges upon them, was, in the ſame year, 1716, carried into a fourth fund, to which was given the name of the *ſinking fund*, becauſe appropriated to the purpoſe of ſinking or decreaſing the public debt. The words of the act of the 3d of Geo. I. which eſtabliſhed this fund, are, "that all the monies to ariſe from time to time, from the ſaid funds, being the exceſſes and ſurpluſſes thereof, ſhall be appropriated to the diſcharging the principal and intereſt of ſuch national debts as were incurred before the 25th of December, 1716, and are declared to be national debts; and to or for *no other uſe, intent, or purpoſe, whatſoever*."

The operations and progreſs of this *ſinking fund* form ſo important a part of the hiſtory of the national debt, that a more particular account of it will here be proper. Before its eſtabliſhment there had exiſted many ſmaller funds of the ſame nature: that is, ſuch duties or taxes had been provided for paying the intereſts of particular loans, as afforded ſurpluſſes by which the principal itſelf was to be gradually redeemed: this was the common practice in the reigns of king William and queen Anne. Moſt of the public duties were given for terms of years; and at the end of thoſe terms they ceaſed of courſe, unleſs continued for farther terms by new acts of parliament: and, in general, it was provided, when any money was raiſed, that the principal ſhould be cancelled either by time, as in the caſe of the ſale of long and ſhort annuities, or by the ſurpluſſes of the duties charged with the payment of the intereſt. This was an excellent plan; but it was by no means carried ſteadily into execution. In the year 1720, moſt of the long and ſhort annuities were converted into redeemable perpetuities, at the expence of above three millions; and the ſurpluſſes of the duties charged with particular loans were often ſo broken into, by being either charged with new loans before they had cancelled the old, or ſpent on current ſervices, as to be rendered incapable of anſwering the end intended by them. In conſequence partly of this bad management, the public debts at the acceſſion of the houſe of Hanover were ſo much increaſed as to be generally reckoned inſupportable; and their reduction was made one of the firſt objects of parliamentary attention. This gave riſe, in 1716, to the inſtitution of the *ſinking fund*, of which we are now ſpeaking; the father of which was, as has been generally ſaid, ſir Robert Walpole, but, in reality, the earl of Stanhope. Upon this fund, the future happineſs and glory of the kingdom were thought to depend; and the law which eſtabliſhed it was declared to be a fundamental law of the realm. In conformity to this, the words of this law were made as ſtrong as they could well be; and, in order to give additional force to it, a repetition of it, in the ſame words, was inſerted in an act of the 5th of Geo. I. c. 3. Particular notice ſhould be taken of theſe words: they order that all the ſurpluſſes of the taxes then made perpetual, ſhall be applied to the diſcharge of the public debts, and *to no other uſe or intent whatever*. When, therefore, a debt had been paid off, the addition ariſing from that payment to the ſurpluſſes (or the annuity diſengaged by it) became a part of the fund, and, together with it, was to be employed in diſcharging farther debts. And the ſame being true of every ſucceſſive annuity diſengaged by every payment, the fund, if never miſapplied, muſt neceſſarily have operated in ſinking the public debt, in the ſame manner that money accumulates, when put out to bear compound intereſt. And in this way this fund did in fact operate for a few years. While in its infancy, it was watched over with great care: the improvement, and the inviolable application of it, were recommended in moſt of the ſpeeches from the throne, and echoed back in the addreſſes of the houſe of commons. It is particularly obſervable, that ſo well did our miniſters then underſtand the nature and importance of this fund, that rather than encroach upon it, they frequently borrowed money in order to defray the neceſſary expences of government. From ſome publications in 1726, it appears, that ſome perſons had been led to apprehend this zeal of the miniſtry would not be permanent, becauſe it was not their intereſt to pay off the public debt, on account of the dependence and influence created by it. In anſwering this objection, the writers on the ſide of the court called ſuch an apprehenſion an indecent jealouſy, and took upon them to aſſure the public, "that in no poſſible exigence of affairs, could our miniſters ever approve of or recommend the alienation of the ſinking fund." Happy would it have been for Britain had this proved true: but in a little time it appeared, that the apprehenſions which had been ſtiled indecent jealouſies, were too well grounded. Men in power came ſoon to ſee, that this fund was advancing too faſt in its operations, and to change their zeal for it into a reſolution to deſtroy it: this will abundantly appear from the following facts.

Charging the income of the ſinking fund with the payment of the intereſt of new loans, is an encroachment upon it, no leſs ſubverſive of its efficacy, than depriving it of groſs ſums; there being no difference between taking from it the annual intereſt of a ſum, and that ſum itſelf. Between the years 1727 and 1732, ſeveral encroachments of this kind had been made upon it; but, being of a leſs obvious nature, they paſſed without meeting with any particular oppoſition. The finiſhing blow was given in the year 1733. In that year, in order to keep the land-tax at one ſhilling in the pound, as it had been the year before, it was neceſſary either to borrow half a million for the current ſervice, or to take this ſum from the ſinking fund. The laſt method was choſen, and propoſed by ſir Robert Walpole to the houſe of commons. Long and warm debates enſued. A propoſal to alienate, in a time of profound peace, a fund which the law had made ſacred, and the alienation of which *no poſſible exigence of public affairs* could juſtify, only for the ſake of keeping the land-tax for one year at one ſhilling in the pound, juſtly kindled the indignation of the patriotic party. They urged the prohibition of the law, the faith of parliament, and the ſecurity of the kingdom. The propoſer of the alienation was reminded of his inconſiſtency and treachery, in endeavouring to beat down that very monument of glory which he had boaſted of having erected for himſelf; and ſir John Barnard warned him, that he was drawing upon him the curſes of poſterity. But all arguments were vain. The miniſtry pleaded that the landed intereſt wanted eaſe, that there was no occaſion for being in a hurry to pay the national debt; and that the circumſtances of the kingdom had altered ſo much ſince the eſtabliſhment of the ſinking fund, that the competition then among the public creditors was, not who ſhould be firſt, but who ſhould be laſt paid. Thus argued, among others, ſir Robert Walpole. His reaſons prevailed; and the houſe of commons, not uſed to refuſe him any thing, conſented. The practice of alienating the ſinking fund having been thus begun, went on of courſe. In the next year, or 1734, 1,200,000l. was taken from it. In 1735, and 1736, it was anticipated and mortgaged. Thus expired, after an exiſtence of a few years, the ſinking fund; that ſacred bleſſing, (as it was once thought,) and the nation's only hope. Could it have eſcaped, it would long before this time have eaſed Britain of all its debts, and left it a much more free and happy country.

By an act of the 25th of Geo. II. 1752, a change was made in the ſinking fund, which it is neceſſary to mention. Before this act, the ſinking fund conſiſted only of the clear ſurpluſſes of the aggregate, the general, and the South-Sea company's, funds. By the war, which began in 1740, there was an addition made to the public debts of near thirty-two millions. This occaſioned a great increaſe of taxes; and the practice was, whenever any new tax produced leſs than the intereſt with which it was charged, to make good the deficiency out of the ſinking

fund, and afterwards to replace the ſum taken from it out of the ſupplies for the following year. But whenever a tax produced more than the charge upon it, the overplus, inſtead of being carried to the ſinking fund, was made a part of the ſupplies for the year. By the act juſt mentioned, all the new taxes, together with all the annuities to the payment of which they had been appropriated, were ordered to be carried into the ſinking fund, and formed into one general account. Moſt of the new taxes having proved deficient, this fund at firſt loſt more than it gained by the change. But the loſs was afterwards more than made up; firſt, by the ſaving which was produced by the reduction of intereſt from three and a half per cent. to three per cent. in 1757; and, ſecondly, by the addition, in the ſame year, of the ſalt-duties to this fund, after they had completed the redemption of a million with which they had been charged in 1745.

The war which began in 1756, added ſeventy-one millions and a half to the public debts. This produced a new increaſe of taxes, which (in conformity to the conſolidating act juſt mentioned) have been brought to the general ſinking fund account, together with the annuities or intereſts with the payment of which they are charged. And it is now the conſtant practice, whenever a new fund or tax is created for paying the intereſt of a loan, to carry both into the ſinking fund; in conſequence of which, this fund gains when the tax happens to produce more, but loſes when it produces leſs than the intereſt which it has been given to pay. The ſinking fund, therefore, which, before the conſolidating act, conſiſted only of the ſurpluſſes of the aggregate, general, and South-Sea company's, funds, conſiſts now of the clear ſurplus of all the appropriated taxes. There is but one tax excepted; and that is, the additional tax upon houſes and windows, granted in 1758, towards paying the intereſt of four millions and a half then borrowed. This tax has never been made a part of the ſinking fund; and, having always proved deficient to the amount of about 45,000l. per ann. the deficiency is conſtantly made good by the ſinking fund, and afterwards replaced from the ſupplies.

Before the laſt reduction of the intereſt of the public debts, the ſinking fund, having ſuffered greatly from various encroachments upon it, produced little more than a million per ann. But after this reduction, and its increaſe by the addition of the ſalt-duties, it produced near two millions per ann. In 1764, it produced at Michaelmas, after making good deficiencies, 2,105,000l. nearly. For five years after 1764, its average produce, reckoned to Chriſtmas in every year, was 2,234,780l. For five years, ended in 1774, its average produce was 2,610,759l. In 1775, it produced 2,917,869l. In 1776, 3,166,517l. In 1777, it was charged with an annuity of 100,000l. per ann. to the civil liſt; and, after paying this annuity and half a year's intereſt of five millions borrowed in that year, it produced nearly 2,700,000l. In 1778, it was taken at three millions; but did not produce, after paying the ſaid annuity, and making good the intereſts of the new loans in 1777 and 1778, more than two.

It appears from this detail, that ſince the peace in 1763, the income of the ſinking fund has increaſed conſiderably. The cauſes of this have been partly the falling in of life-annuities, and the great productiveneſs of the taxes occaſioned by the increaſe of luxury. But the principal cauſe has been the falling in of the intereſt of about ten millions and a half of the public debts, which had been diſcharged during the twelve years of peace between 1763, and 1775. This diminution of the public debts has been made, not by the ſinking fund, but by a contribution from the Eaſt-India company of 400,000l. per ann. begun in 1768, and continued for five years; by the profits of ten lotteries; by the compoſition for maintaining French priſoners; ſale of French prizes taken before the declaration of war in 1756; and other extraordinary receipts, amounting in all to above eight millions. This fund, therefore, did not pay off more than two millions and a half, the reſt of its produce having been employed in bearing the expences of the peace eſtabliſhment, which, during this period, was nearly double to what it had been in any former period.

To the ſum juſt mentioned, add three millions paid off in the peace between 1748 and 1756, and three millions paid off in 1736 and 1737, and it will appear that the whole amount of the public debts paid off by the ſinking fund, ſince its firſt alienation in 1733, was only eight millions and a half; whereas it has been ſhewn, that had only 1,212,000l. per ann. of it been applied inviolably to the redemption of the public debts, one hundred and forty-nine millions would have been paid.

It has been ſaid, that when money is wanted for defraying public expences, it makes no difference whether it is obtained by diverting the ſinking fund, or by a new loan. There cannot be a more deluſive fallacy than this. Money in a ſinking fund, if never alienated, is improved at compound intereſt; but, when procured by a loan, bears only ſimple intereſt. A nation therefore, whenever it applies the income of ſuch a fund to current expences rather than the redemption of its debts, chooſes to loſe the benefit of compound intereſt in order to avoid paying ſimple intereſt; and the loſs in this caſe is equal to the difference between the increaſe of money at compound and ſimple intereſt. This obſervation was very fully eſtabliſhed in an ingenious pamphlet publiſhed by a Mr. John Adam in the year 1727, when the reduction of intereſt on the national debt from five to four per cent. took place; by which meaſure this famous ſinking fund was increaſed to above a million per annum. He obſerves, "that, ſuppoſing the *then* national debt, which was fifty millions, and the ſaid ſinking fund of one million, to be both at four per cent. intereſt, the latter increaſing annually in like proportion as ſuch a ſum put out at compound intereſt would do, the whole national debt would have been diſcharged by the year 1756. Thus," for illuſtration, "at Midſummer 1728, one million would be paid off; and at Midſummer 1729, the ſinking fund would be one million and forty thouſand pounds, and that ſame year and term the debts would be leſſened two millions and forty thouſand pounds. At Midſummer 1730, the ſinking fund would be increaſed to one million and eighty thouſand pounds, and the debts would be leſſened three millions one hundred and twenty-one thouſand ſix hundred pounds; and ſo on to the ſaid year 1756, when the ſaid ſinking fund would be increaſed to thirty millions, and the total amount of the debts paid would be fifty millions. Again, ſuppoſing the fifty millions had been at three per cent. from Midſummer 1727, then at Midſummer 1751, inſtead of 1756, the ſinking fund would be increaſed to thirty millions, and the debt of fifty millions would then be diſcharged."

Theſe obſervations of Mr. Adam, have been ſince carried farther by the late Dr. Price, who, in his Appeal to the Public on the national debt, proves, "that one penny put out at our Saviour's birth to 5 per cent. compound intereſt, would in the year 1781 have increaſed to a greater ſum than would be contained in 200,000,000 of earths all ſolid gold; but, if put out at ſimple intereſt, it at the ſame time would have amounted to no more than ſeven ſhillings and ſixpence. He adds, a million borrowed annually for twenty years, will pay off, in this time, 55 millions 3 per cent. ſtock, if diſcharged at 60l. in money for every 100l. ſtock; and in 40 years more, without any farther aid from loans, 333 millions (that is 388 millions in all) would be paid off. The addition of nineteen years to this period would pay off 1000 millions. A ſurplus of half a million per annum, made up to a million by borrowing half a million every year for twenty years, would diſcharge the ſame ſums in the ſame periods."

The ſinking fund, notwithſtanding the force of theſe obſervations, went on from year to year alienated and neglected; until the opening of parliament in 1786, when the late chancellor of the exchequer, Mr. Pitt, with a zeal

a zeal which juſtly entitles him to the ſupport and praiſe of every true friend to this country, came forward with a plan for liquidating the national debt, upon the above principle, by the application of one million per annum to the ſinking fund; the money to be provided from the ſurpluſſes and exceſſes of the annual taxes; and, in caſe thoſe taxes ſhould be found ſhort of that amount, then the deficiency to be charged upon and made good by further aids.

For the purpoſe of enſuring the due application of this ſinking fund of 1,000,000l. per annum to its deſtined object, it was propoſed to veſt in a certain number of commiſſioners the full power of diſpoſing of it in the purchaſe of ſtock for the public in their own names; the ſpeaker of the houſe of commons, the chancellor of the exchequer, the maſter of the rolls, the governor and deputy governor of the bank of England, and the accountant general of the court of chancery, were named amongſt the commiſſioners, with a power to receive the annual million by quarterly payments of 250,000l. each, to be iſſued out of the exchequer before any other money, except the intereſt of the national debt. By theſe proviſions, the fund would be ſecured, and no deficiencies in the national revenues could affect it, as all ſuch were intended to be ſeparately provided for by parliament. By recent calculations, as well as former, made upon this reform, it appears, that the accumulating compound intereſt on a million of money yearly, together with the annuities that muſt naturally expire and fall into that fund, in the courſe of twenty-eight years, will amount to ſuch a ſum, as will leave a ſurplus of four millions annually, to be applied, if neceſſary, to the exigencies of the ſtate. The good policy of thus making the income of the nation ſo far exceed its expenditure as to leave a million annually towards the liquidation of the public debt, has been univerſally acknowledged; and ſo far as experience has hitherto been able to bear teſtimony, the ſcheme promiſes to anſwer, in the fulleſt extent, the patriotic purpoſes intended by it. To prove this, as well as to inform the reader more fully of the progreſs hitherto made, we ſhall here ſtate what the commiſſioners have already done towards the reduction of the public debt, and what that debt amounted to at the commencement of the preſent year.

Total amount of national debt of Great Britain on the 5th January, 1805 - -	£603,925,792
Stock created by loan of 1805 -	38,700,000
	642,625,792
Transferred for the redemption of the land-tax - - -	22,000,000
	620,625,792
Redeemed by the commiſſioners for management of the ſinking fund -	113,500,000
Leaving as the amount on the 31ſt of January, 1806 - - -	507,125,792

In the laſt year 1805, 7,615,167l. 7s. 9d. were expended by the commiſſioners; and 1,906,104l. 17s. 1¾d. is to be applied in the quarter between the 1ſt of February and the 1ſt of May, 1806. It appears that the following ſtock has been purchaſed between the 3d of February, 1805, and 31ſt of January laſt, viz.

Capital Stock.	Caſh paid.
£6,093,000 3 per Cent. long An.	£3,570,573 5 6
6,468,492 Red An. Conſol. - -	3,804,486 18 3
161,400 Old South Sea Ann. - -	96,562 15 0
133,000 New South Sea Ann. - -	77,374 7 6
22,000 3 per Cent. Ann. 1751 -	12,816 5 0
92,021 Imp. 3 per Cent. Ann. -	53,403 16 6
£12,972,913	

The intereſt of this 12,972,913l. of ſtock is 389,187l. 7s. 9d. which added to the amount of laſt year gives nearly eight millions to be applied in the preſent year.

Of this debt of 507 millions, nearly 100 millions conſiſt of 4 and 5 per cent. ſtock, which being converted into 3 per cents. makes the total amount in 3 per cent. ſtock 557 millions; and valuing the 3 per cent. ſtock at 60 per cent. (which is the preſent average price,) the total capital of the debt in money is 334 millions of pounds ſterling.

The original proviſion of the ſinking fund of a million per annum, with the additions that have ſince been made to it, and the dividends on ſtock bought up by the commiſſioners who manage that fund for the nation, amount altogether at this time to about 8,000,000 per annum. We have thus the evidence of facts, and of about twenty years experience to prove, that a ſingle million per annum, laid by ſince 1786 for purpoſes of accumulation, has multiplied itſelf, on principles of compound intereſt, ſo as to amount at this time to eight millions per annum; and has created a capital in the hands of the commiſſioners of upwards of a hundred and thirteen millions.—In other words, by the plan of that acute calculator, Dr. Price, the nation began about twenty years ſince to buy up its own debts. The fund appropriated for this purpoſe was to be one million per annum, to be laid out in the purchaſe of ſuch portions of ſtock as might be brought to market by the public. The commiſſioners have ſince applied the intereſt ariſing from the ſtock which they have purchaſed, to the increaſe of their funds; and the reſult is, that one hundred and thirteen millions of the national debt, with its intereſt, have thus been redeemed to the nation from its public creditors. The intereſt of this amount of the redeemed ſtock, and the annuity of one million regularly appropriated to this purpoſe, give to the commiſſioners an income for the current year (1806) of eight millions!

The temporary advantages from the actual operation of this plan, are of ſcarcely leſs conſequence to our public credit, than will be its ultimate benefits. The large ſums which the commiſſioners have every week at their diſpoſal, occaſion perſons who are deſirous of ſelling their ſtock, or converting it into money, to find no difficulty in meeting with purchaſers. Hence it may be aſſerted, that at the ſtock exchange there are at this time generally more buyers of ſtock than ſellers; and the ſtate of our national credit is ſuch, that inſtead of there being occaſion, as ſome deſponding perſons have urged, to paſs an act of parliament to extinguiſh the debt, and ruin all the creditors of the nation at a blow, it will rather be neceſſary at ſome diſtant period, to compel the national creditors to receive back their money. To make theſe poſitions plain to the meaneſt underſtanding, we have calculated the future accumulations of the preſent revenue of the commiſſioners, at the ſame rate of increaſe which has hitherto attended the ſinking-fund. That rate has hitherto been 5 per cent. and any perſon ordinarily verſed in arithmetic may verify theſe calculations for his own ſatisfaction. The preſent annual income of the commiſſioners for managing the ſinking-fund, conſiſting of eight millions, will generate by the

Year 1810, the ſum of	£34,480,000
1820, ———	156,700,000
1830, ———	356,000,000

an amount which will exceed the preſent national debt.

However, in 1840 the ſum would be	680,500,000
in 1850 - -	1209,000,000
in 1860 - -	2070,000,000
in 1870 - -	3472,700,000
in 1880 - -	5757,000,000

ſums which outſtrip any accumulation of new debt that the moſt deſponding politician can anticipate.

There exiſted no occaſion for carrying the calculation beyond the year 1830, by which year, if the ſinking-fund continues to be invariably applied, the preſent debt will be extinguiſhed, and the load of taxes taken off which till then will be neceſſary to pay the annual intereſt. But, ſome will exclaim, "In the mean time what becomes of your new debts?—The war-expenditure of the

country will require new loans, and a new debt will probably be accumulated equal in amount to the preſent. —How is this to be diſpoſed of?—What are the funds by which it is to be diſcharged?" We ſhall anſwer the foregoing queries by explaining the proviſion for future debts, which was alſo pointed out by Dr. Price, and which has been adopted by the legiſlature. In 1792 it was enacted, that on all future loans a ſum equal to one per cent. on the ſtock created by ſuch loans ſhould be added to the ſinking-fund as a proviſion for their gradual and ſucceſſive redemption. This appropriation of one per cent. on every loan at the aforeſaid increaſe of 5 per cent. amounts to 100l. in 37 years, or at 4 per cent. intereſt, in leſs than 42 years. Therefore whatever addition is made to the debt every year, if ſuch a fund of one per cent. be regularly and ſacredly allotted for its redemption, the total of that portion of debt muſt in 37 or 42 years be diſcharged. See NATIONAL DEBT, REVENUE, STOCKS, and TAXES.

FUN'DAMENT, *ſ.* [*fundamentum*, Lat.] The back part of the body.—They threw him on the bed, thruſt into his *fundament* a red hot iron. *Hume.*

FUNDAMEN'TAL, *adj.* [*fundamentalis*, Lat.] Serving for the foundation; that upon which the reſt is built; eſſential; important; not merely accidental.—Gain ſome general and *fundamental* truths, both in philoſophy, in religion, and in human life. *Watts.*

Such we find they are, as can controul
The ſervile actions of our wav'ring ſoul,
Can fright, can alter, or can chain the will;
Their ills all built on life, that *fundamental* ill. *Prior.*

FUNDAMEN'TAL, *ſ.* Leading propoſition; important and eſſential part which is the groundwork of the reſt.—It is a very juſt reproach, that there ſhould be ſo much violence and hatred in religious matters among men who agree in all *fundamentals*, and only differ in ſome ceremonies, or mere ſpeculative points. *Swift.*

FUNDAMEN'TALLY, *adv.* Eſſentially; originally. —As virtue is ſeated *fundamentally* in the intellect, ſo perſpectively in the fancy; ſo that virtue is the force of reaſon, in the conduct of our actions and paſſions to a good end. *Grew.*

FUNDAMEN'TALNESS, *ſ.* The ſtate of being fundamental. *Scott.*

FUNDAMEN'TALS, in muſic. See the article MUSIC.

FUNDA'ON, a town of Portugal, in the province of Beira: twenty-two miles weſt of Alfayates.

FUN'DI, in ancient geography, a town of Latium, near Cajeta, on the Appian road, at the bottom of a bay called *Lacus Fundanus*, or Bay of Fundi. It enjoyed all the privileges of Roman citizens, except the right of ſuffrage and of magiſtracy. Now *Fondi*, a city of Naples, on the confines of the pope's dominions. Lat. 41. 35. N. lon. 14. 20. E.

FUNDI'BLE, *adj.* [*fundo*, Lat. to pour out.] Capable of being poured. *Johnſon. Not much uſed.*

FUN'DO, a town of European Turkey, in the province of Moldavia: forty-four miles weſt-north-weſt of Birlat.

FUN'DUS, *ſ.* [Latin.] A bottom, the loweſt part, a cavity. *Scott.*

FUN'DY, a large bay in North America, which opens between the iſlands in Penobſcot bay, in Lincoln county, Maine, and Cape Sable, the ſouth-weſtern point of Nova-Scotia. It extends about 200 miles in a north-eaſt direction; and with Verte bay, which puſhes into the land in a ſouth-weſt direction from the ſtraits of Northumberland, forms a very narrow iſthmus, which unites Nova-Scotia to the continent; and where the diviſion line runs between that province and New-Brunſwick. From its mouth up to Paſſamaquoddy bay, on its north-weſt ſide, ſituated between the province of New-Brunſwick and the diſtrict of Maine, are a number of bays and iſlands on both ſides, and thus far it contracts its breadth gradually. It is twelve leagues acroſs from St. John's, in New-Brunſwick, to the Gut of Annapolis, in Nova-Scotia; where the tides are rapid, and riſe thirty feet. Above this it preſerves nearly an equal breadth, until its waters are formed into two arms, by a peninſula, the weſtern point of which is called *Cape Chignecto*. At the head of the north-eaſtern arm, called *Chignecto channel*, which, with bay Verte forms the iſthmus, the tides riſe ſixty feet. In the Baſin of Minas, which is the eaſt arm or branch of this bay, the tides riſe forty feet. Theſe tides are ſo rapid as to overtake animals feeding on the ſhore.

FUNE'BRAL, and FUNEBROUS, *adj.* [*funebris*, Lat. mournful.] Belonging to a funeral, doleful, diſmal. *Scott. Not much uſed.*

FU'NEN, or FYEN, an iſland of Denmark, at the entrance of the Baltic, nearly of an oval form, with ſome irregularities, extending from north to ſouth about thirty-five miles, eaſt to weſt about thirty. It is a fertile and a pleaſant iſland: moſt of the Daniſh nobility have ſeats here. The ſoil yields great crops of corn, ſo that near 100,000 barrels are annually exported to Norway and Sweden, excluſive of the conſumption at home. The inhabitants keep a great number of bees, and with the honey produced make mead, which forms a conſiderable article of trade, being ſent to every part of the kingdom. Here are ſeveral lakes and rivers, abounding in fiſh, but none navigable; great quantities of cod, herrings, turbots, and other fiſh, are caught in the bays along the coaſt. Odenſee is the capital. Lat. 55. 7. to 55. 42. N. lon. 9. 40. to 10. 50. E. Greenwich.

FU'NERAL, *ſ.* [*funus*, Lat. *funerailles*, Fr.] The ſolemnization of a burial; the payment of the laſt honours to the dead; obſequies.—He that had caſt out many unburied, had none to mourn for him, nor any ſolemn *funerals*, nor ſepulchre with his fathers. 2 *Mac.* v. 10.

Here, under leave of Brutus, and the reſt,
Come I to ſpeak in Cæſar's *funeral*. *Shakeſpeare.*

The pomp or proceſſion with which the dead are carried. —You are ſometimes deſirous to ſee a *funeral* paſs by in the ſtreet. *Swift.*—Burial; interment:

May he find his *funeral*
I' th' ſands, when he before his day ſhall fall. *Denham.*

FU'NERAL, *adj.* Uſed at the ceremony of interring the dead:

Our inſtruments to melancholy bells,
Our wedding cheer to a ſad *funeral* feaſt. *Shakeſpeare.*

Thy hands o'er towns the *funeral* torch diſplays,
And forms a thouſand ills ten thouſand ways. *Dryden.*

FU'NERAL RITES, ceremonies, which uſually accompany the interment of the dead.—Theſe rites differed among the ancients, according to the genius and religion of different countries. The firſt people who ſeem to have paid any particular reſpect to their dead, were the poſterity of Ham. The firſt cultivators of idolatrous worſhip and ſuperſtition after the flood; they were alſo the firſt who aſſerted the migration of the ſoul into all kinds of animals in earth, air, and ſea, and its return to the human body; which they ſuppoſed to be within the term of 3000 years. Hence proceeded the very great care in embalming of dead bodies, and the vaſt expence of providing mauſoleums or repoſitories for them. This alſo gave birth to thoſe wonders of the world, the pyramids of Egypt, which were built to receive the dead bodies of kings. Whenever a perſon died among the Egyptians, his parents and friends put on mournful habits, and abſtained from all banquets and entertainments. This mourning laſted from forty to ſeventy days, during which time they embalmed the body. See the article EGYPT, vol. vi. p. 352.

The

The funeral rites among the Hebrews were ſolemn and magnificent. When any perſon died, his relations and friends rent their clothes; which cuſtom is but faintly imitated by the modern Jews, who now cut off a bit of their garment, in token of affliction. When they came to the burying-place, they made a ſpeech to the dead, concluding with, "Bleſſed be God, who has formed thee, fed thee, maintained thee, and taken away thy life. O dead! he knows your numbers, and ſhall one day reſtore you to life." Then they ſpoke the elogium, or funeral oration; after which they ſaid a prayer, called the *righteouſneſs of judgment*; then turning the face of the deceaſed towards the heavens, they exclaimed, "Go in peace."

Among the ancient Greeks, the rites and ceremonies by which they expreſſed their ſorrow for the death of their friends, were ſolemn and various. They abſtained from banquets and entertainments; they diveſted themſelves of all ornaments; they cut off, or ſhaved, their hair, which they caſt into the funeral pile, to be conſumed with the body of their deceaſed friend. Sometimes they threw themſelves on the ground, and rolled in the duſt, or covered their head with aſhes; they beat their breaſts, and even tore their fleſh, upon the loſs of a perſon they much eſteemed. When perſons of rank, ſuch as public magiſtrates or great generals, died, the whole city put on mourning; all public meetings were interdicted; the ſchools, baths, ſhops, temples, and all places of public reſort, were ſhut up.

The Grecian ſoldiers who died in war, had not only their tombs adorned with inſcriptions ſhowing their names and exploits, but were alſo honoured with an oration in their praiſe. Particularly the cuſtom among the Athenians in the interment of their ſoldiers was as follows: "They uſed to place the bodies of their dead in tents three days before the funeral, that all perſons might have opportunity to find out their relations, and pay their reſpects to them. Upon the fourth day, a coffin of cypreſs was ſent from every tribe, to convey the bones of their own relations; after which went a covered hearſe, in memory of thoſe whoſe bodies could not be found. All theſe, accompanied with the whole body of the people, were carried to the public burying place, called *Ceramicus*, and there interred. One oration was ſpoken in commendation of them all, and their monuments adorned with pillars, inſcriptions, and all other ornaments uſual about the tombs of the moſt honourable perſons. The oration was pronounced by the fathers of the deceaſed perſons who had behaved themſelves moſt valiantly. Thus, after the famous battle at Marathon, the fathers of Callimachus and Cynægyrus were appointed to make the funeral oration. And upon the return of the day, upon which the ſolemnity was firſt held, the ſame oration was repeated annually."

Interment, or laying the dead in the ground, ſeems to have been the moſt ancient practice among the Greeks; though burning came afterwards to be generally uſed among them. It was cuſtomary to throw into the funeral pile thoſe garments the deceaſed uſually wore. The pile was lighted by one of the deceaſed's neareſt relations or friends, who made prayers and vows to the winds to aſſiſt the flames, that the body might quickly be reduced to aſhes; and during the time the pile was burning, the dead perſon's friends ſtood by it, pouring libations of wine, and calling upon the deceaſed.

The funeral rites among the ancient Romans were equally ſolemn and ceremonious. The deceaſed was kept ſeven days; and every day waſhed with hot water, and ſometimes with oil, that, in caſe he were only in a trance, he might be thus awaked; and every now and then his friends meeting, made a loud outcry or ſhout, with the ſame view; which laſt action they called *conclamatio*. The third conclamation was on the ſeventh day; when, if no ſigns of life appeared, the defunct was dreſſed and embalmed by the pollinctores; placed in a bed near the door, with his face and heels towards the ſtreet; and the outſide of the gate, if the deceaſed were of condition, was garniſhed with cypreſs boughs. In the courſe of theſe ſeven days, an altar was raiſed near his bed-ſide, called *acerra*; on which his friends every day offered incenſe; and the libitinarii provided for the funeral. On the ſeventh day a crier was ſent about the city to invite the people to the funeral in theſe words: *Exequias L. Tit. L. filii, quibus eſt commodum ire, jam tempus eſt. Ollus* (i. e. *ille*) *ex ædibus effertur.* The people being aſſembled, the laſt conclamation ended, and the bed was covered with purple: a trumpeter marched forth, followed by matrons called *præficæ*, ſinging ſongs in praiſe of the deceaſed: laſtly, the bed followed, borne by the next relations; and if the perſon were of quality and office, the waxen images of all his predeceſſors were carried before him on poles. The bed was followed by his children, kindred, &c. in mourning: from which act of following the corpſe, theſe funeral rites were called *exequiæ*. The body thus brought to the roſtra, the next of kin, *laudabat defunctum pro roſtris*, made a funeral oration in his praiſe, and in that of his anceſtors. This done, the body was carried to the funeral pile, and there burnt: his friends firſt cutting off a finger, to be buried with a ſecond ſolemnity. The body being conſumed, the aſhes were gathered; and the prieſt ſprinkling the company thrice with clean water, the eldeſt of the *præficæ* crying aloud, *ilicet*, diſmiſſed the people, who took their leave of the deceaſed in this form, *Vale, vale, vale: nos te ordine quo natura permiſerit, ſequemur.* The aſhes, incloſed in an urn, were laid in the ſepulchre or tomb.

It was cuſtomary alſo for perſons of quality, among the ancient Greeks and Romans, to inſtitute games, with all ſorts of exerciſes, to render the death of their friends more remarkable. This practice was generally received, and is frequently mentioned by ancient writers. Patroclus's funeral games take up the greateſt part of one of Homer's Iliads; and Agamemnon's ghoſt is introduced by the ſame poet, telling the ghoſt of Achilles, that he had been a ſpectator at a great number of ſuch ſolemnities.

The celebration of theſe games among the Greeks conſiſted chiefly of horſe-races; the prizes were of different value, according to the quality and magnificence of the perſon that celebrated them. The garlands given to victors on this occaſion were uſually of parſley, which was thought to have ſome particular relation to the dead. Theſe games, among the Romans, conſiſted chiefly of proceſſions; and ſometimes of the combats of gladiators around the funeral pile. They, as well as the Greeks, had alſo a cuſtom of executing criminals before the pile, as victims to appeaſe the manes of the deceaſed. The funeral games were finally aboliſhed by the emperor Claudius, as unſuitable to ſo melancholy an occaſion.

In the various accounts given of Egyptian interment, may be perceived the firſt rudiments of funeral orations, and what was the ſubject of them, which were afterwards moulded into a more regular form by other nations, who adopted this cuſtom. Nor can we omit remarking, that thoſe funeral ſolemnities were attended not only with orations in praiſe of the deceaſed, but with prayers for him; which prayers were uſually made by one who perſonated the deceaſed: an entire form of one of which is preſerved by Porphyry, as follows: "O lord, the ſun, and all the gods who give life to men, receive me, and admit me into the ſociety of the immortal ones; for as long as I lived in this world, I religiouſly worſhipped the gods whom my parents ſhowed me, and have always honoured thoſe who begat my body: nor have I killed any man, nor have I defrauded any of what has been committed to my truſt, nor have I done any thing which is inexpiable. Indeed, whilſt I was alive, if I have ſinned either by eating or drinking any thing which was not lawful; not through myſelf have I ſinned, but through theſe, (ſhowing the cheſt where the entrails were). And having thus ſpoke, he

casts it into the river, but the rest of the body he embalms as pure."

The Grecians, and from them the Romans, adopted the custom of making funeral orations in praise of the dead; and the manner in which it was performed, is thus described by Dr. Kennet: "In all the funerals of note, especially in the public or indictive, the corpse was first brought with a vast train of followers into the forum; here one of the nearest relations ascended the rostra, and obliged the audience with an oration in praise of the deceased. If none of the kindred undertook the office, it was discharged by some of the most eminent persons in the city for learning and eloquence, as Appian reports of the funeral of Sylla. And Pliny the younger reckons it as the last addition to the happiness of a great man, that he had the honour to be praised at his funeral by the most eloquent Tacitus, then consul; which is agreeable to Quintilian's account of this matter, *Num et funebres, &c.* For the funeral orations (says he) depend very often on some public office, and by order of senate are many times given in charge to the magistrates to be performed by themselves in person. The invention of this custom is generally attributed to Valerius Poplicola, soon after the expulsion of the regal family. Plutarch tells us, that honouring his colleague's obsequies with a funeral oration, it so pleased the Romans, that it became customary for the best men to celebrate the funerals of great persons with speeches in their commendation." Thus Julius Cæsar, according to custom, made an oration in the rostra, in praise of his wife Cornelia, and his aunt Julia, when dead; wherein he showed, that his aunt's descent, by her mother's side, was from kings, and by her father's from the gods. Plutarch says, that "he approved of the law of the Romans, which ordered suitable praises to be given to women as well as to men, after death."

The *funeral pile*, among the Greeks and Romans, was a pyramidal stack of wood, whereon were laid the bodies of the deceased to be burnt. It was partly in the form of an altar, and differed in height according to the quality of the person to be consumed. Probably it might originally be considered as an altar, on which the dead were consumed as a burnt-offering to the national deities. The trees made use of in the erection of a funeral pile were such as abounded in pitch or rosin, as being most combustible; if they used any other wood, it was split, that it might the more easily take fire. Round the pile were placed cypress boughs to hinder the noisome smell. The Hindoos are still in the habit of burning their dead; and it not unfrequently happens that the affectionate widow of a deceased husband will ascend the funeral pile, and commit herself to the flames with her husband's corpse. See the article HINDOOSTAN.

M. Pauw remarks, that the custom of burning the dead obtained almost universally, until about 1900 years ago, when it became politically necessary to bury them, because arts, population, and the clearing of grounds, had thinned the forests to such a degree, that towns and entire provinces were menaced with an approaching want of fuel. In the second century of the christian era, the Romans foresaw the necessity of abandoning their ancient practice, of changing their funeral piles into graves, and of committing the remains of their dearest connections, with infinite regret, to worms and putrefaction. See the article BURIAL, vol. iii. p. 520.

FU'NERAL CHAR'GES, by the laws of England, are the first of all debts to be paid and satisfied by executors and administrators. A person died in debt, and 600l. was laid out in his funeral; decreed the same should be a debt, payable out of a trust estate, charged with payment of debts, he being a man of great estate and reputation in his country, and buried there; but had he been buried elsewhere, it seemed his funeral might have been more private, and the court would not have allowed so much. *Prec. Ch.* 27.

Where a citizen of London devised 700l. for mourning, the question was, if it should come out of the whole estate, or out of the legatory part only; it was insisted that if there had been no direction by the will, or if the will had directed, that the expences of the funeral should not exceed such a sum, there the deduction must have been out of the whole estate. Mourning devised by the will, must come out of the legatory part, and not to lessen the orphanage and customary part. 2 *Vern.* 240. Executor is not however liable to pay for funeral expences, unless he orders or contracts for it. 12 *Mod.* 256.

Settlements for separate maintenance of the wife shall never extend to funeral charges; and though she made a will, (according to a power given her,) and an executor, and gave several legacies, but there was no residuum for the executor, the husband's estate in the hands of a devisee subject to the payment of debts was made liable to the funeral charges of the wife. 9 *Mod.* 31. In strictness of law, no funeral expences are allowable against creditors, except for the coffin, ringing of the bell, parson, clerk, and bearers' fees; but not for pall or ornaments; per Holt, 1 *Salk.* 296. Ten pounds was allowed for the funeral of a person in debt; by lord chief justice Holt. Baron Powell in his circuit would allow but 11s. 6d. as all the necessary charge. *Comb.* 342. Forty shillings seems to have been the most usual sum in cases of insolvency. *Salk.* 196. *Godolph.* p. 2. c. 26.

FU'NERARY, *adj.* [*funerarius*, Lat.] Belonging to a funeral. *Scott. Not much used.*

FUNE'REAL, *adj.* [*funerea*, Lat.] Suiting a funeral; dark; dismal:

But if his soul hath wing'd the destin'd flight,
Inhabitant of deep disastrous night,
Homeward with pious speed repass the main,
To the pale shade *funereal* rites ordain. *Pope.*

FUNE'ST, *adj.* [*funestus*, Lat.] Deadly, mortal.

FUNF'KIRCHEN, or FIVE CHURCHES, a town of Hungary, situated in a fertile soil between the Drave and the Danube; the see of a bishop: 110 miles north-west of Belgrade, and 140 south-south-east of Vienna. Lat. 46. 12. N. lon. 35. 41. E. Ferro.

FUNGE'NO, or FUNGANDO, a kingdom of Africa, situated between the river Zaire and Coanza. Subject to Anziko.

FUN'GI, *f.* [*fungus*, from σφογγος, Gr. on account of its spongy nature.] In botany, FUNGUSES, or MUSHROOMS. The first of the great families; and the ninth of the nations, tribes, or casts, into which Linnæus has distributed the whole vegetable world. Also the sixty-seventh order in his Fragments of a Natural Method: the fifty-eighth of his Natural Orders; and the fourth order of the class Cryptogamia, in his Artificial System. See BOTANY, vol. iii. p. 288, and the correspondent engraving. Hedwig and other modern botanists have made some important discoveries respecting the fructification of funguses, by the help of high magnifiers. The seeds are a dark powder in the gills of the agarics; in the boleti the seeds are within the membrane that lines the tubes; in peziza cyathoides they appear to be inclosed in a sort of pod, &c. See the article BOTANY, vol. iii. p. 288.

The *fungi* have all their fructifications in a more or less spongy body. They are extremely numerous, and are divided into the following genera, viz.

1. AGARICUS: fungus with gills underneath.
2. MERULIUS: fungus with veins underneath.
3. BOLETUS: fungus with pores underneath.
4. THÆLÆPHORA: fungus warty underneath.
5. HYDNUM: fungus prickly underneath.
6. PHALLUS: fungus smooth underneath, cellular above.
7. HELVELLA: fungus turbinate, plaited, wrinkled.
8. ATRACTOBOLUS: fungus sessile, cupular, with a lid, ejecting fusiform vesicles bearing the seeds.

9. TYMPA-

9. TYMPANIS: fungus cup-ſhaped; the cupola with a curtain above; ſeeds dry, mouldering to powder.

10. MYROTHECIUM: fungus cup-ſhaped; the cupola with a curtain above; ſeeds rather viſcid.

11. XYLOSTROMA: fungus expanded, coriaceous, ſmooth, equal; ſeeds globular, very minute, ſeated within the fibres of the fungus.

12. HELOTIUM: fungus with a fleſhy-membranaceous convex-hemiſphærical cup, bearing the naked ſeeds underneath.

13. CLAVARIA: fungus elongated, erect, clavate, emitting the ſeeds from every part of its ſurface.

14. CLATHRUS: fungus roundiſh, concealed with fleſhy branches interwoven with each other.

15. PEZIZA: fungus concave; ſeeds contained in the cup.

16. VOLUTELLA: fungus ſalver-ſhaped, on a ſhort ſetaceous ſtalk; upper-ſurface of the cap dotted and umbilicate; the margin at firſt revolute; ſeeds ſimilar.

17. EPICHYSUM: fungus rounded and concave; ſeeds globular, tailleſs, affixed by a branched thread creeping within.

18. CYATHUS: fungus campanulate or cylindrical, bearing lentiform. capſules within.

19. ASCOBOLUS: fungus hemiſphærical; veſicles oblong, ſcatteringly and ſlightly immerſed on the diſk, elaſtically ejecting the ſeeds.

20. THELEOBOLUS: fungus ſeſſile, gelatinous, ſolid, ejecting a gelatinous ſubſtance bearing the ſeeds.

21. SPHÆROBOLUS: fungus ſeſſile, globular-concave, opening in a radiate manner, and ejecting a globular capſule.

22. PILOBOLUS: fungus on a capillary ſtalk inflated and watery at top; cap hemiſphærical, elaſtically ejecting the ſeeds.

23. PUCCINIA: fungus cylindrical, filled with tailed ſeeds, diſpoſed in a radiate manner, and eſcaping elaſtically.

24. LYCOPERDON: fungus becoming powdery and fibrous within; ſeeds attached internally to the fibres.

25. SPUMARIA: follicles branched, filled internally with ſeminiferous fibres, covered with a cellular branny bark.

26. FULIGO: fungus with a cellular-fibrous bark; the fibres penetrating in a reticulate manner through a ſeminal maſs.

27. STEMONITIS: fungus covered with a fugacious or membranaceous bark, filled with ſeminiferous fibres elaſtically expanding themſelves.

28. MICROCARPON: fungus with a membranaceous caſe opening irregularly, filled with ſeminiferous filaments reticulately compact and fixed to the baſe.

29. CRIBRARIA: fungus with the caſe furniſhed with a double membrane; the outer thin and fugacious; the inner reticulate; ſeeds without filaments, ejected through the foramina.

30. RETICULARIA: fungus roundiſh, furniſhed with a caſe filled with ſeeds diſperſed among reticulate filaments.

31. TUBIFERA: fungus furniſhed with caſes ſuperimpoſed on an expanded membrane, connected with each other, and filled with nearly naked ſeeds.

32. ÆCIDIUM: fungus furniſhed with membranaceous caſes, glabrous both ſides, filled with naked ſeeds not cohering.

33. SPHÆRIA: fungus furniſhed with caſes, filled with roundiſh naked gelatinous ſeeds.

34. HISTERIUM: fungus ſeſſile, hollow, with a tranſverſe cleft at top; ſeeds globular, tailleſs, covering the diſk.

35. VERMICULARIA: capſule globular, ſeſſile, filled with looſe worm-ſhaped ſeminiferous bodies.

36. PYRENIUM: fungus globular, ſeſſile, very entire, incloſing naked conglobate ſeeds like a nucleus.

37. TUBER: fungus nearly globular, fleſhy; the fleſh diſtinguiſhed internally with veins.

38. SCLEROTIUM: fungus quite ſimple, globular-oblong, tough, hardiſh, gaping a little at length in the centre, covered with an inſeparable bark never opening above.

39. UREDO: powder mealy, deſtitute of a caſe, effuſed under the cuticles of leaves and ſtems, burſting at laſt with an even margin.

40. TUBERCULARIA: fungus gelatinous; cap tubercled; ſtalk thick, filled, cloſely appreſſed, bearing the ſeeds on the upper ſurface.

41. SPERMODERMIA: fungus quite ſimple, globular, ſeſſile, ſpongy; ſeeds crowded, ſupplying the place of a bark.

42. ACROSPERMUM: fungus quite ſimple, nearly erect, emitting the ſeeds exteriorly from the tip.

43. STILBUM: fungus aggregate, gelatinous, on a ſtalk; head diaphanous, ſhining, ſolid, permanent, bearing the ſeeds externally.

44. ASCOPHORA: fungus erect, on a ſetaceous ſtalk: head globular-oblong, inflated, opake, elaſtic, bearing the ſeeds eternally.

45. CHORDOSTYLUM: fungus very tenacious, on a very long tenacious ſlightly branched ſtalk; head globular, ſomewhat deciduous, bearing the ſeeds.

46. MUCOR: fungus fugacious; heads at firſt diaphanous, becoming opake, fixed to ſimple or branched ſtalks.

47. HYDROPHORA: fungus globular, watery, on a nearly erect capillary ſtalk.

48. PERICONIA: fungus globular; ſeeds ſeſſile, deciduous, every where clothing the head and ſtalk.

49. GRANULARIA: fungus roundiſh, filled with granulations immerſed in a mucilage.

50. MEDUSULA: fungus ſolid, globular, on a ſtalk, crowded; ſeeds external, filiform, flexile, colliquescent.

51. MONILIA: conſiſting of moniliform filaments cluſtered into a head.

52. MUCILAGO: conſiſting of moſt ſimple fugacious filaments.

A new claſſification of fungi has been recently publiſhed at Leipſic, (1805,) according to the method of Perſoonia, by I. B. de Albertini and L. D. de Schweinitz. The ſpecies and varieties they have added are 127 in number, on twelve beautifully coloured plates. The whole is divided into two claſſes and ſix orders. Their new genera appear to be the following:

53. Stilboſpora. 54. Hyloma. 55. Næmaſpora. 56. Geaſtrum. 57. Boviſta. 58. Tuloſtoma. 59. Scleroderma. 60. Piſolithus. 61. Lycogala. 62. Phyſarum. 63. Trichia. 64. Arcyria. 65. Lycea. 66. Tubulina. 67. Onygena. 68. Trichoderma. 69. Conoplea. 70. Amanita. 71. Siſtotrema. 72. Meriſma. 73. Geogloſſum. 74. Spathularia. 75. Leotia. 76. Morchella. 77. Tremella. 78. Agerita. 79. Ceratium. 80. Iſaria. 81. Botrytis. 82. Dematium. 83. Erineum. 84. Racodium. 85. Hemantia. 86. Rhizomorpha. 87. Meſenterica.

See all theſe deſcribed, under their reſpective titles, in this work, with appropriate engravings.

FUN'GI ESCULEN'TI. See PHALLUS.

FUN'GI PAR'VI. See LICHEN BYSSOIDES.

FUNGIL'LI, in botany. See LICHEN ERICETORUM.

FUNGOIDAS'TER. See HELVELLA.

FUNGOI'DES. See AGARICUS, CLAVARIA, HELVELLA, and PEZIZA.

FUNGOS'ITY, *ſ.* Unſolid excreſcence.

FUN'GOUS, *adj.* Excreſcent; ſpongy; wanting firmneſs.—It is often employed to keep down the *fungous* lips that ſpread upon the bone; but it is much more painful than the eſcharotic medicines. *Sharp.*

FUN'GOUSNESS, *ſ.* The ſtate of being fungous. *Scott.*

FUN'GUS, *ſ.* [from σφογγος, Gr. ſponge.] Strictly a muſhroom. See FUNGI. A word uſed to expreſs ſuch excreſcences of fleſh as grow out upon the lips of wounds, or any other excreſcence from trees or plants not naturally belonging to them; as the agaric from the larch-

larch-tree, and auriculæ judæ from elder. *Quincy.*—The ſurgeon ought to vary the diet as the fibres lengthen too much, are too fluid, and produce *funguſes*, or as they harden and produce calloſities. *Arbuthnot.*—This eminence is compoſed of little points or granula, called *fungus* or proud fleſh. *Sharp.*—For its cauſe and cure, ſee the article SURGERY.

FUN'GUS, *ſ.* a common name for the caoutchouc or Indian rubber. See CAOUTCHOUC, vol. iii. p. 744.

FU'NICLE, *ſ.* [*funiculus*, Lat.] A ſmall cord; a ſmall ligature; a fibre.

FUNI'CULAR, *adj.* [*funiculaire*, Fr.] Conſiſting of a ſmall cord or fibre.

FUNI'CULUS, *ſ.* [dim. of *funis*, a rope.] The navel-ſtring.

FU'NIS, in botany. See CISSUS, MELASTOMA, UVARIA, MENISPERMUM, and TRAGIA.

FUNK, *ſ.* A ſtink. A low word.

To FUNK, *v. n.* To ſtink through fear:

The beſt part of the veal, and the Greek for *hunc*,
Is the name of a man that makes us *funk*. *Epig. on Burton.*

FUNK ISLAND, a ſmall iſland in the Atlantic, near the north-eaſt coaſt of Newfoundland. Lat. 50. N. lon. 52. 15. W. Greenwich.

FUNK'ABUN, a town of Perſia, in the province of Mazenderan: fifteen miles weſt of Ferabat.

FUN'NEL, *ſ.* [*infundibulum*, Lat.] An inverted hollow cone with a pipe deſcending from it, through which liquors are poured into veſſels with narrow mouths; a tundiſh.—If you pour a glut of water upon a bottle, it receives little of it; but with a *funnel*, and by degrees, you ſhall fill many of them. *Ben Jonſon.*

Some the long *funnel's* curious mouth extend,
Through which ingeſted meats with eaſe deſcend.
Blackmore.

A pipe or paſſage of communication.—Towards the middle are two large *funnels*, bored through the roof of the grotto, to let in light or freſh air. *Addiſon.*

FUN'NEL-FASHIONED, and FUN'NEL-SHAPED, *adj.* Shaped in the manner of a funnel.

FUN'NY, *adj.* Full of fun, merry.

FUOR'LI, a town of Italy, in the kingdom of Naples, and province of Abruzzo Citra: twenty-one miles ſouth-ſouth-eaſt of Solmona.

FUR, *ſ.* [*fourrere*, Fr.] Skin with ſoft hair, with which garments are lined for warmth, or covered for ornament.—'Tis but dreſſing up a bird of prey in his cap and *furs* to make a judge of him. *L'Eſtrange.*

And lordly gout wrapt up in *fur*,
And wheezing aſthma, loth to ſtir. *Swift.*

Soft hair of beaſts found in cold countries, where nature provides coats ſuitable to the weather; hair in general:

This night, wherein the cub-drawn bear would couch,
The lion and the belly-pinched wolf
Keep their *fur* dry, unbonnetted he runs,
And bids what will take all. *King Lear.*

Any moiſture exhaled to ſuch a degree as that the remainder ſticks on the part:

Methinks I am not right in every part;
I feel a kind of trembling at my heart:
My pulſe unequal, and my breath is ſtrong;
Beſides a filthy *fur* upon my tongue. *Dryden.*

To FUR, *v. a.* To line or cover with ſkins that have ſoft hair:

Through tatter'd clothes ſmall vices do appear;
Robes and *furr'd* gowns hide all. *Shakeſpeare.*

To cover with ſoft matter.—To make lampblack, take a torch and hold it under the bottom of a latten baſon; and, as it groweth to be *furred* and black within, ſtrike it with a feather into ſome ſhell. *Peacham.*

A dungeon wide and horrible; the walls
On all ſides *furr'd* with mouldy damps, and hung
With clots of ropy gore. *Addiſon.*

The *fur-trade* has, for a great number of years paſt, formed a ſpeculation of conſiderable extent amongſt the maritime powers of Europe. The poliſhed nations of antiquity, however, not only rejected the uſe of fur, either as an ornament in dreſs, or as an article of commerce; but ſtigmatiſed thoſe with the epithet of barbarians, who were clothed in any manner with the ſkins of animals. Strabo deſcribes the Indians as covered with the ſkins of lions, tigers, and bears; and Seneca, the Scythians, clothed with the ſkins of foxes, and the ſmaller quadrupeds; while Virgil exhibits a picture of the ſavage Hyperboreans, clad, like the wild Americans, in the ſkins of brute beaſts. It does not appear that the Greeks or early Romans ever made uſe of fur. It undoubtedly originated in thoſe regions where ſeverity of climate required ſuch warm clothing. At firſt it conſiſted of the ſkins only, almoſt in the ſtate in which they were taken from the beaſt; but as ſoon as civilization took place, and manufactures were introduced, fur became the lining of the dreſs, and often an elegant facing for the robes. It is probable that the northern conquerors firſt introduced the faſhion into Europe. We find, that about the year 522, when Totila king of the Viſigoths reigned in Italy, the Suethons of modern Sweden found means, by the commerce of intervening people, to tranſmit, for the uſe of the then Roman people, *ſaphilinas pelles*, the precious ſkins of the ſables. As luxury advanced, furs, even of the moſt valuable ſpecies, were uſed by princes as linings for their tents: thus Marco Polo, in 1252, found thoſe of the cham of Tartary lined with ermines and ſables. He calls the laſt *zibelines* and *zambolines*. He ſays that they were brought from countries far north; from the Land of Darkneſs, and regions almoſt inacceſſible by reaſon of moraſſes and ice. The ancient Welſh ſet a high value on fur, as early as the time of Howel Dda, who began his reign about 940. In the next age, fur became the faſhionable magnificence of Europe. When Godfrey of Boulogne and his followers appeared before the emperor Alexis Comnene, on their way to the Holy Land, he was ſtruck with the richneſs of their fur dreſſes, *tam ex oſtro quam aurifrigio et niveo opere harmelino et ex mardrino griſioque et vario.* How adverſe was the ſtate of luxury in France in the time of their great monarch Charlemagne, who contented himſelf with the plain fur of the otter! In England, fur was deemed a kingly ornament ſo early as the reign of Alfred the Great; and in 1337, the luxury had ſo univerſally prevailed, that Edward III. enacted, that all perſons who could not ſpend a hundred a year, ſhould be prohibited the uſe of this ſpecies of finery.

The French, ſoon after their eſtabliſhment in Canada, in 1608, were the firſt who brought this commerce into enviable repute, by extending their traffic for ſkins to the remoteſt ſettlements of the Indian tribes in North America. When this traffic had been carried on for near half a century by the French, it was thought to be ſo extremely profitable and advantageous, as to become the leading temptation for incorporating the Engliſh Hudſon's-Bay company, in 1670, by Charles II.—See vol. iv. p. 883. But notwithſtanding the exertions of this company to monopolize the *fur-trade*, it continued to be carried on by the French to a very conſiderable extent, until Canada was taken by the Engliſh in 1760. Under the French government, the fur-trade from Canada had been extended as far weſt as the Saſkatchiwine river, in 53 degrees north latitude, and 102 degrees weſt longitude from Greenwich. Numbers of the natives of Canada were induced to penetrate into the Indian countries, to prevail on them to bring ſkins to barter with the French at their ſettlements. It is not neceſſary to examine the cauſe, though experience proves, that it requires much leſs time for a civilized people to deviate into the manners and cuſtoms of ſavage life, than for ſavages

vages to riſe into a ſtate of civilization. Such was the event with thoſe who thus accompanied the native Indians on their hunting and trading excurſions; for they became ſo attached to the Indian mode of life, that they loſt all reliſh for their former habits and native homes. Hence they derived the title of *Coureurs des Bois*, became a kind of pedlars, and were extremely uſeful to the merchants engaged in the fur trade; who gave them the neceſſary credit to proceed on their commercial undertakings. Three or four of theſe people would join their ſtock, put their property into a birch bark canoe, which they worked themſelves, and either accompanied the Indians in their excurſions, or went at once to the country where they knew they were to hunt. At length, theſe excurſions occupied the ſpace of twelve or fifteen months, when they returned with rich cargoes of furs, followed by great numbers of Indians. During the ſhort time requiſite to ſettle their accounts with the merchants, and procure freſh credit, they generally contrived to ſquander away all their gains, when they returned to renew their favourite mode of life; their views being anſwered, and their labour ſufficiently rewarded, by indulging themſelves in extravagance and diſſipation during the ſhort ſpace of one month out of twelve or fifteen. This indifference about amaſſing property, and the pleaſure of living free from all reſtraint, ſoon brought on a licentiouſneſs of manners which could not long eſcape the vigilant obſervation of the French miſſionaries, who had much reaſon to complain of their being a diſgrace to the chriſtian religion; by not only ſwerving from its duties themſelves, but by thus bringing it into diſrepute with thoſe of the Indians who had become converts to it; and, conſequently, obſtructing the great object to which thoſe pious men had devoted their lives. They, therefore, exerted their influence to procure the ſuppreſſion of theſe people, and accordingly, no one was allowed to go up the country to traffic with the Indians, without a licence from the government. The grant of theſe licences was ſoon conſidered as a favour, and they were made transferable, and of courſe ſaleable. Thoſe who bought were allowed to appoint their own agents, and the agents thus employed were generally the *coureurs des bois*, whoſe conduct had given ſuch cauſe of complaint; ſo that the remedy ſoon proved worſe than the diſeaſe. At length, military poſts were eſtabliſhed at convenient places, and ſeveral reſpectable men proſecuted the trade on their own accounts in perſon; which mode was attended with the twofold benefit of ſecuring the reſpect of the Indians, and the obedience of the people employed in the laborious parts of the buſineſs.

As for the miſſionaries, if ſufferings and hardſhips in the proſecution of the great work which they had undertaken deſerved applauſe and admiration, they had an undoubted claim to be admired and applauded: they ſpared no labour and avoided no danger in the execution of their important office; and it is to be ſeriouſly lamented, that their pious endeavours did not meet with the ſucceſs which they deſerved: for there is hardly a trace to be found, beyond the cultivated parts, of their meritorious functions. The cauſe of this failure muſt be attributed to a want of due conſideration in the mode employed by the miſſionaries to propagate the religion of which they were the zealous miniſters. They habituated themſelves at length to the ſavage life, and finally naturaliſed themſelves to the ſavage manners; and, by thus becoming dependent, as it were, on the natives, they acquired their contempt rather than their veneration.

After the conqueſt of Canada by the Engliſh, the trade for furs in that country was for ſome time ſuſpended; the new poſſeſſors having neither knowledge of the Indian language, nor confidence in the natives, who had been taught to entertain hoſtile diſpoſitions towards the Engliſh. By degrees, however, the trade revived, and was ſoon carried beyond the French limits, partly by what is called the North Weſt Company, and partly by private individuals on their own account. This company does not poſſeſs any particular privileges by law, but from its great capital merely it is enabled to trade to certain remote parts of the continent, to the excluſion of thoſe who do not hold any ſhares in it. It was formed by the merchants at Montreal, in 1783; who wiſely conſidered that the trade could be carried on to thoſe diſtant parts of the continent, inhabited ſolely by Indians, with more ſecurity and greater profit, if they joined together, in a body, than if they continued to trade ſeparately. The ſtock of the company was divided into forty ſhares; and as the number of merchants in the town at that time was not very great, this arrangement afforded an opportunity to every one of them to join in the company if he thought proper. The company principally carries on its trade by means of the Utawas or Grand river, which falls into the St. Lawrence about thirty miles above Montreal, and which forms, by its confluence with that river, the lake of the Two Mountains and the lake of St. Louis, wherein are ſeveral large iſlands. To convey the furs down this river, they make uſe of the above-mentioned canoes, formed of the bark of the birch-tree, ſome of which are upon ſuch a large ſcale that they are capable of containing two tons; but they ſeldom put ſo much in them, eſpecially on this river, it being in many places ſhallow, rapid, and full of rocks, and contains no leſs than thirty-two portages.

The canoes are navigated by the Canadians, who are particularly fond of the employment, prefering it in general to that of cultivating the ground. A fleet of them ſets off from Montreal about the month of May, laden with proviſions, conſiſting chiefly of biſcuit and ſalt pork, ſufficient to laſt the crews till their return, and alſo with the articles given in barter to the Indians. At ſome of the ſhallow places in the river, it is ſufficient if the men merely get out of the canoes, and puſh them on into the deep water; but at others, where there are dangerous rapids and ſharp rocks, it is neceſſary for the men to unlade the canoes, and carry both them and the cargoes on their ſhoulders, till they come again to a ſafe part of the river. At night they drag the canoes upon ſhore, light a fire, cook their proviſions for the following day, and ſleep upon the ground wrapped up in their blankets or furs. In general they remain wholly under the canopy of heaven, copying exactly the Indian mode of life, and many of them even wear the Indian dreſſes, which they find more convenient than their own.

Having aſcended the Utawas river for about two hundred and eighty miles, which it takes them about eighteen days to perform, they then croſs by a portage into Lake Niſpiſſing, and from this lake by another portage they get upon French river, which falls into Lake Huron on the north-eaſt ſide; then coaſting along this laſt lake they paſs through the Straits of St. Mary, where there is another portage into Lake Superior; and coaſting afterwards along the ſhores of Lake Superior, they come to the Grand Portage on the north-weſt ſide of it; from hence by a chain of ſmall lakes and rivers they proceed onward to the Rainy Lake of the Woods, and for hundreds of miles beyond it, through Lake Winnipeg, &c. The canoes, however, which go ſo far up the country, never return the ſame year; thoſe intended to bring back cargoes immediately, ſtop at the Grand Portage, where the furs are collected ready for them by the agents of the company. The furs are made up in packs of a certain weight, and a particular number is put into each canoe. By knowing thus the exact weight of every pack, there can be no embezzlement; and at the portages there is no time waſted in allotting to each man his load, every one being obliged to carry ſo many packs.

At the Grand Portage, and along that immenſe chain of lakes and rivers which extend beyond Lake Superior, the company has regular poſts, where the agents reſide; and with ſuch aſtoniſhing enterpriſe and induſtry have the

affairs of this company been carried on, that trading poſts are now eſtabliſhed within five hundred miles of the Pacific Ocean. One gentleman, Mr. Mackenzie, a partner in the houſe at Montreal, has even penetrated to the Pacific Ocean itſelf. The journal kept by him upon theſe expeditions, and which has been recently publiſhed, is replete with information of the moſt intereſting nature. In the firſt attempt which Mr. Mackenzie made to penetrate to the ocean, he ſet out early in the ſpring from the remoteſt of the poſts belonging to the company. He took with him a ſingle canoe, and a party of choſen men; and after paſſing over prodigious tracts of land, never before traverſed by any white perſon, he at laſt came to a large river. Here the canoe, which was carried by the men on their ſhoulders, was launched, and having all embarked, they proceeded down the ſtream. From the courſe this river took for a very great diſtance, Mr. Mackenzie was led to imagine that it was one of thoſe rivers he was in queſt of; namely, one which emptied itſelf into the Pacific Ocean; but at the end of ſeveral weeks, during which they had worked their way downward with great eagerneſs, he was convinced, from the gradual inclination of the river towards another quarter, that he muſt have been miſtaken; and that it was one of thoſe immenſe rivers, ſo numerous on the continent of North America, that run into Baffin's Bay, or the Arctic Ocean. The party was now in a very critical ſituation; the ſeaſon was far advanced, and the length of way which they had to return was prodigious. If they attempted to go back, and were overtaken by winter, they muſt in all probability periſh for want of proviſions in an uninhabited country; if, on the contrary, they made up their minds to ſpend the winter where they were, they had no time to loſe in building huts, and going out to hunt and fiſh, that they might have ſufficient ſtores to ſupport them through that dreary ſeaſon. Mr. Mackenzie repreſented the matter, in the moſt open terms, to his men, and left it to themſelves to determine the part they would take. The men were for going back at all hazards; and the reſult was, that they reached their friends in ſafety. The difficulties they had to contend with, and the exertions they made in returning, were almoſt ſurpaſſing belief.

The ſecond expedition entered upon by Mr. Mackenzie, and which ſucceeded to his wiſhes, was undertaken ſoon afterwards. He ſet out in the ſame manner, but well provided with thoſe articles which he found the want of in his firſt expedition. He was extremely well furniſhed with aſtronomical inſtruments, and in particular with a good time-piece, that he procured from London. He took a courſe ſomewhat different from the firſt, and paſſed through many nations of Indians who had never before ſeen the face of a white perſon, amongſt ſome of whom he was for a time in imminent danger; but he found means to conciliate their good will. From ſome of them he learned, that there was a ridge of mountains at a little diſtance, beyond which the rivers all ran in a weſtern direction. Having engaged ſome guides, he proceeded according to their directions until he came to the mountains, and after aſcending them with prodigious labour, found, to his great ſatisfaction, that the account the Indians had given was true, and that the rivers on the oppoſite ſide did indeed all run to the weſt. He followed the courſe of one of them, and finally came to the Pacific Ocean, not far from Nootka Sound. Here he was given to underſtand by the natives, and their account was confirmed by the ſight of ſome little articles they had amongſt them, that an Engliſh veſſel had quitted the coaſt only ſix weeks before. This was a great mortification to Mr. Mackenzie; for had there been a ſhip on the coaſt, he would moſt gladly have embarked in it rather than encounter the ſame difficulties, and be expoſed to the ſame perils, which he had experienced in getting there: however there was no alternative; he ſet out after a ſhort time on his journey back again, and having found his canoe quite ſafe under ſome buſhes, near the head of the river, where he had hid it, together with ſome proviſions, leſt on going down to the coaſt the natives might have proved unfriendly, and have cut off his retreat by ſeizing upon it, he finally arrived at one of the trading poſts in ſecurity.

Many other individuals belonging to the North Weſt Company, before Mr. Mackenzie ſet out, penetrated far into the country in different directions, and much beyond what any perſon had done before them, in order to eſtabliſh poſts. In ſome of theſe excurſions they unexpectedly fell in with the agents of the Hudſon's Bay Company, who were alſo extending their poſts from another quarter; this caſual meeting between the two companies, gave riſe to ſome very unpleaſant altercations, and the Hudſon's Bay Company threatened the other with an immediate proſecution for an infringement of its charter. The North Weſt Company, however, reſted perfectly eaſy about the menaces of a proſecution, ſatisfied that they had infringed upon the rights of no one. The Hudſon's Bay Company, though it threatened, never attempted to put its threats in execution: but continued nevertheleſs to watch the motions of its rival with a jealous eye; and as in extending their reſpective trades, the poſts of the two companies were approximating nearer and nearer to each other every year, there was great reaſon to imagine that their differences would become ſtill greater, and finally, perhaps, lead to conſequences of a ſerious nature. A circumſtance, however, unexpectedly took place, which happily reconciled them to each other, and terminated all their diſputes.

A very powerful nation of Indians, called the *Aſſiniboins*, who inhabit an extended tract of country to the ſouth-weſt of Lake Winnipeg, conceiving that the Hudſon's Bay Company had encroached unreaſonably upon their territories, and had otherwiſe maltreated a part of their tribe, formed the reſolution of deſtroying a poſt eſtabliſhed by that company in their neighbourhood. A large body of them ſoon collected together, and breathing the fierceſt ſpirit of revenge, marched unperceived and unſuſpected by the party againſt whom their expedition was planned, till within a ſhort diſtance of their poſt. Here they halted according to cuſtom, waiting only for a favourable moment to pounce upon their prey. Some of the agents of the North Weſt Company, who were ſcattered about this part of the country, fortunately got intelligence of their deſign. They knew the weakneſs of the place about to be attacked, and forgetting the rivalſhip ſubſiſting between them, and thinking only how to ſave their countrymen, they immediately diſpatched a meſſenger to give the party notice of the aſſault that was meditated; they at the ſame time ſent another meſſenger to one of their own poſts, deſiring that inſtant ſuccour might be ſent to that belonging to the Hudſon's Bay Company, which the Indians were about to plunder. The detachment arrived before the attack commenced, and the Indians were repulſed; but had it not been for the timely aſſiſtance their rivals had afforded, the Hudſon's Bay people were fully perſuaded that they muſt have fallen victims to the fury of the Indians. This ſignal ſervice was not undervalued nor forgotten by thoſe who had been ſaved; and as the North Weſt Company was ſo much ſtronger, and on ſo much better terms with the Indians in this part of the country, than its rivals, it now evidently appeared to be the intereſt of the latter to have the poſts of the North Weſt Company eſtabliſhed as near its own as poſſible. This was accordingly done for their mutual ſafety, and the two companies, in July 1787, adopted the wiſe reſolution of forming an union of intereſts.

Beſides the furs thus conveyed down to Montreal from the north-weſtern parts of the American continent, by means of the Utawas river, there are large quantities alſo brought there acroſs the lakes, and down the river St. Lawrence. Theſe are collected at the various towns and poſts along the Lakes Huron, Erie, and Ontario, where the

the trade is open to all parties, the ſeveral poſts being protected by regular troops, at the expence of the government. Added likewiſe to what are thus collected by the agents of the company, and of private merchants, there are conſiderable quantities brought down to Montreal for ſale by traders, on their own account. Some of theſe traders come from parts as remote even as the Illinois country, bordering on the Miſſiſſippi. They aſcend the Miſſiſſippi as far as Oniſconſing river, and from that by a portage of three miles get upon Fox River, which falls into Lake Michigan. In the fall of the year theſe two rivers overflow, and it is then practicable to paſs in a light canoe from one river to the other, without any portage whatſoever. From Lake Michigan they get upon Lake Huron, afterwards upon Lake Erie, and thus reach the St. Lawrence. Before the month of September is over, the furs are all brought down to Montreal; as they arrive they are immediately ſhipped, and the veſſels diſpatched in October, beyond which month it would be dangerous for them to remain in the river on account of the ſetting in of winter. Furs are alſo ſhipped in conſiderable quantities at Quebec, and at the town of Trois Rivieres. The reader may form ſome judgment of the extent of the fur-trade in the hands of the North Weſt Company only, from the following account of the furs and peltries which were the produce of the year 1798:

106,000 Beaver ſkins,	6000 Lynx ſkins,
2100 Bear ſkins,	600 Wolverine ſkins,
1500 Fox ſkins,	1650 Fiſher ſkins,
4000 Kitt Fox ſkins,	100 Racoon ſkins,
4600 Otter ſkins,	3800 Wolf ſkins,
17,000 Muſquaſh ſkins,	700 Elk ſkins,
32,000 Martin ſkins,	750 Deer ſkins,
1800 Mink ſkins,	1200 Deer ſkins, dreſſed,

500 Buffalo robes, and a quantity of caſtorum.

The number of men employed by them in the year above-mentioned, amounted to fifty clerks; ſeventy-one interpreters and clerks; 1120 canoe men; and thirty-five guides.

Mr. Mackenzie, after laying open the particulars of this intereſting commerce, concludes with obſerving, "that the fur-trade would be productive of more advantage both to the public and to the merchants, if the Hudſon's Bay and the North Weſt Companies were to unite. Experience (he ſays) has proved, that this trade, from its very nature, cannot be carried on by individuals. A very large capital, or credit, or indeed both, is neceſſary: and conſequently an aſſociation of men of wealth to direct, with men of enterpriſe to act, in one common intereſt, muſt be formed on ſuch principles, as that in due time the latter may ſucceed the former, in continual and progreſſive ſucceſſion. Such was the equitable and ſucceſsful mode adopted by the merchants from Canada, which has been already deſcribed. The junction of ſuch a commercial aſſociation with the Hudſon's Bay Company is the important meaſure which I would propoſe, and the trade might then be carried on with a very ſuperior degree of advantage, both private and public, under the privilege of their charter, and would prove, in fact, the complete fulfilment of the conditions on which it was firſt granted. It would be an equal injuſtice to either party to be excluded from the option of ſuch an undertaking; for, if the one has a right by charter, has not the other a right by prior poſſeſſion, as being ſucceſſors to the ſubjects of France, who were excluſively poſſeſſed of all the then known parts of the country, before Canada was ceded to Great Britain, except the coaſt of Hudſon's Bay, and having themſelves been the diſcoverers of a vaſt extent of country ſince added to his majeſty's territories, even to the Hyperborean and the Pacific Oceans? If, therefore, that company ſhould decline, or be averſe to engage in, ſuch an extenſive, and perhaps hazardous, undertaking, it would not, ſurely, be an unreaſonable propoſal to them, from government, to give up a right which they refuſe to exerciſe, on allowing them a juſt and reaſonable indemnification for their ſtock, regulated by the average dividends of a certain number of years, or the actual price at which they transfer their ſtock. By enjoying the privilege of the company's charter, though but for a limited period, there are adventurers who would be willing, as they are able, to engage in, and carry on, the propoſed commercial undertaking, as well as to give the moſt ample and ſatisfactory ſecurity to government for the fulfilment of its contract with the company." In conſideration of the perils and dangers ſuſtained by exploring the unknown regions of North America, for the purpoſe of extending this commerce, and of the conſequent advantages to geography and commerce, the king has beſtowed the honour of knighthood on the indefatigable projector of the ſcheme, now ſir Alexander Mackenzie.

The ſkins of wild animals are now every where dreſſed with the hair on, for the various purpoſes of ornamental decoration, as well as for the uſe of the army, both horſe and foot. The furs of many ſkins are likewiſe uſed in the felting trade, in which caſe the pelts, ſtripped of the hair or fur, are tanned for leather. A patent has been lately granted to Mr. Thomas Chapman, of Bermondſey near London, for his diſcovery of a method of getting off the wool or fur from ſeal and other ſkins, in a more perfect ſtate than has hitherto been done, for the purpoſe of manufacturing the ſame into hats, or any other article of cloathing; whereby the ſkins or pelts are leſs damaged than by any other proceſs yet adopted, and are preſerved in a perfect ſtate, for the purpoſe of tanning into any kind of leather. Mr. Chapman ſtates his method to be as follows: "When the fur ſkin is in the raw or natural ſtate, lay it in clean freſh water for twelve hours; afterwards take the ſkin to a beam uſually worked on, and, with a proper fleſhing or beaming knife, ſcrape off the blubber or oily ſubſtance that adheres to the pelt. Then waſh the ſkin very clean in ſcalding water, in which the following ingredients have been before mixed and diſſolved; that is to ſay, to every fourteen pails of water, each pail containing about two gallons, put three pounds and a half of ſoft or other ſoap and two pounds of pearl-aſh, and ſo in proportion for a ſmaller or larger quantity. Then put the fur-ſkin in hoops to dry in the ſun, or in a ſtove-room, and make them as dry as poſſible. As the ſkins are ſo dried, take them out of the hoops, and carefully waſh them again in the aforeſaid compoſition, made freſh, and as hot as before. The ſkins are then to be taken to the beam, and again ſcraped with the beaming knife; and the knife will then draw, at every ſtroke of the workman, the coarſe hair only from the ſkin or pelt, leaving the fur or wool adhering thereto, cleared from all the coarſe hair. Then immerſe the ſkin in warm water for twelve hours, in which water the following ingredients muſt have been previouſly mixed and diſſolved; that is to ſay, to every fourteeen pails, each pail containing about two gallons, three pounds of ſoft or other ſoap, one pound and a half of pearl-aſh, and one or two pounds of barilla, more or leſs, according to the temper and pliability of the ſkin. After the ſkins have lain in the water for the above time, take them and lay them on the beam, and ſcrape them with a proper beaming knife; and the workman will, at every ſtroke, draw, or diſcharge, from the ſkin or pelt, ſome of the wool or fur, until all the wool or fur be extracted or diſcharged; and thereby the ſkin or pelt will be left free from every particle of hair, fur, or wool, and will be in no wiſe injured or damaged in its ſurface, or inward ſubſtance. After the wool or fur is thus ſeparated from the ſkin, put it into a hair-bottomed ſieve; then take either two copper kettles, or iron pans, or boilers, of ſufficient ſize to hold fourteen pails of water: fill one of the veſſels with water, and put therein three pounds and a half of ſoft or other ſoap, two pounds and a half of pearl-aſh, and heat the water ſufficiently to diſſolve the ingredients; the wool or fur, in the hair-bottomed ſieve, is to be immerſed in this water; ſtirring it about frequently; and, preſſing it with the hand, or other-

otherwiſe, about five minutes, when you will perceive the roots of the wool or fur ſeparate, expand, and divide freely. After the above operation has been effected, take the other veſſel, fill it with warm water, and therein immerſe the wool or fur; and thoroughly waſh, cleanſe, and preſs from it all filth or dirt that adheres thereto. After it is ſo cleanſed, let it be dried by a ſlow fire-ſtove, or by heat of the ſun, if the ſeaſon will permit. After it is completely dried, pull or part it by hand, or otherwiſe, as it will freely part. After it is thus parted, bow it with the bow-ſtring; and the wool or fur will be fit for the purpoſe of being uſed in the manufacture of hats, or other articles of clothing, and to be nearly equal to every purpoſe for which the wool or fur called beaver is uſed; and is alſo of ſo fine a texture, and ſo good a ſtaple, as to be convertible to any other article of felting or clothing." The patent is dated June 6, 1799.

FUR, *adv.* [It is now commonly written *far.*] At a diſtance:

The white lovely dove
Doth on her wing her utmoſt ſwiftneſs prove,
Finding the gripe of faulcon fierce not *fur.* *Sidney.*

FUR, or FURR, [ſometimes written *Dar-Fur*, but not properly; *dar* being only an appellative, equally applicable to a town, a village, or a kingdom; and thus written, it means literally *the kingdom of Fur.*] A kingdom in the interior of Africa, ſituated between the territories of Bergoo and Kordofan; great part of the latter of which was conquered by the ſultan of *Fur*, in 1794 and 1795. The chief towns are Cobbè, Sweini, Kurma, Cubcabia, Ril, Cours, Shoba, Gidid, and Gelle. The town of Sweini is the inlet to all merchants and traders from Egypt, who come with the caravan; and here they are obliged to wait till the pleaſure of the ſultan is known as to their further approach and deſtination, which is communicated to them by the melek or governor. Cobbè, which is upwards of two miles in length, appears to be the capital of the empire, and is the principal reſort of trade, and reſidence of the merchants. The ſultan reſides in a plain but extenſive building, a conſiderable part of which forms the harem, or apartments for his women, who are numerous.

As the Mahometan religion prevails in Dar-Fur, the monarch can do nothing contrary to the Koran; but, as there is no council to control or even to aſſiſt him, his power may well be termed deſpotic. He ſpeaks in public of the ſoil and its productions as his perſonal property, and of the people as little elſe than his ſlaves. His power in the provinces is delegated to officers who poſſeſs an authority equally arbitrary. In thoſe diſtricts, which have always or for a long time formed an integral part of the empire, theſe officers are generally called *meleks.* In ſuch as have been lately conquered, or perhaps, more properly, have been annexed to the dominion of the ſultan under certain ſtipulations, the chief is ſuffered to retain the title of *ſultan*, yet is tributary to and receives his appointment from the ſultan of Fur. In this country, on the death of the monarch, the title deſcends of right to the oldeſt of his ſons; and in default of heirs male, as well as during the minority of thoſe heirs, to his brother. But under various pretences this received rule of ſucceſſion is frequently infringed. The ſon is ſaid to be too young, or the late monarch to have obtained the government by unjuſt means; and, at length, the pretenſions of thoſe who have any apparent claim to the regal authority are to be decided by war, and become the prize of the ſtrongeſt. It was in this manner that the preſent ſultan, Abd-el-rachmân, gained poſſeſſion of the imperial dignity, in the year of the hejira 1202, of the chriſtian æra 1787. Of the appearance of this monarch and his court (in the year 1795) Mr. Browne gives the following deſcription: I found the monarch ſeated on his throne (*cârſi*), under a lofty canopy, compoſed not of one material, but of various ſtuffs of Syrian and even of Indian fabric, hung looſely on a light frame of wood, no two pieces of the ſame pattern. The place he ſat in was ſpread with ſmall Turkey carpets. The meleks were ſeated at ſome diſtance on the right and left, and behind them a line of guards, with caps, ornamented in front with a ſmall piece of copper and a black oſtrich feather. Each bore a ſpear in his hand, and a target of the hide of the hippopotamus on the oppoſite arm. Their dreſs conſiſted only of a cotton ſhirt, of the manufacture of the country. Behind the throne were fourteen or fifteen eunuchs, clothed indeed ſplendidly in habiliments of cloth or ſilk, but clumſily adjuſted, without any regard to ſize or colour. The ſpace in front was filled with ſuitors and ſpectators, to the number of more than fifteen hundred. A kind of hired encomiaſt ſtood on the monarch's left hand, crying out, *à pleine gorge*, during the whole ceremony, "See the buffaloe, the offſpring of a buffaloe, a bull of bulls, the elephant of ſuperior ſtrength, the powerful ſultan Abd-el-rachmân-el-raſhîd! May God prolong thy life!—O maſter—May God aſſiſt thee, and render thee victorious!" I was told there were occaſions when the ſultan wears a kind of crown, as is common with other African monarchs; but of this practice I had no opportunity to bear teſtimony. When he appeared in public, a number of troops armed with light ſpears uſually attended him, and ſeveral of his ſlaves were employed to bear a kind of umbrella over his head, which concealed his face from the multitude. When he paſſes, all the ſpectators are obliged to appear barefooted, and commonly to kneel; his ſubjects bow to the earth, but this compliance is not expected from foreigners. The ſultan Abd-el-rachmân, ſoon after he became poſſeſſed of ſovereign authority, with the oſtenſible motive of teſtifying his attachment to the religion of the prophet, but more perhaps with a view of obtaining greater weight among his ſubjects, by ſome mark of the conſideration of the firſt of Mohammedan princes, thought proper to ſend a preſent to Conſtantinople; it conſiſted of three of the choiceſt eunuchs, and three of the moſt beautiful female ſlaves that could be procured. The Othman emperor, when they were preſented, had, it is ſaid, never heard of the ſultan of Dar-Fur; but he returned an highly ornamented ſabre, a rich peliſſe, and a ring ſet with a ſingle diamond of no inconſiderable value.

Previouſly to the eſtabliſhment of Iſlamiſm (about 150 years ago) and kingſhip, the people of Fur ſeem to have formed wandering tribes, in which ſtate many of the neighbouring nations to this day remain. In their perſons they differ from the negroes of the coaſt of Guinea. Their hair is generally ſhort and woolly, though ſome are ſeen with it of the length of eight or ten inches, which they eſteem a beauty. Their complexion is for the moſt part perfectly black. The Arabs, who are numerous within the empire, retain their diſtinction of feature, colour, and language. They moſt commonly intermarry with each other. The ſlaves, which are brought from the country they call Fertît, (land of idolaters,) perfectly reſemble thoſe of Guinea, and their language is peculiar to themſelves. In moſt of the towns, except Cobbè, which is the chief reſidence of foreign merchants, and even at court, the vernacular idiom is in more frequent uſe than the Arabic; yet the latter is pretty generally underſtood. The judicial proceedings, which are held in the monarch's preſence, are conducted in both languages, all that is ſpoken in the one being immediately tranſlated into the other by an interpreter.

On all merchandize imported into the kingdom of Fur, the ſultan has a duty, which in many inſtances amounts to near a tenth; and when they are about to leave Dar-Fur on their return to Egypt, another tax is demanded on the ſlaves exported, under pretence of a voluntary douceur, to be exempt from having their ſlaves ſcrutiniſed. All forfeitures for miſdemeanors are due to the king; and this is a conſiderable article; for in caſe of a diſpute in which blood is ſhed, as often happens, he makes a demand

mand of juſt what portion he thinks right of the property of the village in which the offence was committed, of the whole, of an half, of a third, of every ſpecies of poſſeſſion, and this moſt rigorouſly eſtimated. In addition to this, every one who is concerned in a judicial proceeding before him, muſt bring a preſent according to his rank and property: this is another conſiderable ſource of revenue. Of all the merchandiſe, but eſpecially ſlaves, which are brought from the roads, as they call it, that is, from all quarters except Egypt, the king is entitled to a tenth; and in caſe of a *felatèa*, that is, an expedition to procure ſlaves by force, the tenth he is entitled to becomes a fifth, for the merchants are obliged to wait ſix weeks or two months before they can ſell any of their ſlaves, and then are obliged to pay in kind one tenth of the number originally taken, one half of which is by that time generally dead. At the time of leathering the kettle-drum, which happens every year on the 27th of the month Rabia-el-awil, all the principal people of every town and village, nay, every houſekeeper, is obliged to appear at El Faſher, with a preſent in his hands, according to his rank and ability. A number of preſents are daily and hourly received from all the great people of the country, as well as from the merchants who come on buſineſs, and thoſe who ſolicit offices. The merchants generally preſent ſome kind of manufacture for clothing, ſuch as light woollen cloth, carpets, arms, &c. and the people of the country, camels, ſlaves male and female, *tokèas*, oxen, ſheep, &c. But one of the moſt conſiderable articles of revenue is the tribute of the Arabs who breed oxen, horſes, camels, ſheep. Thoſe who breed horſes ſhould bring to the monarch all the males which are yearly produced by their mares; but this they often contrive to avoid. The cuſtomary tribute of the Arabs who breed oxen, or *bukkara* as they are called, is one tenth. If the tribute were regularly paid, it might amount to four thouſand oxen per annum: but theſe Arabs live in tents, and conſequently change their habitations frequently; and, when they feel themſelves united, are not much inclined to pay tribute. Thoſe who breed camels ſhould alſo pay a tenth of their property yearly; but theſe alſo are ſometimes rebellious, and then nothing is received from them. The owners of ſheep and goats pay a tenth. Every village is obliged to pay annually a certain ſum in corn, which is collected by the king's ſlaves. The monarch has alſo lands of his own, which are cultivated by his ſlaves, and which ſerve to ſupply his houſhold; for, though a merchant, he does not ſell corn. Such are the revenues of the monarch of Fur. The king is alſo chief merchant in the country, and not only diſpatches with every caravan to Egypt a great quantity of his own merchandiſe, but alſo employs his ſlaves and dependents to trade with the goods of Egypt, on his own account, in the countries adjacent to Soudan.

The people of Fur are repreſented as uſing many ſuperſtitious ceremonies at their great feaſts. Among others, it is ſaid, they put to death, in the form of a ſacrifice, a young boy and girl. Even to this day, many idols are worſhipped by the women of the ſultan's harem. The mountaineers offer a kind of ſacrifice to the deity of the mountains, when they are in want of rain. Several ſuperſtitious notions prevail among the ſlaves. One of them having died ſuddenly, it was imagined that he had been poſſeſſed by the devil, and none of them would waſh the body. It was with difficulty that they could be prevailed on even to carry it to the place of interment.

The people of Dageou, a country on the weſt, repreſented as not far from Bergoo, it is ſaid, conquered the country now called Fur, and retained it till they were exhauſted by mutual contentions: upon which the preſent race of kings ſucceeded, but from what origin we have not been able to diſcover: probably, Moors driven from the north by the Arabs. The race of Dageou is ſaid to have come from the vicinity of Tunis. It is reported, that they had a cuſtom of lighting a fire on the inauguration of their king, which was carefully kept burning till his death. At preſent there is a cuſtom in Fur, of ſpreading the carpets on which the ſeveral deceaſed ſultans uſed to ſit, before the new prince, and from the one he prefers, it is judged his character will be analogous to that of its former poſſeſſor.

The climate of Fur is ſimilar to the other regions of Africa, which are ſituated ſo contiguous to the torrid zone. The perennial rains, which fall in Fur, from the middle of June till the middle of September, in greater or leſs quantity, but generally both frequent and violent, ſuddenly inveſt the face of the country, till then dry and ſteril, with a delightful verdure. Except where the rocky nature of the ſoil abſolutely impedes vegetation, wood is found in great quantity, nor are the natives aſſiduous completely to clear the ground, even where it is deſigned for the cultivation of grain. As ſoon as the rains begin, the proprietor, and all the aſſiſtants that he can collect, go out to the field, and having made holes at about two feet diſtance from each other, with a kind of hoe, over all the ground he occupies, the *dokn*, a peculiar grain, is thrown into them, and covered with the foot, for their huſbandry requires not many inſtruments. The time for ſowing the wheat is nearly the ſame. The dokn remains ſcarcely two months before it is ripe; the wheat about three. Wheat is cultivated only in ſmall quantities; and the preſent ſultan having forbidden the ſale of it, till the portion wanted for his domeſtic uſe be ſupplied, it is with difficulty to be procured by purchaſe. The harveſt is conducted in a very ſimple manner. The women and ſlaves of the proprietor are employed to break off the ears with their hands, leaving the ſtraw ſtanding, which is afterwards applied to buildings and various other uſeful purpoſes. They then collect them in baſkets, and carry them away on their heads. When threſhed, which is awkwardly and incompletely performed, they expoſe the grain to the ſun till it become quite dry; after this a hole in the earth is prepared, the bottom and ſides of which are covered with chaff to exclude the vermin. This cavity or magazine is filled with grain, which is then covered with chaff, and afterwards with earth. In this way the maize is preſerved tolerably well. In uſing it for food, they grind it, and boil it in the form of polenta, which is eaten either with freſh or ſour milk, or ſtill more frequently with a ſauce made of dried meat pounded in a mortar, and boiled with onions, &c. The Furians uſe little butter; with the Egyptians and Arabs it is an article in great requeſt. There is alſo another ſauce which the poorer people uſe and highly reliſh, it is compoſed of an herb called cowel or cawel, of a taſte in part aceſcent and in part bitter, and generally diſagreeable to ſtrangers. As a ſubſtitute for bread, cakes of the ſame material are alſo baked on a ſmooth ſubſtance prepared for the purpoſe, which are extremely thin, and if dexterouſly prepared not unpalatable. Theſe are called kiſſery (fragments or ſections); they are alſo eaten with the ſauce above-mentioned, or with milk, or ſimply water; and in whatever form the grain be uſed, the rich cauſe it to be fermented before it be reduced to flour, which gives it a very agreeable taſte. They alſo make no heſitation in eating the dokn raw, but moiſtened with water, without either grinding or the operation of fire.

The ſultan here does not ſeem wholly inattentive to that important object, agriculture. At the beginning of the Harif, or wet ſeaſon, which is alſo the moment for ſowing the corn, he goes out with his meleks and the reſt of his train, and, while the people are employed in turning up the ground and ſowing the ſeed, he alſo makes ſeveral holes with his own hand. The ſame cuſtom, it is ſaid, obtains in Bornou, and other countries in this part of Africa. It calls to the mind a practice of the Egyptian kings, mentioned by Herodotus. In what are called gardens, are *bamea*, *meluchia*, lentils, (*adis*,) kidney beans, (*lubi*,) and ſome others. The water-melon, and that

called in Cairo *abd-el-awi*, together with ſome other kinds, abound during the wet ſeaſon, and indeed before, if they be watered. Sultan Teraub was ſolicitous to procure every thing the gardens of Egypt produce, and cauſed much care to be taken of the culture of each article brought: but the preſent prince does not turn his thoughts to that kind of improvement, and little of the effect of his predeceſſor's laudable anxiety is at this moment diſtinguiſhable. There are ſeveral ſpecies of trees, but none that produces fruit worth gathering, unleſs it be the tamarind. The date trees are in very ſmall number, and their fruit diminutive, dry, and deſtitute of flavour. That tree ſeems not indigenous in the country, but to have been tranſported from the neighbourhood of the Nile, Dongola, Sennaar, &c. The inhabitants appear not well to underſtand the management of this uſeful production; and perhaps the great drought will never admit of its flouriſhing, whatever diligence or care may be uſed to increaſe the number or improve the kind.

The camels of Fur are of a mixed breed, and they are found of all colours and ſizes. Thoſe which come directly from the weſt or ſouth are large, ſmooth-haired, and moſt frequently of a colour approaching to white, or light brown. Thoſe which are brought from Kordofân are many of them black, and are remarked to be leſs docile than the others. There are few countries where the animal abounds more than in Dar-Fur. They are remarkable for enduring thirſt, but not for bearing great burthens. The camels in this country are particularly ſubject to the mange, (*gerab*,) which attacks them chiefly in winter, and in ſome paſtures much more than in others. This malady is very contagious. It is cured by the application of a kind of tar, procured by diſtillation per deliquium, from the ſeeds of the water-melon. When the male camel is found unruly, they ſometimes deprive him of one or both teſticles. It is a cruel operation, as immediately after having incided with an ordinary knife, they ſear the wound with an hot iron till the hemorrhage be ſtopped. It may be doubted whether this practice be permitted by the law of the prophet; but, however bigoted their minds, where advantage is hoped for, their faith is ductile. The fleſh of the camel, particularly of the female, (*naka*,) which is fattened for the purpoſe, is much uſed for food. It is inſipid, but eaſily digeſted, and no way unpleaſant. The milk alſo is much in eſteem. The camels bred in Fezzân, and other countries to the weſt, as well as thoſe of Arabia, are for labour reckoned ſuperior to thoſe of Fur, and fetch a higher price. The former are larger, and able to carry a heavier burthen, but not ſo capable of enduring thirſt. In Soudân they ſeldom carry above five hundred weight, and oftener three or three and a half: while in Egypt they are frequently obliged to toil under eight, ten, or even more. From theſe are ſelected the camels which bear the ſacred treaſure to the tomb of the prophet. Soudân affords many fine dromedaries, but thoſe of Sennaar are moſt celebrated. Incredible ſtories are told of the long and rapid journies performed by them; as that they will hold out for four-and-twenty hours, travelling conſtantly at the rate of ten miles per hour: however this be, they are indiſputably ſwift, and perform long journeys almoſt without refreſhment.

The wild or ferocious animals are, principally, the lion, the leopard, the hyena, the wolf, the jackal, (*canis aureus*,) the wild buffaloe: but they are not commonly ſeen within the more cultivated part of the empire, excepting the hyena jackal; the former come in herds of ſix, eight, and often more, into the villages at night, and carry off with them whatever they are able to maſter. They will kill dogs, and aſſes, even within the incloſure of the houſes, and fail not to aſſemble wherever a dead camel or other animal is thrown, which, acting in concert, they ſometimes drag to a prodigious diſtance; nor are they greatly alarmed at the ſight of a man, or the report of fire-arms.

Alabaſter, and various kinds of marble, exiſt within the limits of Fur. The rocks chiefly conſiſt of grey granite. But of ſtone adapted to building, or convertible into lime, either there is none, or the quantity muſt be extremely ſmall. The granite ſerves for hand-mills, without being cut, for the metal of which their tools are compoſed is too ſoft to be employed for that purpoſe. Foſſile ſalt is common within a certain diſtrict: and there is a ſufficient ſupply of nitre, of which however no uſe is made.

FUR'-WROUGHT, *adj.* Made of fur:

Silent along the mazy margin ſtray,
And with the *fur-wrought* fly delude the prey. *Gay.*

FU'RA, a ſmall iſland near the weſt coaſt of Scotland: four miles and a half weſt of Udrigill Head.

FURA'CIOUS, *adj.* [*furax*, Lat.] Thieviſh; inclined to ſteal.

FURA'CIOUSNESS, *ſ.* Thieviſhneſs, propenſity to theft. *Scott.*

FURA'CITY, *ſ.* [*furax*, Lat.] Diſpoſition to theft thieviſhneſs.

FU'RAN, *ſ.* in botany. See EPIDENDRUM.

FU'RANS, a river of France, which runs into the Iſere, near Romans.

FUR'BELOW. *ſ.* A piece of ſtuff plaited and puckered together, either below or above, on the petticoats or gowns of women. This, like a great many other words, is the child of mere caprice. *Trev. Dict.*

Nay, oft in dreams invention we beſtow
To change a flounce, or add a *furbelow*. *Pope.*

To FUR'BELOW, *v. a.* To adorn with ornamental appendages of dreſs.—She was flounced and *furbelowed*; every ribbon was crinkled, and every part of her garments in curl. *Addiſon.*

When arguments too fiercely glare,
You calm them with a milder air;
To break their points, you turn their force,
And *furbelow* the plain diſcourſe. *Prior.*

To FUR'BISH, *v. a.* [*fourbir*, Fr.] To burniſh; to poliſh; to rub to brightneſs.—*Furbiſh* the ſpears, and put on the brigandines. *Jer.* xlvi. 4.

Inferior miniſters, for Mars repair
His broken axle-tree, and blunted war;
And ſend him forth again, with *furbiſh'd* arms. *Dryden.*

FUR'BISHER, *ſ.* [*fourbiſſeur*, Fr.] One who poliſhes any thing.

FUR'CA, *ſ.* [from פרק *farkah*, Heb. to divide.] A fork; a prong. In botany, it means ſometimes the thorn, ſometimes the fork, of a plant or tree. In antiquity, a piece of timber reſembling a fork, uſed by the Romans as an inſtrument of puniſhment. Sentence to the furca was of three kinds: the firſt only ignominious, when a maſter, for ſmall offences, forced a ſervant to carry a furca on his ſhoulders about the city. The ſecond was penal, when the party was whipped round the circus, or other place, with the furca about his neck. The third was capital, when the malefactor, having his head faſtened on the furca, was whipped to death.

FUR'CA ET FOS'SA, the gallows and the pit. An ancient privilege granted by our kings. It ſignified a juriſdiction of puniſhing felons; that is, men by hanging, and women with drowning. And ſir Edward Coke, ſays *foſſa* is taken away, but that *furca* remains. 3 *Inſt.* 58.

FUR'CAM ET FLAGEL'LUM, the meaneſt of all the ancient ſervile tenures, when the bondman was at the diſpoſal of his lord for life and limb.

FUR'CATION, *ſ.* [*furca*, Lat.] Forkineſs; the ſtate of ſhooting two ways like the blades of a fork.—When ſtags grow old they grow leſs branched, and firſt loſe their brow-antlers, or loweſt *furations* next the head. *Brown.*

FURCHE', *ſ.* in heraldry, a croſs forked at the ends.

FURETIE'RE (Antony), a French author, born at Paris

Paris in 1620. He firſt purſued the ſtudy of the law, and for a time exerciſed the charge of procureur-fiſcal of the abbey of St. Germain des Près. He then entered into the eccleſiaſtical ſtate, and obtained the abbacy of Chalivoi, and the priory of Chuines. He made himſelf known by various compoſitions in verſe and proſe, and became a member of the French academy. That body was then engaged in the compilement of its Dictionary, of which circumſtance Furetiere was ſuppoſed to take advantage in framing one of his own, of which a ſpecimen appeared in 1684. This embroiled him with the academy, and cauſed his expulſion from that ſociety in 1685. He publiſhed a *factum* in his own juſtification, but it was ſo full of ſatire and perſonal abuſe, that it ſerved only to widen the breach; and though his place remained unoccupied, he continued in a ſtate of excluſion till his death in 1688. The academy manifeſted its ſurviving reſentment, by decreeing that the uſual funeral ſervice on the death of a member ſhould not be performed for him. The dictionary of Furetiere was publiſhed in 1690, under the title of *Dictionnaire Univerſel*, two volumes folio. Baſnage de Beauval publiſhed an improved edition of it in 1701, three volumes folio, which was reprinted at Amſterdam in 1725, four volumes folio. It has ſerved as the baſis of what is called the *Dictionnaire de Trevoux*, of which the laſt edition was printed in 1771, eight volumes folio. Furetiere's other works were, Five Satires, in verſe; the Goſpel Parables, in verſe; and *Le Roman Bourgeois*. A *Furetiana* appeared after his death, but is little eſteemed.

FUR'FUR, *ſ.* [from פרפר *farfarah*, Heb. to break into ſmall pieces.] Huſk or chaff, ſcurf or dandriff, that grows upon the ſkin, like bran.

FURFURA'CEOUS, *adj.* [*furfuraceus*, Lat.] Huſky; branny; ſcaly.

FURFURA'TION, *ſ.* [from *furfur*, bran.] A diſeaſe of the head, in which it is covered with a ſcalineſs or ſcurf like bran; a ſcald head. Alſo a branny ſediment in the urine.

FURGO'LE (John-Baptiſt), a learned writer on legal antiquities, born in 1690, at Caſtel-Ferrus, in Lower Armagnac, was an advocate in the parliament of Toulouſe. He was eſteemed and patroniſed by the chancellor d'Agueſſeau, who encouraged him to publiſh the works by which he obtained his reputation. Of theſe, the moſt generally intereſting are, *Traité des Curés Primitifs*, 4to. 1736; *Traité des Teſtamens & autres Diſpoſitions de dernier Volonté*, four volumes 4to. 1745; *Traite de la Seigneurie feodale univerſelle, & du Franc-aleu naturel*, 12mo. 1767. He was made capitoul of Toulouſe in 1745, and died much regretted in 1761.

FU'RIA, *ſ.* [from *furio*, to enrage, becauſe of the excruciating torments it occaſions.] In helmintology, a genus of worms belonging to the order of inteſtina; the characters of which are: body linear, equal, filiform, and ciliate on each ſide with a ſingle row of reflected prickles, preſſed cloſe to the body. There is only one ſpecies at preſent known, called *furia infernalis*. It inhabits the vaſt marſhy plains of Bothnia and Finland; where it crawls up ſhrubs and ſedge-graſs, and being carried forwards by the wind, penetrates ſuddenly into ſuch expoſed parts of men and horſes as are not perpendicularly ſituated. It quickly inſinuates itſelf under the ſkin, leaving a black point where it had entered, which is ſoon ſucceeded by the moſt excruciating pain, inflammation, and gangrene of the part, ſwooning and death. This will ſometimes happen in the courſe of a day or two, frequently within a few hours, unleſs the worm be immediately extracted, which is effected with great caution and difficulty, by applying a poultice of curds or cheeſe; or carefully diſſecting between the muſcles where it had entered.—A correct figure of it is given in the engraving, conſiderably magnified, to ſhew only the ciliated prickles on its ſides.

FU'RIBUND, *adj.* [*furibond*, Fr. *furibundus*, Lat.] Full of madneſs, or like a madman.

FU'RIES, in pagan mythology, certain goddeſſes whoſe office it was to puniſh the wicked after death. They were three in number: Alecto, Megæra, and Tiſiphone; who were deſcribed with ſnakes inſtead of hair, and eyes darting lightning, carrying iron chains and whips in one hand, and in the other flaming torches; the latter to diſcover, and the former to puniſh, the guilty: and they were ſuppoſed to be conſtantly hovering over ſuch perſons as were planning or premeditating any enormous crime. Mythologiſts ſuppoſe, that Tiſiphone puniſhed the crimes which ſprang from hatred or anger; Megæra, thoſe from envy; and Alecto, thoſe from an inſatiable purſuit after riches and ambition. They were worſhipped at Caſina in Arcadia, and at Carmia in Peloponneſus. They had a temple at Athens near the Areopagus, and their prieſts were choſen from amongſt the judges of that court. At Telphuſia, a city in Arcadia, a black ewe was ſacrificed to them.

FURIGEL'DUM, *ſ.* a mulct paid for theft: by the laws of king Ethelred, it is allowed, that they ſhall be witneſſes *qui nunquam* furigeldum *reddiderunt*, i. e. who never were accuſed of theft.

FU'RIOUS, *adj.* [*furieux*, Fr. *furioſus*, Lat.] Mad; phrenetic.—No man did ever think the hurtful actions of *furious* men and innocents to be puniſhable. *Hooker.*—Raging; violent; tranſported by paſſion beyond reaſon:

Who can be wiſe, amaz'd, temp'rate and *furious*,
Loyal and neutral, in a moment? No man. *Shakeſpeare.*

Violent; impetuouſly agitated:

With clamour thence the rapid currents drive,
Towards the retreating ſea their *furious* tide. *Milton.*

FU'RIOUSLY, *adv.* Madly; violently; vehemently.—They obſerve countenance to attend the practice; and this carries them on *furiouſly* to that which of themſelves they are inclined. *South.*

She heard not half, ſo *furiouſly* ſhe flies;
Fear gave her wings. *Dryden.*

FU'RIOUSNESS, *ſ.* Frenzy; madneſs; tranſport of paſſion.

FURI'NA, the goddeſs of robbers, worſhipped at Rome. Some ſay that ſhe is the ſame as the Furies. Her feſtivals were called *Furineia*.

FU'RIUS AN'TIAS, an ancient Latin poet, contemporary with Q. Lutatius Catulus, who is recorded to have ſent him a treaty made during his conſulate, B.C. 102. This circumſtance renders it probable that it was this Furius (and not the following) who compoſed annals in verſe. A. Gellius mentions him as having been cenſured by a grammarian for certain innovations in language, and quotes ſome lines from him, which appear inflated. Macrobius affirms that Virgil borrowed conſiderably from Furius the annaliſt, and copies ſome lines in proof of his aſſertion.

FU'RIUS BIBA'CULUS, a Latin poet, born at Cremona, B.C. 102, and contemporary with Cicero. He wrote a poem on the Gallic war, in which, probably, were contained thoſe contumelious verſes againſt Cæſar which are referred to by Tacitus and Suetonius. He was intimate with the grammarian Valerius Cato, whoſe learning he praiſes, while he laments his indigence, in ſome lines, written in an eaſy ſtyle, quoted by Suetonius in his book On illuſtrious Grammarians. The fragments remaining of both the Furii are to be met with in the *Corpus Poetar. Latin.*

FUR'KENBERG, a town of Germany, in the circle of Lower Saxony, and duchy of Mecklenburg: thirty-ſix miles north of Spandau.

To FURL, *v. a.* [*freſler*, Fr.] To draw up; to contract:

When fortune ſends a ſtormy wind,
Then ſhew a brave and preſent mind:
And when with too indulgent gales
She ſwells too much, then *furl* thy ſails. *Creech.*

FU'RLONG, *ſ.* [ꝑanlanȝ, Sax.] A meaſure of length, containing 660 feet, or 220 yards, or 40 poles or perches, or the eighth part of a mile.—If a man ſtand in the middle of a field and ſpeak aloud, he ſhall be heard a *furlong* in a round, and that in articulate ſounds. *Bacon.*

FUR'LOUGH, *ſ.* [*verlof*, Dut.] A temporary diſmiſſion from military ſervice; a licence given to a ſoldier to be abſent:

Brutus and Cato might diſcharge their ſouls,
And give them *furlo's* for another world;
But we, like ſentries, are oblig'd to ſtand
In ſtarleſs nights, and wait th' appointed hour. *Dryden.*

FUR'MENTY, *ſ.* [more properly *frumenty*, or *frumety*, of *frumentum*, Lat.] Food made by boiling wheat in milk:

Remember, wife, therefore, though I do it not,
The ſeed-cake, the paſties, and *furmenty* pot. *Tuſſer.*

FUR'MION, a town of Venetian Iſtria: eighteen miles eaſt-ſouth-eaſt Umago.

FUR'NACE, *ſ.* [*furnus*, Lat.] An incloſed fireplace.—The fining pot is for ſilver, and the *furnace* for gold. *Prov.*—Whoſo falleth not down and worſhippeth, ſhall the ſame hour be caſt into the midſt of a burning fiery *furnace*. *Dan.*

Heat not a *furnace* for your foe ſo hot
That it may ſinge yourſelf. *Shakeſpeare.*

FURNACES have increaſed in number and variety, in proportion as they have daily become more and more inſtrumental in diffuſing the light of ſcience, in promoting the extenſion of the arts, and in perfecting and enlarging our moſt valuable manufactures. The origin of the furnace might be traced to the moſt remote antiquity; but its improved conſtruction, and application to ſo many important objects, are to be attributed to the ingenuity of the modern chemiſts. Indeed, it was impoſſible for them to ſucceed in any of the eſſential operations by the agency of fire, without ſuch aids; and accordingly we find ſeveral furnaces conſtructed for theſe uſes, which ſoon became the foundation for others in the large way. Among thoſe adapted to chemical experiments, are, 1. The ſmall evaporating furnace, for digeſtion, diſtillation, &c. 2. The reverberatory or condenſing furnace, for operations with the retort. 3. Macquer's docimaſtic or aſſaying and cupelling furnace, for ſmelting ores, and refining metals. 4. Dr. Black's regiſter furnace, for the more equable diſtribution of heat, or rather for more immediate and intenſe combuſtion. See theſe ſeveral furnaces deſcribed, with figures of them, in the article CHEMISTRY, vol. iv. p. 191, 192.

BLAST FURNACE.

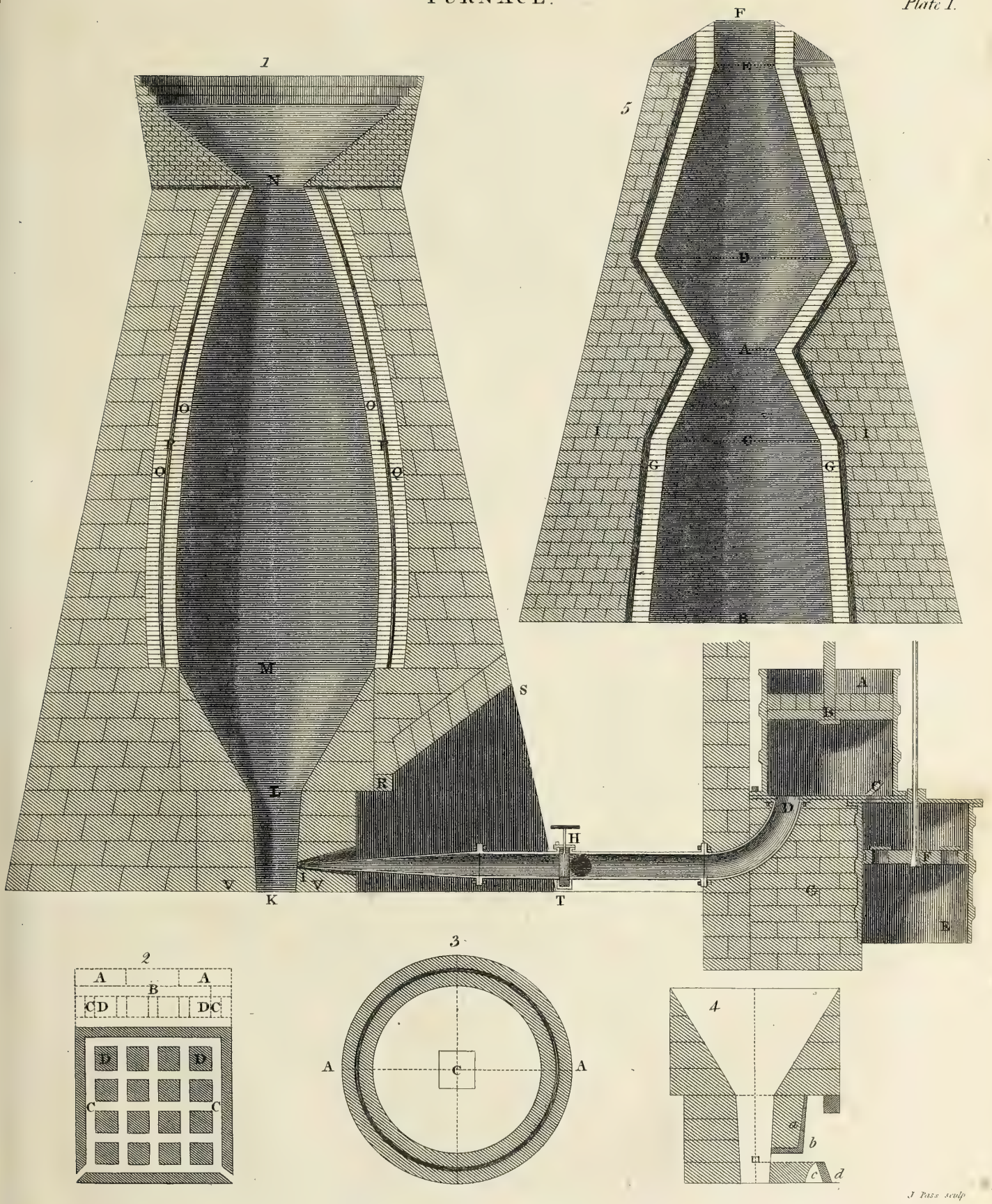
This is uſually conſtructed in a large conical or quadrangular building, and calculated on a principle of very high combuſtion, for the purpoſe of ſmelting iron-ſtone or ores, in the great iron founderies. Its velocity is promoted by the impelling power of a blowing machine, forcing the whole contents of the air-pump through one or two ſmall apertures called noſe-pipes; and in proportion to the power of the engine, air of various denſities can be produced, ſo that denſity and velocity are intimately connected, and mutually implied. The well-known combuſtibility of iron, and the indiſpenſible neceſſity of exciting combuſtion by the introduction of large quantities of condenſed air into this furnace, in contact with ore in various ſtates of maturity as to ſeparation, into contact with iron exiſting in all the modifications of quality as to carbonation, and into contact with an immenſe body of ignited fuel, render this proceſs the moſt important in the grand ſcale of our manufactures. The annexed engraving, fig. 1. repreſents a blaſt-furnace, with part of its blowing machine. A, the regulating cylinder, eight feet diameter and eight feet high. B, the floating piſton, loaded with weights proportionate to the power of the machine. C, the valve, by which the air is paſſed from the pumping cylinder into the regulator: its length is twenty-ſix inches, and breadth eleven inches. D, the aperture by which the blaſt is forced into the furnace. Diameter of this range of pipes eighteen inches. The wider theſe pipes can with conveniency be uſed, the leſs is the friction, and the more powerful are the effects of the blaſt. E, the pumping cylinder, ſix feet diameter, nine feet high: travel of the piſton in this cylinder, from five to ſeven feet per ſtroke. F, the blowing piſton, with one of the valves, of which there are ſometimes two, and ſometimes four, diſtributed over the ſurface of the piſton. The area of each is proportioned to the number of valves: commonly they are 12+16 inches. G, a pile of ſolid ſtone building, on which the regulating cylinder reſts, and to which the flanch and tilts of the blowing cylinder are attached. H, the ſafety-valve, or cock; by the ſimple turning of which the blaſt may be admitted to, or ſhut off from, the furnace, and paſſed off to a collateral tube on the oppoſite ſide. I, the tuyere, by which the blaſt enters the furnace. The end of the tapered pipe, which approaches the tuyere, receives ſmall pipes of various diameters, from two to three inches, called noſe-pipes. Theſe are applied at pleaſure, and as the ſtrength and velocity of the blaſt may require. K, the bottom of the hearth, two feet ſquare. L, the top of the hearth, two feet ſix inches ſquare. KL, the height of the hearth, ſix feet ſix inches. L is alſo the bottom of the boſhes, which here terminate of the ſame ſize as the top of the hearth; only the former are round, and the latter ſquare. M, the top of the boſhes, twelve feet diameter and eight feet of perpendicular height. N, the top of the furnace, at which the materials are charged; commonly three feet diameter. MN, the internal cavity of the furnace from the top of the boſhes upwards, thirty feet high. NK, total height of the internal parts of the furnace, forty-four feet and an half. OO, the lining. This is done in the neceſt manner with fire-bricks made on purpoſe, thirteen inches long and three inches thick. PP, a vacancy which is left all round the outſide of the firſt lining, three inches broad, and which is beat full of coke-duſt. This ſpace is allowed for any expanſion which might take place in conſequence of the ſwelling of the materials by heat when deſcending to the bottom of the furnace. QQ, the ſecond lining, ſimilar to the firſt. R, a caſt iron lintel, on which the bottom of the arch is ſupported. RS, the riſe of the arch. ST, height of the arch; on the outſide fourteen feet, and eighteen feet wide. V V, the extremes of the hearth, ten feet ſquare. This and the boſh-ſtones are always made from a coarſe gritted freeſtone, whoſe fracture preſents large rounded grains of quartz, connected by means of a cement leſs pure.

Fig. 2 repreſents the plan of the hearth, and a view of the manner in which the falſe bottom is conſtructed. AA, the bottom ſtones of the hearth. B, ſtratum of bedding ſand. CC, paſſages by which the vapour, which may be generated from the damps, are paſſed off. DD, pillars of brick. The letters in the horizontal ſection, correſpond to ſimilar letters in the dotted elevation.

Fig. 3, AA, horizontal ſection of the diameter of the boſhes, the lining and vacancy for ſtuffing at M, in fig. 1. C, view of the top of the hearth at L, in fig. 1.

Fig. 4, vertical ſide-ſection of the hearth and boſhes; ſhewing the tymp and dam-ſtones, and the tymp and dam-plates. *a*, the tymp-ſtone. *b*, the tymp-plate, which is wedged firmly to the ſtone, to keep it firm in caſe of ſplitting by the great heat. *c*, dam-ſtone, which occupies the whole breadth of the bottom of the hearth, excepting about ſix inches, which, when the furnace is at work, is filled every caſt with ſtrong ſand. This ſtone is ſurmounted by an iron plate of conſiderable thickneſs, and of a peculiar ſhape, *d*, and from this called the dam-plate. The top of the dam-ſtone and plate is two, three,

or



J. Pass sculp.

The Blast Furnace.

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or four, inches under the level of the tuyere hole. The ſpace betwixt the bottom of the tymp and the dotted line is alſo rammed full of ſtrong ſand, and ſometimes fire-clay. This is called the tymp-ſtopping, and prevents any part of the blaſt from being unneceſſarily expended. The ſquare of the baſe of this furnace is thirty-eight feet; the extreme height from the falſe bottom to the top of the crater is fifty-five feet.

The furnace, round the bottom and ſides, for two feet up the ſquare funnel, receives a lining of common bricks upon edge, to prevent the ſtone from ſhivering or mouldering when the fire comes in contact with it. On the front of the furnace is erected a temporary fire-place, about four feet long, into the bottom of which are laid correſponding bars. The ſide walls are made ſo high as to reach the under-ſurface of the tymp-ſtone; excepting a ſmall ſpace, which afterwards receives an iron-plate of one inch and a half thickneſs, by way of a cover: this alſo preſerves the tymp-ſtone from any injury it might ſuſtain by being in contact with the flame. The fire is kindled upon the bars, and is fed occaſionally with ſmall coals. As the whole cavity of the furnace ſerves as a chimney for this fire, the draught in conſequence is violent, and the body of heat carried up is very conſiderable. In the courſe of three weeks, by means of this fire, the furnace will, from its erection, become entirely free from damp, and fit for the reception of the materials: when this is judged proper the fire-place is removed, but the interior bricks are allowed to remain till the operation of blowing commences. Some looſe fuel is then thrown upon the bottom of the furnace, and a few baſkets of cokes are introduced; theſe are allowed to become thoroughly ignited before more are added. In this manner the furnace is gradually filled; ſometimes entirely full, and at other times 5-8ths or 3-4ths full. The number of baſkets full depend entirely upon the ſize of the furnace: that repreſented in the engraving, will contain 900 baſkets. If the coal is ſplint, the weight of each baſket-full will be nearly 110lb. × 900 = 99,000lb. cokes. As this quality of cokes is made with a loſs of nearly fifty per cent. the original weight in raw coals will be equal to 198,000lb. When we reflect that this vaſt body of ignited matter is replaced every third day, when the furnace is properly at work, an idea may be formed of the immenſe quantity of materials requiſite, as alſo the conſequent induſtry exerted, to ſupply one or more furnaces for the ſpace of one year.

When the furnace is ſufficiently heated throughout, ſpecific quantities of cokes, iron-ſtone, and blaſt-furnace cinders, are added: theſe are called *charges*. The cokes are commonly filled in baſkets, which, at all the various iron-works, are nearly of a ſize. The weight of the baſket, however, depends entirely upon the nature and quality of the coal, being from 70 to 112lb. each. The iron-ſtone is filled into boxes, which, when moderately heaped, contain 56lb. of torrefied iron-ſtone; they often exceed this when the ſtone has been ſeverely roaſted. The firſt charges which a furnace receives, contain but a ſmall proportion of iron-ſtone to the weight of cokes: this is afterwards increaſed to a full burden, which is commonly four baſkets cokes, 320lb. two boxes iron-ſtone, 112lb. one box blaſt-furnace cinders, 60 or 70lb. At new works, where theſe cinders cannot be obtained, a ſimilar quantity of limeſtone is uſed.

The deſcent of the charge, or burden, is facilitated by opening the furnace below two or three times a-day, throwing out the cold cinders, and admitting, for an hour at a time, a body of freſh air. This operation is repeated till the approach of the iron-ſtone and cinder, which is always announced by a partial fuſion, and the dropping of lava through the iron bars, introduced to ſupport the incumbent materials while thoſe on the bottom are carried away. The filling above is regularly continued, and when the furnace at the top has acquired a conſiderable degree of heat, it is then judged time to introduce the blaſt; the preparations neceſſary for which are the following:—

The dam-ſtone is laid in its place firmly imbedded in fire-clay; the dam-plate is again imbedded on this with the ſame cement, and is ſubject to the ſame inclination. On the top of this plate is a ſlight depreſſion, of a curved form, towards that ſide fartheſt diſtant from the blaſt, for the purpoſe of concentrating the ſcoria, and allowing it to flow off in a connected ſtream, as it tends to ſurmount the level of the dam. From this notch to the level of the floor a declivity of brick-work is erected, down which the ſcoria of the furnace flows in large quantities. The opening betwixt the dam and ſide-walls of the furnace, called the *fauld*, is then built up with ſand, the looſe bricks are removed, and the furnace bottom is covered with powdered lime or charcoal duſt. The ignited cokes are now allowed to fall down, and are brought forward with iron bars nearly to a level with the dam. The ſpace between the ſurface of the cokes and the bottom of the tymp-plate is next rammed hard with ſtrong binding ſand; and theſe cokes, which are expoſed on the outſide, are covered with coke-duſt. Theſe precautions being taken, the tuyere-hole is then opened and lined with a ſoft mixture of fire-clay and loam: the blaſt is commonly introduced into the furnace at firſt with a ſmall diſcharging-pipe, which is afterwards increaſed as occaſion may require. In two hours after blowing, a conſiderable quantity of lava will be accumulated; iron bars are then introduced, and perforations made in the compreſſed matter at the bottom of the furnace; the lava is admitted to all parts of the hearth, and ſoon thoroughly heats and glazes the ſurfaces of the fire-ſtone. Shortly after this it riſes to a level with the notch in the dam-plate, and by its own accumulation, together with the forcible action of the blaſt, it flows over. Its colour is at firſt black; its fracture denſe, and very ponderous; the form it aſſumes in running off is flat and branched, ſometimes in long ſtreams, and at other times leſs extenſive. If the preparation has been well conducted, the colour of the cinder will ſoon change to white; and the metal, which in the ſtate of an oxyd formerly coloured, will be left in a diſengaged ſtate in the furnace. When the metal has riſen nearly to a level with the dam, it is then let out by cutting away the hardened loam of the fauld, and conveyed by a channel, made in ſand, to its proper deſtination; the principal channel, or runner, is called the *ſow*, the lateral moulds are called the *pigs*.

In ſix days after the commencement of blowing, the furnace ought to have *wrought herſelf clear*, and have acquired capacity ſufficient to contain from 5000 to 7000 weight of iron. The quality ought alſo to be richly carbonated, ſo as to be of value and eſtimation in the pig-market. At this period, with a quality of coal as formerly mentioned, the charge will have increaſed to the following proportions:—five baſkets cokes, 400lb. ſix boxes iron-ſtone, 336lb. one box limeſtone, 100lb.

An analyſis of the ſmelting operation, and the tendency which the individual agents have to produce change in the quality and quantity of the iron, next demand conſideration. Let us, however, firſt notice the characteriſtic features exhibited by the different kinds of iron while in fuſion, whereby the quality of the metal may be juſtly defined.—When fine N° 1, or ſupercarbonated crude iron, is run from the furnace, the ſtream of metal, as it iſſues from the fauld, throws off an infinite number of brilliant ſparkles of carbon. The ſurface is covered with a fluid pellicle of carburet of iron, which, as it flows, rears itſelf up in the moſt delicate folds: at firſt the fluid metal appears like a denſe ponderous ſtream, but, as the collateral moulds become filled, it exhibits a general rapid motion from the ſurface of the pigs to the centre of many points; millions of the fineſt undulations move upon each mould, diſplaying the greateſt nicety and rapidity of movement, conjoined with an uncommonly beautiful variegation of colour, which lan-

guage is inadequate juſtly to deſcribe. Such metal, in quantity, will remain fluid for twenty minutes after it is run from the furnace, and when cold, will have its ſurface covered with the beautiful carburet of iron, of an uncommonly rich and brilliant appearance. When the ſurface of the metal is not carbureted, it is ſmooth like forged iron, and always convex. In this ſtate iron is too rich for melting without the addition of coarſe metal, and is unfit to be uſed in a cupola furnace for making fine caſtings, where thinneſs and a good ſkin are requiſite.

N° 4, or oxygenated crude iron, when iſſuing from the blaſt-furnace, throws off from all parts of the fluid ſurface a vaſt number of metallic ſparks: they ariſe from a different cauſe than that exerted in the former inſtance. The extreme privation of carbon renders the metal ſubject to the combination of oxygen ſo ſoon as it comes into contact with atmoſpheric air. This truth is evidently manifeſted by the ejection of ſmall ſpherules of iron from all parts of the ſurface: the deflagration does not, however, take place till the globule has been thrown two or three feet up in the air; it then inflames and ſeparates, with a ſlight hiſſing exploſion, into a great many minute particles of brilliant fire. When theſe are collected they prove to be a true oxyd of iron, but ſo much ſaturated with oxygen as to poſſeſs no magnetic obedience. The ſurface of oxygenated iron, when running, is covered with waving flakes of an obſcure ſmoky flame, accompanied with a hiſſing noiſe; forming a wonderful contraſt with the fine rich covering of plumbago in the other ſtate of the metal, occaſionally parting and exhibiting the iron in a ſtate of the greateſt apparent purity, agitated in numberleſs minute fibres, from the abundance of the carbon united with the metal. When iron thus highly oxygenated comes to reſt, ſmall ſpecks of oxyd begin to appear floating upon the ſurface: theſe increaſe in ſize; and when the metal has become ſolid, the upper ſurface is found entirely covered with a ſcale of blue oxyd of various thickneſſes, dependent upon the ſtage of oxygenation or extreme privation of carbon. This oxyd, in common, contains about 15 per cent. of oxygen, and is very obedient to the magnet. In place of a dark blue ſmooth ſurface, convex and richly carbonated, the metal will exhibit a deep, rough, concave face, which, when the oxyd is removed, preſents a great number of deep pits. This iron in fuſion ſtands leſs convex than carbonated iron, merely becauſe it is leſs ſuſceptible of a ſtate of extreme diviſion; and indeed it ſeems a principle in all metallic fluids, that they are convex in proportion to the quantity of carbon with which they are ſaturated. This iron flows dead and ponderous, and rarely parts in ſhades but at the diſtance of ſome inches from each other.

The above is a ſlight ſketch of the appearance of the two extreme qualities of crude or pig-iron, when in a ſtate of fuſion; but there ſtill remain two intermediate ſtages of quality to be deſcribed: theſe are, carbonated and carbo-oxygenated iron; that is, N° 2 and 3 of the manufacturers. Carbonated iron exhibits, like N° 1, a beautiful appearance in the runner and pig. The breakings of the fluid, in general, are leſs fine; the agitation leſs delicate; though the diviſion of the fluid is equal, if not beyond that of the other. When the internal ebullition of the metal is greateſt, the undulating ſhades are ſmalleſt and moſt numerous: ſometimes they aſſume the ſhape of ſmall ſegments; ſometimes fibrated groups; and at other times minute circles, of a mellower colour than the ground of the fluid. The ſurface of this metal, expoſed to external air, when cooling is generally ſlightly convex, and full of punctures: theſe, in iron of a weak and fuſible nature, are commonly ſmall in the diameter, and of no great depth. In ſtrong metal, the punctures are much wider and deeper. This criterion, however, is not infallible, when pig-iron of different works is taken collectively. At each individual work, that iron will be ſtrongeſt whoſe honeycombs are largeſt and deepeſt.

Carbo-oxygenated, or N° 3, pig-iron, runs ſmoothly, without any great degree of ebullition or diſengagement of metallic ſparks. The partings upon its ſurface are longer, and at greater diſtances from each other, than in the former varieties; the ſhape they aſſume is either elliptical, circular, or curved. In cooling, this metal acquires a conſiderable portion of oxyd; the ſurface is neither markedly convex nor concave; the punctures are leſs, and frequently vaniſh altogether. Their abſence, however, is no token of a ſmooth face ſucceeding; in qualities of crude iron oxygenated beyond this, a concave ſurface is the conſequence of the extreme abſence of carbon; and, in proportion as this principle is abſent, the ſurface of the iron acquires roughneſs and aſperity. It may be proper here to mention, once for all, that although, for convenience, the manufacturer has, from a juſt eſtimation of the value of the metal in a ſubſequent manufacture, affixed certain numbers for determinate qualities of iron, yet it is difficult to decide at what degree of ſaturation of carbon each reſpective term commences: ſuffice it to ſay, that the two alterative principles, oxygen and carbon, form two diſtinct claſſes, that in which oxygen predominates, and that in which carbon predominates; the latter comprehends N° 1 and 2 of the manufacturers, the former includes oxygenated, white, and mottled; and the equaliſation of theſe mixtures form carbo-oxygenated crude iron.

N° 1 and 2, with their intermediate qualities, poſſeſs ſurfaces more or leſs convex, and frequently with thin bliſters: this we attribute to the preſence of carbon, which being plentifully interſperſed betwixt and throughout the particles of the metal, the tendency which the iron has to ſhrink in cooling is entirely done away; it helps to diſtend the aggregate of the maſs, and to give a round face, by gradually elevating the central parts of the ſurface, which are always laſt to loſe their fluidity. Again, that quality of iron known by the name of N° 3, or carbo-oxygenated, is moſt commonly found with a flat ſurface. If we ſtill farther trace the appearance of the ſurface of pig-iron, when run from the furnace, we ſhall find N° 4, either with a white or mottled fracture, poſſeſſed of concave faces rough and deeply pitted. Beyond this it may be imagined that every degree of further oxygenation would be productive of a ſurface deeper in the curve, and rougher, with additional aſperities. The contrary is, however, the caſe: when crude iron is ſo far debaſed as to be run from the furnace in clotted lumps highly oxygenated, the ſurface of the pigs is found to be more convex than that of the iron N° 1, but then the fracture of ſuch metal preſents an impure maſs covered on both faces with a mixture of oxydated iron, of a blueiſh colour, nearly metallic. In ſhort, this quality of iron is incapable of receiving ſuch a degree of fluidity as to enable us to judge whether the convexity of its ſurface is peculiar to its ſtate, or is owing to its want of diviſion as a fluid, whereby the gradual conſolidation of the metal is prevented.

Theſe features ſufficiently diſtinguiſh betwixt the various qualities of crude iron after they are obtained from the blaſt-furnace: they are, however, criterions not leſs infallible, whereby we can prejudge the quality of the metal many hours before it is run from the furnace. Theſe are the colour and form of the ſcoria, the colour of the vitrid cruſt upon the working bars, and the quantity of carburet which is attached to it. The variety of colour and form in the cinder almoſt univerſally indicate the quality of the metal on the hearth. Hence, from a long courſe of experience, have ariſen the following denominations: Cinder of ſulphury iron; Cinder of N° 1, N° 2, and N° 3; and Cinder of ballaſt iron. Although at different works, from local circumſtances, the ſame kind of ſcoria may not indicate preciſely the ſame quality of iron, yet the difference is ſo ſmall, that the following deſcription of the various cinders may convey a very juſt idea of their general appearance.

When the ſcoria is of a whitiſh colour and ſhort form,

branching from the notch of the dam, and emitting from its ſtream beautiful ſparks of ignited carbon, reſembling thoſe ejected from a crucible of caſt ſteel in fuſion, expoſed to external air, or to the combuſtion of fine ſteel filings in a white flame; if, when iſſuing from the orifice of the furnace, it is of the pureſt white colour, poſſeſſing no tenacity, but in a ſtate of the greateſt fluid diviſion, and, when cold, reſembles a maſs of heavy torrefied ſpar, void of the ſmalleſt vitrid appearance, hard and durable, it is then certain that the furnace contains ſulphury iron, i. e. ſuper-carbonated iron. At blaſt-furnaces, where a great quantity of air is thrown in per minute, ſuper-carbonated crude iron will be obtained with a cinder of a longer form, with a rough flinty fracture towards the outſide of the column.

That cinder or lava, which indicates the preſence of carbonated iron in the hearth of the furnace, forms itſelf into circular compact ſtreams, which become conſolidated and inſerted into each other; theſe are in length from three to nine feet. Their colour, when the iron approaches the firſt quality, is a beautiful variegation of white and blue enamel, forming a wild profuſion of the elements of every known figure; the blues are lighter or darker according to the quantity of the metal and the action of the external air while cooling. When the quality of the pig-iron is ſparingly carbonated, the blue colour is leſs vivid, leſs delicate; and the external ſurface rougher, and more ſullied with a mixture of colour. The ſame ſcoria, when fuſed in veſſels which are allowed to cool gradually, parts with all its variety of light and ſhade, and becomes of a yellowiſh colour, ſometimes nearly white when the quantity of incorporated metal has been ſmall.

The lava or cinder which is emitted from the blaſt-furnace when carbo-oxygenated (or N° 3) iron is produced, aſſumes a long ziz-zag form. The ſtream is ſlightly convex in the middle; broad, flat, and obliquely furrowed, towards the edges. The end of the ſtream frequently rears itſelf into narrow tapered cones, to the height of ſix or eight inches: theſe are generally hollow in the centre, and are eaſily demoliſhed, owing to their exceſſive brittleneſs. The colour of this lava is very various; for the moſt part it is pale yellow mixed with green. Its tenacity is ſo great, that if, while fluid, a ſmall iron hook is inſerted into it at a certain degree of heat, and then drawn from it with a quick but ſteady motion, twenty to thirty yards of fine glaſs thread may be formed with eaſe. If the colours are vivid and variegated, the thread will poſſeſs, upon a minute ſcale, all the various tints of colouring which is found in the columnar maſs. When by accident a quantity of this lava runs back upon the diſcharging-pipe, it is upon the return of the blaſt impelled with ſuch velocity as to be blown into minute delicate fibres, ſmaller than the moſt ductile wire; at firſt they float upon the air like wool, and when at reſt very much reſemble that ſubſtance.

The preſence of oxygenated crude iron (N° 4) on the furnace-hearth, is indicated by the lava reſolving itſelf into long ſtreams, ſometimes branched, ſometimes columnar, extending from the notch to the loweſt part of the declivity; here it commonly forms large, flat, hollow cakes, or inclines to form conical figures: theſe are, however, ſeldom perfect; for the quantity of fluid lava, conveyed through the centre of the column, accumulates faſter than the external ſides of the cone are conſolidated; and thus, when the ſtructure is only half finiſhed, the ſmall crater vomits forth its ſuperabundant lava, and is demoliſhed. The current of ſuch lava falls heavily from the dam as if ſurcharged with metal, and emits dark red ſparks reſembling the agitation of ſtraw embers. Its colour is ſtill more varied than the former deſcriptions of ſcoriæ, and is found changing its hues through a great variety of greens ſhaded with browns. Another variety of ſcoria, which indicates the ſame quality of iron, aſſumes a ſimilar form; but has a black ground colour mixed with browns, or is entirely black. When the latter colour prevails, the texture of the cinder becomes porous; the quantity of iron left is now very conſiderable, and ſuch as will be eaſily extracted in the aſſay-furnace with proper fluxes. In caſes of total derangement in the furnace, the ſcoria will ſtill retain this black colour, although the quantity of metal may amount to 25 per cent. the fracture, however, becomes denſe, and its ſpecific gravity increaſes in proportion to the quantity of metal it holds incorporated.

The next ſource of information, as to the quality of the iron in the furnace, is to be got from the colour of the ſcoria upon the working bars, which are from time to time inſerted to keep the furnace free from lumps, and to bring forward the ſcoria. When ſuper-carbonated crude iron is in the hearth, the vitrid cruſt upon the bars will be of a black colour and ſmooth ſurface, fully covered with large and brilliant plates of plumbago. As the quality of the metal approaches to N° 2 (carbonated), the carburet upon the ſcoria decreaſes both in point of quantity and ſize. When carbo-oxygenated iron, or N° 3, is in the furnace, the working bars are always coated with a lighter coloured ſcoria than when the former varieties exiſt; a ſpeck of plumbago is now only found here and there, and that of the ſmalleſt ſize. When the quality of the metal is oxygenated, as N° 4, not only have the plates of carburet diſappeared, but alſo the coally colour on the external ſurface of the ſcoria; what now attaches to the bars, is nearly of the ſame nature and colour as the lava emitted at the notch of the dam. Theſe criterions are infallible; for, as the fuſibility or carbonation of the metal is promoted in a direct ratio to the comparative quantity of the coally principle preſent in the furnace, ſo in the ſame proportion will the vitrid cruſt encircling the working bars exhibit the preſence of that principle in the furnace.

Thus combuſtion, in the blaſt furnace, conſiſts in the rapid ignition of a given quantity of fuel, and its accompanying portion of ore, in a certain given time. That furnace which can in the ſhorteſt time reduce the greateſt quantity of fuel, all things elſe being in proportion, will conſtantly manufacture the greateſt quantity of iron. In common, before the introduction of the blaſt, the furnace is filled with alternate ſtrata of coke, iron-ſtone, and limeſtone, heated by ſimple atmoſpheric preſſure to a bright red or white heat, and the iron ſtone to a melting heat. This temperature is then quickly increaſed throughout the furnace, by the application of the blaſt. The blowing orifices or tuyeres of the furnace, exhibit the fuel increaſing in whiteneſs, and the iron-ſtone rapidly diſſolving before the blaſt, of a blackiſh colour. At this period, the lava which flows from the furnace, in conſequence of the reduction of the ore and lime-ſtone, is conſiderably charged with iron, and is of a blackiſh brown, or greeniſh brown, colour. Theſe appearances continue for twelve, twenty-four, or thirty-ſix, hours, according to the mode of treatment in bringing forward the furnace after blowing. The tuyere (if a bright tuyere furnace) will appear like a blaze of pure light, at times very oppreſſive to the eye; it ſoon, however, becomes accuſtomed to it, and will with facility diſcern the individual maſſes of coke, as they are forced away, with the rapidity of lightning, before the concentrated force of the air. The concrete ore and lime-ſtone are no longer viſible; but a fine metallic ſpray is conſtantly deſcending, and, forced from the fuel, precipitates itſelf to the bottom of the furnace. The ſcoria formed by the fuſion and union of the lime-ſtone, with the immetallic parts of the ore, is carried before the blaſt in a ſimilar manner and form, but eaſily diſtinguiſhable from the fluid metal by its buoyancy, want of velocity when impelled, and by its opaque colour. In this ſtate, the furnace is conſidered in excellent ſmelting order. The iron is generally revived with little loſs; and the colour and purity of the cinder or lava ſufficiently indicate the perfection of the ſeparation.

tion. When at any time the brightneſs of the tuyere fails, and becomes dull white or reddiſh white, then a change is indicated; the iron-ſtone and lime-ſtone will again appear in the ſolid unſeparated ſtate, and the change of colour in the cinder infallibly betokens an irregularity in the movements of the furnace.

At the introduction of the blaſt, the interior of the furnace at the tuyere is ſimply a mixture of ignited maſſes of cokes and iron-ſtone, the latter partly ſemifuſed, but the greateſt part merely heated to a bright red heat. In the deſcent through the furnace, in contact with ignited coke, the particles of metal in the ore may, by parting with the oxygen, have received a diſpoſition to become revived. The increaſed temperature creates an additional tendency, by eſtabliſhing a greater force of affinity betwixt the fuel and the iron. But the metal approaching to its proper ſtate, meeting the current of blaſt, is immediately ſubject to a partial combuſtion. The portion thus oxydated conveys to the lava, in proportion to its quantity and oxygenation, the colour already mentioned. As ſoon as the continuation of the blaſt conveys a higher temperature to the ſuperior regions of the furnace, the appearance of the ſolid matter at the tuyere ceaſes. The fuſion and ſeparation of the metal from the ore are effected in ſituations more remote from the blaſt, or chief ſource of decompoſition, in a temperature more ſuited to the nature and exiſtence of the metal. The iron, once formed into a fluid, and its fluidity preſerved, its deſcent to the blaſt is attended with little or no injury to its carbonation.

The quantity of air diſcharged into the furnace, under the appellation of *blaſt*, depends upon the number of ſtrokes of the blowing cylinders which the engine makes per minute, and on the area and diameter of the air pump. This is independent of every conſideration of denſity and increaſe of power in the ſteam cylinder; ſo long as the blowing or air cylinder remains the ſame, and the engine performs the ſame diſcharges, the meaſure of atmoſpheric air, which enters the furnace, will remain the ſame. The rapid improvements, which of late years have been made in the blowing machine, have increaſed the quantity from 1000 to 4000 feet per minute per furnace; and the quantity or produce in iron has been thus conſiderably increaſed.

In the manufacture of iron, it has always been the unceaſing object of the iron-maker to improve his blowing apparatus; for uniformly he has found, that in proportion as he can raiſe air, and make it enter the furnace, ſo will his weekly quantity of metal be increaſed. When charcoal of wood was the matter of fuel made uſe of, the affinities betwixt the latter and the ore were eſtabliſhed with more facility. Small furnaces, called *bloomeries*, were ſufficiently large, and deemed of profitable capacity, if they produced a bloom or two of iron per day, of 90 to 120lbs. each. Hand bellows, and what were called fuel blaſts, were ſufficiently large for the minor operations. After the general introduction of the refinery furnaces, and the diviſion of the manufacture into the making of pig iron, and the refining of this into bar or malleable iron, the advantages of a powerful blaſt were immediately perceived. Water wheels, working two pairs or more of leather bellows, were found to produce powerful effects, and, in conſequence, almoſt every ſituation that preſented a command of materials and a waterfall, became the ſcite of an iron mill. The ſimple mode of blowing furnaces by means of a trompe, was at the ſame time introduced; but in general it was found, that much greater advantage could be derived from the deſcent of water upon a wheel, either as to denſity or quantity, than by means of the beſt conſtructed trompe.

The uſe of water wheels and leather bellows continued general throughout the iron buſineſs, until the principles and mechaniſm of the ſteam-engine were eſtabliſhed upon unerring grounds. This wonderful invention was ſoon applied with the happieſt effect in many ſituations rich with mineral treaſures, but to which nature had denied the advantage of water ſufficient to turn machinery. Cylinders, compoſed of wood, firmly jointed and hooped, were firſt introduced as a ſubſtitute for leather bellows: theſe were ſoon after replaced by bored cylinders of caſt iron; and with this great diſcovery and application of the art of caſting, the blowing machine aſſumed a general and well-proportioned form. This took place about forty years ago, and continued with a few temporary deviations until the introduction of Bolton and Watt's highly improved engine, with the *water-blaſt*. The following is a deſcription of the air-pump blowing cylinder, mentioned above: The diameter of the cylinder for one furnace varies from twenty-five to thirty-ſix inches, and for two furnaces from thirty-ſix to fifty inches. Upon the oppoſite of the main or working beam, ſometimes at equal, and ſometimes at unequal, diſtances from the centre, is placed the air-pump or blowing cylinder. This, in common, is equal to four or five times the area of the former; and, with the ſmall working power of the ſteam cylinder, ſeldom condenſe the air beyond $1\frac{1}{2}$ to $1\frac{3}{4}$ lbs. per ſquare inch. The air-pump is commonly conſtructed open below, as ſhewn at E, in the above-mentioned engraving. This plan was ſometimes deviated from, and the cylinder inverted. The blowing piſton is loaded with weights, and the air expreſſed by its deſcent. In this mode of working, the act of the ſteam piſton, deſcending in vacuum, raiſes the air-pump piſton loaded with weights. Upon the return of the ſtroke, or while the ſteam piſton aſcends in the cylinder, this piſton loaded with weights ſinks the whole length of the ſtroke, and by means of this loading, proportioned to the powers of the engine, forces the air either into the regulator or the furnace. Above, or parallel to the air-pump is placed the regulating cylinder, as ſhewn in the plate. This has a valve of communication, which opens every ſtroke the engine makes, and admits the whole diſcharge of the air. The piſton of the cylinder, frequently called the fly piſton, is loaded with weights, and kept conſtantly vibrating; ſo that when any deficiency of preſſure ariſes from the remitting action of the air-pump piſton, the blaſt is comparatively equalized by the preſſure of the fly piſton upon the included air. The ſize of this cylinder is generally in the proportion of nine to ſix of the air-pump.

The chief objections to this mode of blowing, are founded upon the great inequality of the blaſt, and a very conſiderable waſte of air that takes place at the *ſnort*, or ſafety valve, to prevent the fly piſton being blown entirely out of the cylinder. The ſnort is an opening made in the top of the air-pump cylinder, on which reſts a heavy iron valve, faced with leather ſtuffed with wool; this is, by means of an upright iron rod, attached to a lever, which runs acroſs the top of the regulating cylinder. As ſoon as the fly piſton riſes to a certain height, a block of wood, or other contrivance, lifts one end of the lever, and along with it the valve, to a certain height, and permits a quantity of the denſeſt air to eſcape, ſufficient to inſure the ſafety of the piſton. Notwithſtanding theſe precautions, however, many accidents and ſtops are found to enſue. In conſequence of this, ſome iron maſters contrived to take the ſpare or waſte air from the ſnort, to receive it in an inverted cheſt above water, and blow to its extent ſmithy and finery fires. Endeavours of this kind, to economiſe the air, raiſed and condenſed at a great expence, were ſufficient proofs that a method was ſtill wanting to complete the blowing machine, to render its motions ſteady and uniform, and to equaliſe the denſity of the blaſt throughout the whole ſtroke. This was at length accompliſhed by inverting large cheſts, or cylinders, in ciſterns of wood, ſtone, or iron. The ſpace betwixt the inner and outer ciſterns was conſtructed of ſufficient capacity to oppoſe the expanſive force of the blaſt of a column of water of equal or ſuperior reſiſtance. Hence this invention is called the *water-blaſt*.

A blowing machine, with the water-blaſt, capable of ſupporting two blaſt furnaces, ought to have the inverted cheſt of the regulator equal to three or four hundred

ſquare

ſquare feet of area. In calculating the proportions and dimenſions of water regulators in general, the principle is, to allow the ſpace around the inverted cheſt equal in point of ſuperficial meaſurement to the area of the interior of the cheſt, that the deſcending column of water may diſplace no more in the perpendicular aſcent, than it is itſelf abſolutely depreſſed. If the area or ſpace, in which the water riſes and falls, is only equal to half the area of the inverted cheſt, then for every foot of water which is depreſſed in the bottom of the cheſt, a column of two feet will be raiſed and maintained on the outſide. On the contrary, if the outſide ſpace for water be equal to twice the area, then every foot of water depreſſed in the cheſt will only elevate the external column ſix inches. It is evident, therefore, from theſe general facts, that a conſiderable latitude may at any time be aſſumed in conſtructing the water regulator, particularly in old eſtabliſhed works, where local circumſtances and convenience confine its ſituation to one ſpot.

Where it is not inconvenient to uſe a high perpendicular column of water, the inverted cheſt may be increaſed one half, double, or even triple, the ſuperficial meaſurement of the outſide ſpace; ſo that if the power of the blowing machine is equal to three pounds upon the ſquare inch, the water in the cheſt will be depreſſed nearly three feet and a half, and raiſed in the perpendicular column five feet three inches in the firſt, ſeven feet in the ſecond, and ten feet and a half in the laſt, caſe. This plan, to ſuit former eſtabliſhments, may be adopted with conſiderable modifications, always keeping in mind, that every foot of area gained upon the ſurface of the water, is a material acquiſition to the equaliſing powers of the regulator.

One imperfection, however, attends this want of equilibrium on the two ſpaces for the action and re-action of the water.—Whatever ſpace the waters would fall, at the return of the ſtroke, ſuppoſing the inſide and outſide columns exactly balanced, would in this caſe be increaſed one half, double, or triple. Again, where ſituation does not admit of the perpendicular column being raiſed beyond, or not even to the extent, of the depreſſion that takes place within the inverted cheſt, and where an additional ſpace cannot be procured for an increaſe of its diameter, an inverted cheſt of much leſs height than common may be uſed, loaded with a material of great weight, ſuch as iron. The water in that caſe would diſtribute itſelf over the ſurface of the cheſt, inſtead of riſing in perpendicular height.

But a ſerious objection is notwithſtanding made to cheſts or cylinders, where the eduction pipe approaches within a ſhort ſpace of the ſurface of the water; namely, water riſing in the pipes, and being conveyed along with the air into the furnace. This may take place in two ways; by an inſenſible and uniform diſcharge of water into the furnace, making the blaſt at the tuyere viſible, like the reſpiration of the human body in a froſty day; or ſometimes in quantity, ſufficient to hazard the deſtruction of the furnace and buildings. The former is occaſioned by the air from the eduction pipe, at the commencement of the ſtroke, impinging violently upon the ſurface of the water, and raiſing a portion of it in the ſtate of ſpray. This is ſpeedily diſſolved or entangled in the maſs of condenſed air before the return of the next ſtroke, and becomes expreſſed along with the blaſt into the furnace. The other hazardous conſequence is occaſioned chiefly by undulation in the column of water, when the blowing machine is, by derangement or accident, working under its proper power or number of ſtrokes. In theſe caſes, when the pauſe at the end of the ſtroke is prolonged, an exhauſtion ſometimes takes place in the air-pipes, the water riſes and is carried in a ſtream through the blowing-pipe into the furnace. The ſame caſualties will alſo occur, if the ſurface of the water is upon a level, or nearly ſo, with the tuyere.

In judicious erections this danger is moſt carefully avoided; the ſurface of water in the inverted cheſt or cylinder is kept at leaſt eight, nine, or ten, feet under the level of the tuyere, even at the laſt period of return, when the water has riſen to its greateſt height within. This precaution alſo enſures an advantage of much importance. A large ſpace is obtained betwixt the top of the cheſt and the depreſſed ſurface of the water; this becomes a ſpacious reſervoir for the condenſed air, and, by generating a conſiderable portion of elaſticity, prevents any violent perturbation upon the water at any period of the ſtroke. The increaſed diſtance betwixt the ſurface of the water, and the pipe which conducts the air from the cylinder, has a complete tendency to prevent the elevation of the aqueous particles, and always enſures a quantity of air comparatively free from moiſture.

The application of water regulators to blowing machines, by Meſſrs. Bolton and Watt, was ſoon followed by an attempt at further improvement, by the introduction of the air-vault; the principle of which was to form a receiver of ſuch capacity, that the elaſticity or ſpring of the condenſed air would be ſufficient to expreſs and equaliſe the blaſt during the return of the ſtroke. To effect this, an immenſe magazine was requiſite; to erect which of any metallic ſubſtance would have been ruinouſly expenſive, and, if conſtructed of wood, inſufficient for retaining the air. It became therefore requiſite to try the experiment upon building, or by excavation from the ſolid rock.

Air-vaults of this kind were conſtructed both at the Clyde and Muirkirk iron-works in Scotland, and a conſtant current of air produced; but nearly one half the quantity lifted by the air-pump eſcaped through the walls and arches of the building. This was made viſible by rubbing ſoapy water upon the external walls. At Devon iron works in Scotland, an air-vault was excavated from the ſolid rock, ſeventy-two feet long, fourteen feet wide, and thirteen feet high; equal to thirteen thouſand feet of cubical meaſurement. This immenſe excavation was made comparatively air-tight, by cauking the ſeams and fiſſures of the rock, plaſtering and then covering the whole with alternate layers of pitch and cloſe wove paper. This was the moſt perfect experiment ever tried upon the air-vault; and if an opinion is to be formed of the perfection of the apparatus by the quantity of iron at one time manufactured, a very trifling portion of air indeed muſt have been loſt. It has been frequently noticed in Scotland, that at works where the materials were in any degree ſimilar, three thouſand to three thouſand five hundred cubical feet of air per minute will, in the courſe of a week, produce from thirty to thirty-five tons of pig-iron, whatever may be the denſity at which it is thrown into the furnace. In both theſe ways has the air-vault been tried; but with ſuch indifferent conſequences as to its ſuperiority, that the plan ſeems now to be given up.

Several other modes of conſtruction for the blaſt-furnace have of late been tried, but without even reaching the advantages of the one already deſcribed. The vertical ſection of a very curious furnace of this kind, cut acroſs from the top of the boſhes, is exhibited in the preceding engraving at figure 5. The conſtruction is truly ſingular; and from this alone great advantages were expected to reſult. The originality of the principle conſiſts in the double ſquare, or throat; one immediately above the hearth, which is not ſhewn in this figure, and another half way up the cone, four feet in diameter, as repreſented in the plate at A.—B, the top of the boſhes, where the ſection or cone is cut off, twelve feet in diameter. C, an inferior diameter of ten feet, previous to the formation of the throat at A. D, the top of the ſecond row of boſhes, of the ſame diameter as B. E, the furnace mouth, or termination of the ſecond cone, four feet diameter, and proportioned to A. F, the funnel top for carrying off the flame occaſioned by the blaſt, ſo as not to interfere

with the workmen in filling the furnace. The dimensions, as to height, are as follow:

From B to C	height	12 feet
C to A	ditto	6
A to D	ditto	6
D to E	ditto	13
Height of the hearth, and first row of boshings, not shewn in the figure		15
Height of the bottom stones, and false bottoms,		4
Total height of this furnace from the foundation,		56 feet.

G G, the lining, made of fire bricks. I I, the common building, which might be either of sand-stone, or of bricks.

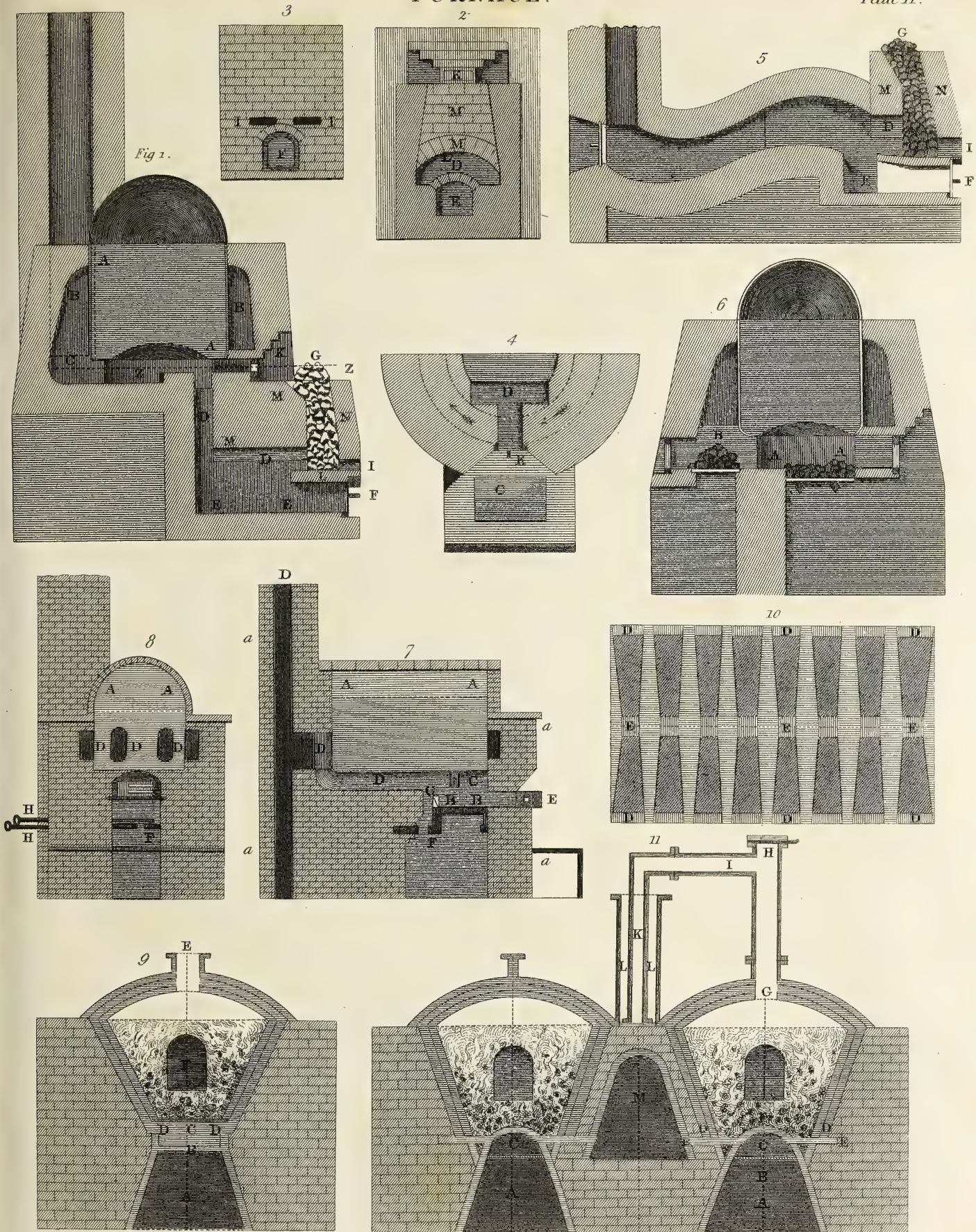
The reasoning which led to the construction of this furnace, proceeded from a belief that the boshes and throat or square of a blast-furnace were of the greatest importance on two accounts. First, because they supported the weight of the materials; and secondly, because they concentrated the heat. These acting conjointly, permitted the least possible quantity of materials to pass, till they dropt away in a state of semi-fusion, or complete separation. In furnaces, however, the cones of which were 30 feet high and upwards, this was conceived impossible to take place for any length of time, to any considerable extent. The height and gravitating pressure of the materials were more than sufficient to counteract the most favourable construction of boshes: and as this could not admit of diminution, the suspension of the materials and the concentration of the heat must be effected by some other means. This, at one time, was believed to have been completely effected by the scheme of an additional square, and an extra set of boshes; and there is little doubt but that, by converting perpendicular to lateral pressure, the suspension of the materials was reduced at least to one half of its former intensity. It was not doubted but that the process of smelting and separation would commence, in part, at A; that what escaped fusion and separation in that quarter, would be easily resolved below; and that the process of combustion intensely at work in two different places at once, would greatly facilitate the general reduction, and add considerably to the produce in iron of the furnace. These sanguine expectations were however unfortunately not realized; the solitary instance of one furnace only being constructed in support of this theory, and its mere temporary endurance, was a high proof of the inutility of the plan. From this we therefore proceed to the new-invented furnace of Mr. Watt of Birmingham.

STEAM-ENGINE FURNACE. The construction of this furnace is described in the specification of the patent obtained for the invention by Mr. Watt as follows: His "improved methods of constructing furnaces or fire-places, consist in causing the smoke or flame of the fresh fuel, in its way to the flues or chimney, to pass, together with a current of fresh air, through, over, or among, fuel which has already ceased to smoke, or which is converted into coaks, charcoal, or cinders, and which is intensely hot; by which means the smoke and grosser parts of the flame, by coming into close contact with, or by being brought near unto, the said intensely-hot fuel, and by being mixed with the current of fresh or unburnt air, are consumed, or converted into heat, or into pure flame free from smoke." This is done, "first, by stopping up every avenue or passage to the chimney or flues, except such as are left in the interstices of the fuel, by placing the fresh fuel above, or nearer to, the external air than that which is already converted into coaks or charcoal; and by constructing the fire-places in such manner that the flame, and the air which animates the fire, must pass downwards, or laterally, or horizontally, through the burning fuel, and pass from the lower part, or internal end or side, of the fire-place, to the flues or chimney. In some cases, after the flame has passed through the burning fuel, it is made to pass through a very hot funnel, flue, or oven, before it comes to the bottom of the boiler, or to the part of the furnace where it is proposed to melt metal, or perform other office, by which means the smoke is still more effectually consumed. In other cases, the flame is carried immediately from the fire-place into the space under a boiler, or into the bed of a melting or other furnace." In Plate II. of Furnaces, fig. 1 shews a section of a fire-engine boiler, and its furnace or fire-place, which has been chosen for an example of the application of this new method to the heating and evaporating of water. A A, the boiler, which may be made of any form suitable to its use. B B, a flue, surrounding the boiler as usual. C, the uptake, or passage from the space under the boiler to the flues. D D, a funnel or flue for the flame to come from the fire-place to the boiler. E E, a place to contain the ashes; and F, is a door to take them out at, which must be kept continually shut during the time of working. G H, the fire-place: the fresh fuel is put in at G, and gradually comes down as the fuel below consumes. The part at H, is very hot, being filled with the cokes or coals which have ceased to smoke. I, an opening or openings, to admit fresh air and regulate the fire. K, a door into the space under the boiler; which, being opened, admits air, and stops the draught of the chimney when the operation is wanted to cease. Fig. 2. represents a section of the same fire-place in the other direction; in which M M, is the back of the fire-place; L, the brick arch on which the fuel lies; and E, the ash-hole. Fig. 3, gives an outside view of the same fire-place, shewing the air-holes II, and the ash-hole door F; and fig. 4 is a plan of the same, with part of the boiler seating, taking in the line Z Z of fig. 1. The dotted lines represent the flues, and the arrows point out the direction of the flame. The fire is first kindled upon the brick arch L, fig. 1; and, when well lighted, more fuel is gradually added until it is filled up to G; and care is taken to leave proper interstices for the air to pass, either among the fuel, or between the fuel and the front wall N; and as much air is admitted at II, as can be done without causing the smoke to ascend perpendicularly from G, which it will do if too much air is admitted at I I. The dimensions of this fire-place are adjusted for burning about eighty-four pounds weight of coals in an hour; where greater or less quantities are required to be burnt, the furnaces must be enlarged or diminished accordingly; or, if much greater, more furnaces than one must be employed. Fig. 5, represents this new fire-place as applied to a furnace for smelting iron and other metals, and is constructed without the funnel or perpendicular flue D, in fig. 1. In this description, the same letters refer to the same parts in all the preceding figures.

Mr. Watt also constructs his new fire-places so that the part G H lies sloping, or horizontal, and otherwise varies the figure or form, and proportions; but in all cases the principle is the same; the fresh or raw fuel being placed next the external air, and so that the smoke or flame passes over or through the coaked or charred part of the fuel. He also occasionally covers the opening G, and causes the air to enter only, or principally, at I I. In particular cases, he places the fresh fuel on a grate as usual, as at A A, fig. 6. and beyond that grate, at or near the place where the flame passes into the flues or chimneys, he places another smaller grate B, on which he maintains a fire of charcoal, cokes, or coals which have been previously burnt until they have ceased to smoke; which, by giving intense heat and admitting fresh air, consumes the smoke of the first fire. Lastly, he states his new invention to consist only in the method of consuming the smoke, and increasing the heat, by causing the smoke and flame of the fresh fuel to pass through very hot funnels or pipes, or among, through, or near, fuel which is intensely hot, and which has ceased to smoke; and by mixing it with fresh air when in these circumstances; and in the form and nature of the fire-places above-mentioned: the boilers and other parts of the furnaces being

FURNACE.

Plate II.



Improved Furnaces.

London. Published as the Act directs July 12th 1806, by J. Wilkes

I. Pass sculp.

being ſuch as are in common uſe. Theſe new-invented fire-places are alſo applicable to furnaces for almoſt every other purpoſe.

An invention of a ſimilar kind has alſo been preſented to the public by Mr. W. Thompſon, of Bow-lane, London. He deſcribes it to be "a furnace which will effectually conſume the ſmoke ariſing from it, without requiring more coals than uſual, as has been the caſe with former contrivances for that purpoſe. It may be adapted to any boiler or copper already ſet up, and at a very ſmall expence. Fig. 7, in the engraving, is a ſection of an oblong boiler and fire-place; *aaaa*, the brick-work in which boilers are uſually ſet. AA, the boiler. Two iron flues run through this boiler, and alſo go round it. BB, the fire-place; which muſt be about one-third longer than they are generally made. C, an arch, which runs acroſs the fire-place, two inches lower than the bottom of the flue under the boiler, and about the middle of the fire-place. DDDD, flues through which the hot air aſcends, and ſpends its heat on the boiler. E, the door of the fire-place; which muſt have a ſmall ſhutter in it. Through this ſhutter the coals muſt be gently ſtirred up, by the ſlice or poker, taking care not to injure the arch, nor to raiſe too great a quantity of coals at once. F, is a ſmall ſpace left behind the fire for a current of air to come through, as in the patent lamps. G, a brick placed with its whole length acroſs the fire-place, to hinder the coals from falling down the ſpace F, and choking it. Fig. 8, is a front view of the ſame boiler and fire-place, in which the ſame letters repreſent the ſame parts. HH, are two ſlides, the one ſhifting backwards, the other forwards, to make the ſpace F, for the current of air, larger or ſmaller, as by practice may be found neceſſary.

"The manner in which this furnace operates is thus: The arch C, hinders the ſmoke from going up the chimney, and obliges it to paſs through the fire behind it; which has a very ſtrong draught, and burns the ſmoke as it paſſes through. The air which comes up through the ſpace F, gives freſh vigour to the flame, which conſumes any ſmoke that may be left. It muſt be obſerved that too much air will have a very bad effect, as it will cool the flame; therefore the ſlides HH, muſt be regulated in ſuch a manner as the operator may find moſt advantageous. The ſhutter in the door E, muſt alſo be of a proper ſize; as its being too large, or too ſmall, will be prejudicial."

A further improvement on Furnaces has been recently made by Mr. David Muſhet, of Glaſgow, for the purpoſes of metallurgy, in forming bars, ingots, &c. The inventor deſcribes it as follows: "The general principles of my proceſſes are, the fuſion of malleable iron, or of iron ore, in ſuch manner as immediately to convert them into *caſt-ſteel*; and likewiſe, in certain caſes, the after cementation of this ſteel, to give it malleability, and the property of welding, in order to fit it for ſuch purpoſes as require ſteel poſſeſſing thoſe properties. Theſe principles can be acted upon for the production of the various qualities of ſteel, in a variety of ways; but the principle of my invention, and the mode of operation, may be fully underſtood by the inſtances which I ſhall adduce, and which will enable any perſon to perform the ſame, and to vary and alter the mode of operation, according to his intention, and the particular quality of ſteel he may wiſh to manufacture. Thus caſt-ſteel may be made by taking any convenient quantity of malleable iron, according to the ſize of the furnace and crucible to be employed, and introducing it into the crucible, along with a proper proportion of charcoal, charcoal-duſt, pit-coal, pit-coal duſt, black-lead, or plumbago, or of any ſubſtance containing the coally or carbonaceous principle; but in general charcoal, pit-coal, pit-coal cokes, eſpecially if prepared in the manner hereafter deſcribed, will be found to anſwer beſt; for this proceſs not only bar-iron may be employed, but alſo what is commonly called *ſcraps* or *waſte iron*; but when the latter is uſed, a little more carbonaceous matter muſt be added to the mixture to revive the ruſt or oxyd of iron adhering to the ſcraps: the mixture in the crucible muſt be put into a furnace capable of giving a ſufficiently intenſe degree of heat to run down or fuſe the mixture, which muſt be then poured out into bar, ingot, or other, moulds, according as the manufacturer intends to produce bars or ingots, or various articles or utenſils that are or may be made of caſt-ſteel; for the whole iron by fuſion, with the charcoal or other ſubſtances, or things containing carbonaceous matter, will be found to have paſſed into the ſtate of caſt-ſteel. If caſt into bars or ingots, and a proper quantity of charcoal or other ſubſtances or things containing carbonaceous matter has been employed, ſuch bars, or ingots, will be found in a ſtate ready to take the hammer, and to be drawn or rolled into other ſhapes, according to the intention of the manufacturer. In ſome caſes, eſpecially where a heavy charge is to be run down, the crucibles muſt be previouſly diſpoſed in the furnace, and the mixture introduced into them afterwards by the proceſs before deſcribed, and which may be varied by any prudent operator. Caſt-ſteel may be made in a few hours, which by the proceſſes hitherto diſcovered, has uſually required many days, and ſometimes weeks; for caſt-ſteel by the common method of manufacture has been hitherto made from bar-ſteel which had previouſly required for its own converſion into that ſtate, from the ſtate of bar-iron or ſcrap-iron, a tedious cementation with charcoal in a furnace conſtructed for the purpoſe, and uſually known among manufacturers by the name of a *converting* furnace. It cannot therefore eſcape obſervation, that this is not the only ſaving in point of time and expence gained by my proceſs or proceſſes; for when I meet with or procure iron-ſtones, or iron-ores, ſufficiently rich, and free from foreign mixtures, I ſave even the time and expence neceſſary for the converſion of ſuch iron-ſtone, or iron-ore, firſt into caſt or pig iron, and afterwards by a tedious and expenſive proceſs, accompanied with a great waſte of metal, into bar-iron; for ſuch ore, or iron-ſtones, being previouſly roaſted or torrified, when that proceſs may be found neceſſary, may be ſubſtituted for the bar-iron ſcraps, or waſte iron, as before deſcribed, and the reſult will be caſt-ſteel, if a proper quantity of charcoal, charcoal-duſt, pit-coal, pit-coal duſt, plumbago or black-lead, or of any ſubſtances or things containing carbonaceous matter, had been uſed for the common and ordinary qualities of caſt-ſteel; a much ſmaller quantity of carbonaceous matter is requiſite in the mixture than perhaps would have been ſuſpected, before my invention: when charcoal from wood is employed, a ſeventieth to a ninetieth of the weight of the iron will generally be found ſufficient: when the quantity of the carbonaceous matter or principle exceeds one ſeventieth, and is increaſed from one ſixtieth to one fortieth or more of the weight of the iron, the ſteel becomes ſo completely fuſible that it may be run into moulds of any ſhape, and be capable afterwards of being filed and poliſhed. Hence by caſting may be conſtructed ſtoves, grates, kitchen utenſils, many kinds of wheels, and mill works, a great variety of ſmall machinery, and many other articles, which could not be ſo made by the proceſſes before in uſe, and which way of making ſuch articles conſtitutes a part of my invention. By my proceſs various kinds of ſteel, differing as much from each other in their qualities as the various kinds of pig or caſt-iron differ from each other, can be formed by merely varying the proportion of carbonaceous matter. Caſt-ſteel of the common and ordinary quality is ſo volatile when in fuſion, as to admit of being run into any ſhape, except ſtraight moulds of a conſiderable diameter; but ſteel of ſuch denſity as to admit of being caſt into any form may be produced by my proceſs, by increaſing the quantity of charcoal or matter containing the carbonaceous principle, and then fuſing the mixture as before directed. When I wiſh to produce qualities of ſteel ſofter than is uſually manufactured by the common proceſs, I find.

find it beſt to uſe a ſmall proportion of charcoal, ſometimes ſo little as a two hundredth part of the weight of the iron: ſteel produced with any proportion of charcoal, not exceeding one hundredth, will generally be found to poſſeſs every property neceſſary to its being caſt into thoſe ſhapes which require great elaſticity, ſtrength, and ſolidity; it will alſo be found generally capable of ſuſtaining a white heat and of being welded like malleable iron, and indeed as the proportion of charcoal or other carbonaceous matter is reduced, the qualities of the ſteel will be found to approach nearer to thoſe of common malleable iron. By further purſuing the principle of my new invention, I fuſe down malleable bar or ſcrap iron, in a crucible, without any viſible addition of carbonaceous matter, and run it into bar, ingot, or other moulds; in this ſtate the metal is nearly of the ſame quality as when put in, only altered by the combination of a ſmall portion of carbonaceous matter which the iron by its chemical affinity attracts from the ignited fuel, or from the ignited carbonic gas of the furnace, and which enters by the mouth or through the pores of the crucible, probably diſſolved in caloric at a very high temperature: but whether ſo diſſolved or not, the fact is, that a proportion of the carbon paſſes from the fire into union with the iron, and thereby converts it into an extremely ſoft ſteel. Beſides the different modes of operation above ſpecified, I further reduce iron-ore, bar-iron, or ſcrap-iron, by the addition of lime, or chalk, or other carbonates, or of carburets with clay, glaſs, and other fluxes, in various proportions, and form all the various qualities of ſteel formerly enumerated. If the various kinds and qualities of ſteel obtained by the proceſs or proceſſes above-mentioned, be introduced into the common converting or other ſteel furnaces, in contact with carbonaceous matter, or with earths, and heated for five days, more or leſs, according to the thickneſs of the bars or other forms, and the quantity introduced, the bars, ingots, or other ſhapes, being then taken from the furnace, will be found to poſſeſs all the ſolidity which they were formerly poſſeſſed of as caſt-ſteel, with that property of welding peculiar to bliſtered-faggot, or German-ſteel, of the uſual mode of manufacture.

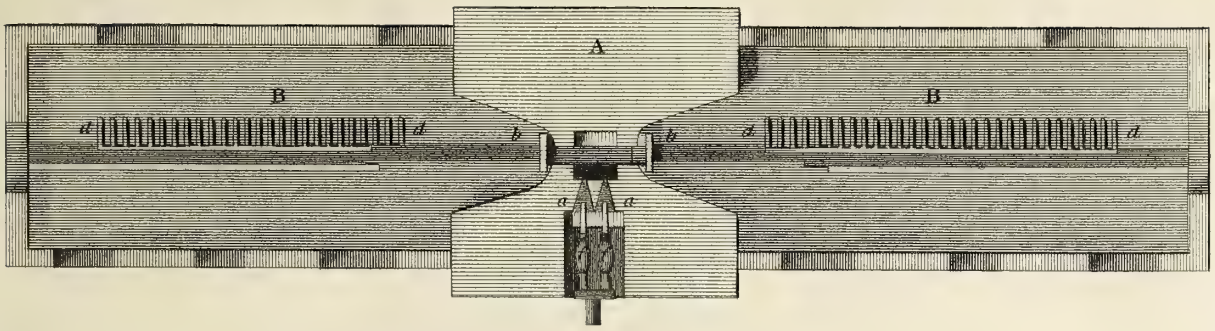
"By this invention I obtain ſteel, which for ſolidity may be uſed for the purpoſes of caſt-ſteel, uniting at the ſame time the property of welding without deſtroying the ſolidity or quality of the metal, a circumſtance of the higheſt importance to our manufactures. Ingots, bars, plates, and every ſhape into which this ſteel is caſt, rolled, or hammered, will be poſſeſſed of uniformity of quality without thoſe numerous reeds, flaws, bliſters, and diſjoined laminas, found in ſteel made by the proceſſes in uſe before my invention. When pit-coal cokes are to be uſed in any of the foregoing operations, either in mixture with the ore, or with the iron, or for fuel in the furnaces, in which the crucibles containing the mixture are expoſed to the action of the fire, it is of the utmoſt importance that the cokes be properly prepared. The proceſs which I have found to anſwer beſt for this purpoſe, though common cokes will alſo do, is founded upon the principle that all acceſs of oxygen to the coals to be coked ſhould be prevented: this end is gained by preparing the cokes in iron veſſels in the ſame manner as wood is now charred for the purpoſe of being employed in the manufacture of gun-powder; the bitumens, or coal-tar, as it is commonly called, which is volatilized from the coals to be coked by the heat applied to the exterior of the iron veſſel, or other chamber, containing the ſaid coals, is thus ſaved, inſtead of being burnt or diſſipated in the atmoſphere, as is the caſe in the common proceſs of coaking, in which the coals are expoſed to combuſtion in open heaps, and which alſo partially, though in a leſs degree, takes place in the proceſs, commonly known by the name of "Lord Dundonald's proceſs for preparing coal-tar;" but as it is of importance in large manufactories that the proceſs of coaking ſhould keep pace with the other proceſſes connected with metallurgy, that a ſufficient quantity of cokes may always be at command, of an uniform quality, it may be neceſſary in many caſes to prepare furnaces ſomewhat different in conſtruction, but agreeing in principle with the one for preparing charcoal, which has above been generally alluded to." The following conſtruction of a coaking furnace, but which may be varied in form according to the form of the ſcite of particular manufactories, and other circumſtances, will be found calculated to produce cokes of an excellent quality, and at the ſame time a ſaving of all the bitumen, or coal-tar, volatilized by the proceſs, and where circumſtances render it adviſable, will admit of metallic ores being roaſted at the ſame time, along with the coals to be coked in the interior of the ſtructure, or with ſuch a proportion of coally matter as ſimply to torrify the ores, or iron ſtones, for the blaſt-furnace.

Fig. 9, in the preceding Plate II. repreſents an end ſection of this furnace. A, the aſh-pit, ſix feet wide at the bottom, and narrowing to four feet at the bearer, which is placed acroſs to ſupport the furnace bars. B, the iron bearer. C, the fire-place. D D, the commencement of the flue, which ſurrounds the interior building of the furnace ſix inches high, and two feet broad; of theſe flues there are eight in the length of the preſent furnace, and their number may be extended or diminiſhed in proportion as the furnace is conſtructed of a larger or ſmaller ſize, as theſe flues conduct the flame and heat from the ignited coals upon the grates, the interior part of the furnace and its contents become thoroughly heated. The vapour ariſing from the coals or ores expoſed to ignition, together with the flame and ſmoke of the coals uſed for fuel, eſcape by the aperture E, of which there are alſo eight in the extreme length of the preſent furnace: any greater length of chimney may be added above the preſent, as circumſtances may point out; the ſame apertures may alſo ſerve to charge the furnace. F, a ſmall door in the front of the furnace, which ſerves to empty it of its contents. G, plate of caſt iron which ſerves for the bottom of the furnace, and on which the ſide walls are built; the under ſurface of this plate is caſt with a number of ſmall protuberances, which, when covered with a coating of clay, keep hold of the ſame, and prevent the oxydation of the iron, although expoſed to a conſiderable degree of heat. In place of an iron plate, an arch of fire bricks on edge may be ſubſtituted, particularly where there is no ſcarcity of ſmall-coal or other fuel: inſtead of making the ſides of fire bricks as repreſented in the engraving, caſt-iron plates with flanges may be ſubſtituted, which will tranſmit the heat with greater facility than brick. Fig. 10, exhibits a top view of the furnace cut acroſs at the ſpring of the arch. D D, D D, D D, the ſide flues as they riſe from the ſides of the furnace, to convey the heat and flame betwixt the inner and outer arches. E, E, E, apertures by which the ſmoke and vapour, ariſing from the ſide flues, and from the cavity of the furnace, make their eſcape; their dimenſions are twelve inches, and may be either round or ſquare; in order to facilitate the ignition of the materials acted upon for diſtillation, it will be neceſſary to introduce into every ſecond flue, a wooden plug, to reſt with its under end upon the bottom of the furnace, which are withdrawn when the furnace is filled. The fire is then laid upon the grates at C, and ſed with culm or waſte coals; in a ſhort time the cavity of the furnace, or coaker, and its contents, become completely ignited, vapour and ſmoke are diſengaged in large quantities, and carried off through the apertures E, E, E.

Fig. 11, repreſents a furnace of a ſimilar ſhape, and conſtructed upon the ſame principles, but which is calculated to collect and condenſe the ſmoke and vapour into pit-coal tar, which is volatilized in this new proceſs of charring. A, the aſh-pit. B, the bearing bar, or plate. C, the fire-place. D, D, the ſide flues, as deſcribed in fig. 9. E, E, flues by which the ſmoke ariſing from the

FURNACE.

3



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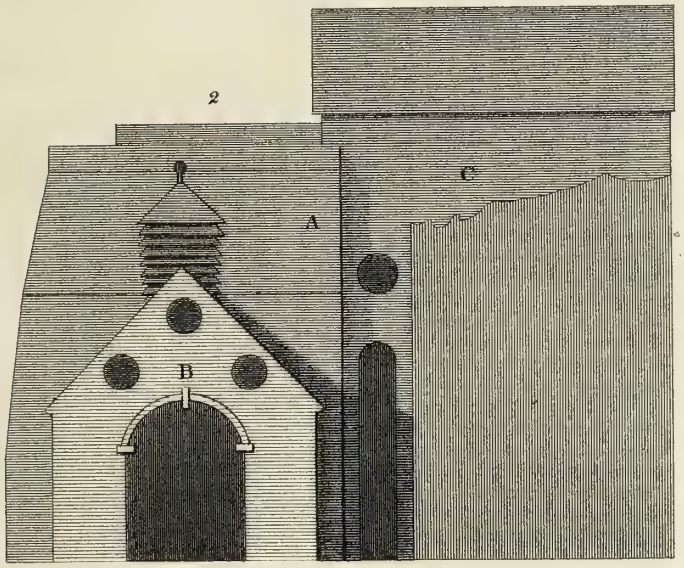

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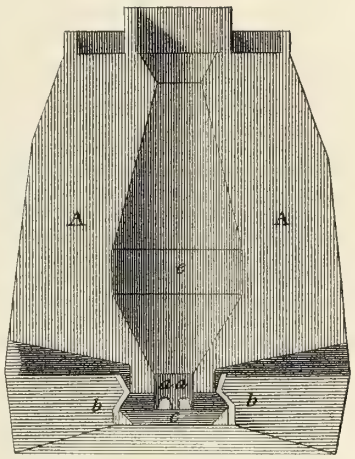


1

I. Pass sculp.

Birch's Patent Smelting Furnace.

London, Published as the Act directs, August 2nd 1806, by J. Wilkes

fuel may be eaſily conducted into adjoining chambers, and the ſoot collected for forming lamp-black; this is eaſily facilitated by ſhutting the correſpondent damper at the furnace top, till nearly all the ſmoke has entered the chamber. F, the furnace bottom, an arch of fire-bricks upon edge, in place of a caſt iron plate, deſcribed in fig. 9. G, one of the apertures by which the ſmoke and vapour ariſes from the cavity of the furnace; the damper is kept ſhut upon the top of the pipe or chimney H, and the ſmoke is conducted along the horizontal pipe I, and enters the cylinder K; the external cylinder L L, being conſtantly kept full of cold water, condenſes the ſmoke in K, which, falling down the internal ſides of the tapered cylinder, iſſues out below, and is conducted by means of a rhone, or pipe, to a general receiver. A furnace of the preſent ſize has eight flues in all, four of which ſerve to conduct the ſmoke of the cavity to the condenſer; the other four are ſimply mounted with dampers, for alternately forcing the ſmoke of the fuel into the vault M, and for admitting the free circulation of air neceſſary to maintain the combuſtion on the grates. In operating with furnaces of this conſtruction, I ſhall remark upon the whole, that, when the furnace without the condenſing apparatus is uſed, the cokes preparing in the interior of the furnace ought to be expoſed ſome hours after the ſmoke has diſappeared; but the neceſſary length of time will immediately depend upon the quantity of the coal ſubmitted to be coaked. The ſame precaution is neceſſary in uſing the condenſing furnace; for this end all the dampers ought to be opened, and remain ſo for a conſiderable ſpace after the ſmoke and vapour have diſappeared.

An improved ſmelting furnace has been lately projected by Mr. Birch, of Abernant, in Glamorganſhire; which received the ſanction of his majeſty's letters patent, dated April 6, 1802; and of which the following is a deſcription: "I the ſaid James Birch, do hereby deſcribe and aſcertain the nature of my invention, and the manner in which the ſame is to be performed, by the plan and elevation annexed, and exemplified in the Furnace Plate III. the different views in which are all marked with the ſame correſponding letters.

Fig. 1, repreſents a front elevation of the furnace, and its two caſt-houſes. A, the ſtack of the furnace. B, B, the two caſt-houſes. C, the bridge-houſe. *a*, *a*, the two new-invented tuyeres.

Fig. 2, an end view of the ſame furnace and caſt-houſes. A, the ſtack of the furnace. B, the caſt-houſe. C, the bridge-houſe.

Fig. 3, the ground-plan of the furnace and caſt-houſes. A, the ſtack of the furnace. B, B, the two caſt-houſes. *a*, *a*, the two new-invented tuyeres; *b*, *b*, the two new-invented tymps; *c*, the hearth wherein the metal is contained; *d d* and *d d* the two beds of pigs recently caſt; *f*, *f*, the two new-invented blowing-pipes.

Fig. 4, gives the ſection of the furnace-ſtack, ſhewing the two new-invented tymps and tuyeres. A, A, the outſide walls of the furnace-ſtack; *a*, *a*, the two new-invented tuyeres; *b*, *b*, the two new-invented tymps; *c*, the hearth wherein the metal is contained; *e*, the inſide of the furnace-ſtack. Parts of the furnace, as heretofore conſtructed, are alſo introduced, for the purpoſe of more accurately explaining the ſaid invention, which conſiſts chiefly in the application of two tuyeres on the ſame ſide, and two tymps oppoſite each other, as ſhewn in the engraving. By this invention a much greater quantity of iron may be made out of one furnace with leſs materials than heretofore, and with leſs blaſt, and a power will likewiſe be obtained of always making the iron better in quality."

A patent for a *Philoſophical* Furnace and Boiler, has alſo been granted to Mr. William Raley, of Newbald in Yorkſhire, which he deſcribes thus: "I William Raley do declare, that my invention is deſcribed in manner following; that is to ſay: The above-mentioned boiler, of any ſize, is made of copper, iron, or other metal, as thought proper; the form or ſhape of which is either circular, ſquare, oblong, or otherwiſe, as may be found neceſſary, or moſt convenient. The dimenſions of the boiler may be in the following proportions, viz. ſuppoſe a circular or round boiler is ſix feet high or deep, from its top or rim, which reſts or hangs on the furnace; its width or diameter at its top or rim, five feet; and its diameter at bottom, three feet; adding about one foot and a half more, in height, (above its rim,) for the convex or outer part of its cover, as in common boilers for ſteam-engines. And, with an intent to increaſe the quantity or force of ſteam, the whole, or as much as poſſible, of the inſide of the boiler (above the level of the water in its bottom) is to be kept wet with water, by means of certain cells, cavities, aqueducts, troughs, tubes, or other contrivances, being placed in the inſide of the boiler, to contain a quantity of water above the level of that in its bottom. And, to convey the ſaid water to the extremity of the inſide of the boiler, above the level of that in its bottom, a contrivance with cells is effected in the following manner, viz. divide the whole circumference or inner extremity of the boiler, (from its top to the bottom,) into a number of equal parts or diviſions, by narrow pieces of copper, (or other metal,) from one to four inches broad, or more, according to the ſize of the boiler; which pieces are to be fixed to its ſides: the number of the above-mentioned parts or diviſions may be from eight to ſixteen, more or leſs, according to the ſize of the boiler. In each of theſe diviſions (beginning near the top or rim of the boiler) are placed pieces of thin copper, or other metal, each piece reaching from one partition to another; which pieces ſtand perpendicular edge-wiſe round the inſide of the boiler: the bottom or lower edge of which pieces are joined to, or brought into contact with, the inſide of the boiler, ſo as to form a circle, or kind of hoop, round the extremity of the inſide of the boiler. Hence, the above-mentioned thin pieces of copper, or other metal, being thus arranged, form a kind of cells, ſo as to contain a portion of water in each cell. The above-mentioned circular or hoop-like arrangement of cells, ſhould be continued, at certain diſtances, from near the top or rim of the boiler, down to its bottom, or nearly ſo. At the end of each of the above-mentioned cells, cloſe to each partition, is a ſmall hole to let out the water, ſo that it may fall into another circle or hoop-like arrangement of cells, placed below. Theſe holes are at one end of thoſe cells, contained in one circular or hoop-like arrangement thereof, and at the other end of thoſe contained in the next circle, &c. Hence the water, in its deſcent, runs firſt one way and then the other, thereby forming a kind of ſerpentine motion in each diviſion. The diſtance theſe circular arrangements of cells are one from the other, may be about one foot, more or leſs, according to the ſize of the boiler. In caſe they are at the diſtance of one foot, the thin pieces of copper, or other metal, need only be about half a foot broad. The above-mentioned cells are ſupplied with water, either from that within the boiler, or from ſome reſervoir, or other containing veſſel, on the outſide thereof. They are ſupplied with water from without the boiler, by tubes from a cloſe reſervoir of water, placed a convenient height above the level of the boiler; each tube having a cock, or kind of valve, ſo as to let a due quantity of water into the cells in each diviſion, within the boiler. A ſteam-tube is placed from the ſaid cloſe reſervoir to the boiler, to preſerve an equal balance of power of the ſteam in each of the two veſſels. The above-mentioned cloſe reſervoir may (for a boiler of the ſame dimenſions) be about one foot and a half high or deep, three feet in diameter at its top, and two feet and a half in diameter at its bottom. The water is thrown either into the cloſe reſervoir, or boiler, by a pump, worked by the force of ſteam, or otherwiſe, (from the hot

well, or other convenient place;) or by a tube, from an open ciſtern or reſervoir, whoſe height, above the ſaid cloſe reſervoir, is ſo high, that the water therein may be more than ſufficient to counterbalance the ſtrength of the ſteam in the cloſe reſervoir and boiler. The above-mentioned tube has a cock or valve, to let the water into the cloſe reſervoir, or boiler; which cock is regulated by a float, or other contrivance. The water in the cloſe reſervoir is made boiling hot, by placing the ſaid reſervoir over the vents or chimneys of the furnace. The cells, or other contrivances, are ſupplied with water from within the boiler by a ſmall pump, placed within the boiler, by which the water is raiſed into a kind of open reſervoir, within the boiler; from which it is conveyed, by tubes, or open aqueducts, to thoſe parts where it is wanted. The rod or ſhaft of this pump, which actuates its bucket or piſton, paſſes through a packed collar, in the centre of the boiler's cover. Or, inſtead of a pump, the water within the boiler is conveyed into the cells, or other contrivance, by a kind of ſpoons, or other ſmall veſſels, placed at the extremity of ſmall pieces of iron, or other metal, croſs-wiſe, or in a ſtar-like poſition, where they are to act as types. From the centre of theſe ſmall pieces of iron, where they croſs each other, is a rod or ſhaft, the ſame as the pump, whereby the ſtar-like arrangement of ſpoons, or other ſmall veſſels, are made to deſcend and aſcend. By their deſcent they are filled with water; and in their aſcent they are emptied into the cells, cavities, aqueducts, &c. their tails or types ſtriking againſt a kind of rim or hoop, or other contrivance, for that purpoſe. The height of the water in the boiler is adjuſted or regulated by a common balance-float, or other contrivance, as in common boilers belonging to ſteam-engines. If the water in the boiler becomes too high, or too much in quantity, it is to be diminiſhed by ſtraightening the cocks or valves of the tubes deſcending from the reſervoir which ſupply it: and if the water is too low, they muſt be widened. And, in caſe the water is much too high, (through inattention,) it is to be diminiſhed by opening a ſmall cock or valve, placed near the bottom of the boiler, or by means of a ſyphon, with its cock or valve. If the ſize of the boiler is very large, the quantity or force of ſteam therein may be increaſed by raiſing its bottom concave next the fire, ſo that it becomes conical, broad at its baſis, (viz. about two-thirds of the diameter of the boiler's bottom,) and terminating at its apex in a ſmall tube, paſſing through the cover of the boiler, ſo as to give the heat a little vent, and terminating in the cavity under the cloſe reſervoir. The above contrivance may either be conical, pyramidical, angular, &c. according to the ſhape of the boiler; around which are placed cells, cavities, aqueducts, tubes, &c. the ſame as thoſe round the inner extremity of the boiler, and ſupplied with water either from within or without the boiler, by the ſame pump, or reſervoir, placed a ſufficient height above the boiler, as above obſerved.

"Steam, produced by means of the above-mentioned philoſophical boiler, is applicable to ſteam-engines, and other mechanical purpoſes, and to various branches of pharmacy, by its being admitted into double pans, ſtills, or other proper veſſels. The furnace in which the philoſophical boiler is fixed, is of the ſame ſhape as the boiler, and about four or five inches, more or leſs, according to the ſize thereof, wider in diameter; ſo that the boiler may hang therein by its top or rim, leaving a kind of cavity, or narrow flue, for the heat to act uniformly round the whole of the boiler to its top or rim. From the above flue the heat is to aſcend, by four or more flues or chimneys, in oppoſite directions, cloſe by the top or rim of the boiler. Theſe flues or chimneys are to incline arch-wiſe over the top of the boiler; where, meeting, they are to form an opening or cavity, in which the cloſe or undermoſt reſervoir is to be hung; from which the heat is to aſcend by three or more ſmall flues or vents, placed in an angular or oppoſite direction, cloſe by the rim or top of the reſervoir, until they riſe above it, where they are to meet, and form one common chimney. The aſh-hole and fire-place are made ſo that the air may not enter in at the front, or on one ſide of the aſh hole only, as is common; but in different directions, ſo as to meet under the centre of the fire, which is to be directly under the centre of the boiler's bottom. Where the furnace is uſed as a ventilator, there need only be one opening in the front of the aſh-hole, which muſt have a door, the ſame as the fire-place; both of which are to ſhut as cloſe as poſſible, to prevent the acceſs of air; the fire being wholly ſupplied therewith by tubes in different parts of the aſh-hole, with their ends inclining, to prevent the aſhes, &c. from entering. The lower ends of theſe tubes join a larger tube, at the outſide of the aſh-hole; the lower end of which terminates in the pit, mine, &c. where it is divided into a number of ſmaller tubes, extended to different parts thereof, ſo as to attract or draw air and vapours therefrom; a cock or damper being placed near the top of the large tube, to regulate the air neceſſary for the fire. It may at times be neceſſary to open the door of the aſh-hole a little, to aſſiſt in ſupplying the fire with more air. If the engine, to which the above philoſophical furnace and boiler are applied, raiſe a conſiderable quantity of water, the ſaid water is made to aſſiſt in the act of ventilation, by letting it into a cloſe veſſel, having three tubes from its upper part; one to let in the water from a reſervoir, into which the engine has raiſed it; another to let out the air; and the third, which deſcends into the pit, mine, &c. to draw air and vapours therefrom; alſo another tube, from its bottom, to let out the water; each of which tubes has a cock. Suppoſe the above veſſel empty, and the cocks cloſed: open the cocks of two of the uppermoſt tubes, viz. that for letting in the water from the reſervoir, and the other for letting out the air, and the water will enter the veſſel, and diſcharge the air by the other tube. When the veſſel is full of water, cloſe the cocks of the two tubes laſt mentioned, and open thoſe of the other two; ſo will the water run out of the veſſel, which will be filled with air and vapours, from the pit, mine, &c. The above cocks are opened and cloſed by the action of the engine, or otherwiſe: hence, by two or more of the above veſſels, a conſtant and regular diſcharge of air and vapours is effected. Where the water, raiſed by the engine, is not employed in the act of ventilation, it may be applied to the following actuating wheel, of a kind of tubular conſtruction, as follows: A tube of copper, or other ſubſtance, whoſe diameter and length is according to the quantity of water raiſed and the height of its fall, being wideſt at its top, to receive the water as it ſtands perpendicular on the point of an axis, paſſing through its centre. The bottom of the ſaid tube is, towards its extremity, cut into a number of diviſions, or kind of fans, reſembling the fly of a ſmoke-jack, or common ventilator, placed in windows, doors, &c. The water paſſing through the openings, between the fans, cauſes the tube to have an horizontal motion. Above the tube, on its axis, is a ſmall wheel, applicable to pumps, or any other devices which require motion."

A very ingenious method of applying an elementary or phyſical power to blaſt furnaces, has been lately ſuggeſted by Mr. Robert Hindmarſh, of Walworth, near London; for which he obtained the king's patent, and ſets forth his invention as follows: "It is well known that the preſſure of water and other fluid bodies, in any containing veſſel, is in proportion to the altitude of the fluid, without any regard to the quantity. Thus, if a cylindrical or otherwiſe figured veſſel, whoſe bottom, for example, is three feet in diameter, have a cloſe top, with a tube twenty feet high fitted into it, and the veſſel and tube, when full, contain only one pint of water, which weighs only one pound, yet the preſſure of this water upon the bottom of the ſaid veſſel, will be equal to 10737 lb. which is the

ſame

ſame as it would be, were the veſſel a perfect cylinder, twenty feet high, and three feet in diameter throughout, and filled with water; and this preſſure is exerted, not only in a downward direction upon the bottom of the veſſel, but, by the peculiar property of fluids, is alſo exerted with the ſame power at equal depths, upwards, laterally, and in all directions. It is of no conſequence whether the tube be perpendicular or inclined; the preſſure being always in proportion to the abſolute height of the fluid, and the baſe againſt which it preſſes, whatever the form of the veſſel or tube may be. This aſtoniſhing property of fluid bodies is called the *hydroſtatic paradox*; and, though long known to ſcientific men, has hitherto been thought incapable of being applied to machinery with mechanical advantage. But, having diſcovered a method of bringing it into effect, it is in the *application* thereof, under an indefinite variety of forms, that the principle of my invention conſiſts.

"Suppoſe a ſtream of water to run from the ſide of a hill, or other elevated ſituation, into a tube communicating with the top and bottom of a cylinder, ſuppoſe three feet in diameter, in which is a moveable piſton, water-tight, with a rod working through a ſtuffing-box, alſo water-tight. If, by means of a cock or valve, the communication be opened for the water to paſs into the cylinder below the piſton, while the communication with the part above the piſton is cut off by another cock or valve, the water will force the piſton up; and, by ſhutting the cock or valve below, and opening that above, the piſton will be forced down again. Whenever the piſton deſcends, the water below it paſſes off through a pipe at the bottom of the cylinder; and, when the piſton aſcends, the water above it paſſes off through a pipe at the top of the cylinder, the cocks or valves of which pipes are previouſly opened for that purpoſe. And thus the piſton is worked alternately upward and downward, with a power equal to 5368 lb. if the water in the tube be ten feet high; with a power equal to 10737 lb. if it be twenty feet high; with a power equal to 21475 lb. if it be forty feet high; and, with a power equal to 53689 lb. if it be one hundred feet high; the power increaſing in arithmetical proportion, according to the altitude of the water in the tube; and in geometrical proportion, according to the diameter or ſurface of the baſe againſt which the water preſſes. On this principle, the piſton-rod, by being connected in the uſual way with machinery of any kind, will act upon it with great advantage; being applicable to blaſt furnaces, to mills of every deſcription, to cranes for raiſing and lowering goods, &c. to pumps, preſſes, and all other machinery where power is required.

"The above deſcription is given on a ſuppoſition that the water, which works the piſton of the cylinder, runs away either wholly or partially in waſte. But the following deſcription ſhews how the ſame water may be returned back, ſo as to work the machine over and over again, and, conſequently, how the principle of this invention may be applied in all ſituations, even where there is no natural fall of water. In addition to the before-mentioned cylinder, let there be provided a ſecond cylinder, ſuppoſe four feet in diameter, with a piſton, water-tight, the rod of which communicates motion to any other machinery: upon this piſton let there be placed weights equal to 20282 lb. The piſton being down, with this great weight upon it, is raiſed in the following manner. At the bottom of this ſecond cylinder a tube is inſerted, the lower part of which may be of iron, or other ſtrong materials, and the reſt of leather, for the convenience of bending. The upper end of this tube terminates in a large cup or reſervoir, capable of holding as much water as will fill the cylinder at the bottom of the tube; and the cup, ſo fitted to the end of the tube, is placed at the top of a wheel, which we will ſuppoſe to be twenty feet or more above the cylinder, and of a diameter ſufficient to anſwer the under-mentioned purpoſe. Pour water into the cup, and it will deſcend through the tube into the cylinder below the piſton, which will be immediately forced up, ſay two, three, or more feet, together with the weight of 20282 lb. upon it. The piſton being elevated, the cylinder is now full of water, as is the tube up to the bottom of the cup, which itſelf is empty. In order to diſcharge the water from this ſecond cylinder, and permit the piſton to be again depreſſed, the wheel, by a connecting rod, or other medium paſſing between it and the piſton of the firſt cylinder while at work, is cauſed to make half a revolution; by which motion, the empty cup, together with the upper end of the tube, is lowered to the bottom of the wheel; and, conſequently, the preſſure of the water, againſt the under part of the piſton of the ſecond cylinder, is ſo far taken off, that the great weight of 20282 lb. upon the piſton, preſſes it downward, and urges the water out of the cylinder, through the tube into the cup; which cup is again elevated to its former poſition by another half revolution of the wheel, effected as before by the piſton-rod of the firſt cylinder; and ſo on, alternately, without any loſs of water in the ſecond cylinder. The waſte water from the firſt cylinder may run into a reſervoir, and be raiſed thence to its former ſituation, by the action of the piſton in the ſecond cylinder, working a pump or other engine, beſides having ſufficient power to drive other machinery. The elevation and depreſſion of the cup and upper end of the tube may alſo be effected in a variety of other ways, as by a man or a horſe working it; but the method here deſcribed is ſufficient to explain this part of the principle of my invention, which conſiſts in applying and taking off, in certain required proportions, the preſſure of water in the cylinder, by alternately elevating and depreſſing the upper end of the tube, on the altitude of which fall of water depends the momentum of the power produced. Or, the ſame effect may be produced by ſubſtituting a heavy rolling weight, ſuppoſe of nine tons, inſtead of the ſecond cylinder with its apparatus: this weight, by means of the piſton rod of the firſt cylinder, is to be made to roll withinſide the arch of a large wheel, like that of a crane, backwards and forwards, over the centre of a balance, the frame-work of which is ſo contrived as to keep the rolling weight always on the ſame level, while the balance moves freely up and down.

"In the above deſcriptions, no allowance is made for the friction of the piſtons in the two cylinders, as is uſual in other machines; for, having invented a method of working the piſtons without any friction at all, I apply the power thereby ſaved to the actual working of the machinery itſelf; and, therefore, the ſaid method of working without friction is conſidered as a part of my invention, and is deſcribed as follows. Let the piſton be fitted to the cylinder, but neither air nor water tight, ſo that it may ſlide up and down without any friction. The upper and under part of the piſton muſt be lined with leather, or any other ſubſtance that is water-tight; which leather, or other ſubſtance, muſt be continued from the piſton, when elevated, down to the bottom of the cylinder, and, when depreſſed, to the top of the cylinder, in the form of a bag on each ſide of the piſton: the extreme ends of both bags muſt be well faſtened to the cylinder, leaving the ſides looſe, and free to fall in folds, during the aſcent and deſcent of the piſton. Now, when the water ruſhes into either end of the cylinder, it enters the cavity of one of theſe bags, and, preſſing againſt the piſton, endeavours indeed to force the bag through the inſenſible ſpace between the edge of the piſton and the cylinder; but, it being impoſſible for the bag to paſs that way, without being doubled and alſo incloſing a portion of the water, and the piſton being fitted to the cylinder ſo cloſely as not to admit even the ſubſtance of the bag ſingly, much leſs doubly and with a portion of water incloſed, the conſequence is, that the piſton riſes and falls without any friction at all; and yet the water is prevented from paſſing between the piſton and cylinder. Thus, the power which is uſually loſt by the friction of the piſton, is here

completely ſaved, without detriment to the work; and the phyſical operation of the water, or other ponderous ſubſtance, is permitted to have its full effect."

To FUR'NACE, *v. a.* To throw out as ſparks from a furnace. *A bad word:*

He *furnaces*
The thick ſighs from him. *Shakeſpeare.*

FUR'NACE-BURNING, *adj.* Burning like a furnace:

I cannot weep; for all my body's moiſture
Scarce ſerves to quench my *furnace-burning* heart. *Shakeſ.*

FUR'NAGE, *ſ.* [*furnagium*, Lat.] A fee paid to the lord of the manor by his tenants, for baking their bread in his common oven.

FURNEAU'X, an iſland in the ſouthern Pacific ocean, diſcovered by Bougainville, and afterwards by captain Cooke; the iſland is low, and ſurrounded by a coral bank: ſome cocoa trees and inhabitants were ſeen. Lat. 17. 11. S. lon. 143. 7. W. Greenwich.

FURNEAU'X (Philip), a learned Engliſh nonconformiſt divine, born at Totneſs in Devonſhire, in 1726. His claſſical education he received at the free-ſchool in his native town, at the ſame time with the learned Dr. Kennicott, with whom he contracted an intimacy and friendſhip, which laſted through life. Being deſigned for the profeſſion of the miniſtry, he was ſent at a proper age to an academical inſtitution in London, which was ſupported by the funds bequeathed by Mr. Coward. Soon after he commenced public preacher he was choſen aſſiſtant to Mr. Henry Read, paſtor of a preſbyterian congregation in St. Thomas's, Southwark; and afterwards he became one of the Sunday-evening lecturers at Salters'-hall, in the city of London. In 1753 he ſucceeded the reverend Mr. Lowman as paſtor of the congregation at Clapham, in the county of Surrey. In this ſituation he continued his miniſterial ſervices for more than twenty-three years, and was reſpected for his extenſive learning and eminent talents by the diſſenters in general. During this time he was choſen one of the truſtees of thoſe funds, to which he was partly indebted for his education; and received the diploma of doctor of divinity from one of our northern univerſities. In 1777 he was attacked by a malady, which terminated in a derangement of his mental powers, from which he never recovered to the time of his death in 1783, when he had nearly completed the fifty-ſeventh year of his age. He was the author of Letters to the Honourable Mr. Juſtice Blackſtone, concerning his Expoſition of the Act of Toleration, and ſome Poſitions relating to religious Liberty, in his celebrated Commentaries on the Laws of England, 8vo. 1770. The other treatiſe was an Eſſay on Toleration, 8vo. 1778; in which he had a particular view to an application to parliament, for that relief in matters of ſubſcription, which was obtained by an act paſſed in 1779.

FUR'NES, or VUERNE, a town of Flanders, ſituated on the canal made from Bruges to Dunkirk, about a league from the ſea. The town-houſe is a good building, adorned with many figures of kings and princes; it has a handſome tower, with muſical chimes. The French took Furnes three times, and kept it by the ſecond article of the peace of Aix-la-Chapelle made in 1668, but abandoned it in 1692: ſoon after which, the allies fortified it, and the French, under the command of marquis de Boufflers, afterwards mareſchal of France, laid ſiege to it the 29th of December, the ſame year. The comte de Hornes, general of the Dutch artillery, who was governor, and commanded a garriſon of four thouſand men, ſurrendered the place the 5th of January following, before the French had attacked it in form: fifteen miles ſouth weſt of Oſtend, and twenty north-north-weſt of Ypres. Lat. 51. 4. N. lon. 20. 13. E. Ferro.

FUR'NESS, a promontory on the coaſt of Lancaſhire. See FOURNESS, vol. vii. p. 629.

FUR'NIMENT, *ſ.* [*furnire*, low Lat.] Furniture:

Lo! where they ſpyde with ſpeedie whirling pace
One in a charet of ſtraunge *furniment*
Towards them driving. *Spenſer.*

To FUR'NISH, *v. a.* [*fournir*, Fr.] To ſupply with what is neceſſary to a certain purpoſe.—Thou ſhalt *furniſh* him liberally out of thy flock. *Deut.* xv.—Come, thou ſtranger, and *furniſh* a table, and feed me of that thou haſt ready. *Eccleſ.*

She hath directed
How I ſhall take her from her father's houſe;
What gold and jewels ſhe is *furniſh'd* with. *Shakeſpeare.*

To give; to ſupply.—Theſe ſimple ideas, the materials of all our knowledge, are ſuggeſted and *furniſhed* to the mind only by theſe two ways, ſenſation and reflection. *Locke.*—To fit up; to fit with appendages.—Plato entertained ſome of his friends at dinner, and had in his chamber a bed or couch, neatly and coſtly *furniſhed*. Diogenes came in, and got up upon the bed, and trampled it, ſaying, I trample upon the pride of Plato. Plato mildly anſwered, But with greater pride, Diogenes. *Bacon.*—To equip; to fit out for any undertaking.—Will your lordſhip lend me a thouſand pounds to *furniſh* me? *Shakeſ.*

Ideas, forms, and intellects,
Have *furniſh'd* out three diff'rent ſects. *Prior.*

To decorate; to ſupply with ornamental houſehold ſtuff:

The wounded arm would *furniſh* all their rooms,
And bleed for ever ſcarlet in the looms. *Hallifax.*

FUR'NISHER, *ſ.* [*fourniſſeur*, Fr.] One who ſupplies or fits out.

FUR'NISHING, *ſ.* External pretence:

Something deeper
Whereof perchance theſe are but *furniſhings*. *Shakeſ.*

FUR'NITURE, *ſ.* [*fourniture*, Fr.] Moveables; goods put in a houſe for uſe or ornament.—No man can tranſport his large retinue, his ſumptuous fare, and his rich *furniture*, into another world. *South.*—Appendages.—By a general conflagration mankind ſhall be deſtroyed, with the form and all the *furniture* of the earth. *Tillotſon.*—Equipage; embelliſhments; decorations:

The duke is coming: ſee the barge be ready,
And fit it with ſuch *furniture* as ſuits
The greatneſs of his perſon. *Shakeſpeare.*

FU'ROR, *ſ.* [*furo*, Lat. to be mad.] A high degree of hyſterics in women, is called a *furor uterinus*, when it is attended with a moſt violent irritability of the uterus and pudenda.

FU'ROT-LA-VALET'TE, a town of France, in the department of the Rhône and Loire: twelve miles from St. Etienne.

FURRACKABAD', a town of Hindooſtan, in the circar of Rohilcund, on the weſt ſide of the Ganges: and capital of a ſmall diſtrict belonging to a prince of the Patan Rohilla tribe: about thirty miles in length along the bank of the Ganges: ſeventy-five miles eaſt Agra, and ſeventy-ſix north-weſt Lucknow. Lat. 27. 23. N. lon. 79. 52. of E. Greenwich.

FURRACKABAD', a town of Hindooſtan, in the country of Bengal, near the Ganges: forty-two miles north-north-weſt of Moorſhedabad.

FUR'REN LOUGH, a lake of Ireland, in the county of Mayo: twelve miles north-weſt of Caſtlebar.

FUR'RIER, *ſ.* A dealer in furs.

FUR'ROW, *ſ.* [furh, Sax.] A ſmall trench made by the plow for the reception of ſeed.—Wheat muſt be ſowed above *furrow* before Michaelmas. *Mortimer.*

Then ploughs for ſeed the fruitful *furrows* broke,
And oxen labour'd firſt beneath the yoke. *Dryden.*

Any long trench or hollow; as a wrinkle:

My lord it is, though time has plow'd that face
With many *furrows* ſince I ſaw it firſt;
Yet I'm too well acquainted with the ground quite to forget it. *Dryden.*

FUR'ROW-WEED, *ſ.* A weed that grows in furrowed land.—Crown'd with rank fumiter, and *furrow-weeds*. *Shakeſpeare.*

To FUR'ROW, *v. a.* [from furian, Sax.] To cut in furrows:

While the ploughman near at hand,
Whiſtles o'er the *furrow'd* land. *Milton.*

To divide in long hollows.—No briny tear has *furrow'd* her ſmooth cheek. *Suckling.*

The billows fall, while Neptune lays his mace
On the rough ſea, and ſmooths its *furrow'd* face. *Dryden.*

To make by cutting:

There go the ſhips that *furrow* out their way;
Yea, there of whales enormous ſights we ſee. *Wotton.*

FUR'RY, *adj.* Covered with fur; dreſſed in fur:

From Volga's banks th' imperious czar
Leads forth his *furry* troops to war. *Felton.*

Conſiſting of fur:

Stretch out thy lazy limbs, awake, awake,
And winter from thy *furry* mantle ſhake. *Dryden.*

FURRYS-TOWN, a town of the iſland of Jamaica, in St. James county: twenty miles north-eaſt of Savanna la Mar.

FUR'SEY, a ſmall iſland of England, at the entrance into Poole harbour.

FUR'STENAU, a town of Germany, in the circle of Weſtphalia, and biſhopric of Oſnabruck: fifteen miles north-north-weſt of Oſnabruck, and eight ſouth-eaſt of Lingen.

FUR'STENAU, a town of Germany, in the circle of Upper Saxony, and marggraviate of Meiſſen: three miles ſouth of Lauenſtein.

FUR'STENBERG, a principality of Germany, in the circle of Swabia, founded in the thirteenth century, and divided into ſeveral branches, all which are extinct except that of Stuhlingen: the chief of the houſe and his eldeſt ſon have the title of princes, the brothers and other children are called land-graves. The eſtates give ſix voices in the aſſemblies of the circle, and a ſeat on the bench of princes at the diet of the empire. The title is taken from an ancient caſtle, ſituated near the town of Furſtenberg. The pretenſions of cardinal Furſtenberg, to the archbiſhopric of Cologne, ſupported by the king of France, in oppoſition to the emperor and the pope, gave occaſion to the breaking out of the war that began to diſturb Europe in 1689. The Roman month amounts to 372 florins; and the tax to the chamber of Wetzlar is 291 rixdollars.

FUR'STENBERG, a town of Germany, in the circle of Swabia, and principality of Furſtenberg, with an ancient caſtle, which gives name to an illuſtrious family, princes of the empire: fourteen miles north-north-weſt of Schaff hauſen, and thirteen weſt-ſouth-weſt of Durlingen.

FUR'STENBERG, a town of Germany, in the circle of the Upper Rhine, and county of Waldeck: ten miles weſt of Waldeck, and twenty-ſeven weſt of Caſſel.

FUR'STENBERG, a town of Germany, in the circle of Weſtphalia, and biſhopric of Paderborn: two miles north-eaſt of Wunnenburg.

FUR'STENBERG, a town of Luſatia, on the Oder, taken by the Pruſſians, in the year 1745, to open a way to Sileſia. Its tolls bring in about 5000 crowns yearly to the king of Pruſſia: thirteen miles ſouth Frankfort on the Oder.

FUR'STENBERG, a town of Germany, in the circle of Upper Saxony, and duchy of Mecklenburg, on the Havel: ten miles ſouth-eaſt of Strelitz.

FUR'STENBERG (Ferdinand de), an eminent prelate, deſcended from the free barons of that name in Weſtphalia, and born at Bilſtein in 1626. He ſtudied at Cologne, where he contracted an intimate friendſhip with the nuncio Chigi, who, upon his return to Rome, and elevation to the cardinalate, invited Furſtenberg to reſide with him. When ſeated in the papal chair by the name of Alexander VII. he conferred ſeveral benefices on him, and by his recommendation procured his election to the biſhopric of Paderborn, in 1661. The high reputation Furſtenberg acquired in this ſtation cauſed him to be appointed by the famous biſhop of Munſter, Van Galen, his coadjutor; and upon the death of that prelate, in 1678, he ſucceeded to the ſee, and was declared by the pope apoſtolical vicar of all the north of Europe. He ſhewed himſelf worthy of this truſt by extraordinary zeal in making converts, which he carried ſo far as to ſupport conſiderable foundations for the propagation of the catholic religion in China and Japan. At the ſame time he did not neglect the cultivation of the belles-lettres, either by his own efforts, or thoſe of many learned men whom he patroniſed. He collected a number of manuſcripts and monuments of antiquity, and gave to the world a valuable work relative to theſe objects, entitled *Monumenta Paderbornenſia, Amſt.* 1672, 4to. He alſo printed at Rome a collection of Latin poems, under the title of *Septem Virorum illuſtrium Poemata*, which contained ſeveral of his own, written with much purity. He died in 1683. Soon after his death a magnificent edition of his Latin poems was written at the Louvre, at the expence of the king of France.

FUR'STENECK, a town and caſtle of Germany, in the circle of the Upper Rhine, and biſhopric of Fulda: thirteen miles north of Fulda.

FUR'STENFELD, a town of Germany, in the duchy of Stiria, ſituated on the confines of Hungary, near the conflux of the rivers Feiſtritz and Laufnitz: thirty miles eaſt of Gratz, and ſixty-eight ſouth of Vienna. Lat. 47. 6. N. lon. 34. 6. E. Ferro.

FUR'STENFELD, a town of Germany, in the circle of Upper Saxony, and New Mark of Brandenberg: ten miles north of Coſtrin.

FUR'STENWALDE, a town of Germany, in the circle of Upper Saxony, and Middle-Mark of Brandenberg: twenty-ſix miles eaſt of Berlin, and twenty weſt of Frankfort on the Oder.

FUR'STENWALDE, a town of Germany, in the circle of Upper Saxony, and marggraviate of Meiſſen: two miles ſouth of Lauenſtein.

FUR'STENWERDER, a town of Germany, in the circle of Upper Saxony, between the Damſee and Wahrenſee, in the Ucker Mark of Brandenburg: ten miles weſt-north-weſt of Prenzlow.

FURT, a town of Germany, in the circle of Lower Bavaria, on the Champl: fifty-ſix miles north-north-weſt of Paſſau, and eighty-ſix north-north-eaſt of Munich. Lat. 49. 13. N. lon. 30. 32. E. Ferro.

FURTH, a town of Germany, in the circle of the Lower Rhine, and electorate of Mentz: ſix miles ſouth-eaſt of Heppenheim.

FURTH, a town of Germany, in the circle of Franconia, and principality of Anſpach, on the Rednitz; large and well peopled, with a great number of artiſans. The Jews have a ſynagogue and a printing-office: four miles weſt of Nuremberg.

FUR'THER, *ad.* [from *forth*, not from *far*, as is commonly imagined; *forth*, *further*, *furtheſt*, corrupted from *forther*, *fortheſt*, forðer, Sax. *Forther* is uſed by Sir Thomas More. See FORTH and FARTHER, of which the examples are to be referred to this word.] At a greater diſtance. Beyond this.—What *further* need have we of witneſſes? *Matth.* xxvi. 65.

Satan had journey'd on, penſive and ſlow:
But *further* way found none, ſo thick intwin'd,
As one continu'd brake, the undergrowth
Of ſhrubs and tangling buſhes had perplex'd
All path of man or beaſt that paſs'd that way. *Milton.*

Further has in ſome ſort the force of a ſubſtantive in the phraſe *no further*, for *nothing further*:

Let this appeaſe
Thy doubt, ſince human reach *no further* knows. *Milton.*
And now *what further* ſhall enſue behold. *Milton.*

FUR'THER, *adv.* [from *forth.*] To a greater diſtance.—And the angel of the Lord went *further*, and ſtood in a narrow place. *Numb.* xxii. 26.

To FUR'THER, *v. a.* [from the adverb; ꝑonꝺꝑian, Sax.] To put onward; to forward; to promote; to countenance; to aſſiſt; to help.—Grant not, O Lord, the deſires of the wicked: *further* not his wicked device. *Pſ.* cxl. 8.

Things thus ſet in order, in quiet and reſt,
Shall *further* thy harveſt, and pleaſure thee beſt. *Tuſſer.*

FUR'THERANCE, *ſ.* [from *further.*] Promotion; advancement; help.—Our diligence muſt ſearch out all helps and *furtherances* of direction, which ſcriptures, councils, fathers, hiſtories, the laws and practices of all churches afford. *Hooker.*

Cannot my body, nor blood ſacrifice,
Intreat you to your wonted *furtherance?* *Shakeſpeare.*

FUR'THERER, *ſ.* [from *further.*] Promoter; advancer.—That earneſt favourer and *furtherer* of God's true religion, that faithful ſervitor to his prince and country. *Aſcham.*

FUR'THERMORE, *adv.* Moreover; beſides:

This ring I do accept moſt thankfully,
And ſo, I pray you, tell him: *furthermore*,
I pray you, ſhew my youth old Shylock's houſe. *Shakeſ.*

FUR'THEST, *adv.* The ſuperlative of *forth.*—The *furtheſt* a prudent man ſhould proceed in general is to laugh at ſome of his own foibles. *Shenſtone.*

FUR'TIVE, *adj.* [*furtive*, Fr. *furtivus*, Lat.] Stolen; gotten by theft:

Or do they, as your ſchemes, I think, have ſhown,
Dart *furtive* beams and glory not their own,
All ſervants to that ſource of light, the ſun? *Prior.*

FU'RUM, a ſmall iſland in the Baltic, near the eaſt coaſt of Sweden. Lat. 57. 17. N. lon. 16. 32. E. Greenwich.

FU'RUNCLE, *ſ.* [*furoncle*, Fr. *furunculus*, Lat.] A bile; an angry puſtule.—A *furuncle* is in its beginning round, hard, and inflamed; and as it increaſeth, it riſeth up with an acute head, and ſometimes a puſtule; and then it is more inflamed and painful, when it arrives at its ſtate, which is about the eighth or ninth day. *Wiſeman.*

FURUSU'ND, an iſland of Sweden, in the Baltic. Lat. 59. 46. lon. 18. 45. E. Greenwich.

FU'RY, *ſ.* [*furor*, Lat. *fureur*, Fr.] Madneſs:

It is a tale
Told by an ideot; full of ſound and *fury*,
Signifying nothing. *Shakeſpeare.*

Rage; paſſion of anger; tumult of mind approaching to madneſs.—He hath given me to know the natures of living creatures, and the *furies* of wild beaſts. *Wiſd.* vii. 20.

I do oppoſe my patience to his *fury*; and am arm'd
To ſuffer with a quietneſs of ſpirit
The very tyranny and rage of his. *Shakeſpeare.*

Enthuſiaſm; exaltation of fancy:

Greater than human kind ſhe ſeem'd to look,
And with an accent more than mortal ſpoke;
Her ſtaring eyes with ſparkling *fury* roll,
When all the god came ruſhing on her ſoul. *Dryden.*

[From *furia*, Lat.] One of the deities of vengeance, and thence a ſtormy, turbulent, violent, raging woman.—The ſight of any of the houſe of York, as a *fury* to torment my ſoul. *Shakeſpeare.*

FURZE, *ſ.* [ꝼyꝛꝛ, Sax. *geniſta ſpinoſa*, Lat.] Gorſe; goſs. In botany: ſee ULEX.—For fewel, there groweth great ſtore of *furze*, of which the ſhrubby ſort is called tame, and the better grown French. *Carew.*

We may know,
And when to reap the grain, and when to ſow,
Or when to fell the *furzes*. *Dryden.*

FUR'ZEBUSH, *ſ.* A buſh of furze.
FUR'ZES, *ſ. plu.* Furze-buſhes. *Dryden.*
FUR'ZIN, *ſ. plu.* Furze-buſhes. *Tuſſer.*
FUR'ZY, *adj.* [from *furze.*] Overgrown with furze; full of gorſe:

Wide through the *furzy* field their route they take,
Their bleeding boſoms force the thorny brake. *Gay.*

FUSA'NUS, *ſ.* [*fuſain*, the French name for *euonymus* or ſpindle-tree.] In botany, a genus of the claſs polygamia, order monoecia, natural order of elæagni. The generic characters are—I. Hermaphrodite. Calyx: perianth one-leafed, turbinate; half-five-cleft (four-cleft, Berg.) clefts ovate-acute, from flat ſpreading, with the tips gibboſe-uncinate, ſomewhat concave. Corolla: none. Stamina: filaments four, linear, grooved in the middle, a little longer than the germ, inſerted into the calyx near it, and occupying the ſinus of it. Antheræ roundiſh, compreſſed, four-lobed, erect. Piſtillum: germ large, turbinate, almoſt inferior; wide at top, from flat ſomewhat concave, ſtriated, quadrangular, with four hollowed ſinuſes, each on each ſide of the germ ſolitary. Style thick, very ſhort, ſubquadrangular. Stigmas four, obtuſe cruciform, ſmall. Pericarpium: a drupe. II. Male. Calyx, &c. as in the hermaphrodite, but the fruit abortive.—*Eſſential Character.* Hermaphrodite. Calyx, five cleft; corolla, none; ſtamina, four; germ inferior; ſtigmas four. Male. Calyx, &c. of the former. Fruit abortive.

Fuſanus compreſſus, or flat ſtalked fuſanus, a ſingle ſpecies. This is a tree, with compreſſed and ancipital branches. Leaves oppoſite, obovate, blunt with a point, flat, quite entire, ſmooth, on ſhort petioles; racemes from the axils of the branches, erect, compreſſed, ſcarcely longer than the leaves. The number of parts in the flower four or five. The fruitful tree has a three-leaved involucre at the baſe of the germ with five glands. According to Juſſieu, it is a glaucous ſhrub, with oppoſite branches: the leaves are ſuboppoſite, entire, and ſcarcely nerved; the flowers ſmall, in terminating panicles, ſome of them five-cleft, and moſtly males. The younger Linnæus ſees no neceſſity for ſeparating it from the Theſiums. Juſſieu doubts whether it may not be more nearly allied to the Rhamni. Native of the Cape of Good Hope; introduced in 1766, by Mr. Francis Maſſon. It may be increaſed by cuttings, planted early in the ſummer in a good loamy earth, in pots, ſet in a glaſs-caſe or hot-bed, ſhaded and watered gently till they have ſtruck root.

FU'SAROLE, *ſ.* in architecture, a ſmall round member cut in form of a collar, with oval beads, under the echinus, or quarter-round, in the doric, ionic, and compoſite, capitals.

FUSCA'TION, *ſ.* [*fuſcus*, Lat.] The act of darkening or obſcuring.

To FUSE, *v. a.* [*fundo*, *fuſum*, Lat.] To melt; to put into fuſion; to liquefy by heat.

To FUSE, *v. n.* To be melted; to be capable of being liquefied by heat.

FUSE, *ſ.* of a bomb or granado ſhell, is that which makes the whole powder or compoſition in the ſhell take fire, to do the deſigned execution. 'Tis uſually a wooden pipe or tap filled with wildfire, or ſome ſuch matter; and is intended to burn no longer than is the time of the motion of the bomb from the mouth of the mortar to the place where it is to fall, which time Anderſon makes twenty-ſeven ſeconds. *Harris.*

FU'SEE, *ſ.* [*fuſeau*, Fr.] The cone round which is wound the cord or chain of a clock or watch.—The reaſon of the motion of the balance is by the motion of the next wheel, and that by the motion of the next, and that by

by the motion of the *fuſee*, and that by the motion of the ſpring: the whole frame of the watch carries a reaſonableneſs in it, the paſſive impreſſion of the intellectual idea that was in the artiſt. *Hale.*—A firelock, [from *fuſil*, Fr.] a ſmall neat muſquet. This is more properly written *fuſil*.

FU'SEE, *ſ.* Track of a buck. *Ainſworth.*

FU'SI (Anthony), a French catholic prieſt, born in Lorrain, towards the end of the ſixteenth century. He entered young among the Jeſuits, but did not continue long in their connection. Afterwards he purſued his ſtudies in the univerſity of Lorrain, where he took his degrees in theology, and then removed to Paris, where he received the bonnet of doctor from the faculty of the Sorbonne. In that city he was preferred to the benefice of St. Bartholomew, with the annexed cures of St. Leu and St. Giles; and he had alſo the appointments of apoſtolical prothonotary, and of preacher and confeſſor in the royal houſehold. He appears to have indulged a greater liberality of opinion than could be tolerated by bigoted catholics, and to have advanced ſentiments concerning the ſalvation of children who died without baptiſm, and on other topics, which were made the ſubjects of complaint againſt him before his eccleſiaſtical ſuperiors. Fuſi was alſo an enemy to perſecution for conſcience ſake, and freely expoſed to his pariſhioners the iniquity and folly of attempting to make converts to truth by force and violence, urging them, by deeds of chriſtian charity, and their own exemplary lives, to invite deluded wanderers into the pale of the church. He entertained, however, a thorough diſlike to the Jeſuits, and would never ſuffer any of that fraternity to enter his pulpit; with that formidable and revengeful body, therefore, he became an object of deep reſentment, and they reſolved to ruin him. By their management the churchwardens of St. Leu were induced to inſtitute a criminal proceſs againſt him in 1609, in which they accuſed him of lewdneſs, hereſy, and witchcraft. While the ſuit was pending, a ſatirical piece, entitled *Le Maſtigophore, ou Precurſeur de Zodiaque, &c.* made its appearance, intended to ridicule Nicholas Vivian, firſt churchwarden of St. Leu, and the principal inſtrument in carrying on the proceſs againſt Fuſi. This piece being attributed to Fuſi, Vivian commenced a proſecution againſt him as the author, and having obtained a decree of arreſt, he ſent him to the priſon of the Chatelet, in 1612. His cauſe was tried in the biſhop's court, where he was pronounced guilty of the libel, and of hereſy; and was alſo adjudged to be deprived of his benefices, interdicted from the diſcharge of any eccleſiaſtical function, and to make reparation to Vivian. Againſt this ſentence he appealed to the parliament; but there it was confirmed by an arrêt in the ſame year. At length, after remaining in different priſons between four and five years, and making ſatisfaction to Vivian, he was ſet at liberty; upon which he withdrew to Geneva, where he embraced the proteſtant religion in 1619. The time of his death is uncertain. Beſides the Maſtigophore, he was the author of an account of his caſe, entitled *Factum pour M. Antoine Fuſi, Docteur en Theologie, &c.* 8vo. and of a large volume in octavo, 1619, employed in deſcribing the abuſes and crimes of the church of Rome. This work was entitled *Le Franc Archer de la vraie Egliſe, contre les Abus & Enormités de la fauſſe, par noble Antoine Fuſi, jadis Protonotaire-apoſtolique, Docteur Sorboniſte, Predicateur & Confeſſeur de la Maiſon du Roi, Curé des Egliſes, &c.* Prefixed to it is *Au Roi de la Grande-Bretagne, Jacques I. Remonſtrance apologétique ſur Enormités & Abus demeſurés, Attentats & Inhumanités, du Chef de la fauſſe Egliſe & de ſes Suppots, contre les vrais & legitimes Enfans de la Vraie.*

FU'SIBLE, *adj.* Capable of being melted; capable of being made liquid by heat.—Colours afforded by metalline bodies, either colliquate with, or otherwiſe penetrate into, other bodies, eſpecially *fuſible* ones. *Boyle.*

FUSIBI'LITY, *ſ.* Capacity of being melted; quality of growing liquid by heat.—The bodies of moſt uſe, that are fought for out of the depths of the earth, are the metals, which are diſtinguiſhed from other bodies by their weight, *fuſibility*, and malleableneſs. *Locke.*

FU'SILE, *adj.* [*fuſile*, Fr. *fuſilis*, Lat.] Capable of being melted; liquefiable by heat.—Some, leſs ſkilful, fancy theſe ſcapi that occur in moſt of the larger gothic buildings of England are artificial; and will have it, that they are a kind of *fuſile* marble. *Woodward.*—Running by the force of heat:

Perpetual flames,
O'er ſand and aſhes, and the ſtubborn flint,
Prevailing, turn into a *fuſile* ſea. *Philips.*

FU'SIL, *ſ.* [*fuſil*, Fr.] A firelock; a ſmall neat muſquet. [In heraldry; from *fuſus*, Lat.] Something like a ſpindle.—*Fuſils* muſt be made long, and ſmall in the middle, in the ancient coat of Montague, argent three *fuſils* in feſſe gules. *Peacham.*

FUSILI'ER, *ſ.* A ſoldier armed with a fuſil; a muſketeer.

FU'SION, *ſ.* [*fuſio*, Lat. *fuſion*, Fr.] The act of melting. The ſtate of being melted, or of running with heat.—Metals in *fuſion* do not flame for want of a copious fume, except ſpelter, which fumes copiouſly, and thereby flames. *Newton.*

The origin of the art of fuſing metals, is carried back by Mr. Bryant to the remote era of the Cyclopians. "The Idæi Dactyli, (ſays he,) were Cyclopians; and they are ſaid to have firſt forged metals, and to have reduced them to common uſe; the knowledge of which art they obtained from the fuſion of minerals at the burning of mount Ida. From this event the Curetes, and Corybantes, who were the ſame as the Idæi Dactyli, are ſuppoſed to have learnt the myſtery of fuſing and forging metals."

FUSS, *ſ.* A tumult; a buſtle. *A low cant word:*

End as it befits your ſtation;
Come to uſe and application;
Nor with ſenates keep a *fuſs:*
I ſubmit, and anſwer thus. *Swift.*

FUST, *ſ.* [*fuſte*, Fr.] The trunk or body of a column. A ſtrong ſmell, as that of a mouldy barrel.

To FUST, *v. n.* To grow mouldy; to ſmell ill.

FUS'TIAN, *ſ.* [*futaine*, Fr. from *fuſte*, a tree, becauſe cotton grows on trees.] A kind of cloth made of linen and cotton, and perhaps now of cotton only.—Is ſupper ready, the houſe trimm'd, the ſervingmen in their new *fuſtian*, and their white ſtockings? *Shakeſpeare.*—A high ſwelling kind of writing, made up of heterogeneous parts, or of words and ideas ill aſſociated; bombaſt.—*Fuſtian* is thoughts and words ill ſorted, and without the leaſt relation to each other. *Dryden.*

Chance thoughts, when govern'd by the cloſe,
Oft riſe to *fuſtian*, or deſcend to proſe. *Smith.*

By the law of England, no perſon ſhall dreſs fuſtians with any other inſtrument than the broad ſheers, under the penalty of twenty ſhillings. And the maſter and wardens of the company of clothworkers in London, &c. have power to ſearch the workmanſhip of ſheermen, as well for fuſtian, as cloth. 11 *Hen.* VII. c. 27. 39 *Eliz.* c. 13.

FUS'TIAN, *adj.* Made of fuſtian. Swelling; unnaturally pompous; ridiculouſly tumid. Uſed of ſtile.—Virgil, if he could have ſeen the firſt verſes of the Sylvæ, would have thought Statius mad in his *fuſtian* deſcription of the ſtatue on the brazen horſe. *Dryden.*

When men argue, th' greateſt part
O' th' conteſt falls on terms of art,
Until the *fuſtian* ſtuff be ſpent,
And then they fall to th' argument. *Hudibras.*

FUSIFORM, *adj.* [*fuſiformis*, from *fuſus*, Lat. a ſpindle.] In botany, it means a fuſiform or ſpindle-ſhaped root; ſimple, or generally ſo, tapering downwards to a point; as in raddiſh, carrot, parſnep. It applies alſo to the leaf, as in craſſula rubens, &c.

FUS'TIC,

FUS'TIC, *ſ.* A ſort of wood brought from the Weſt-Indies, uſed in dying of cloth. See MORUS.

To FUS'TIGATE, *v. a.* [*fuſtigo*, Lat.] To beat with a ſtick; to cane.

FUSTILA'RIAN, *ſ.* A low fellow; a ſtinkard. A word uſed by Shakeſpeare only.—Away, you ſcullion, you rampallian, you *fuſtilarian*: I'll tickle your cataſtrophe. *Shakeſpeare.*

FUS'TINESS, *ſ.* Mouldineſs; ſtink.

FUS'TY, *adj.* Ill-ſmelling; mouldy.—Hector ſhall have a great catch, if he knock out either of your brains: he were as good crack a *fuſty* nut with no kernel. *Shakeſp.*

FU'SURE, *ſ.* [*fuſura*, Lat.] The act of melting, the ſtate of being put into fuſion. *Scott. Not much uſed.*

FU'TAK, a town of Hungary, on the Danube, oppoſite Peter Wardein, ſituated in a plain, where the Imperialiſts had a camp in 1736: ſixteen miles ſouth-ſouth-eaſt of Bacs.

FU'TILE, *adj.* [*futile*, Fr. *futilis*, Lat.] Talkative; loquacious.—One *futile* perſon, that maketh it his glory to tell, will more hurt than many that know it their duty to conceal. *Bacon.*—Trifling; worthleſs; of no weight:

Scarce a ſouthern gale
Warm'd our chill air, unloaded with the threats
Of tyrant Rome, but *futile* all. *Shenſtone.*

FUTI'LITY, *ſ.* [*futilité*, Fr.] Talkativeneſs; loquacity.—This fable does not ſtrike ſo much at the *futility* of women, as at the incontinent levity of a prying humour. *L'Eſtrange.*—Triflingneſs; want of weight; want of ſolidity.—Trifling *futility* appears in their ſigns of the zodiac, and their mutual relations and aſpects. *Bentley.*

FUT'TOCKS, *ſ.* [corrupted from *foot-hooks*. *Skinner.*] The lower timbers that hold a ſhip together.

FU'TURE, *adj.* [*futurus*, Lat. *futur*, Fr.] That which will be hereafter; to come; as, the *future* ſtate:

Glory they ſung to the Moſt High! good will
To *future* men, and in their dwellings peace. *Milton.*

FU'TURE, *ſ.* Time to come; ſomewhat to happen hereafter.—The mind, once jaded by an attempt above its power, either is diſabled for the *future*, or elſe checks at any vigorous undertaking ever after. *Locke.*

Thy letters have tranſported me beyond
This ign'rant preſent time; and I feel now
The *future* in the inſtant. *Shakeſpeare.*

FU'TURE, or FUTURE TENSE, in grammar, denotes an inflexion of verbs, whereby they denote, that a thing will be in ſome time yet to come. See the article GRAMMAR.

FU'TURELY, *adv.* In time to come.—This preſcience of God, as it is preſcience, is not the cauſe of any thing *futurely* ſucceeding; neither doth God's aforeknowledge impoſe any neceſſity, or bind. *Raleigh.*

FUTURI'TION, *ſ.* The ſtate of being to be; the condition of being to come to paſs hereafter.—It is imaginable, that the great means of the world's redemption ſhould reſt only in the number of poſſibilities, and hang ſo looſe in reſpect of its *futurition*, as to leave the event in an equal poiſe, whether ever there ſhould be ſuch a thing or no? *South.*

FUTU'RITY, *ſ.* Time to come; events to come.—I will contrive ſome way to make it known to *futurity*, that I had your lordſhip for my patron. *Swift.*

Not my ſervice paſt, nor preſent ſorrows,
Nor purpos'd merit in *futurity*,
Can ranſom me. *Shakeſpeare.*

Event to come.—All *futurities* are naked before that all-ſeeing eye, the ſight of which is no more hindered by diſtance of time than the ſight of an angel can be determined by diſtance of place. *South.*

This, great Amphiarus, lay hid from thee,
Though ſkill'd in fate and dark *futurity*. *Pope.*

The ſtate of being to be; futurition.—It may be well reckoned among the bare poſſibilities, which never commence into a *futurity*; it requiring ſuch a free, ſedate, and intent, mind, as it may be, is no where found but among the platonical ideas. *Glanville.*

FUT'WAH, a town of Hindooſtan, in the country of Bengal: nine miles ſouth-eaſt of Patna.

FU'TY, *adj.* [ſuppoſed to be a corruption of *futile*.] Fooliſh, ſilly, talkative. *Scott. Not much uſed.*

FU'TY, *adj.* [*futier*, Fr.] Crafty, ſubtile. *Scott.*

FU'ZIR, a town of Hungary: twelve miles ſouth-ſouth-eaſt of Caſchan.

To FUZZ, *v. n.* [without etymology.] To fly out in ſmall particles.

FUZZ'BALL, *ſ.* A ſpecies of fungus which, when preſſed, burſts, and ſcatters duſt in the eyes.

FY, *interj.* [*fy*, French and Flemiſh; φεῦ, Gr. *vah*, Lat.] A word of blame and diſapprobation.—*Fy*, my lord, *fy!* a ſoldier, and afraid? What need we fear who knows it, when none call our power to account? *Shakeſp.*—*Fy*, madam, he cried, we muſt be paſt all theſe gaieties. *Tatler.*

But *fy*, my wand'ring muſe, how thou do'ſt ſtray!
Expectance calls thee now another way. *Milton.*

Nay, *fy*, what mean you in this open place?
Unhand me, or, I ſwear, I'll ſcratch your face:
Let go, for ſhame; you make me mad for ſpite:
My mouth's my own; and if you kiſs, I'll bite. *Dryden.*

FY'AL. See FAYAL.

FY'OT DE LA MARCHE (Claude), count de Boſjan, a French eccleſiaſtic, born at Dijon, in 1630. At twenty years of age he publicly maintained theological theſes in the college of the Jeſuits at Dijon, and was honoured by having Louis XIV. then in that city, among the number of his auditors. In 1662 that prince nominated him abbot of the collegiate church of St. Stephen, at Dijon; and he alſo created him his almoner, and prior of Notre Dame, at Portarlier on the Saone. In 1665 the abbots of the dioceſe of Langres conſtituted him their repreſentative in the eccleſiaſtical chamber at Langres; and in the ſame year the provincial aſſembly at Lyons nominated him a deputy of the ſecond order in the general aſſembly of the clergy of France, held at Paris, and at Pontoiſe. In 1668 the king gave him the rank of an honorary counſellor of the parliament of Dijon; and in the following year a brevet of counſellor of ſtate. He eſtabliſhed and endowed a ſeminary for the education of young eccleſiaſtics in his abbey, and proved himſelf in other reſpects a munificent benefactor to it. He died at Dijon in 1721, in the ninety-firſt year of his age. He was the author of ſeveral pious and devotional treatiſes; and alſo of A Hiſtory of the Abbey of St. Stephen, fol. 1696. This work is held in much eſtimation on account of the profound and curious reſearches which it contains relating to the antiquities of the city of Dijon.

FYR'DERING; FYR'THING; FYR'DUNG; [from fyrbeþunz, Sax. i. e. *expeditionis apparatus*.] In the ancient Britiſh cuſtoms, a going out to war, or a military expedition at the king's command; the not going upon which, when ſummoned, was puniſhed by fine at the king's pleaſure. *Leg. Hen.* I. c. 10.

FYRES, a river of Scotland, which runs into Loch Neſs, in the county of Inverneſs: ten miles north-eaſt of Fort Auguſtus. There is a conſiderable cataract, or fall, about two miles from its mouth.

The *Fall* of *Fyres* is conſidered as the grandeſt natural curioſity in the Highlands of Scotland. Mr. Lettice, in his Tour through Scotland, deſcribes it as follows: "The hollow way, leading through the cliffs, is called *Glenneagh*, famous for its wild and rugged ſcenery. As we laboriouſly approached the laſt acclivities, the roaring of unſeen waters increaſed upon the ear, and were decidedly thoſe of ſome tremendous cataract tumbling from a lofty precipice. A few minutes now brought us within ſight

ſight of the celebrated Fall of Fyres; a moſt majeſtic ſcene, the greateſt caſcade in the Highlands. After venturing at leaſt five hundred feet below the ſummit of the hill, we beheld this grand cataract in front, pouring down from the vaſt height above; but broken in its progreſs through the different ſtages of the rock. At the laſt ſtage but one, where the freedom of its paſſage was arreſted by a narrow channel in a cleft of the precipice, it grew furious and foaming from the obſtruction, till, at length delivered, it iſſued forth on a broad ſurface of rock juſt below, and, in one vaſt and voluminous ſheet, tumbled into the profound gulph with a momentum that ſhook the glen, and filled the circumambient ſpace with a continnal ſpray:

"Now rolling down the ſteep amain
Headlong, impetuous, ſee it pour!
The rocks and nodding groves rebellow to the roar.

"When we had re-aſcended the lofty hill, which from the bottom appeared all but perpendicular, we were led into a vaſt ſubterrain, beneath a neighbouring eminence, called the *Giant's Cave*; but, for want of light, we could not explore it ſufficiently to reward our curioſity. We were much more intereſted by the Little Fall of Fyres, which opened to us from a bridge, at no great diſtance from the great cataract. This has the character of a torrent, but owes its principal conſequence to the huge uncouth maſſes of rock which form its bed, and project above and on either ſide of it, with a ſolemn chaotic confuſion and ſavage magnificence."

FYTT (John), a celebrated painter, born at Antwerp about the year 1625. He painted in conjunction with Rubens and Jordaens. His general ſubjects were live and dead game, wild boars, dogs, fruits, flowers, and birds, particularly partridges, which he deſcribed with ſurpriſing truth. He likewiſe imitated ſucceſsfully the bas relieves on vaſes of marble or porphyry; and gave uncommon freſhneſs to his fruits and flowers; and in objects of the animal kind, he deſcribed the hairs of animals and the plumage of birds with wonderful ſpirit and freedom of pencil.

FYZABAD', a town of Hindooſtan, in the province of Oude, on the Gogra; founded by Sadatkhan, a Perſian, who was forty years governor of the province, near the ancient city of Oude. He firſt built a palace, with extenſive gardens, and made it the place of his reſidence; many houſes were added, till, by degrees, it became a large city, and for ſome time the capital of the province: it was defended with a fortreſs, a ditch, towers, ramparts, &c. Sixty-five miles eaſt of Lucknow, and eighty north of Allahabad. Lat. 26. 45. N. lon. 82. 24. E. Greenwich.

G.

G IS the ſeventh letter, and fifth conſonant, of the Engliſh alphabet; though in the alphabets of all the oriental languages, the Hebrew, Phenician, Chaldee, Syriac, Samaritan, Arabic, and even Greek, *G* is the third letter. The Hebrews call it *ghimel* or *gimel*, "camel;" on account of its reſemblance to the neck of that animal; and the ſame appellation it bears in the Samaritan, Phenician, and Chaldee: in the Syriac it is called *gamel*, in Arabic *giim*, and in Greek *gamma*. The gamma (Γ) is manifeſtly the gimel (ג) of the Hebrews or Samaritans: all the difference conſiſts in this, that the gamma is turned to the right, and the gimel to the left, according to the different modes of writing which obtained among thoſe different nations; hence all the pains Salmaſius has taken on Solinus, to prove that the G was derived from the Greek kappa, is loſt.

From the Greeks the Latins borrowed their form of this letter; the Latin G being certainly a corruption of the Greek gamma Γ, as is now clearly demonſtrated in Dr. Fry's "Pantographia;" as well as in many Greek and Latin MSS. ſhewing the progreſſive charges through which the letter paſſed from Γ to G. Diomed. lib. ii. cap. *De Litera*, calls G a new letter. His reaſon is, that the Romans had not introduced it before the firſt Punic war; as appears from the roſtral column erected by C. Duilius, on which we every where find a C in lieu of G. It was Sp. Carvilius who firſt diſtinguiſhed between thoſe two letters, and invented the figure of the G, as we are aſſured by Terentius Scaurus. The C ſerved very well for G; it being the third letter of the Latin alphabet, as the Γ or γ was of the Greek.

The G is found inſtead of C on ſeveral medals: *Vaillant, Num. Imperat.* tom. i. p. 39. M. Beger produces a medal of the *Familia Ogulnia*, where GAR is read inſtead of CAR, which is on thoſe of M. Patin. But the C is more frequently ſeen on medals in lieu of G; as, AUCUSTALIS CALLAECIA CARTACINENSIS, &c. for AUGUSTALIS, &c. Not that the pronunciation of thoſe words was altered, but only that the G was unartfully or negligently cut by the workmen: as is the caſe in divers inſcriptions of the eaſtern empire; where AUC, AUCC, AUCCC, are frequently found for AUG, &c.

The northern people frequently change the G into V or W; as in *Gallus, Wallus*; *Gallia, Wallia, Vallia*, &c. For in this inſtance it muſt not be ſaid that the French have changed the W into G; becauſe they wrote *Gallus* long before *Wallus* or *Wallia* was known, as appears from all the ancient Roman and Greek writers. And yet it is equally true, that the French change the W of the northern nations, and V conſonant, into G; as, *Willielmus*, "William," into *Guillaume*; *Wulphilas* into *Gulphilas*; *Vaſco* into *Gaſcon*, &c.

The letter G is of the mute claſs, and cannot be a y way ſounded without the help of a vowel. It is formed by the reflexion of the air againſt the palate, made by the tongue as the air paſſes out of the throat; which Martianus Capella expreſſes thus, G *ſpiritus cum palato*; ſo that G is a palatal letter. The modern G takes its form from that of the Latins. In Engliſh it has two ſounds, one from the Greek Γ, and the Latin, which is called that of the hard *G*, becauſe it is formed by a preſſure ſomewhat hard on the fore-part of the tongue againſt the upper gum; which ſound it retains before *a, o, u, l, r*; as *gate, go, gull*. At the end of a word it is always hard, as *ring, ſing*, &c. The other ſound, called that of the ſoft *G*, reſembles that of *j*; and is commonly, though not always, found before *e* and *i*, as in *geſture, giant*, &c. To this rule, however, there are many exceptions; *G* is often hard before *i*, as *give*, &c. and ſometimes before *e*, as *get*, &c. It is alſo hard in derivatives from words ending in *g*, as *ſinging, ſtronger*, &c. and generally before *er*, at the end of words, as *finger*. Before *n*, at the end of a word, *g* is commonly melted away; as in the French, from which theſe words are commonly derived: thus, from *benign, malign, condign*, we pronounce *benine, maline, condine*. It is often ſilent in the middle of the words before *h*; as, *might*. At the end of a word *gh* has often the ſound of *f*, as *laugh, rough, tough*. The Saxon Ȝ, ȝ, ſeems to have had generally the ſound of *y* conſonant; whence *gate* is by ruſtics ſtill pronounced *yate*. As a numeral, G was anciently uſed to denote 400; and with a daſh over it thus Ḡ, 40,000.

As an abbreviature, G. ſtands for *Gaius, Gellius, gens, genius*, &c. G. G. for *gemina, geſſit, geſſerunt*, &c. G. C. for *genio civitatis* or *Cæſaris*. G. L. for *Gaius libertus*, or *genio loci*. G. V. S. for *genio urbis ſacrum*. G. B. for *genio bono*. And G. T. for *genio tutelari*.

In muſic, G is the character or mark of the treble cleff;

and from its being placed at the head, or marking the firſt found in Guido's ſcale, the whole ſcale took the name *gamut*.

GA'AL, [געל, Heb. an abomination.] The ſon of Ebed.

GA'ARDE, a town of Norway, in the dioceſe of Aggerhuus: fifty-ſix miles north-weſt of Chriſtiana.

GA'ASH, a hill in Paleſtine, ſituated in the tribe of Ephraim; on the north ſide of which Joſhua the ſucceſſor of Moſes was buried. *Joſh.* xxiv. 30. *Judges* ii. 9. We read of the brooks of Gaaſh. 2 *Sam.* xxiii. 30. 1 *Chron.* xi. 32.

GA'BA or GAB'DES, a city of Paleſtine, ſituated in the tribe of Benjamin. *Joſh.* xviii. 24. 1 *Eſdr.* v. 20.

GABA'EL, a man's name.

GAB'ALA, a town of Arabia Felix: ſixty-four miles north-north-eaſt of Aden.

GABA'LE, in mythology, a deity worſhipped at Heliopolis under the figure of a lion, with a radiant head; and it is thus repreſented on many medals of Caracalla.

GABA'RA, or GAB'BARA, [from קבר *cabbar*, a ſepulchre, or גבר, Heb. *gabbar*, a man.] In antiquity, the dead bodies which the Egyptians embalmed, and kept in their houſes, eſpecially thoſe of ſuch of their friends as died with the reputation of great piety and holineſs, or as martyrs. See EMBALMING, vol. vi. p. 352.

GAB'ARAGE, *ſ.* Wrappers in which Iriſh goods are wrapped.

GABARD'INE, *ſ.* [*gavardina*, Ital.] A coarſe frock; any mean dreſs.—My beſt way is to creep under his *gabardine*; there is no other ſhelter hereabouts. *Shakeſpeare.*

You call me miſbeliever, cut-throat dog,
And ſpit upon my Jewiſh *gabardine*. *Shakeſpeare.*

GAB'ARET, a town of France, in the department of the Landes, and chief place of a canton, in the diſtrict of Mont de Marſan, on the Geliſe: five leagues weſt of Condom, and eight eaſt of Mont de Marſan.

GABARO'N, a bay on the ſouth-weſt of Louiſburg, in the iſland of Cape Breton.

GAB'AROUS BAY, a bay on the eaſt coaſt of the iſland of Cape Breton. Lat. 45. 50. N. lon. 60. W. Greenwich.

GABASEL'KI, a town of Ruſſia, in the government of Viborg: thirty ſix miles north of Serdopol.

GAB'ATHA, a man's name.

GABA'ZA, a town of Natolia, pleaſantly ſituated on the ſide of a hill, from the top of which is a fine proſpect of the Archipelago, and part of its numerous iſlands. The whole ſpace from the town to the ſea, which is about three miles, is entirely covered with gardens, orchards, and vineyards; the value of which is conſiderably enhanced by being in the vicinity of Scutari and Conſtantinople.

GAB'BATHA, [Heb. elevated.] The name of a place where Jeſus Chriſt received final ſentence of death. *John* xix. 13.

To GAB'BLE, *v. n.* [*gabbare*, Ital. *gabbaren*, Dut.] To make an inarticulate noiſe:

Flocks of fowl, that when the tempeſts roar,
With their hoarſe *gabbling* ſeek the ſilent ſhore. *Dryden.*

To prate loudly without meaning.—Have no wit, manners, nor honeſty, but to *gabble* like tinkers at this time of night? *Shakeſpeare.*

Which made ſome think, when he did *gabble*,
He had heard three labourers of Babel. *Hudibras.*

GAB'BLE, *ſ.* Inarticulate noiſe like that of brute animals.—Not to know what we ſpeak one to another, ſo we ſeem to know, is to know ſtraight our purpoſe: chough's language, *gabble* enough, and good enough. *Shakeſpeare.*—Loud talk without meaning:

Forthwith a hideous *gabble* riſes loud
Among the builders; each to other calls,
Not underſtood. *Milton.*

GAB'BLER, *ſ.* A prater; a chattering fellow.

GA'BEL, *ſ.* [*gabelle*, Fr. *gabella*, Ital. gabel, Sax. a tribute.] An exciſe; a tax. This word had the ſame ſignification among our ancient writers, as *gabelle* had formerly in France; and the term has been variouſly uſed; as for rent, cuſtom, ſervice, &c. Where it was a payment of rent, thoſe who paid it were termed *gablatores*. *Co. Lit.* 213. It is by ſome authors diſtinguiſhed from tribute; *gabel* being a tax on moveables, tribute on immoveables. When the word was formerly uſed in France without any addition to it, it ſignified the *tax on ſalt*; though afterwards it was applied to all other taxes. —The *gabels* of Naples are very high on oil, wine, and tobacco. *Addiſon.*

GA'BEL, a town of Bohemia, in the circle of Boleſlaw, where prince Henry entered Bohemia, after having gained an advantage over the Auſtrians in the month of July, 1778: nine miles north-north-eaſt of Leypa, and forty-five north of Prague.

GA'BERSTORF, a town of Germany, in the duchy of Stiria: ten miles weſt-ſouth-weſt of Gnaa.

GA'BES. See CABES.

GA'BIAN, a village of France, in the department of the Herault, with a mineral ſpring; near it from a rock iſſues petroleum, or native tar: ſeven miles north-weſt of Pezenas.

GA'BII, in ancient geography, a city of the Volſci, now extinct, taken by the artifice of Sextus, the ſon of Tarquin, who gained the confidence of the inhabitants, by deſerting to them, and pretending that his father had ill-treated him. Romulus and Remus were educated there, as it was the cuſtom at that time to ſend there the young nobility, and Juno was the chief deity of the place. The inhabitants had a peculiar mode of tucking up their dreſs, whence *Gabinus cinctus*. *Virgil.*

GA'BIN, a town of Poland, in the palatinate of Rawa: forty miles weſt of Warſaw.

GABIN'DA, or KAPINDA, a town of Africa, in the kingdom of Loango.

GABIN'IAN LAWS, in Roman antiquity, laws inſtituted upon ſeveral occaſions by perſons of the name of *Gabinius*. The firſt was the *Gabinia lex de Comitiis*, by A. Gabinius the tribune, in the year of Rome 614. It required that in the public aſſemblies for electing magiſtrates, the votes ſhould be given by tablets, and not *vivâ voce*. Another, *de Comitiis*, which made it a capital puniſhment to convene any clandeſtine aſſembly, agreeable to the old law of the twelve tables. Another, *de Militiâ*, by A. Gabinius the tribune, year of Rome 685. It granted Pompey the power of carrying on the war againſt the pirates during three years, and of obliging all kings, governors, and ſtates, to ſupply him with the neceſſaries he wanted, over all the Mediterranean ſea, and in the maritime provinces as far as 400 ſtadia from the ſea. Another, *de Uſurâ*, by Aul. Gabinius the tribune, year of Rome 685. It ordained that no action ſhould be granted for the recovery of money borrowed upon ſmall intereſt to be lent upon larger. This was an uſual practice at Rome, which obtained the name of *verſuram facere*. Another againſt fornication. See the article ROME.

GABIN'IUS (Aulus), a Roman chief, who arrived at the conſulate before Chriſt 58; and in the next year, through the intrigues of Clodius, obtained the government of the rich province of Syria. After exhauſting that unhappy country by his oppreſſions, he carried his arms into Judea againſt Alexander, ſon of Ariſtobulus, whom he reduced to ſue for peace; and he re-eſtabliſhed Hyrcan in the dignity of pontiff, and regulated the government of that country to his own mind. He next, upon promiſe of a large ſum, agreed to replace on the throne of Parthia, Mithridates, who had been expelled by his brother Orodes. He had croſſed the Euphrates upon this expedition, when he was overtaken by Ptolemy Auletes king of Egypt, who, on Pompey's recommendation, came to perſuade Gabinius to undertake his re-eſtabliſhment in his kingdom, then uſurped by his ſon-in-law, Archelaus. The Roman chief, for the enormous bribe

of

of ten thouſand talents, made no ſcruple of deſerting Mithridates; and though it was contrary to an expreſs law for a governor to march out of his province or engage in a new war without the conſent of the ſenate, yet, confiding in the friendſhip of Pompey, he proceeded with his army towards Egypt. He diſpatched his general of the horſe, Mark Antony, to ſecure the paſſes, and following into the heart of the country, gave Archelaus a total defeat, and took him priſoner. For a large ranſom he ſuffered him to eſcape; but the ambition of the young prince induced him again to take up arms, and he ſtood a long ſiege in Alexandria. At length he was ſlain in battle, and Ptolemy Auletes was quietly ſeated on his throne. In the mean time Gabinius was accuſed at Rome of high crimes and miſdemeanors, and Cicero employed his powerful eloquence againſt him, as one who had diſgraced the Roman name. Such was the indignation excited among the people, that he would have been condemned in his abſence, had he not been ſcreened by Pompey and Craſſus. Gabinius returned to Rome, B. C. 54, and was impeached of high-treaſon, of which charge he was acquitted by a ſmall majority. He was then tried for corruption and extortion, and was condemned to perpetual baniſhment. He expended his ill-gotten wealth in bribes to his advocates and judges, and lived abroad in poverty and obſcurity, till the breaking out of the civil war between Cæſar and Pompey. The former of theſe generals, knowing his military talents, made him one of his lieutenants. In this quality, marching through Illyricum, he was defeated with great loſs by the people of the province, and compelled to take refuge in Salona. There, after contending ſome months againſt great diſtreſs, he died of remorſe and grief, unpitied and unlamented, even by thoſe he had endeavoured to ſerve.

GA'BION, *ſ.* [French.] A wicker baſket which is filled with earth to make a fortification or intrenchment. —His battery was defended all along with *gabions*, and caſks filled with ſand. *Knolles.*—See the article FORTIFICATION, vol. vii. p. 592.

GABIONA'DE, *ſ.* A bulwark made with *gabions*.

GA'BISE, a town of Aſiatic Turkey, in the province of Natolia: twenty-eight miles ſouth-eaſt of Conſtantinople.

GA'BLE, *ſ.* [*gaval*, Welſh; *gable*, Fr.] A triangular end of a building carried up (perpendicularly in front) to the ridge of the roof.—Take care, that all your brick-work be covered with the tiling, according to the new way of building, without *gable* ends, which are very heavy, and very apt to let the water into the brick-work. *Mortimer.*

GA'BLE-END FO'RELAND, a cape on the eaſt coaſt of the northern iſland of New Zealand, in the South Pacific Ocean. Lat. 38. 15. S.

GABLEN'Z, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg: ſix miles north-north-weſt of Zwickau.

GAB'LOCKS, *ſ.* Falſe ſpurs for fighting cocks, of ſteel, ſilver, &c.

GA'BON, a river of Africa, which runs into the Atlantic, near Cape St. Clara. It gives name to a country through which it paſſes.

GABO'RI, a bay on the ſouth-eaſt coaſt of Cape Breton iſland. The entrance into it, which is not more than twenty leagues from the iſles of St. Pierre, is between iſlands and rocks about a league in breadth. The bay is two leagues deep, and affords good anchorage.

GABOU', or JABOU, a country of Africa, between Benin and Dahomy, about 150 miles from the coaſt; the chief trade is in ſlaves.

GABRANTO'VICI, a people who anciently inhabited ſome part of Yorkſhire.

GA'BRES, or GAYRES, a religious ſect in Perſia and India; called alſo *Gebres*, *Guebres*, *Gaurs*, *&c.* The Turks call the Chriſtians *gabres*, *i. e.* infidels, or people of a falſe religion; the word *gabre*, among the Turks, having the ſame ſignification as *pagan* among the Chriſtians. In Perſia the word has a more peculiar ſignification; being applied to a ſect diſperſed through the country, and ſaid to be the remains of the ancient Perſians or followers of Zoroaſter, the worſhippers of fire. They have a ſuburb at Iſpahan, which is called *Gaurabad*, or "the town of the *Gaurs*," where they are employed in the meaneſt drudgery: ſome of them are diſperſed through other parts of Perſia; but they principally abound in Kerman. Some of them fled many ages ago into India, and ſettled about Surat, where their poſterity remain to this day. There is alſo a colony of them at Bombay. They are a poor, ignorant, inoffenſive people, extremely ſuperſtitious, but honeſt in their dealings.

GABRIAC', a town of France, in the department of the Aveiron, and chief place of a canton, in the diſtrict of St. Genies: four leagues north-eaſt of Rhodez.

GA'BRIEL, [גבריאל of גבר a mighty one, and אל God, Heb. *i. e.* the ſtrength of God.] The archangel placed, in the Jewiſh Talmud, at the head of the ſecond order of the celeſtial hierarchy. See the article ANGEL, vol. i. p. 693–696. A proper name of men.

GA'BRIEL (Giles de), a franciſcan monk, native of Liege, who was admitted licentiate of the univerſity of Louvain, ordained prieſt, appointed definitor-general of his order, and apoſtolic-commiſſary in the Netherlands. He was the author of ſeveral theological works, in which he inculcates a very ſevere and rigid morality. Among other pieces he publiſhed at Bruſſels, in 1675, a book entitled *Specimina Moralis Chriſtianæ & Moralis Diabolicæ*, or Specimens of Chriſtian Morality and of Diabolical Morality, 8vo. This extraordinary title excited an alarm at the court of Rome, whither the author was obliged to repair in order to juſtify himſelf, while his book was prohibited till it ſhould undergo a ſtrict examination. When it had paſſed the ordeal, and received ſome corrections, it was permitted to be reprinted by the author at Rome, in 1680, under the title of *Specimina Moralia*; but it was afterwards publiſhed at Lyons in its original form, and with its original title, in 1683, 12mo. A French tranſlation from the Roman edition, reviſed, corrected, and enlarged, made its appearance in 1680, entitled *Les Eſſais de la Théologie Morale*, *&c.* 12mo.

GA'BRIEL-SEVE'RUS, a Greek prelate, native of Monembaſia, in Peloponneſus. He was conſecrated biſhop of Philadelphia at Conſtantinople in 1577, by the patriarch Jeremy; but finding the Greeks in that dioceſe to be few in number, he removed to Venice, where he exerciſed the archiepiſcopal functions over the members of his communion in the territories of that republic. In that city he publiſhed, in the Greek language, a treatiſe on the Sacraments, a defence of the Greek church againſt the terms of the union enjoined by the council of Florence, and other treatiſes on the rites of the Greek church. They were publiſhed in a collective form at Paris, in 1671, by Richard Simon, under the title of *Fides Eccleſiæ Orientalis*, *ſeu Gabrielis Metropolitæ Philadelphienſis Opuſcula*, in 4to.

GA'BRIEL-SIONI'TA, a learned Maronite, profeſſor of the Syriac and Arabic languages at Rome, whence he was induced to proceed to Paris to take a part in editing the magnificent Polyglot Bible, publiſhed by M. Le Jay. He carried with him Syriac and Arabic verſions of the Bible, tranſcribed by himſelf from MSS. at Rome, to which, with incredible labour, he added the vowel points as they were afterwards printed, and which did not exiſt in the writings from which he took his tranſcripts. He was appointed profeſſor-royal of the Syriac and Arabic languages at Paris, and was highly eſteemed and much employed by the learned world as a tutor in them. He died in that city in 1648. Walton, in the Engliſh Polyglot, has copied the verſions introduced by Sionita. Beſides his labours on the Bible, he alſo publiſhed tranſlations of other Arabic works, and an Arabic geography, entitled *Geographia Nubienſis*, 4to. 1619.

GA'BRIEL, a mountain of Ireland, in the county of Cork: twelve miles fouth of Bantry.

GA'BRIEL, an iſland in the great river La Plata, South America, diſcovered by Sebaſtian Cabot, in 1526.

GA'BRIELITES, in eccleſiaſtical hiſtory, a ſect of anabaptiſts that appeared in Pomerania in 1530. They derive their name from Gabriel Scherling; who, after having been for ſome time tolerated in that country, was obliged to remove, and died in Poland.

GABRI'NI (Nicholas), commonly known under the name of *Rienzi*, born at Rome, in the fourteenth century. His father was a tavern keeper in a quarter of the city inhabited by the loweſt of the populace. As his name was Lorenzo, by contraction Rienzo, the ſon was uſually called Nicolo di Rienzo. He received a literary education, and early diſtinguiſhed himſelf by the elevation of his ſentiments. The glories of ancient Rome, compared with its preſent abject ſtate, deſerted for Avignon by the pontiffs, and oppreſſed by the lawleſs ſway of its nobles, appear to have excited a real enthuſiaſm in his breaſt. The common people were accuſtomed to regard him as an extraordinary perſon, deſtined to redreſs thoſe wrongs of which they were deeply ſenſible; and even the ſuperior ranks viewed him with reſpect for his knowledge and talents. He obtained the poſt of a public ſcribe; and in 1346, he was joined in a deputation from the Romans to pope Clement VI. at Avignon, for the purpoſe of exhorting him to bring back the papal court to its original ſeat. On this occaſion he ſpoke with ſo much force and freedom, and painted in ſuch ſtrong colours the inſolences and oppreſſions of the nobles, that he excited a high idea of his character. The pope created him an apoſtolic notary, but gave no explicit reply to the deputies. Rienzi, upon his return, entered upon the exerciſe of his office, which he diſcharged with a probity that added to his reputation; at the ſame time he was attentive to foment the diſcontents of the people by harangues againſt the nobility, and againſt the abuſes in the public adminiſtration. Having thus prepared men's minds for a change, and engaged many perſons of all orders in his deſigns, in the month of April, 1347, during the abſence of the governor of Rome, Stephen Colonna, he ſummoned a ſecret aſſembly upon mount Aventine, before which he made an energetic ſpeech, deſcribing the wretchedneſs and degradation into which the chriſtian capital was fallen, and from which nothing but the efforts of its own citizens could raiſe it. He then cauſed them all to ſubſcribe an oath for the eſtabliſhment of the *good eſtate*. He had the addreſs to gain over the pope's vicar to his purpoſes; and at a ſecond aſſembly in the capitol he produced fifteen articles as the baſis of the good eſtate, which were unanimouſly approved; and the people conferred upon him the title of tribune, with power of life and death, and all the other attributes of ſovereignty. The governor Colonna, upon his return, threatened him with puniſhment, but was himſelf conſtrained to leave the city; and Rienzi baniſhed with him the principal noble families of Rome, after capitally puniſhing ſeveral who were convicted of oppreſſion and other crimes. In the firſt exerciſe of his authority he conducted himſelf with ſtrict regard to juſtice and the public good. He placed the moſt reſpectable citizens at the head of the judiciary adminiſtration, and purged Rome of all thoſe violences and enormities which had ſo long diſgraced it. The pope was induced to ſanction his power, which, though termed an uſurpation, ſeems to have been as lawfully conferred as the conſent of the governed could make it. The reputation of the new tribune of Rome ſoon extended throughout Italy. The meſſengers whom he ſent to propoſe to the different ſtates a general league, were every where received with high reſpect, though unarmed and only diſtinguiſhed by a ſilver wand; and honourable embaſſies were ſent to him in return. His friendſhip was courted by Louis king of Hungary, and the emperor Louis of France. Perſons of warm imagination conceived that he was to be the inſtrument of reſtoring the ancient grandeur of Rome and Italy. Among theſe the moſt conſpicuous was the celebrated Petrarch, who had contracted an admiration of his character, when joined with him as one of the deputies to the pope. There are extant ſome eloquent and pathetic letters which he wrote to Rienzi, warmly exhorting him to proceed in his glorious undertakings. In the mean time, that intoxication which ſcarcely ever fails to ſeize upon thoſe who ſuddenly riſe to ſupreme power from mean extraction, began to betray him into extravagancies, which injured his character and reputation. He cauſed himſelf to be created a knight, with a ſingular mixture of religious and military ceremonies. He aſſumed a variety of titles; iſſued a letter declaring Rome the head of the world; and cited the two rival emperors, Charles and Louis, and the electors, to appear before him, and juſtify their pretenſions. He diſmiſſed the pope's legate, reduced the nobles to greater humiliation, and eſtabliſhed a reign of terror. He was for a time ſucceſsful againſt the attempts of the exiled nobles to reſtore themſelves by force of arms; but at length, finding that he had loſt the affection and confidence of the people, he withdrew ſecretly from Rome, and in the beginning of 1348, took refuge in the kingdom of Naples. He was at firſt received with honour by the king, but the efforts of his enemies brought him into ſuch hazard, that he thought proper to retreat to a hermitage, where he lived concealed till the commencement of 1350. He then took advantage of the jubilee to return ſecretly to Rome, where being diſcovered, he withdrew to the king of the Romans at Prague. Thence, either voluntarily or through conſtraint, he came into the hands of pope Clement at Avignon, who put him in priſon, and appointed a commiſſion of three cardinals to try him. But after the deceaſe of that pope, his ſucceſſor Innocent VI. in 1354, releaſed him from confinement, and ſent him to Rome, in order to oppoſe Baroncelli, who had ſeized the government of that capital. The Romans received him again with great demonſtrations of joy, and he recovered his former authority. But after a turbulent adminiſtration of ſome months, the nobles found means to excite a ſedition againſt him, in which he was cruelly maſſacred, in October, 1354. His body was treated with the greateſt indignity by the people; and his end adds one more ſad example to the many recorded by hiſtory, of the uſual fate of popular leaders and reformers, whoſe plans generally ariſe from vanity, and terminate in ambition.

GACE', a town of France, in the department of the Orne, and chief place of a canton, in the diſtrict of l'Aigle: four leagues weſt of l'Aigle, and four and a half eaſt of Argentan.

GACH'PAS, an Indian tribe, in North America, formerly in alliance with the Delawares.

GACIL'LE (La), a town of France, in the department of the Morbihan, and chief place of a canton, in the diſtrict of Rocheford: three leagues north-eaſt of Rocheford.

GAD, *ſ.* [ȝaꝺ, Sax. *gaddur*, Iſlandic, a club.] A wedge or ingot of ſteel.—Flemiſh ſteel is brought down the Rhine to Dort, and other parts, ſome in bars, and ſome in *gads*; and therefore called Flemiſh ſteel, and ſometimes *gad* ſteel. *Moxon.*—It ſeems to be uſed by *Shakeſpeare* for a ſtile or graver, [from ȝaꝺ, Sax. a goad.]

I will go get a leaf of braſs,
And with a *gad* of ſteel will write theſe words. *Shakeſ.*

A meaſure of nine or ten feet, a geometrical perch.

To GAD, *v. n.* [Derived by Skinner from *gadfly*; by Junius from *gadaw*, Welſh, to forſake; thought by others only the preterite of the old word aȝaan, *to go.*] To ramble about without any ſettled purpoſe; to rove looſely and idly.—Give the water no paſſage, neither a wicked woman liberty to *gad* abroad. *Eccleſ.* xxv. 25.—Envy is a *gadding* paſſion, and walketh the ſtreets, and doth not keep home. *Bacon.*

Gad not abroad at ev'ry queſt and call
Of an untrained hope or paſſion;
To court each place or fortune that doth fall,
Is wantonneſs in contemplation. *Herbert.*

GAD, one of the twelve patriarchs of Iſrael, the ſeventh ſon of Jacob, and the firſt by Zilpah the handmaid of Leah. His deſcendants were diſtinguiſhed by their courage and warlike exploits during the conqueſt of Canaan, and their ſubſequent defence of the poſſeſſions aſſigned them in the promiſed land. The Gadites were at firſt much expoſed to the hoſtile incurſions of their neighbours, but by their continual watchfulneſs and bravery they frequently diſappointed them in their hopes of plunder, and by ſucceſsful expeditions into their reſpective countries ſo far overawed them, that at length they enjoyed the portion of their inheritance in peace and ſecurity. Theſe circumſtances in their hiſtory were predicted in the laſt bleſſing pronounced by Jacob upon his ſons, when ſpeaking of Gad he ſaid, "a troop ſhall overcome him," or invade him, "but he ſhall overcome at laſt." *Gen.* xxx. 11. xlix. 19. *Joſh.* xiii. 24. &c.

GAD, a province of Paleſtine, occupied by the tribe of that name: ſituated eaſtward of the river Jordan, which formed its weſtern boundary; having the half tribe of Manaſſeh in Baſhan on the north; the land of the Ammonites on the eaſt; and the river Arnon on the ſouth, which ſeparated it from the tribe of Reuben. It contained within theſe limits, the land of Jazer, half the land of Gilead, half the land of the Ammonites, (taken from them by the Amorites. See AMMONITES, vol. i.) and a part of the kingdom of Sihon. It contained many cities, ſome of which they built ſoon after its conqueſt. Ramoth in Gilead appears to have been the chief; it formed part of the kingdom of Iſrael after the defection of the ten tribes from the houſe of David, and was afterwards ſubdued by Tilgath-pilneſer, king of Aſſyria. *Numb.* xxxii. *Deut.* iv. 43. *Joſh.* xiii. 24, 28. 1 *Kings* xxii. 3. 1 *Chron.* v. 26.

GAD, the name of a river of Paleſtine, probably ſituated in the above province. 2 *Sam.* xxiv. 5.

GAD, a Jewiſh prophet, and David's domeſtic ſeer, with whom he was accuſtomed to adviſe on affairs of importance. When the diſpleaſure of Heaven had been excited againſt David and Iſrael, by the crime of ordering the people to be numbered, Gad was divinely commiſſioned to wait upon the king, and to offer him the choice of three evils, famine, unſucceſsful war, or a peſtilence; one of which was to be inflicted as a puniſhment on that people. When the king had choſen the peſtilence, and its dreadful ravages had awakened the people to repentance, Gad was farther commiſſioned to inſtruct David to erect an altar in the threſhing-floor of Ornan the Jebuſite, and to offer on it burnt-offerings and peace-offerings, which met with a propitious acceptance. Around this ſpot the future temple was built, as it appeared to have been intended for that honour by divine ſelection. Gad wrote a hiſtory of his own times, out of which, together with the writings of the prophets Samuel and Nathan, the account of the actions of David, as given in the books of Samuel and Chronicles, was moſt probably compiled. 2 *Sam.* xxiv. 11, &c. 1 *Chron.* xxi. 9, &c. xxix. 29.

GAD'ARA, in ancient geography, a town of the Peræa, or Transjordan, in the Decapolis, a very ſtrong place. Reſtored by Pompey after its demolition by the Jews. *Joſephus.* After Herod's death it was joined to the province of Syria by Auguſtus.

GADARE'NES, or GERGESENES, country of, ſituated in Paleſtine, eaſtward of the river Jordan oppoſite Galilee; it was frequently viſited by the Saviour while upon earth; here he healed the man poſſeſſed of a legion of devils. It is likewiſe called the land of *Genneſaret*. *Matth.* xiv. 34. viii. 28. *Mark* vi. 53. *Luke* viii. 26.

GAD'DER, *ſ.* A rambler: one that runs much abroad without buſineſs.—A drunken woman, and a *gadder* abroad, cauſeth great anger, and ſhe will not cover her own ſhame. *Eccleſ.* xxvi. 8.

GAD'DI, [Heb. my troop.] A man's name.

GAD'DIEL, [Heb. the army of Gad.] A man's name.

GAD'DINGLY, *adv.* In a rambling, moving manner.

GAD'DITE, *ſ.* A deſcendant of Gad, one of the ſons of Jacob.

GA'DEBUSCH, a town of Germany, in the circle of Lower Saxony, and duchy of Mecklenburg, near which the Swedes defeated the Danes in 1712: ſixteen miles weſt-north-weſt of Schwerin.

GA'DEMIS, or GA'DEMIR, a country of Africa, weſt of Fezzan, and 100 leagues from the Mediterranean, and ſaid to contain ninety-two villages; the capital bears the ſame name. Lat. 31. 30. N. lon. 11. E. Greenwich.

GA'DEN, a town of Germany, in the archduchy of Auſtria: ten miles ſouth-weſt of Vienna.

GADERSLE'BEN, a town of Germany, in the circle of Lower Saxony, and principality of Halberſtadt: twenty miles eaſt of Halberſtadt.

GA'DES, or GADI'RA, in ancient geography, an iſland in the Atlantic, on the Spaniſh coaſt, twenty-five miles from the Columns of Hercules. It was ſometimes called *Tarteſſus* and *Erythia* according to Pliny. Geryon, whom Hercules killed, fixed his reſidence there. Hercules, ſurnamed Gaditanus, had there a celebrated temple in which all his labours were engraved with excellent workmanſhip. The inhabitants are called *Gaditani*.

GAD'FLY, *ſ.* [By Skinner, who makes it the original of *gad*, it is called *goadfly*. Suppoſed to be originally from *goad*, in Sax. ȝad, and *fly*.] A fly that ſo ſeverely ſtings the cattle, that it makes them gad or run madly about.—See the article OESTRUS, and ENTOMOLOGY, vol. vi. p. 842.

Light fly his ſlumbers, if perchance a flight
Of angry *gadflies* faſten on the herd. *Thomſon.*

GADIAG', a town of Ruſſia, in the government of Tchernigov: 112 miles ſouth-eaſt of Tchernigov.

GADO'NA, or GAD'UA, a country of Africa, on the ſouth ſide of the river Senegal, containing mines of gold, iron, and ſaltpetre. Lat. 13. 30. N. lon. 8. W. Greenwich.

GADO'LINITE, *ſ.* in mineralogy, an earth or ſtone, diſcovered by M. Gadolin in 1794, at Ytterby, or Ytterley, in Sweden; from whence it has alſo taken the name of Yttria.—See the article MINERALOGY.

GA'DUS, *ſ.* the COD-FISH: a genus of the order jugulares. The generic character is, pectoral fins ſlender, and tapering to a point. The body is long, thick, laterally compreſſed, and covered with ſmall ſmooth ſcales which eaſily rub off. The head is ſmooth, wedge-ſhaped, with a broad front. The mouth large, the jaws armed with little ſharp teeth bending inwards; ſome ſpecies have barbles hanging from the lower jaw. The tongue is broad and ſmooth; but the palate is rough, being armed with ſmall teeth; and there are ſeveral rugged bones about the throat. The eyes are near the top of the head, round, large, and covered with a membrane. The noſtrils are double, and near the eyes. The coverts and opening of the gills are large; the covert conſiſts of three laminæ, the under one edged with a ſkin. The membrane of the gills is ſtrong, with ſeven or eight rays. The fins are from ſeven to ten; two pectorals, the ſame number at the throat, ſometimes two at the anus, the tail-fin, and one, two, or three, on the back; the rays of the fins are moſtly covered with the common ſkin. The different ſpecies are found in the North and Baltic ſeas, and ſome alſo in the Mediterranean and Weſtern Ocean. They are all ſea fiſh, except the barbot, and do not often come into rivers.

I. *Three dorſal fins; and barbles at the mouth.* 1. Gadus æglefinus, the haddock: the lateral line black, and the tail bifurcated, form the ſpecific character. There are ſeven rays in the membrane of the gills, nineteen in the pectoral

pectoral fins, ſix in the ventrals, twenty-two in the firſt anal, twenty-one in the ſecond, twenty-ſeven in the tail, ſixteen in the firſt dorſal, twenty in the ſecond, nineteen in the third. The head is wedge-ſhaped, the upper jaw longer than the lower, whence hangs one barble; the mouth is narrower than in the reſt of the ſpecies. The eyes are large, pupil black, iris ſilvery. The ſcales are ſmall, round, and ſtrongly fixed in the ſkin. The back is browniſh, arched, and thick; the belly and ſides are ſilvery; and there is a black ſpot on each ſide near the pectoral fin, the prints, as it is ſaid, of the finger and thumb of St. Peter, when he held this ſpecies, and took the tribute out of its mouth: a mark which ſuperſtition has extended to the whole race of haddocks, at once to atteſt and commemorate that miracle; unfortunately, however, the haddock is not the only fiſh that has been ſuppoſed to be thus diſtinguiſhed by the marks of the apoſtolic touch.

This ſpecies inhabits the North Sea, and are taken in plenty in the autumn near Heligoland, whence they are carried to Hamburgh. It is remarkable, that the haddock does not paſs through the Sound into the Baltic; and that the next ſpecies, which lives in the Baltic, never paſſes the Straits into the North Sea, though they are found in plenty near each other in both thoſe ſeas. They are found in Holland, Eaſt Friezeland, &c. and appear upon the coaſts of Britain annually, particularly thoſe of Yorkſhire, about the middle of December, and in ſuch vaſt ſhoals, that they cover a tract frequently of many miles. They do not venture far from the ſhore; when the fiſhermen caſt their lines beyond their limits, which is commonly about three miles from land, there are ſeldom any taken. The larger haddocks quit the coaſt as ſoon as they begin to be out of ſeaſon, leaving behind only the ſmaller fiſh. This remark is applicable to all the fiſh that appear on the Yorkſhire coaſt, except the mackerel, which alone remains after becoming unfit for uſe. The haddock is the moſt common ſpecies in the London market, as it is not only plenty, but in ſeaſon during the greateſt part of the year. The larger fiſh begin to roe in the middle of November, and continue ſo till the end of January, when they are unfit for uſe. Thoſe of the middle ſize recover about the beginning of May, and are in ſeaſon till February; ſuch as are incapable of breeding remain at all times fit for the table. In ſtormy weather none of this ſpecies take the bait; the fiſhermen aſſert, that they then ooze in the bottom of the ſea, and ſhelter themſelves there, till the agitation of the water has ceaſed: in proof of this, they allege, that thoſe which are taken immediately after a ſtorm, are covered with mud upon the back. In Greenland, they live in the deeps, but riſe to the ſurface towards evening, eſpecially if the water be rough; ſometimes alſo they jump out of the water to avoid the purſuit of the dog-fiſh, which catch them in their paws between the cracks in the ice when they come to take the air. In Friezeland they fiſh for them with ground lines baited with a ſmall fiſh, which they throw in at night, and ſeldom fail to find a haddock on every hook in the morning, eſpecially in fine weather; they have alſo a laudable cuſtom among them, which is, that every fiſherman is obliged to throw in a line for the widows of fiſhermen in the village, and to ſend them what it produces. The Greenlanders catch them with their hands through holes in the ice, towards which the fiſhes preſs to take air.

The length of this fiſh is commonly a foot, and their weight a pound and a half; ſome have been ſeen of two or three feet long, and weighing forty pounds. They ſpawn in February, the females coming in towards the ſhore in great ſhoals to lay their ova; then come the males, and fecundate the eggs. The haddock eats crabs and ſea-inſects; it purſues the herrings, and grows fat upon them in the ſummer; whereas in autumn the haddock is lean, becauſe it lives then upon worms. The fleſh is white, firm, well-taſted, and eaſy of digeſtion. Several other voracious kinds, as well as the ſhark, are its enemies. The liver is whitiſh, conſiſting of two lobes of unequal lengths; the ſpleen is triangular, lying under the ſtomach, which is long, thick, and has ſeveral appendages; the inteſtinal canal has three ſinuoſities, and is wide below. The air-bladder is long, and covered with a glutinous ſubſtance. The kidneys, roe, and ovary, are double, and the eggs are yellow. There are fifteen ribs on each ſide, and thirty-five vertebræ in all.

2. Gadus callarias, the torſk: ſpecific character, the upper jaw the longeſt, tail even, the lateral line broad and ſpotted. There are ſeven rays in the branchioſtege membrane, ſeventeen in the pectoral fins, ſix in the ventrals, eighteen in the firſt anal, ſeventeen in the ſecond, twenty-ſix in the tail, fourteen in the firſt dorſal, fifteen in the ſecond, eighteen in the third. The head is leſs than the haddock's; it is of a grey colour, on which appear ſome ſpots, brown in ſummer and black in winter; the mouth is large, the upper jaw longer than the lower, with ſeveral rows of teeth; from the lower hangs a barble, and it has but one row of teeth; the palate is alſo armed with teeth. The eyes are round; the pupil black, the iris of a yellowiſh white. The trunk is grey, ſpotted with brown as far as the belly, and covered with little, thin, ſoft, ſcales; the ſpots on the body in ſome of the young ones is a light red inclining to yellow. The lateral line is near the back, and bends downwards towards the firſt anal fin. The belly is thick, mingled with black and brown, in ſome reddiſh. The fins are white, ſometimes red: hence it has been called *varius*, or varying. This ſpecies is found in the Baltic and Northern Ocean; they will enter the rivers as far as the waters of the ocean are mingled with them. They are caught near Rugenwald in Pomerania all the year, but particularly in June; they are alſo caught in plenty about Travemund, Oehland, Gothland, Bornholm, Lubec, in Pruſſia, and in Livonia. In Greenland, the moſt favourable ſeaſons for this fiſhery are the ſpring and autumn; in winter, they make holes in the ice, and invite the fiſh by ſome glittering bait. Bloch ſays, that this is the tendereſt and beſt of all the genus, and may be eaten by weakly perſons without danger. They live on other fiſh, aquatic inſects, and worms: Fabricius found in its ſtomach the father-laſher, ſome crabs, and ſeveral ſea-worms. They ſeldom weigh more than two pounds; yet they have been taken about Rugenwald weighing ſeven or eight pounds, and even to fourteen; Schoneveldt ſpeaks of one four feet long. They ſpawn in January and February; the Icelanders ſalt and dry them, and give them the name of titteling. The interior conformation is the ſame as the preceding, except that the inteſtinal canal has but two ſinuoſities: there are eighteen ribs on each ſide, and the vertebræ are fifty-three in number.

3. Gadus morhua, the common cod-fiſh: the largeneſs of the ſcales, and a ſpine in the firſt anal fin, form the ſpecific character. There are ſeven rays in the membrane of the gills, ſixteen in the pectoral fins, ſix in the ventrals, ſeventeen in the firſt anal, ſixteen in the ſecond, thirty in the tail, fifteen in the firſt dorſal, nineteen in the ſecond, twenty-one in the third. The head, back, and ſides, are grey, with yellowiſh ſpots; when the young ones haunt a rocky bottom, their belly becomes reddiſh with yellow ſpots; but this colour paſſes off as they grow bigger, and quit thoſe deeps, and then they regain their natural colours. The mouth is large; the upper jaw protruded, and a little barble hangs from the lower. The pupil of the eye is black, the iris yellowiſh. The belly is white; the tail and dorſal fins are ſpotted with yellow, the ventrals and anals are grey, and the pectorals yellow, the rays are all ſoft and ramified. The anus is nearer to the head than to the tail.

This fiſh inhabits the ocean, and is found between the fortieth and ſixty-ſixth degree of north latitude; it is alſo found in higher latitudes, as in Greenland, but then they are not ſo good, nor ſo numerous. They are taken in vaſt

vaſt quantities at Newfoundland, Cape Breton, Nova Scotia, and on the coaſts of Norway and Iceland; alſo off the Dogger-bank, and about the Orcades. But their principal reſort for centuries paſt, has been on the banks of Newfoundland, and other ſand-banks off Cape Breton. That extenſive flat ſeems to be the broad top of a ſubaqueous mountain, every where ſurrounded with a deeper ſea. Hither the cod annually repair, in numbers beyond the power of calculation, to feed upon the worms that ſwarm upon the ſandy bottom. Here they are taken in ſuch quantities, that they ſupply all Europe with a conſiderable quantity of proviſion. The Engliſh have ſtages erected all along the ſhore, for ſalting and drying them; and the fiſhermen, who take them with the hook and line, draw them as faſt as they can throw out. This immenſe capture makes no ſenſible diminution of their numbers; for, after their food is conſumed in theſe parts, or when the ſeaſon of propagation approaches, they take their departure for the polar ſeas, where they depoſit their roes in full ſecurity, and repair the waſte which has been occaſioned by death, or the depredations of their enemies. They annually make their appearance on the coaſt of Iceland, Norway, and Britain, gradually diminiſhing in their numbers as they proceed to the ſouth, and ceaſing altogether before they advance to the ſtraits of Gibraltar. Before the diſcovery of Newfoundland, the greateſt fiſheries of the cod were on the coaſts of Iceland, and the weſtern iſles of Scotland, where the Engliſh reſorted in queſt of them, as early as the beginning of the fifteenth century. Our right of fiſhing in theſe parts, however, was not acknowledged by the government of Denmark till the reign of James I. whoſe marriage with a princeſs of that country ſecured to his ſubjects that indulgence, of which they availed themſelves ſo completely, that they had then a hundred and fifty ſhips employed in the Iceland fiſhery. Even on the banks of Newfoundland, the French, Spaniards, and Portugueſe, had originally a far larger portion of the fiſhing than the Britiſh: in 1570, the former nations had upwards of three hundred veſſels employed in that trade, when thoſe of the Engliſh did not exceed fifty. Matters, however, have ſince been reverſed; and the Engliſh ſhipping on that coaſt has immenſely increaſed; it is now ſuperior to that of any other nation, and the trade is deemed a valuable acceſſion to the wealth of individuals, as well as to the naval power of the empire: 20,000 Britiſh ſeamen are at preſent employed in this fiſhery. This immenſe fiſhery is conducted in a tract of the ſea agitated by a perpetual ſwell, and involved in continual darkneſs by means of a thick fog that conſtantly hangs over it. In the cod fiſh, the ſight is probably very imperfect; for almoſt every ſmall body that is agitated by the water attracts their rapacity, ſtones and pebbles not excepted, for theſe are often found in their ſtomachs. The general weight of the cod-fiſh on the Britiſh coaſts is from fourteen to forty pounds; ſome have indeed been caught near eighty, but thoſe of the middle ſize are moſt eſteemed for the table. Their time of ſpawning is from January to April, when they depoſit their eggs in rough rocky ground. After having been exonerated of a load containing frequently three millions of young, the parent recovers its plumpneſs ſooner than almoſt any other fiſh; and is caught in good condition during almoſt the whole ſummer. Schoneveldt remarks a kind appointment of Providence in the immenſe fecundity of this fiſh; and in that abundant ſupply which it affords to the inhabitants of thoſe bleak and frozen countries, that are unfit for the production of grain. The ichthyophagi of theſe barren regions, ſays he, not only furniſh themſelves with a ſubſtitute for bread, by drying this fiſh, but ſend a vaſt quantity of their ſurplus ſtores to add to the ſupply of other nations. The numbers and fertility of theſe fiſh, ſeem indeed amply to juſtify the grateful exultations of this writer; for they are ſuch as will for ever baffle all the efforts of man, and the voracity of the inhabitants of the ocean, to exterminate their race, at leaſt while they are caught only with hook and line. Leeuenhoek reckons the number of eggs in a middle-ſize cod to be 9,344,000; Brindley reckons them at four millions only; but even that is ſufficient to ſupply all that can be deſtroyed by fiſhery, if we conſider what quantities ſpawn every year.

The cod generally haunts deep places in the open ſea, coming on the banks and ſhores in ſpawning-time; they eat crabs, whelks, herrings, and other fiſh, and are ſo greedy that they do not ſpare even their own young; like birds of prey, they have the faculty of caſting up what they cannot digeſt; but, according to Anderſon, their digeſtive powers are ſo ſtrong, that the fiſhermen of Heligoland have found the haddocks which were thrown out for baits completely digeſted in their ſtomachs in ſix hours. The ſpawning-time differs with theſe, as in other fiſh, according to age, the various degrees of cold in the bottom of the water, the nature of the air, and the temperature of the ſeaſons. July 17, 1801, Mr. Norris, cooper, of Portſmouth, hawling his ſeine-net near South-ſea-caſtle, caught a very fine cod, which weighed fifty-five pounds and three quarters. This fiſhery laſts almoſts all the year in Norway, England, and America; but the period in which the greateſt quantities are taken on the coaſts of Norway and Iceland is from February till the end of March or the middle of April; in America, the moſt conſiderable fiſhery is in May and June; in July theſe fiſh diſappear, but come again in September; but, as the waters of that country are then covered with ice, the fiſhery is not to be depended upon by Europeans at that ſeaſon. In the north, the cod-fiſhery draws together four or five thouſand men, Normans, Danes, Swedes, Hamburghers, Dutch, and French; but the Dutch are thoſe who derive the greateſt advantage from it, as they prepare and barrel up the fiſh with moſt care and ſkill; but, as they are forbidden, as well as other nations, to dry their fiſh in the country, they ſalt the greater part, hanging ſome few on poles, on-board their veſſels, to dry.

The mode of preparing the cod-fiſh for preſervation conſiſts partly in drying it in the air, partly in ſalting it, or in both. The firſt makes what is called in the north *ſtockfiſch*, or dried cod; the ſecond, *laberdan*, ſalted or green cod; a third preparation is called *klippfiſch*, (rock-fiſh,) white cod. The Icelanders, who get almoſt their whole food from this fiſh, take the greateſt pains to prevent want by preſerving it when it is plenty; they dry it, giving it then the general name of *ſtockfiſh*; but there are two preparations, one called *ſtackfiſch*, ſplit-cod, and the other *hængefiſch*. They are prepared in the following manner: when the men have landed their cargo, the women cut off the heads of the fiſh, open the belly, draw out the entrails, then ſplit the back within-ſide, and take out the back-bone except the three laſt vertebræ; then they boil the heads and eat them freſh, and the men take the gills for bait. They dry the bones, which ſerve to make fires, or as food for their cattle; and they make oil from the livers. The fiſh thus cut up, they ſpread them on the rocks till the wind has thoroughly dried them, which is generally in three weeks or a month; but, if a ſharp wind blows from the north, this is generally accompliſhed in three or four days. Where there are no rocks, and the ſoil is ſandy, they make a bed of ſtones laid cloſe together, turning the fiſh downwards upon them, that the inſide may be kept from the rain, which would ſpoil it; there they ſuffer them to lie in heaps till they find occaſion to ſell them.—The *hænge-fiſch* is prepared nearly in the ſame manner; but with this difference, that the back is cut from without, and ſplit entirely through, and that a hole is made to paſs the poles through on which they are hung on ſtages of ſtone; as theſe ſtones are only laid one upon another without any cement, the air has a free paſſage; and the whole is covered with boards or graſs to keep out the wet.

The curing of this fiſh is different among the Norwegians from what it is with the Icelanders, as they uſe ſalt.

When

When the heads are cut off and the fish cleaned out, they are put into a large tub with a quantity of French salt; and a week after they put them in heaps on a kind of grating to let the blood and brine run off; after this, they rub them with Spanish salt; then pack them up tight in casks, for sale, under the name of *laberdan*; when only dried on the rocks, they call them *klippfische*; they split the large ones that the salt may penetrate better, but the small ones have only the belly opened: the latter are called *round fish*, the former *flat-fish*; when dried on poles, they call them *rothfisch*. All these sorts are carried to Bergen, and thence transported to all parts of Europe. The heads are eaten, but where forage is scarce they are given to cattle. The inhabitants of the north dry the heads on the shore, and give them to their cattle mixed with sea-weed; cows fed in this manner we are assured give much more milk than when straw or hay is given them.

As the air-bladder of this fish is very glutinous, the Icelanders prepare from it an isinglass not much inferior to that of Russia. The following is the mode they pursue: they leave the back bones in lumps with the air-bladders attached to them till they are ready to rot; then they lay them on a block, and beat the vertebræ till the bladders are loosened, as well as the ligaments by which they were fastened, and which are called pockets; they now cut away the bladders, and place them on a table or block, on which is nailed a rough brush intended to clean them; with a jagged knife they scratch the outer skin off the bladders and ligaments. The bladders being thus cleaned, they are soaked for a time in lime-water, to take off all the fat which may yet adhere to them; then they rince them in clear water, afterwards dry them, and then they may be used as isinglass. At Newfoundland they have attempted the same thing; but, as they have neither time nor room for all these processes, they salt the air-bladders, and keep them for use; or else eat them; when wanted for the purpose of making isinglass, they must be soaked in water to take away the salt. The thickest bladders are best for the purpose, though the isinglass will not be quite so clear as that made from thin ones. The Norwegians eat the air-bladders fresh; or they salt them for sale: they call them *sunde-mauer*, or stomachic, believing them to be good for the stomach: hence the English name *sounds* or *zounds*. At Newfoundland they make the tongues also turn to advantage: they eat them either fresh or salted, and count them a delicacy. The Norwegians, Icelanders, &c. make oil from the liver; for, when it attains a certain degree of corruption, the oily parts will run out of themselves by degrees; and this oil is preferable to whale-oil, because it keeps leather a longer time moist, and when used for light it makes less smoke. The ova or eggs also are preserved with care; they are salted, put into small casks, and sold to the Dutch and French, for the French and Spaniards use them as a bait for catching the anchovy; they export annually from Bergen at least twenty thousand barrels of these eggs; each barrel sells for about 7s. sterling.

We have spoken generally of this fishery, as it regards Great Britain; but it is time to enter more particularly into the history of this considerable commerce. The vessels which go to Norway and Newfoundland commonly set out in March, some sooner, some later, according to the distance they have to go; and return about the end of September. As soon as they arrive, they make a gallery on-board each vessel from the main-mast to the poop, and sometimes from one end of the vessel to the other; this outer gallery is furnished with casks, staved at one end, in which the sailors or fishermen place themselves as a protection from the cold, and their heads are covered with a shelter which is fastened to the cask. As soon as a man takes a fish from the hook, he cuts out the tongue; then he gives it to a boy, who carries it to the *cleaner*; he cuts off the head, takes out the liver and entrails, and then drops it through a hole in the double deck, where the *preparer* gets it, and, having taken out the back-bone, drops it through another hole, into the place where they salt it and lay it in heaps; the *salter* takes care to have salt enough between the layers or beds, that the fish may not shake and rub; but he must not put too much; and on this the skill or nicety of curing them depends, for too much or too little salt hurts the fish, and lessens the price it will fetch.

Though this fishery be very considerable in the north of Europe, it is not to be compared to what is carried on in North America, particularly on the banks of Newfoundland, as hinted in the early part of this article. We may suppose, that the Newfoundland fishery is not now so considerable for the English as it was before the rupture with the American colonies, as they now share it with us, and the fishermen of Boston only take annually in Massachusetts-bay more than fifty thousand quintals of cod-fish; and a certain space in North America has also been ceded to the French for the like purpose. The fishery, however, was very plentiful for Great Britain in 1785, when two hundred and twenty vessels were employed; and Pennant assures us, in his Arctic Zoology, that such a quantity of the cheven or chub-fish are caught by us off the Dogger-bank and the Well-bank, as may make us amends for the diminution of the fishery at Newfoundland.

The French carry on the Newfoundland fishery to a pretty considerable extent. In 1768, they sent one hundred and fourteen vessels, carrying in the whole 15,590 tons; each vessel brought away on an average 6000 fish; so that the fishery of that year amounted to 24,066,000 fish, or 192,528 quintals, which may be reckoned to have produced in France 3,174,305 livres, near 150,000l. sterling: these fish would produce also near 2000 tons of oil, which would be 231,000 livres, near 10,000l. sterling, more. And as the French fish in other places also, it may be guessed what a profitable thing this fishery must be to the French government; yet all they caught could not supply that kingdom during Lent, and they constantly bought great quantities from the Dutch. According to Anderson, the first vessel sent by the French to Newfoundland was in 1537; and in 1578 they sent a considerable number. Before the last war, France employed, according to a late writer, more than three hundred vessels in this fishery. Part of these go to Newfoundland, where they dry the fish they have caught; others fish on the great bank, and thence carry salted fish; another part carry goods to St. Pierre's and Miquelon, and barter them for dried fish; the first sort of vessels have from sixty to ninety men as their complement, and the value of one of them with her cargo is estimated at 70,000 livres; those which fish on the great bank carry but fifteen men, and are estimated at 25,000 livres value; the last, which are for barter, carry from fifteen to twenty men, and their average worth is about 50,000 livres. The total number of vessels in 1786 was 330, of seamen 11,315. In a work published at Paris in 1791, the produce of the French cod-fishery at Newfoundland, is stated to have increased from six to sixteen millions within the last twenty years.

According to Frazier, the cod appears in great numbers at Chili in the month of November. Admiral Anson says they are prodigiously large; and, from the testimony of some of his people who had been at Newfoundland, asserts that they are as plenty there as at Newfoundland itself. The abbé Molina asserts, that the cod-fishery is so plentiful on the coasts of Gio Fernandez, that the same thing may be observed of it as we have remarked at Newfoundland, viz. that fish are drawn as fast as the lines are thrown in. The cod appears also on the coasts of Valparaiso in the months of October, November, and December; but only in stormy weather; and these people, who formerly set no value on the cod-fish, have within these few years applied themselves to this lucrative branch of trade, and now annually dry a great num-

M.E. Bloch del.

J. Pass sculp.

1. The Cod. 2. The Pollack.

London. Published as the Act directs. July 20. 1805 by J. Wilkes.

ber of theſe fiſh; a Frenchman of the name of Luiſon firſt ſet them the example in their own country.

The cod is not tenacious of life; it dies ſoon after it is taken out of the ſea, or even if put into freſh water. As they are excellent when eaten freſh, the Dutch fiſhermen endeavour, by means of perforated tubs, to convey them alive to the ſea-ports; but the Engliſh prick the air-bladder with a pin, which obliges them to remain at the bottom of the veſſel they are put in, and thus preſerves them longer alive. The ſtomach is large; and at the origin of the inteſtinal canal there are ſix appendages divided into ſeveral branches. The liver is of a pale red, and conſiſts of three lobes; the ſpleen is blackiſh, and long; the kidneys are at the back-bone, along the ventral cavity, ending in a long bladder; the ſeed-veſſel and ovary are double. See Plate I. fig. 1.

There is a variety of the cod found about the Iſle of Man, between England and Ireland, which is called *red cod* or *rock-cod*. It is of a vermilion colour, and much eſteemed. Cepede conſiders it as a diſtinct ſpecies.

4. Gadus luſcus, the bib: ſpecific character, the firſt ray of each ventral fin terminating in a long filament or briſtle. The firſt dorſal fin has thirteen rays, the ſecond twenty-three, the third ten; the pectorals eleven, the ventrals ſix; the firſt anal thirty-one, the ſecond eighteen, the tail-fin ſeventeen. The mouth is ſmall, the upper jaw ſomewhat the longeſt; a ſingle barble hangs from the corner. The ſecond dorſal fin is very long; the anus is nearer to the head than to the tail; the tail-fin is forked, and equally divided. This ſpecies is found in the European ocean; it ſeldom exceeds a foot in length. The ſcales are very firmly fixed to the ſkin, and are larger in proportion than even thoſe of the common cod. The upper ſurface is yellowiſh, or olive-colour; the under part ſilvery. It is delicate eating. The eyes are veiled by a membrane, like the reſt of the genus; but ſome have ſuppoſed in this ſpecies a peculiar power of inflating this membrane ſo as to cover entirely one or both organs of ſight; hence the trivial name *luſcus*, or blind with one eye; though probably this appearance was only an accidental circumſtance in the ſingle individual examined.

5. Gadus barbatus, the whiting-pout: ſpecific character, the breadth of the body equal to one-third of its length, indentions on each ſide of the lower jaw. There are ſix rays in the membrane of the gills, eighteen in the pectoral fins, ſix in the ventrals, twenty-five in the firſt anal, ſeventeen in the ſecond, thirty in the tail, thirteen in the firſt dorſal, nineteen in the ſecond, eighteen in the third. The head is ſmall; the mouth large; the upper jaw projects, and both jaws are armed with ſmall teeth; there are two bones in the gullet as rough as a file; in front of the lower jaw is a barble, and ſix or ſeven little holes on each ſide. The lips are ſtrong, made up of ſeveral cartilages united by a common membrane, which the fiſh can draw back or protrude at will; the tongue is ſhort, thick, and rough at the hinder part; the noſtrils are double, and placed near the eyes; the eyes are large, jutting out, and provided with a membrane; pupil black, iris ſilvery; but this muſt vary in ſome ſubjects, for Duhamel ſays the iris is lemon-colour. The gill-covert is compoſed of ſeveral laminæ; the aperture is large, and the membrane only viſible in part. This fiſh has ſmall ſcales which adhere very ſtrongly to the ſkin. The lateral line, which begins at the back of the head, is black; it forms a bend towards the belly at the extremity of the ſecond dorſal fin, and is loſt in the tail. The back is of a greeniſh brown, round, and fleſhy; the belly ſhort, and white; the ſides white inclining to red; the anus is not far from the head. Of the three dorſal fins, the firſt is ſhort, high, and ſhaped like a ſcythe. There is a black ſpot in the middle of the pectoral fin, which Fabricius, however, did not remark in thoſe he ſaw in Greenland. The fins have all ſoft rays united by a thick membrane; they are olive-colour, except the tail, which is red; and moſt of the fins are black at the extremities.

This ſpecies is known in many countries of the Northern Ocean. Gronovius found it in Holland, Rutty in Ireland, Willughby in England, Leem in Lapland, Otho Fabricius in Greenland, Duhamel in the north of France. At Croiſic in Brittany they remain moſt of the year in the open ſea, only approaching the rocky ſhores in Auguſt to caſt their ſpawn. In Greenland they ſpawn in February and March, laying their eggs in ſunny places; the young appear in June, and may then be ſeen in numbers near the ſhore. Their length is from fifteen to eighteen inches, and their weight about three pounds; with us they ſeldom grow more than a foot long, and are very plentiful. Duhamel ſays, that in the ſeaſon they catch them about Breſt from one hundred to one hundred and fifty at a haul. This is alſo of the voracious tribe, feeding particularly on the blenny ſpecies; but, for want of better fare, it will feed on crabs. Its fleſh is white and ſoft, but ſoon taints; from October to January is the ſeaſon, yet in France they are lean and dry even at that time, and conſequently little eſteemed; but with us they are fat, and reckoned good food; the Greenlanders eat them either freſh or dried, and do not like them the worſe for being a little tainted; they take out the eggs of the dried ones, and dreſs them for food; they alſo prepare the liver in a peculiar manner.

6. Gadus minutus, the poor: this ſpecies, which is never more than ſeven or eight inches long, is diſtinguiſhed by the belly being black within, and the anus midway between head and tail. There are ſeven rays in the membrane of the gills, fourteen in the pectoral fins, ſix in the ventrals, twenty-five in the firſt anal, ſeventeen in the ſecond, eighteen in the tail, twelve in the firſt dorſal, nineteen in the ſecond, twenty in the third. The body is long, the head wedge-ſhaped; the upper jaw is the longeſt, and has more rows of ſharp teeth than the lower; the lower jaw has a barble alſo, and ſeveral ſmall dents. The eyes are round, with a black pupil and a ſilvery iris, and are covered with a membrane. The cheeks, the ſides, and the belly, are ſilver-colour, ſtudded with black dots; the back is dark yellow; the lateral line is narrow and ſtraight, and the anus is in the middle of the body. The ſcales are thin, very ſmall, and eaſily rub off. This ſpecies is found in the Baltic and North Seas, and in the Mediterranean. It is the ſmalleſt of the cod kind yet diſcovered; and it is the only one found in the Mediterranean. It is taken near Marſeilles, and in ſuch quantities as ſometimes to prove a nuiſance. It is unfit either for being dried or ſalted; if the firſt is attempted, it grows as hard as a horn. When it appears in the Baltic, the fiſhermen rejoice, becauſe it announces a plentiful fiſhery of cod and haddock; and they call it the *leader*, becauſe, being ſmall and going in ſhoals, the larger ſpecies follow them with rapacity, and thus become the prey of more rapacious man. This ſpecies haunts deep places, living on young fry, ſhell-fiſh, ſnails, crabs, and ſea-worms. They come into ſmooth places to ſpawn, depoſiting their ova between ſtones and on aquatic plants. It is well-taſted when freſh; and is caught with a ground-line and in nets.

7. Gadus blennioides, the blenny-gadus: ſpecific character, the firſt ray of each ventral fin long, and divided in two. The membrane of the gills has ſix rays; the firſt dorſal fin ten or eleven, the ſecond ſeventeen, the third ſixteen; the ventrals five, the pectorals nineteen; the firſt anal twenty-ſeven, the ſecond nineteen; and the tail-fin twenty-ſeven. The head is thick, of a conical ſhape, with a blunt ſnout; the lips are double and fleſhy; the teeth are ſmall and uneven, eſpecially thoſe of the upper jaw; the tongue is pointed, fleſhy, and prominent; the palate is furrowed longitudinally within. The eyes are large, with a ſilvery iris. The gill-coverts are ſoft. The firſt dorſal fin is narrow, and of a triangular ſhape; the ſecond lower; the third ſomewhat higher, but ſhorter. The firſt anal fin is rounded, the other triangular; the pectorals are narrow, ſickle-ſhaped, and thin; the tail is bifurcated. The firſt ray of each ventral being divided,

and being alſo much longer than the reſt, occaſion at firſt ſight an appearance of only two rays to this fin; hence the trivial name of *blennioides*, becauſe the blennies in general have but two rays in the ventral or jugular fins. This ſpecies haunts the Mediterranean; grows to about a foot in length; it is not much in requeſt for food. Pallas firſt deſcribed it; it is ſometimes miſtaken for the whiting, which it much reſembles. The ſcales are ſmall; it is moſtly of a ſilvery colour, with ſome gold-yellow tints on the fins.

8. Gadus ſaida, the ſaida: ſpecific character, the lower jaw rather longeſt, the ſecond ray of each ventral fin ending in a long filament. The firſt dorſal fin has ten or eleven rays, the ſecond ſixteen or ſeventeen, the third twenty; each ventral five or ſix, each pectoral ſixteen; the firſt anal eighteen, the ſecond twenty; the tail twenty-four or twenty-ſix. This ſpecies was firſt made known by Lepechin. The jaws are armed with ſharp hook teeth; there are two rows in the palate, and two lenticular bones with ſmall teeth in the throat. The opercula, or gill-coverts, conſiſt each of three pieces; the firſt triangular, and furniſhed with two ſpines; the ſecond elliptic, the third ſemilunar. The lateral line is ſtraight, and near the back. The dorſal and anal fins are triangular: the fourth ray of the third dorſal, the fifth of the firſt anal, and ſecond of the ventrals, end in a long briſtle. The upper ſurface is of a dark colour with irregular black ſpots, which are diſtributed alſo on the ſilvery gill-coverts; the ſides are bluiſh; the under parts white; the top of the head quite black. This ſpecies ſeldom exceeds a foot in length; it is uſed as food, but not greatly eſteemed. It is found in the White Sea, in the north of Europe.

II. *Three dorſal fins; no barbles at the mouth.* 9. Gadus virens, the green gadus: ſpecific character, the back is green, the tail forked, the jaws of equal length. The firſt dorſal fin has thirteen rays, the ſecond twenty, the third nineteen; the pectorals ſeventeen, the ventrals ſix; the firſt anal twenty-four, the ſecond twenty, the tail-fin forty. This ſpecies reſembles the pollack, and has been often miſtaken for it; but beſides the equal length of the jaws, the lateral line being ſtraight, and the green colour of the upper ſurface, ſufficiently diſtinguiſh them. Theſe fiſh are very plentiful on the coaſt of Norway, and form a pretty conſiderable branch of commerce; ſo that they have five different names for them according to their age. In that country they are ſaid to be five inches and a half long at a year old, ſeventeen inches at three years, and twenty-eight inches at four years.

10. Gadus merlangus, the whiting: the ſilvery hue which pervades the whole body of this fiſh, (whence the name,) and the protruſion of the upper jaw, form the ſpecific character. There are ſeven rays in the membrane of the gills, twenty in the pectoral fin, ſix in the ventral, thirty in the firſt anal, twenty in the ſecond, thirty-one in the tail, ſixteen in the firſt dorſal, eighteen in the ſecond, and nineteen in the third. The body is long, covered with ſmall, round, thin, ſilvery, ſcales. The head ends in a point; the eyes, near which are the noſtrils, are round, with a large black pupil, and ſilvery iris. The upper jaw is armed with ſeveral rows of teeth, of which thoſe in front are the longeſt; the lower jaw has but one row; in front of the palate, on each ſide, is a large triangular bone; in the throat there are two round bones below, and above two long rugged bones; on each ſide of the lower jaw there are nine or ten little dents. The back is olive colour, and arched, as is the belly. The ſides are ſomewhat compreſſed, and the anus is nearer the head than the tail. The lateral line has a ſtraight direction; and there is a black ſpot at the origin of the pectoral fins. The fins are white, except the pectorals and tail, which are blackiſh. This fiſh is found in the Baltic and North Seas, though not numerous in the former; but they are plentiful on the coaſts of Holland, France, and England, where they are reckoned the moſt delicate and wholeſome ſpecies of the genus. They attain the length of a foot, ſometimes one and a half, rarely two; but on the Dogger-bank they are caught of the weight of from four to eight pounds. They live at the bottom of the ſea, feeding on little crabs, worms, and young fry, particularly of ſprats and herrings; which therefore are the uſual bait. They are caught uſually with a ground-line, ſixty-four fathoms long, with from a hundred to two hundred hooks. One veſſel throws out about twenty of theſe lines, armed with 4000 hooks, and they need only lie about two or three hours. The greateſt fiſhery for whiting is carried on in France from December to February; but in England and Holland in the ſpring. They appear in ſuch quantities on our coaſts, as to form ſhoals of three miles long and a mile and a half wide; and, as they are caught in too great numbers to be eaten freſh, they ſalt them, by which however they loſe the delicacy of their taſte, and are then called *buckthorn*; they are often uſed in this ſtate as ſhips' ſtores. As they purſue the herrings, they are often taken in the ſame nets; and are in greateſt perfection at this time, becauſe they are fattened by feeding on the young herrings. In October the roes and ovaries begin to ſwell; and they continue ſpawning from the end of December till the beginning of February; and about that time they become ſoft, lean, and inſipid to the taſte. They are purſued by the rapacious animals which inhabit the ſea; yet they multiply faſt.

There are ſeveral varieties of the whiting, ſome perhaps ariſing from the ſeaſon and the nature of the places they frequent, but others abſolutely in ſhape and colour. Citizen Noel has the following obſervations on the whitings caught in the department of the Lower Seine. "Nov. 1798. There is a great difference between the whitings caught about Yport, Dalles, and Fecamp, and thoſe from about Ailly to Treport, and beyond. The firſt are ſhorter, their bellies broader, and the lateral line is ſlightly curved inſtead of being ſtraight; the head and tail of a darker colour inclining to brown; the fleſh is more firm, better taſted, and conſequently much ſought after." Theſe differences in colour, &c. Noel attributes to the nature of the ſoil or bottom they haunt, and of the food they conſequently meet: about Yport and Fecamp, is moſtly a rocky bottom; but gravel or clay at Ailly, Dieppe, and Treport. He is of opinion that the whitings will be ſmaller but more delicate food in ſhallows near the ſhores, than in ſtony places far diſtant from the land.

11. Gadus carbonarius, the coal-fiſh: the mouth black, the lateral line white and ſtraight, form the ſpecific character. There are ſeven rays in the membrane of the gills, twenty-one in the pectoral fins, ſix in the ventrals, twenty-five in the firſt anal, twenty in the ſecond, twenty-ſix in the tail, fourteen in the firſt dorſal, nineteen in the ſecond, twenty in the third. The head is narrow. At the gill-coverts and the belly, a ſilvery hue ariſes from the black ground, and the belly is, as it were, encompaſſed with a ſtring of black dots; the reſt of the body and the head are of a ſhining black, whence the name in Engliſh and German. This colour, however, is conſtant only in the old ones; for when young they are olive or brown; which inclines to black as they grow older, and grows darker and darker: and hence they have different names according to their age in ſome parts of England. The mouth is ſmall; and the jaws, which are armed with teeth, end in a point; the lower is the longeſt; the tongue is a bright ſilver colour. The irides of the eyes are white, with a black ſpot on each ſide. This fiſh is furniſhed with thin ſcales, round and lozenge-ſhaped. Under the pectoral fins is a ſpot of the deepeſt black; and the anus is nearer to the head than to the tail. This ſpecies inhabits the Baltic and North Seas; they alſo frequent the rocky and deep coaſts all round this iſland, but are found in greateſt plenty in the vicinity of the Orkneys, where their fry conſtitutes a great part of the ſupport of the poor. The young begin to appear on the coaſt of Yorkſhire, in the month of July, in numbers that defy all computation: they are at that period only an inch and

a half long; in Auguſt they are from three to five inches, and are taken in vaſt quantities with the angling rod; they are then reckoned a very delicate diſh, but afterwards grow ſo coarſe, that, by the time they are a year old, few people eat them. They are ſold either freſh, or when ſalted, in the counties of York and Northumberland, at an inferior price to the other ſpecies of cod. The ſpecies in ſome counties grows to the length of two feet and a half, and the breadth of four or five inches, weighing thirty pounds and upwards. The ova are of the ſize of millet; and, by preſſing the belly never ſo little, they ooze out at the navel. The Icelanders, who have whiting in plenty, deſpiſe this ſpecies; in Norway the poor people eat them and make oil of the liver. They are caught all the year round; but particularly in ſummer, when in purſuit of the ſprat, which is therefore the beſt bait to catch them with; another bait is a bit of eel-ſkin. This ſpecies is ſalted and dried in the ſame manner as the common cod; and in that ſtate can hardly be diſtinguiſhed from it. The interior conformation is the ſame as the whiting.

12. Gadus pollachius, the pollack: ſpecific character, the lower jaw longer than the upper, the lateral line bent. There are ſeven rays in the membrane of the gills, nineteen in the pectoral fins, ſix in the ventrals, eighteen in the firſt anal, nineteen in the ſecond, forty-two in the tail, thirteen in the firſt dorſal, eighteen in the ſecond, nineteen in the third. See Plate I. fig. 2. The tail (not the fin) ends in a ſharp point, and is brown, as well as the back; the under jaw is the longer; and both jaws are armed with teeth, as in the preceding ſpecies; the tongue is ſhort, pointed, and rough towards the back part. The pupil of the eye is black, the iris yellow with numberleſs black dots. The ſcales are thin, oblong, and edged with yellow. The dark colour of the back is loſt by degrees in the white of the ſides, which are ſtudded with brown dots, as well as the belly, the ground colour of which is ſilvery. The pectoral fins are yellowiſh and ſmall; the ventrals orange-colour; the anals olive with black dots. This is alſo found in the Baltic and the Northern Ocean; lying in deep holes in the rocks, and places where the ſea is moſt agitated; a few are caught in the Baltic near Lubec, and in the North Sea; but in Norway and England they are very common, and arrive in ſummer in great ſhoals. They often riſe to the ſurface of the water, and even jump above it in divers poſitions, catching any thing that floats on the ſurface; at this time they are caught with a line and hook baited with a gooſe's feather. They grow a foot and a half long, weighing two or three pounds; but they have been caught three feet in length, and eight or ten inches wide. As food, they are white, firm, and better taſted than the coal-fiſh, though inferior to the torſk and the whiting. They feed on young fry, particularly the ſand-launce, which has been found in the ſtomach. The liver is of a pale red colour, in three lobes.

III. *Two dorſal fins.* 13. Gadus merlucius, the hake: ſpecific character, the lower jaw the longeſt, and no barbles at the mouth. The membrane of the gills is ſupported by ſeven rays, the pectoral fins, by twelve, the ventrals by ſeven, the anal by thirty-ſeven, the tail by twenty, the firſt dorſal by ten, the ſecond by thirty-nine. This ſpecies grows from one and a half to two feet in length, and is of a more ſlender ſhape than the common cod. Its form ſomewhat reſembles that of the pike; whence it is called the *ſea-pike* by the French and Italians. The mouth is large, and furniſhed with a mixture of ſhort and long teeth; and the palate, as is common to the fiſhes of this genus, is beſet with ſharp ſpines or teeth. The lateral line runs near the back, from five to ten pimples or warts appear on the part of it neareſt the head. It is white above, light grey underneath; theſe colours being ſimilar to thoſe of the aſs, it has been called *ονος* by Ariſtotle and many other writers; and the word *aſellus*, or young aſs, has been aſſumed as a generic term for many of the ſpecies. The hake is found in abundance on many of our coaſts, particularly thoſe of Ireland, where there was formerly a ſtated fiſhery on the Nymph Bank off Waterford; immenſe quantities were caught there at the two ſeaſons of their periodical appearance, June and September, when ſix men with hooks and lines frequently killed a thouſand fiſh in one night; the produce of this fiſhery was ſalted up and exported to Bilboa in Spain; it has, however, been for many years upon the decline, owing to the fiſh deſerting their wonted ſtation. This dereliction of their accuſtomed haunts, is not peculiar to the fiſhes of this ſpecies; the haddock has in the ſame manner abandoned the coaſts of Waterford, and the herrings and the baſking ſharks have diſplayed the ſame caprice, in relinquiſhing their ſtations on ſeveral parts of the Britiſh ſhores. Naturaliſts have not yet given any plauſible account of this irregularity in the migration of fiſhes. In ſome inſtances it may be occaſioned by the cloſe purſuit of an unuſual number of predatory fiſh, to avoid whoſe voracity they may be driven upon ſhores that they were formerly unaccuſtomed to frequent; a deficiency of the ſmaller fiſh, that ſupplied them, may, in other inſtances, have forced them to abandon a reſidence where they could no longer be ſupported: but the pernicious cuſtom of trawling is perhaps the moſt common cauſe of their abandoning the uſual ſtations, becauſe, by that means, not only a great part of their ſpawn is demoliſhed, which was lodged in the ſand, but the worms and inſects which conſtituted their food, are either deſtroyed by it, or driven into deeper water.

14. Gadus molva, the ling: ſpecific character, the upper jaw protruded, barbles from the lower. There are ſeven rays in the membrane of the gills, nineteen in the pectoral fin, ſix in the ventral, fifty-nine in the anal, thirty-eight in the tail, fifteen in the firſt dorſal, ſixty-three in the ſecond. The ling is the narroweſt and longeſt of the genus, whence its name in ſeveral languages. The head is large, flattened above and below, and ending in a blunt point; it is of a brown colour, as is alſo the back. The eyes are oblong, the pupil black, iris white with a ſpot of faint yellow. The mouth is large; the tongue white, thin, and ſharp pointed. The body is narrow, long, and round; yellowiſh on the ſides, and of a dirty white on the belly; the lateral line is ſtraight. The anus is ſomewhat nearer to the head than to the tail. The ſcales are oblong, and ſtrongly fixed in the ſkin. The pectoral and dorſal fins are dark grey; towards the extremity of the dorſals there is a black ſpot, and alſo on the anal, which fin is otherwiſe grey; all the fins are edged with white; the fin of the tail is black.

The ling inhabits particularly in the North Sea; and is taken often about Heligoland at the mouth of the Elbe; they are from four to ſeven feet in length. This fiſh abounds more or leſs upon the coaſts all round the Britiſh iſles; it is, however, moſt frequent near the Scilly iſles, and thoſe on the weſt of Scotland and Ireland, where it has long formed a conſiderable branch of commerce, regulations being framed concerning it ſo early as the reign of Edward III. The fiſh is in perfection from the beginning of February till May; in June they depoſit their ſpawn in the ſoft muddy bottoms near the mouths of rivers; about this time the males ſeparate from the females, many of the former being caught by fiſhermen without a ſingle individual of the latter. When the ling is in ſeaſon, its liver is white, and abounds with an oil of an excellent quality and flavour; but, as ſoon as the fiſh becomes out of ſeaſon, the liver gradually aſſumes a red colour, reſembling that of an ox, and it then produces no oil: the ſame change of colour of the liver is obſervable in cod, and ſeveral other fiſhes, but not in a degree ſo remarkable. It would ſeem, that this oil, which is lodged in the cellular membranes of fiſhes, returns into their blood, and ſupports them during the period of procreation; a ſeaſon in which they purſue the work of generation with ſo much eagerneſs, that they neglect

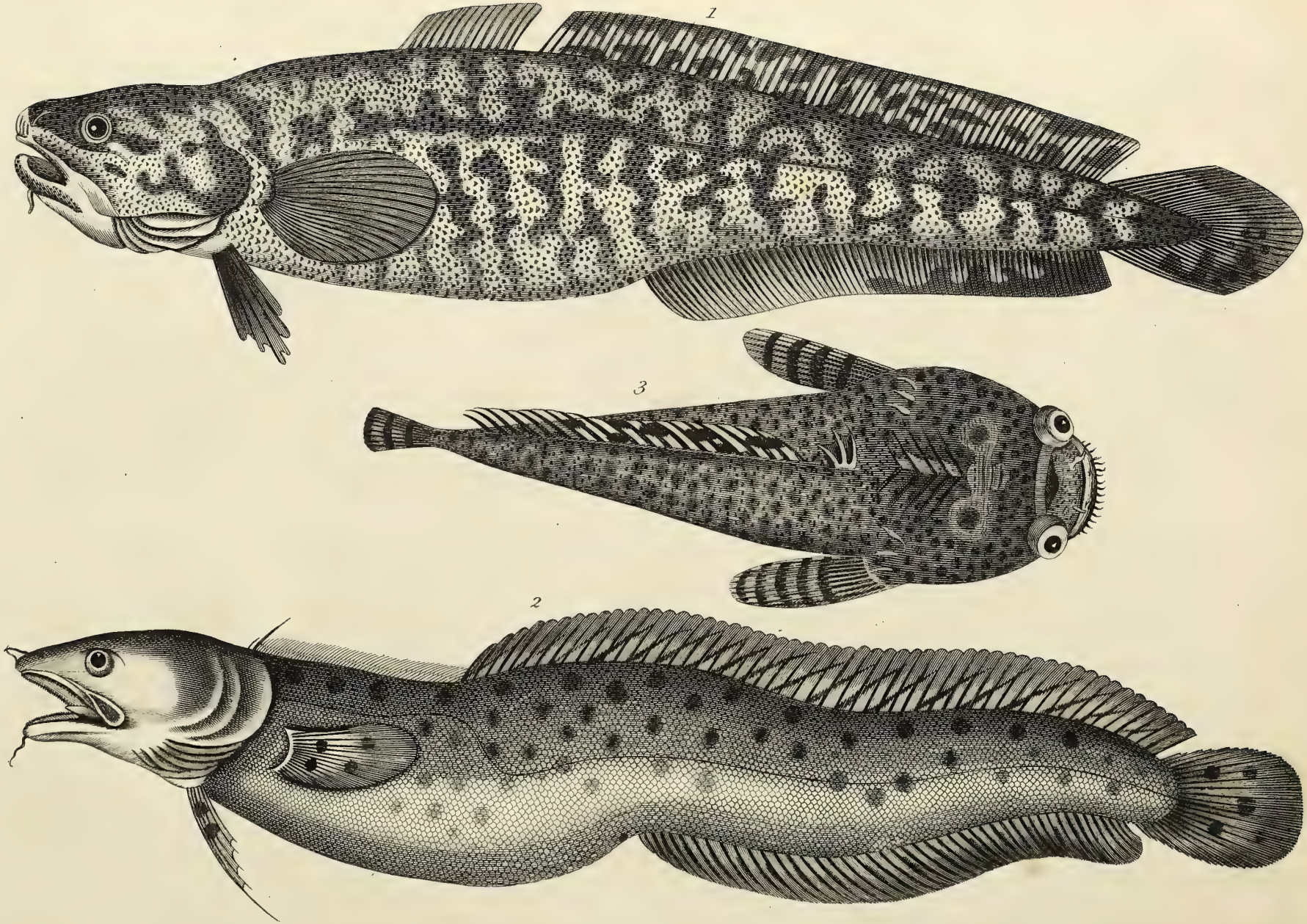
neglect their food. As the oil of this ſpecies can only be obtained while the animal is in ſeaſon, ſo it can be extracted from the liver only by a ſlow fire; if a violent heat be applied in melting it, a very ſmall quantity will be had from the fiſh, even in its greateſt perfection. Such fiſh as are cured for exportation, muſt meaſure a certain length from the ſhoulder to the tail, otherwiſe they are not entitled to the bounty which parliament has granted for the encouragement of this trade; twenty-ſix inches is the length of a ſizeable fiſh; thoſe of inferior dimenſions are called *drizzles*; and, becauſe incapable of procreation, they continue in ſeaſon during the whole ſummer. Next to the herring and the cod, this fiſh, on account of its rapid increaſe, is the moſt important article of commerce for ſeveral nations. In England, great quantities are ſalted for home conſumption as well as for exportation; they are prepared like the cod, but keep better in long voyages. From Norway they export annually 90,000lbs. weight of them; the ſpring is the time for the fiſhery in that country, and the beſt places are the ſand-banks near Storregen; the little bubbles which riſe to the ſurface of the water point out the ſpot where the fiſh are to be found, which is moſtly in deep places, where they feed on craw-fiſh, crabs, and ſmall fiſh; gurnards have been found in the ſtomach, and even half-digeſted plaiſe. This ſpecies is found alſo at Spitzbergen and Newfoundland, but of an inferior quality; likewiſe in Greenland and Lapland; thoſe of Iceland are ſo bad, that the inhabitants are obliged to eat them, becauſe they cannot ſell them. The beſt ſort are taken up in great plenty in the month of Auguſt near Hittland, where they dry them in the ſame manner as the common cod; they are taken with a ground line ſixty fathoms long, baited with herrings and other fiſh. Eaten freſh, they are very good food, when in ſeaſon, which is from February till May, and are even preferable to the cod.

15. Gadus albidus, the black-and-white gadus: ſpecific character, a barble from the chin, the ventral fins two long divided rays. There are ſeven rays in the membrane of the gills, ten in the firſt dorſal fin, fifty-ſix in the ſecond, eleven in each pectoral, two in each ventral, fifty-three in the anal, and ſixteen in the tail. We have already deſcribed a ſpecies, the *blennioides*, with didactylous rays in the ventral fins, ſimilar to the blenny; but the preſent, with a ſimilar appearance, belongs to a different diviſion, having but two dorſal fins and one anal. This, however, has the ſame haunts, the Mediterranean ſea; it is not more than four inches long, of an oblong ſhape, ſlippery, and ſlightly compreſſed. The head is of a pale red colour, flat at top, compreſſed at the ſides; two ſpines behind the eyes. The lower jaw is the ſhorteſt, and there are ſeven dents or punctures underneath on each ſide. The teeth are ſmall, pointed, and cloſe together. The eyes large, with a white iris. The lateral line ſtrait. The general colour is whitiſh, head reddiſh; black ſpots and edgings to the fins; the tail-fin is rounded, and of a blackiſh hue. It is placed by Cepede among the blennies.

16. Gadus tau, the toad-fiſh: many little barbles hanging from the lower jaw, and three ſpines in the firſt dorſal fin, and in each operculum, form the ſpecific character. There are ſix rays in the membrane of the gills, twenty in the pectoral fins, ſix in the ventrals, fifteen in the anal, twelve in the tail, three in the firſt dorſal, and twenty in the ſecond. The head of this fiſh is large, broad, and flattened; the under jaw is protruded, and the barbles form a ſemicircle. Both jaws are armed with ſharp teeth of various lengths; they form two rows in the lower jaw, and more in the upper: there alſo two rows on each ſide in the roof of the mouth. The tongue is ſhort, pointed, and hard. The eyes are large and protuberant, and half-way covered with a membrane; the pupil is black, the iris gold colour. Between the eyes, there is in the neck a furrow and a yellow ſtripe acroſs exhibiting ſome reſemblance to the Greek τ (tau), whence the ſpecific name; on each ſide of the eyes is a row of little warts, which take a direction towards the chin. The gill-coverts conſiſt of two laminæ, ending in three ſpines; the membrane of the gills is looſe. The head is brown; the body and fins are of the ſame colour, with white ſpots, and the belly is a dirty white. The anus is ſomewhat nearer to the aperture of the mouth than to the end of the tail fin. The body is covered with ſlime; it is ſmooth; and the ſcales are ſoft, thin, and ſo ſmall as hardly to be viſible to the eye; they are round, and of a brown colour edged with white. The pectoral fins terminate in a point, as well as the ventrals, which laſt lie under the throat, and the firſt ray is ſtrong, ſtiff, and longer than the reſt; the firſt dorſal is ſhort, and conſiſts of three ſpiny rays; the ſecond dorſal, and the anal, have ſimple rays much protruded beyond the membrane; but the tail-fin, which is round, and alſo the pectoral fins, have forked rays. This ſpecies is found in Carolina, and is there called *toad-fiſh*, on account of its colour; it is alſo found in Hudſon's Bay, and thereabouts; and is of the voracious kind, as may be concluded from the large mouth, and numerous teeth. See Plate II. fig. 3.

17. Gadus lota, the barbot, or eel-pout: ſpecific character, the jaws of equal length, with one or more barbles from the lower. There are ſeven rays in the membrane of the gills, twenty in the pectoral fins, ſix in the ventrals, ſixty-ſeven in the anal, thirty-ſix in the tail, fourteen in the firſt dorſal, ſixty-eight in the ſecond. The head is large, broad, and flatted below. The aperture of the mouth is large; the jaws are armed with ſeven rows of little ſharp teeth, and a ſingle barble hangs from the lower. The tongue is broad; and there are ſeveral jagged bones about the palate. The noſtrils are double; the foremoſt covered with a membrane. The eyes are ſmall; the pupil bluiſh, the iris yellow. The membrane of the gills lies acroſs, and is pretty broad. The body is laterally compreſſed, variegated with black and yellow; ſometimes brown with pale yellow ſpots, according to the waters in which it is bred up. It is ſoft, ſmooth, and lubricated like an eel; it has ſmall, ſoft, thin, ſcales, which have been overlooked by various authors. As the head is ſhaped like a frog's, and the body like an eel, the Dutch call it *putael*, and the Engliſh, *eel-pout*. The lateral line is ſtraight, the belly white, and the tail-fin round. The vent is nearer to the head than to the tail. The anal and dorſal fins are narrow, and mottled like the body. See Plate II. fig. 1.

Of this numerous genus, the burbot is the only ſpecies which lives in freſh water, and in rivers or lakes indifferently. It is indigenous not only to Germany, and other parts of Europe, but alſo to the Eaſt-Indies. It abounds in the lake of Geneva, and is found in ſeveral of the rivers in the north of England. According to Dr. Schæpf, it is found in Hudſon's Bay, and the waters thereabouts; and Falk ſays it lives in all the freſh-water rivers of Ruſſia and Siberia; in ſeveral places they make iſinglaſs from it, which however is not near ſo good as what comes from the ſturgeon: in Siberia and many parts of Ruſſia, eſpecially among the country people, they uſe the ſkin of this fiſh inſtead of glaſs, and it is as clear as oiled paper; the Oſtides and Tſchulymich Tartars uſe the ſkins for their ſummer-dreſs, and make bags of it to preſerve their peltry. The barbot is particularly fond of clear water, and hides in the hollows formed by ſtones, watching for the fiſh as they ſwim by; they alſo feed on worms and aquatic inſects, and, when other food fails, they devour one another; they will even attack the ſtickleback, in which they ſometimes loſe their lives, for the ſtickleback in ſtruggling drives his ſharp ſpine into the throat of the barbot, and they have been caught in this ſituation; the barbot, on the other hand, is often the prey of the pike and other rapacious kinds. When well fed, it grows pretty faſt, and attains the length of two or three feet, and weighs from ten to twelve pounds. As they are hardy and tenacious of life, they may be kept ſome time by feeding



M. Bulbeck del.

J. Pass sculp.

1. The Barbot. 2. The Whistle-Fish. 3. The Toad-Fish.

London. Published as the Act directs Nov.r 23. 1805. by J. Wilkes.

feeding them with bullock's heart, or ſmall fiſh. The ſpawning-time is in December and January; then they leave the depths, and come into the ſtreams, ſeeking for ſmooth places to depoſit their ova; they increaſe very faſt. The fleſh is white, though bony, and well-taſted; being not very fat, it is good for weak ſtomachs, and the liver is counted a delicacy; a certain counteſs of Beuchlingen, in Thuringia, is ſaid to have expended great part of her revenue on this luxury. The liver ſuſpended in a glaſs, and placed near a ſtove, or in the ſun, gives out an oil which Aldrovandus regards as an efficacious remedy againſt hard knots or calloſities; and Haen and others confirm this opinion. This ſpecies is caught either by nets, by the floating line, or by the ground-line: this fiſhery was formerly ſo abundant about the Oder, that the fiſhermen, not being able to diſpoſe of all they caught, uſed to cut the flatteſt of them into ſlips, dry them, and uſe them as matches. The gullet is wide, with large folds or wrinkles like the pike. The inteſtinal canal has two ſinuoſities, and thirty appendages of different lengths, in which Richter diſcovered ſolitary worms. The liver is large, and of a pale red colour. The ſeed-veſſel and ovary are double, and 128,000 ſmall eggs of a pale yellow colour have been counted in one fiſh; theſe eggs are reckoned poiſonous. There are fifty-eight vertebræ in the ſpine of the back, and eighteen ribs on each ſide.

18. Gadus muſtela, the brown weaſel fiſh, or bearded cod: five barbles hanging from the mouth, the firſt dorſal fin very low, form the ſpecific character. There are five rays in the membrane of the gills, fourteen in the pectoral fins, ſeven in the ventrals, twenty in the anal, twenty-five in the tail, and forty-two in the ſecond dorſal; the rays of the firſt dorſal are ſo ſoft and ſmall, that their number cannot be exactly counted, but there are more than fifty.

The head is ſmall, flatted above and below; the palate of the mouth is rough; the jaws, the upper of which is the longeſt, are armed with very ſharp ſmall teeth; the tongue is looſe, and narrow. There is a barble at the extremity of the lower jaw, and four at the upper; behind the latter are two round holes. The pupil of the eye is black, the iris gold-yellow. The ſides of the head are ſilvery inclining to violet; the ſides and back are of a dirty yellow with black ſpots; but the colours vary greatly, as may be ſeen by the deſcriptions of different authors. The lateral line makes a bend behind the pectoral fin, then goes ſtraight to the end of the tail. The pectoral and ventral fins are reddiſh; the firſt dorſal lies ſo low as to be hardly viſible out of its furrow, and is compoſed of very ſoft and tender rays, of which the firſt or ſecond only is long; ſo that this fin is generally deſcribed as having but one ray, though it has probably fifty at leaſt. The other fins are light brown, thoſe of the anus and back having long ſpots of a darker brown, and the tail has round ſpots of the ſame colour; the rays of all the fins are ſoft. The whole fiſh is covered with mucilage, and the body with very ſoft ſcales. See Plate II. fig. 2.

This ſpecies equally belongs to the Mediterranean and the North Sea; but they appear in great quantities in the Adriatic and on the coaſt of Cornwall. In the Mediterranean they are ſeldom more than a ſpan long; but Pennant ſays they run nineteen inches long in the North Sea, yet ſtill do not weigh more than two pounds. The fleſh is ſoft and ill-taſted. They ſpawn in autumn; but do not increaſe very faſt, becauſe the cod and mackrel devour the greateſt part of their young; they live on ſhell-fiſh.

This ſpecies varies in the number of barbles. The *tricirratus*, or three-bearded cod, or cockling, is deſcribed by Bloch as having five rays in the membrane of the gills, one only perceptible in the firſt dorſal fin, fifty-ſix in the ſecond, eighteen in the pectoral fins, ſix in the ventrals, forty-ſix in the anal, and twenty in the tail. This variety has two barbles from the upper jaw, one from the lower. Turton makes it a diſtinct ſpecies.—The *ruſſicus* has one barble at the lower jaw only; body covered with brown ſpots.

19. Gadus cimbrius, the four-barbled cod: ſpecific character, four barbles, the firſt dorſal fin almoſt obliterated, its firſt ray terminated by two horizontal filaments like a T. The ſecond dorſal fin has forty-eight rays, the pectorals ſixteen, the ventrals ſeven, the anal forty-two, and the tail twenty-five. This ſpecies much reſembles the muſtela, varying in the number of barbles; but the form of the firſt ray of the firſt dorſal ſeems to be the ſpecific difference. Two barbles ariſe near the noſtrils, and one from each lip. This fiſh is found in the Atlantic, eſpecially on the Swediſh ſhores; it was firſt obſerved by M. de Struſſenfeld, and is well deſcribed by him in the Memoirs of the Stockholm Academy, tom. xxxiii. p. 46.

20. Gadus Danicus, the Daniſh cod: ſpecific character, the lower jaw the longeſt, the anal fin very long, conſiſting of ſeventy rays or thereabouts. This ſpecies has barbles from the lower jaw; it has two dorſal fins, and in every reſpect belongs to this third diviſion. Muller has a ſhort deſcription of it in his *Prodr. Zool. Dan.* and Cepede has brought it into his ſyſtem; but it is not mentioned by Linnæus nor Gmelin, nor his tranſlator Turton.

21. Gadus Leverianus, the Leverian cod: ſpecific character, ſubcinereous, with occellated whitiſh ſpots. Deſcribed by Dr. Shaw in his Gen. Zool. from a ſpecimen in the Leverian Muſeum, that beautiful collection of natural hiſtory, now, alas! no longer exiſting as a collection, having been ſold off by auction in lots in May and June 1806. Body extremely long in proportion to its depth, and of nearly uniform diameter as far as the ſecond dorſal fin, from which part it gradually leſſens towards the tail. Head large; mouth wide; lower jaw longer than the upper; both furniſhed with a row of ſharp, ſubulated, and ſlightly curved, teeth, of which thoſe in the lower jaw are by far the largeſt and longeſt: eyes rather large: gill-membrane ſix or ſeven-rayed: pectoral fins of moderate ſize: ventral rather ſmall and narrow: firſt dorſal fin ſubtriangular, ſituated at a conſiderable diſtance from the head, and the ſecond at a great diſtance from the firſt, being of a ſimilar ſhape, but rather larger: vent-fin ſmall, ſhallow, ſquariſh, and ſituated immediately beneath the ſecond dorſal: tail of moderate ſize, and even at the end. Skin ſmooth, without perceptible ſcales, and every where marked by numerous, ſmall, round, whitiſh, occellated ſpots on a pale brown ground-colour: lateral line not diſtinctly viſible, but rather marked by a continued angular elevation of the ſkin along the whole length of the body, ſo as to give the fiſh a ſquariſh form. Length about two feet two inches: depth about two inches and a half. Suppoſed to be a native of the Southern Ocean, being placed in a collection of fiſhes taken during the laſt voyage of captain Cook.

22. Gadus niger, the black gadus: black; caudal fin forked, ſecond dorſal adipous, fifty-two rays in the anal. There are ſeven rays in the membrane of the gills, ſixty in the ſecond dorſal fin, twenty in the pectorals, four in the ventrals, twenty-ſix in the tail. Obſerved by citizen Noel at the Iſle of Bute in Scotland, in Solway-frith, at Liverpool, and in the river Merſey. Length near a foot. A barble depends from the lower jaw, and two filaments from each pectoral fin; the firſt dorſal fin conſiſts of a ſingle articulated ray. This, ſays Cepede, ſhould be diſtinguiſhed from ſome black varieties of the common cod, which inhabit the lake of Strom, in Mainland, one of the Shetland Iſles, a mile or two from the ſtrait, where that lake communicates with the ſea. They are caught where the water is entirely freſh; they are very good food; a proof how eaſily many ſpecies of cod and of other kinds might be bred or kept in freſh water, which are now found only in the ſea.

IV. *One dorſal fin only.* 23. Gadus Mediterranicus, the three-bearded cod: ſpecific character, two barbles from

the upper jaw, one from the lower. The dorſal fin has fifty-four rays, the pectorals fifteen, the ventrals two, the anal forty-four. This has been ſuppoſed by Bloch to be a variety of the muſtela, and Gmelin ſeems to be of the ſame opinion, though he places it as a diſtinct ſpecies, in which we have followed him. This indeed has only one dorſal fin, and the muſtela has two; yet in that and the cimbrius the firſt dorſal is hardly viſible above the back, only one fin appearing diſtinct; ſo that, if any rudiments of another dorſal fin could be diſcovered in this, it will certainly refer it to that ſpecies. Cepede places it among the blennies.

24. Gadus broſme, the long-tailed cod: ſpecific character, the mouth bearded, the tail lanceolated. The dorſal fin has 100 rays, the pectorals twenty, the ventrals five, the anal ſixty, the tail thirty. This ſpecies is found in the ſea on the ſouth part of Greenland, and in the northern climates of Europe generally. The tail fin ſwells into an oval in the middle, and goes off to a point like the top of a pike or lance, and is ſometimes a yard long, ſays Cepede; but he does not ſay what is the length of the whole fiſh. The back is of a dark brown colour; the fins and under parts lighter; ſome long tranſverſe ſpots on the ſides.

25. Gadus ſalarias, Forſkael's gadus: ſpecific character, ſome teeth in front longer and more hooked than the reſt. There are ſix rays in the membrane of the gills, thirty-ſix in the dorſal fin, fourteen in the pectorals, two in the ventrals, twenty-ſix in the anal, and thirteen in the tail. Forſkael regards this ſpecies as holding a middle place between the gadus and the blenny, and it has ſome of the generic marks of each. Cepede places it among the blennies, probably on account of the didactylous rays of the ventral fins. The large teeth in front have ſome reſemblance to the fangs of wild beaſts. The body is clouded with ſpots of various colours; the dorſal fin runs from head to tail. This ſpecies is about a foot long; and is found in the Red Sea.

26. Gadus Scoticus, the Scotch torſk: ſpecific character, one barble from the lower jaw; the ventral fins fleſhy, and divided into four; tail rounded. The membrane of the gills has five rays, the dorſal fin thirty-one, the pectoral fins eight, the anal twenty-one. This ſpecies haunts the ſeas of Greenland, or of the north of Europe. The belly is thick, and of a white colour; the head brown; the ſides yelloviſh; the dorſal, anal, and tail fins, edged with white. This ſpecies grows to the length of two feet, and about ſix inches broad. Cepede places it among the blennies.

27. Gadus lubb, the Swediſh cod: no ſpots or bars on the body; tail forked; ſixty-five rays in the anal fin. There are ſeven rays in the membrane of the gills, 103 in the dorſal, twenty-one in the pectorals, five in the ventrals, and thirty-ſix in the tail. Inhabits the Cattegat, and the ſalt lakes of Bohus, in Sweden. Body conic, tail flat, and grows above a yard long. Jaws nearly equal, a ſhort barble from the lower. The eye is large, with a yellow iris. Teeth in the jaws, palate, and throat; tongue ſmooth, white, and fleſhy. Lateral line firſt bent, then ſtraight. Colour browniſh green; a black ſtripe along the dorſal and anal; a white and a black band on the caudal.

GA'EL, a town of France, in the department of the Iſle and Vilaine, and chief place of a canton, in the diſtrict of Montfort: three leagues and a quarter weſt of Montfort, and one ſouth of St. Meen.

GÆO'DES, *ſ.* [γαιωδης, from γαια, Gr. earth.] A ſpecies of thunderſtone found on the ſurface of the earth.

GÆRT'NER (Joſeph), the ſon of a phyſician, born at Calu, a little town in Swabia, in the kingdom of Wirtemberg, March 12, 1732. Diſcovering an early paſſion for anatomy, botany, and phyſiology, he was encouraged in theſe purſuits, and was ſent to the univerſities of Tubingen and Gottingen, at the laſt of which he remained till 1753. Quitting Gottingen, he travelled into Italy and France, and in the ſpring of 1755 came to England, where he remained till the end of the year. Returning, through France, to his native country, he received the degree of M. D. which he ſolicited not becauſe he purpoſed to devote himſelf to the practice of phyſic, but becauſe this title would facilitate the means of proſecuting his favourite ſtudies. In 1759, he went to Holland; attended the botanical courſe of the celebrated Van Royen, at Leyden; and, forming the cloſeſt friendſhip with this profeſſor, he entirely devoted himſelf to natural hiſtory, regarding the other ſciences only as they were ſubſervient to it. A ſecond viſit to England enabled him to make an acquaintance with our moſt celebrated naturaliſts; and he publiſhed ſome papers in our Philoſophical Tranſactions, and was elected a member of the royal ſociety. This honour was ſucceeded, on his re-viſiting Germany in 1761, by his being choſen to the anatomical chair at the univerſity of Tubingen, which induced him to proſecute with increaſing ardour his reſearches in comparative anatomy. The fame which he had acquired in England ſoon ſpreading over Europe, his name was inſerted among the members of the imperial academy of ſciences at Peterſburg. Being elected alſo profeſſor of botany and natural hiſtory in that city, and having more partiality for this ſcience than for anatomy, he repaired to Peterſburg in June 1768. A journey to the Ukraine enabled him to collect a great number of new plants; and, on his return to the metropolis of Ruſſia, he enjoyed the protection of the empreſs, and the reſpect of the learned. In the midſt, however, of this flattering ſituation, he was ſubject to ſuch inceſſant intruſions and interruptions, that he ſighed for ſolitude and leiſure; and renouncing fortune and ambition, he fixed his reſidence at the humble place of his nativity: where he devoted himſelf to the compoſition of that great work which occupied the remainder of his life, and is the fruit of twenty years of labour.

After having laid the plan of his Carpology, or Treatiſe on Fruits, and arranged its diviſions, he was ſoon aware that, in the little town of Calu, he could procure but few of thoſe fruits which it would be neceſſary for him to examine. In England and Holland, he had obſerved the greateſt number, of which he had taken notes: but notes alone were inſufficient; he felt the neceſſity of re-examining all theſe fruits, in order to deſcribe and delineate them with ſcrupulous exactneſs; and learning that Mr. (now ſir Joſeph) Banks was juſt returned from a voyage round the world, with immenſe ſtores of natural hiſtory, he departed for London in the ſpring of 1778, where on his arrival he experienced from the Engliſh naturaliſt the moſt liberal and generous acceſs to his treaſures. Sir Joſeph permitted M. Gærtner not only to examine, without exception, all the fruits which he poſſeſſed, but to cut and to analyſe them for the ſake of delineating their anatomy; he alſo preſented him with thoſe of which he had duplicates; and he lent him his credit to aſſiſt in procuring ſuch as were not in his poſſeſſion. Enriched by the preſents of ſir Joſeph Banks, and by others from the garden at Kew, he proceeded to Amſterdam, to enjoy an interview with M. Thunberg, lately returned from a voyage to Japan and the Cape of Good Hope; from whom he obtained a number of exotic fruits, and who promiſed to forward to Calu ſuch as had not yet come to hand.

Quitting Amſterdam, M. Gærtner repaired to Leyden, to examine ſome intereſting articles in its cabinet of natural hiſtory: but his reſearches met here with a melancholy interruption. The frequent uſe of the microſcope, added to his exceſſive application, brought on a nervous complaint which ſadly affected his eyes; and he returned to Calu ſtrongly apprehenſive of loſing his ſight, ſince nothing was found to afford him any relief. For twenty months, he was almoſt continually confined to his bed, and forced to exclude the light from his chamber. He at length renounced the uſe of all medicine, when by degrees his malady abated, and in a little time

time his ſight became perfectly re-eſtabliſhed. Though his health was feeble, he reſumed his work with ardor; and in about two years the manuſcript and deſigns intended for the firſt volume were completely finiſhed. Solicitous, however, of attaining correctneſs, he employed conſiderable time in reviſion; with which and other purſuits connected with his chief object, he was ſo fully occupied, that this firſt volume did not appear till March 1788. It was printed at his own expence at Stutgard, and dedicated to M. (ſir Joſeph) Banks.

Devoted with enthuſiaſm to his botanical ſtudies, he laboured in them with almoſt unremitting perſeverance; fearful leſt, in his declining health, the night of death ſhould ſurpriſe him before his work was finiſhed. He completed the MS. of his ſecond volume, and ſent it to the printer in April 1791; and he was ſtimulated by freſh ſpecimens of fruit preſented to him from different quarters, to commence a ſupplement: but his conſtitution, already weakened by his ſedentary avocations, was incapable of ſuſtaining the farther intenſity of his ſtudies. Conſumed by a ſlow fever, his hands grew weak and trembling; and on July 14, 1791, death terminated his ſcientific labours, in the 59th year of his age. His manners were pure, his taſte ſimple, and with unſhaken conſtancy he directed his efforts to the acquiſition and diffuſion of knowledge. He never was ſolicitous to augment his fortune, judging that the ſacrifice of his time could not be remunerated by other advantages: but he obtained by his economy, ſufficient to defray the expence of his travels, to purchaſe books and objects of natural hiſtory, and to pay for the impreſſion of his work, on which he founded no expectation of gain. To his other virtues he added that of modeſty. In the preface to his ſecond volume, he acknowledges with frankneſs the defects of his work, and points out what remains to be done. He has left among his MSS. a polyglot-dictionary of the names of plants; a publication much wanted. The ſupplement to his great work on fruits, we underſtand, will be completed by his ſon.

GÆRTNE'RA, *ſ.* [In memory of Joſeph Gærtner, M.D. F.R.S. &c. the ſubject of the preceding article.] In botany, a genus of the claſs decandria; order monogynia. The generic characters are—Calyx: perianth one-leafed, five-parted, permanent; diviſions oblong, obtuſe, ſpreading, nearly equal. Corolla: petals five, roundiſh, large, flat, ſpreading, torn and ciliate on the edge, nearly equal, with very ſhort claws. Stamina: filaments ten, filiform, very ſlightly coaleſcent at the baſe; nine ſlender, erectiſh, ſhorter than the corolla, the tenth thicker, the length of the petal, bent in at top. Antheræ parallelopiped, nine equal ſmall, the tenth on the longer filament a little larger. Piſtillium: germ ſuperior, three-toothed, ſmall: ſtyle filiform, lateral, bent in, the length of the greater ſtamen, permanent: ſtigma ſharp. Pericarpium: capſule woody, having four wings, one-celled; wings lanceolate, widening towards the tip, obtuſe; one very large, upright; two ſmaller, patulous; the fourth very ſmall, aſcending. Seed ſingle, roundiſh—*Eſſential Character.* Calyx: five-parted, the leaflets having on the outſide a ſingle marginal gland. Corolla: five-petalled, ſomewhat unequal, toothletted, furniſhed with very ſhort claws. Seed-veſſel nearly globoſe, with four wings.

Gærtnera racemoſa, a ſolitary ſpecies. According to Rheede (in Hort. Malab.) four of the petals are white, and the fifth yellow. The ſeed veſſel is nearly globular, or inverſely parabolical, leathery, thin, of a yellowiſh bay colour, marked on the ſide with the rudiment of the ſtyle; on the top it has a ſmall triangular creſt, and on the edge it has three very long leathery wings of an ovate-lanceolate ſhape, the middle one larger than the others. Seed kidney-form-globular, wrinkled, gibbous, ferruginous-reddiſh. It is a large climbing woody ſhrub, flowering in the wet and cold ſeaſon. It is cultivated all over the coaſt of Coromandel, on account of the beauty and fragrance of its flowers. It is the *vedal chitta* of the Telingas. Native of the Eaſt Indies, in the Circar mountains. See BANISTERIA benghalenſis, which is the ſame plant.

GÆSA'TÆ, a people that dwelt on the banks of the Rhone, who aſſiſted the Senones in taking and plundering Rome under Brennus. *Strabo.*

GAES'BECK, a town of Brabant: ſeven miles ſouth-weſt of Bruſſels.

GAE'TA, a ſeaport town of Italy, in the kingdom of Naples, and country of Lavora, ſituated on a bay called *the Gulf of Gaeta:* the harbour is defended by a citadel. It is the ſee of a biſhop, ſuffragan of Capua, but exempt from his juriſdiction: the ſituation is at the foot of a mountain near the ſea. This town was taken in 1707 by the imperial troops by aſſault: forty miles north-weſt of Naples. Lat. 41. 16. N. lon. 31. 10. E. Ferro.

GÆTU'LIA, in ancient geography, a country of Africa, lying to the ſouth of Mauritania, called *Gætulia Propria. Gætuli*, the people, were diſtinguiſhed by different epithets, as Nigri, Autololes, Daræ, and Baniuræ. *Pliny.* —The Gætuli were among the firſt inhabitants of Africa; a rough, unpoliſhed people, living on the ſpontaneous productions of the earth; a wandering tribe, who took up with the firſt place in which night ſurpriſed them. *Salluſt.*

GAFERA'ID, a town of Aſiatic Turkey, in the province of Caramania; thirty-two miles ſouth-eaſt of Cogni.

GAFF, *ſ.* a harpoon or large hook, uſually fixed to a pole, and uſed in ſmall ſhips, to extend the upper edge of the mizen, or thoſe ſails whoſe foremoſt edges are joined to the maſt by hoops or lacings, and which are uſually extended by a boom below.

GAF'FAREL (James), a French divine, and learned writer, born in 1602. He acquired great ſkill in the oriental languages, and in the cabaliſtic and occult ſciences. Cardinal Richelieu made choice of him for his library-keeper, and ſent him into Italy to collect ſcarce manuſcripts and books. He publiſhed *Curioſitez Inouies*, Unheard-of Curioſities. He died in 1681, aged 80. He had almoſt finiſhed an "Hiſtory of the Subterranean World;" containing an account of the caves, grottoes, vaults, catacombs, and mines, he had met with in thirty years travels.

GAF'FER, *ſ.* [ȝeferne, companion, Sax.] A word of reſpect now obſolete, or applied only in contempt to a mean perſon:

For *gaffer* Treadwell told us by the bye,
Exceſſive ſorrow is exceeding dry. *Gay.*

GAFFLEN'TZ, a town of Germany, in the archduchy of Auſtria: ſixteen miles ſouth-ſouth-eaſt of Steyr.

GAF'FLES, *ſ.* [ȝaffelucaſ, ſpears, Sax.] Artificial ſpurs put upon cocks when they are ſet to fight. A ſteel contrivance to bend croſs-bows. *Ainſworth.*

GAF'FOLDGILD, *ſ.* [Sax.] The payment of cuſtom, a tribute. *Scott.*

GAF'FOLDLAND, *ſ.* [Sax.] The land which was ſubject to the gaffoldgild, land liable to be taxed. *Scott.*

GAFF'SA, a town of Africa, in the country of Tunis: 130 miles ſouth-weſt of Cairoan.

GAFU'RIO (Franchino), an eminent profeſſor of muſic, born in 1451 at Lodi, where his father Bettino was a ſoldier in the ſervice of the duke of Mantua. He was educated for the prieſthood, and particularly applied himſelf to the ſtudy of muſic. After taking orders, he went to Mantua, and then to Verona, at which place he firſt commenced a teacher of muſic. He viſited Genoa, Naples, and other cities, continually improving himſelf in muſical ſcience, and augmenting his reputation by his writings and lectures. In 1484 he was invited to Milan, and placed at the head of the choir in that cathedral. The duke Lodovico Sforza alſo created him the firſt public profeſſor of muſic in his capital; where he reſided many years, and compoſed many learned works which

have perpetuated his name. He alſo cauſed the writings of the ancient Greek authors concerning muſic to be tranſlated into Latin. A work on Muſical Inſtruments, which he publiſhed in 1518, involved him in an angry controverſy with Giovanni Spatario, a muſician in Bologna, who gave a ſevere criticiſm of it, to which he replied with equal acrimony. It is not known to what age Gafurio lived; but as his reply to Spatario is dated in 1520, he muſt have reached his ſeventieth year. He was a man of general learning, and wrote moſt of his works in Latin, in a ſtyle of conſiderable elegance. He likewiſe compoſed poems in that language. His muſical publications, which are ſtill in high repute, are: *Theoricum Opus Muſicæ Diſciplinæ*, Neap. 1480; Milan, 1492. *Practica Muſicæ utriuſque Cantus*, Milan, 1496; Venet. 1512. *Angelicum & Divinum Opus Muſicæ materna lingua ſcript.* Milan, 1508. *De Harmonica Muſicorum Inſtrumentorum*, Mil. 1518. He likewiſe publiſhed the works of Maffeo Vegio, and an oration of Jac. Antiquario in praiſe of Louis XII. of France.

To GAG, *v.n.* [from *gaghel*, Dutch, the palate. *Minſhew.*] To ſtop the mouth with ſomething that may allow to breathe, but hinder to ſpeak.—There foam'd rebellious logic, *gagg'd* and bound. *Pope.*

GAG, *ſ.* Something put into the mouth to hinder ſpeech or eating:

Some, when the kids their dams too deeply drain,
With *gags* and muzzles their ſoft mouths reſtrain. *Dryden.*

GAG, one of the Papuan Iſlands, which having the advantage of a ſafe bay, with plenty of freſh water, and timber, induces navigators to touch there, though it is wholly uninhabited.

GAGARAWAU' BAY, a bay on the north coaſt of the Iſland of St. Vincent.

GAGA'TES, *ſ.* [γαγάτης, from Γαγης, Gr. a river in Lycia, where it is found.] A ſpecies of jet or agate-ſtone.

GAGE, *ſ.* [*gage*, Fr.] A pledge; a pawn; a caution; any thing given in ſecurity.—There is my *gage*, the manual ſeal of death. *Shakeſpeare.*

But ſince it was decreed, auſpicious king,
In Britain's right that thou ſhould'ſt wed the main,
Heav'n, as a *gage*, would caſt ſome previous thing,
And therefore doom'd that Lawſon ſhould be ſlain. *Dryd.*

A meaſure; a rule of meaſuring:

One judges as the weather dictates; right
The poem is at noon, and wrong at night;
Another judges by a ſurer *gage*,
An author's principles or parentage. *Young.*

[In ſea language.] When one ſhip is to windward of another, ſhe is ſaid to have the *weather-gage*.

To GAGE, *v. a.* [*gager*, Fr.] To wager; to depone as a wager; to impawn; to give as a caution, pledge, or ſecurity.—He found the Turkiſh merchants making merry: unto theſe merchants, he gave due ſalutations, *gaging* his faith for their ſafety, and they likewiſe to him. *Knolles.*—To bind by ſome caution or ſurety; to engage:

My chief care
Is to come fairly off from the great debts
Wherein my time, ſomething too prodigal,
Hath left me *gaged*. *Shakeſpeare.*

To meaſure; to take the contents of any veſſel of liquids particularly. More properly *gauge*. See GAUGE.

Nay, but I bar to-night: you ſhall not *gage* me
By what we do to-night. *Shakeſpeare.*

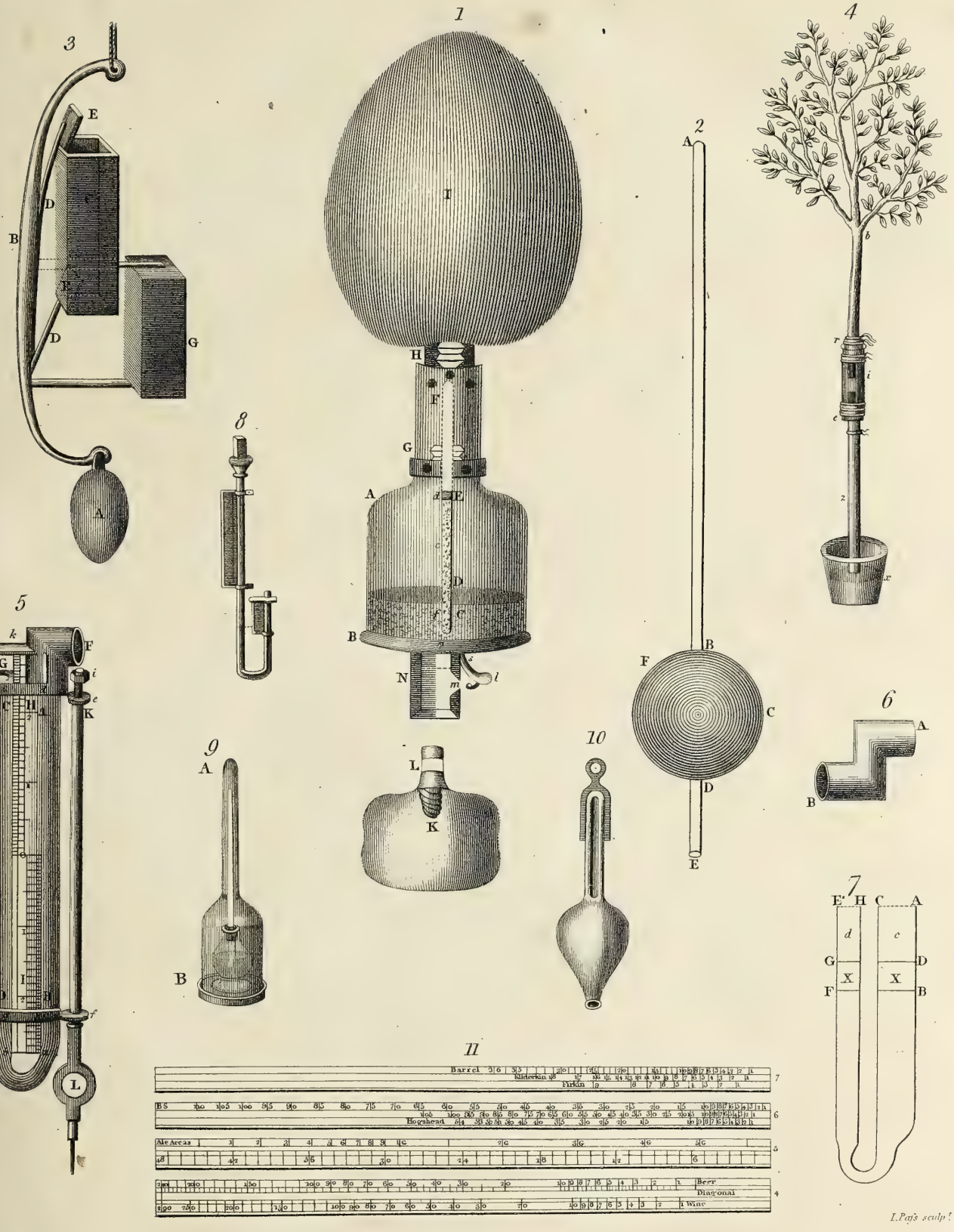
In hydroſtatics, pneumatics, &c. the *gage* is an inſtrument for aſcertaining meaſures of various kinds: viz. 1. The SEA-GAGE; which is an inſtrument for finding the depth of the ſea. Several kinds of theſe have been invented by Dr. Hales, Dr. Deſaguliers, and others. Formerly, the machines for this purpoſe conſiſted of two bodies, the one ſpecifically lighter, and the other ſpecifically heavier, than the water; ſo joined together that as ſoon as the heavy one came to the bottom, the lighter ſhould get looſe from it, and emerge; and the depth was to be eſtimated by the time the compound was in falling from the top to the bottom of the water, together with the time the lighter body was in riſing, reckoned from the diſappearing of the machine, till the emergent body was ſeen again; but no certain concluſion could be drawn from ſo precarious and incomplete an experiment. But that invented by Drs. Hales and Deſaguliers was of a more exact nature, depending on the preſſure of the fluid only. For as the preſſure of fluids in all directions is the ſame at the ſame depth, ſo a *gage* which diſcovers what the preſſure is at the bottom of the ſea, will ſhew what the true depth of the ſea is in that place, whether the time of the machine's deſcent be longer or ſhorter.

Dr. Hales, in his Vegetable Statics, deſcribes his gage for eſtimating the preſſures made in opaque veſſels; where honey, being poured over the ſurface of mercury in an open veſſel, riſes upon the ſurface of the mercury as it is preſſed up into a tube whoſe lower orifice is immerſed into the honey and mercury, and whoſe top is hermetically ſealed. Now as by the preſſure, the air in the tube is condenſed, and the mercury riſes, ſo the mercury comes down again when the preſſure is taken off, and would leave no mark of the height to which it had riſen; but the honey or treacle, put upon the mercury, by ſticking to the inſide of the tube, leaves a mark, which ſhews the height to which it had riſen, and conſequently gives the quantity of preſſure, and the height of the ſurface of the fluid. Deſaguliers's addition to this machine, conſiſted in a contrivance to carry it down to the bottom of the ſea by means of a heavy weight, which was immediately diſengaged by ſtriking the bottom, and the gage, made very light for the purpoſe, re-aſcended to the top.

A correct delineation of this gage is given in the annexed engraving at fig. 1. AB repreſents the gage-bottle or jar, in which is cemented the gage-tube F*f*, in the braſs cap at G. The upper end of tube F is hermetically ſealed, and the open lower end *f*, is immerſed in mercury, marked C, on which ſwims the treacle. On the top of the bottle is ſcrewed a tube of braſs HG, pierced with ſeveral holes to admit the water into the bottle AB. The body K is a weight hanging by its ſhank L in a ſocket N, with a notch on one ſide at *m*, in which is fixed the catch *l* of the ſpring *s*, and, paſſing through the hole L in the ſhank of the weight K, prevents its falling out when once hung on. On the top, in the upper part of the braſs tube at H, is fixed a large empty ball or full-blown bladder I, which muſt not be ſo large but that the weight K may be able to ſink the whole under water. The inſtrument is uſed in the following manner: the weight K being hung on, the gage is let fall into the water, and ſinks to the bottom: the ſocket N is ſomewhat longer than the ſhank L; and therefore, after the weight K comes to the bottom, the gage will continue to deſcend till the lower part of the ſocket ſtrikes againſt the weight: this gives liberty to the catch to fly out of the hole L, and let go the weight K: when this is done, the ball or bladder I inſtantly buoys up the gage to the top of the water. While the gage is under water, the water, having free acceſs to the treacle and mercury in the bottle, will by its preſſure force it up into the tube F*f*, and the height to which it has been forced by the greateſt preſſure, viz. that at the bottom, will be ſhown, as before obſerved, by the mark in the tube which the treacle leaves behind it. This ſhows into what ſpace the whole air in the tube F*f* is compreſſed; and conſequently the height or depth of the water which by its weight produced that compreſſion, which is the thing required.

If the gage-tube F*f* were of glaſs, a ſcale might be drawn on it with the point of a diamond, ſhowing, by inſpection, what height the water ſtands above the bottom. But the length of ten inches is not ſufficient for fathoming great depths at ſea, ſeeing that, when all the air in ſuch a length of tube is compreſſed into half an inch, the depth

GAGE.



Improved Gages.

London Published as the Act directs August 30th 1806 by J. Wilkes.

depth of water is no more than ſix hundred and thirty-four feet, which is not half a quarter of a mile. If, to remedy this, we make uſe of a tube fifty inches long, which for ſtrength may be a muſket-barrel, and ſuppoſe the air compreſſed into an hundredth part of half an inch; then, as 1 : 99 : : 400 : 39600 inches, or 3300 feet; even this is but little more than half a mile, or 2640 feet. But ſince it is reaſonable to ſuppoſe the cavities of the ſea bear ſome proportion to the mountainous parts of the land, ſome of which are more than three miles above the earth's ſurface, therefore, to explore ſuch great depths, Dr. Hales contrived a new form for his ſea-gage, or rather for the gage-tube in it, as follows. B C D F fig. 2. is a hollow metalline globe, communicating on the top with a long tube A B, whoſe capacity is a ninth part of that globe. On the lower part at D, it has alſo a ſhort tube D E, to ſtand in the mercury and treacle. The air contained in the compound gage-tube is compreſſed by the water as before; but the degree of compreſſion, or height to which the treacle has been forced, cannot there be ſeen through the tube; therefore, to anſwer that end, a ſlender rod of metal or wood, with a knob on the top of the tube A B, will receive the mark of the treacle, and ſhow it when taken out. If the tube A B be fifty inches long, and of ſuch a bore that every inch in length ſhould be a cubic inch of air, and the contents of the globe and tube together five hundred cubic inches; then, when the air is compreſſed within an hundredth part of the whole, it is evident the treacle will not approach nearer than five inches of the top of the tube, which will agree to the depth of 3300 feet of water as above. Twice this depth will compreſs the air into half that ſpace nearly, viz. two inches and an half, which correſpond to ſix thouſand ſix hundred, which is a mile and a quarter. Again, half that ſpace, or one inch and a quarter, will ſhow double the former depth, viz. thirteen thouſand two hundred feet, or two miles and an half; which may probably be very nearly the greateſt depth of the ſea.

2. The Bucket Sea-Gage. This inſtrument was alſo contrived by Dr. Hales, to find the different degrees of coolneſs and ſaltneſs of the ſea at different depths. It conſiſts of a common houſehold pail or bucket made with two heads. Theſe heads have each a round hole in the middle, about four inches in diameter, covered with ſquare valves opening upward; and that they may both open and ſhut together, there is a ſmall iron rod fixed to the upper part of the lower valve, and the other end to the lower ſide of the upper valve: ſo that, as the bucket deſcends with its ſinking weight into the ſea, both the valves may open by the force of the water, which by that means has a free paſſage through the bucket. But when the bucket is drawn up, then both the valves ſhut by the force of the water at the upper part of the bucket; ſo that the bucket is drawn up full of the loweſt ſea-water to which it has deſcended. When the bucket is drawn up, a mercurial thermometer fixed in it is examined; but great care muſt be taken to obſerve the degree at which the mercury ſtands, before the lower part of the thermometer is taken out of the water in the bucket, leſt it be affected by the different temperature of the air. In order to keep the bucket in a right poſition, there are four cords fixed to it, reaching about three feet below it; to which the ſinking weight is fixed. The reſult of ſeveral trials with this gage was, that, when it was let down to different depths from 360 feet to 5346 feet, in lat. 25. 13. N. and lon. 25. 12. W. it was diſcovered by the thermometer, that the cold increaſed gradually in proportion to the depths, till it deſcended to 3900 feet, viz. near three-fourths of a mile, whence the mercury in the thermometer came up at 53°; and though it was afterwards ſunk to 5346 feet, which is a mile and 66 feet, it came up no lower: the warmth of the water upon the ſurface, and that of the air, was all that time 84°. When the water in the bucket was become of the ſame temperature with that on the ſurface of the ſea, equal quantities of both were weighed and tried by the hydrometer; that from below was found to be the heavieſt, and conſequently the ſalteſt.

Dr. Hales was probably led to the conſtruction of this ſea-gage, from that invented by Dr. Hook, for the ſame purpoſe. This is exhibited in the engraving at fig. 3. It conſiſts of a ſquare bucket C, whoſe bottom and lid are ſo contrived, that as the weight A ſinks the iron B, to which the bucket C is faſtened by two handles D D, on the end of which are the moveable bottoms or valves E E, and thereby draws down the bucket, the reſiſtance of the water keeps up the bucket in the poſture C, whereby the water, whilſt the bucket is deſcending, hath a free paſſage through it; whereas, as ſoon as the bucket is pulled upwards by the line F, the reſiſtance of the water to that motion beats the lid downwards, and keeps it in the poſture ſhewn at G, whereby the included water is kept from getting out, and the ambient water prevented from getting in. Phil. Tranſ. No. 9. p. 149. and No. 24. p. 447. or Abr. vol. ii. p. 260.

3. The Aqueo-Mercurial Gage. An apparatus contrived by Dr. Hales, and applied in various forms to the branches of trees, in order to determine the force with which they imbibe moiſture. Let *e*, *r*, fig. 4, be a cylindric glaſs, of an inch diameter within, and eight inches long. Into this glaſs is introduced the branch of a young thriving tree *b*, about three feet long, with lateral branches; the diameter of the tranſverſe cut *i*, being three-fourths of an inch. Having fitted the joint *r* to the tube at *r*, by folding a piece of ſheep's ſkin round the ſtem, it is cemented with a mixture of bees-wax and turpentine melted together, in ſuch a proportion as to make a very ſtiff clammy paſte when cold, and over the cement folds of wet bladders are bound firmly with packthread. To the lower end *e* of the large tube, a ſmaller tube *z e* is cemented, being about one-fourth of an inch diameter, eighteen inches long, and full one-eighth of an inch thick. Theſe tubes are cemented together at *e* with common hard brick-duſt or powdered chalk cement, and the joint is farther ſecured with the cement of bees-wax and turpentine, over which a wet bladder is bound. The apparatus being thus prepared, the branch is turned downwards, and the glaſs-tube upwards, and then both tubes are filled with water; with the finger applied to the open end of the ſmall tube, it is inverted and immerſed in the glaſs ciſtern *x*, full of mercury and water. In this ſituation the lower end of the branch was immerſed ſix inches in water, viz. from *r* to *i*; the water was imbibed by the branch at its tranſverſe cut *i*; and, during its aſcent into the ſap-veſſels of the branch, the mercury roſe in the tube *e z* from the ciſtern *x*, ſo that in half an hour it was riſen five inches and three-fourths high, as far as *z*. The height of the mercury indicated, in ſome meaſure, the force with which the ſap was imbibed, though not the whole force; becauſe, while the water was imbibed by the branch, its tranſverſe cut was covered with innumerable little hemiſpheres of air, and many air-bubbles iſſued out of the ſap-veſſels, which partly filled the tube *e r*, as the water was drawn out of it: and, therefore, the height of the mercury could only be proportionable to the exceſs of the quantity of water drawn off above the quantity of air which iſſued out of the wood. If the quantity of air iſſuing from the wood had been equal to the quantity of water imbibed, it is plain that the mercury could not riſe at all, becauſe there would be no room for it in the tube: but if nine parts in twelve of the water be imbibed by the branch, and only three ſuch parts of air iſſue into the tube in the ſame time, the mercury muſt riſe near ſix inches, and ſo proportionably in other caſes. Dr. Hales obſerved, that the mercury roſe higheſt when the ſun was clear and warm, and that it ſubſided three or four inches towards evening, but roſe again the next day as it grew warm, though ſeldom ſo high as at firſt. Dr. Hales adapted the ſize and ſhape of the glaſs apparatus to a great variety of branches of ſeveral ſizes

and of different kinds of trees, and repeated the experiment in a variety of inſtances. See his Vegetable Statics, vol. i. chap. ii. p. 84, &c.

5. The TIDE-GAGE. An inſtrument uſed for determining the height of the tides by Mr. Bayly, in the courſe of a voyage towards the ſouth-pole, &c. in the Reſolution and Adventure, in 1772, 1773, 1774, and 1775. This inſtrument conſiſts of a glaſs tube, whoſe internal diameter was ſeven-tenths of an inch, laſhed faſt to a ten-feet fir rod, divided into feet, inches, and quarters: this rod was faſtened to a ſtrong poſt fixed upright and firm in the water. At the lower end of the tube was an exceeding ſmall aperture, through which the water was admitted. In conſequence of this conſtruction, the ſurface of the water in the tube was ſo little affected by the agitation of the ſea, that its height was not altered one-tenth of an inch, when the ſwell of the ſea was two feet; and Mr. Bayly was certain, that with this inſtrument he could diſcern a difference of one-tenth of an inch in the height of the tide.

6. The WIND-GAGE; an inſtrument for meaſuring the force of the wind upon any given ſurface. It was invented by Dr. Lind, and firſt deſcribed in the Phil. Tranſ. vol. lxv. The inſtrument conſiſts of two glaſs tubes, of five or ſix inches in length, as ſhewn by the letters A B C D, in the engraving at fig. 5. Their bores, which are the better for being equal, are about four-tenths of an inch in diameter. They are connected together like a ſiphon, by a ſmall bent glaſs-tube marked *a b*, the bore of which is about one-tenth of an inch in diameter. On the upper end of the leg A B there is a tube of latten braſs, which is bent perpendicularly outwards, and has its mouth open towards F. On the other leg C D is a cover with a round hole G in the upper part of it, two-tenths of an inch in diameter. This cover and the bent tube are connected together by a ſlip of braſs *c d*, which not only gives ſtrength to the whole inſtrument, but alſo ſerves to hold the ſcale H I. The bent tube and cover are fixed on with hard cement or ſealing-wax. To the ſame tube is ſoldered a piece of braſs *e*, with a round hole to receive the ſteel ſpindle K L; and at *f* there is juſt ſuch another piece of braſs ſoldered to the braſs-hoop *g h*, which ſurrounds both legs of the inſtrument. There is a ſmall ſhoulder on the ſpindle at *f*, upon which the inſtrument reſts, and a ſmall nut at *i*, to prevent it from being blown off the ſpindle by the wind. The whole inſtrument is eaſily turned upon the ſpindle by the wind, ſo as always to preſent the mouth of the bent tube towards it. The end of the ſpindle has a ſcrew on it, by which it may be ſcrewed into the top of a poſt, or a ſtand made on purpoſe. It has alſo a hole at L, to admit a ſmall lever for ſcrewing it into wood with more facility. A thin plate of braſs *k* is ſoldered to the bent tube, about half an inch above the round hole G, ſo as to prevent rain from falling into it. There is likewiſe a crooked tube, as ſhewn at A B, fig. 6, to be put occaſionally upon the mouth of the bent tube F, in order to prevent rain from being blown into the mouth of the wind-gage when it is left out all night, or expoſed in the time of rain.

The force or momentum of the wind is aſcertained by this inſtrument, by filling the tubes half full of water, and puſhing the ſcale a little up or down, till the o of the ſcale, when the inſtrument is held up perpendicularly, be on a line with the ſurface of the water in both legs of the wind-gage. The inſtrument being thus adjuſted, hold it up perpendicularly, and, turning the mouth of the bent tube towards the wind, obſerve how much the water is depreſſed by it in the one leg, and raiſed in the other. The ſum of the two is the height of a column of water which the wind is capable of ſuſtaining at that time; and every body that is oppoſed to that wind will be preſſed upon by a force equal to the weight of a column of water, having its baſe equal to the altitude of the column of water ſuſtained by the wind in the wind-gage. Hence the force of the wind upon any body where the ſurface oppoſed to it is known may be eaſily found: and a ready compariſon may be made betwixt the ſtrength of one gale of wind and that of another.

The force of the wind may be likewiſe meaſured with this inſtrument, by filling it until the water runs out at the hole G. For, if we then hold it up to the wind as before, a quantity of water will be blown out; and if both legs of the inſtrument are of the ſame bore, the height of the column ſuſtained will be equal to double the column of water in either leg, or the ſum of what is wanting in both legs. But if the legs are of unequal bores, neither of theſe will give the true height of the column of water which the wind ſuſtained. But the true height may be obtained by the following formulæ.

Suppoſe that after a gale of wind which had blown the water from A to B, in fig. 7, forcing it at the ſame time through the other tube out at E, the ſurface of the water ſhould be found ſtanding at ſome level as D G, and it were required to know what was the height of the column E F, or A B, which the wind ſuſtained. In order to obtain this, it is only neceſſary to find the height of the columns D B, or G F, which are conſtantly equal to one another; for either of theſe, added to one of the equal columns A D, E G, will give the true height of the column of water which the wind ſuſtained. Let the diameters A C, E H, of the tubes, be reſpectively repreſented by *c d*; and let $a = $ A D or E G, and $x = $ D B, or G F: then it is evident, that the column D B is to the column E G as $c^2 x$ to $d^2 a$. But theſe columns are equal. Therefore $c^2 x = d^2 a$; and conſequently $x = \frac{d^2 a}{c^2}$. But if, at any inſtant of time whilſt the wind was blowing, it was obſerved, that when the water ſtood at E, the top of the tube out of which it is forced, it was depreſſed in the other to ſome given level B F, the altitude at which it would have ſtood in each had it immediately ſubſided, may be found in the following manner. Let $b = $ A B, or E F. Then it is evident that the column D B is equal to the difference of columns E F, G F. But the difference of theſe columns is as $d^2 b - d^2 x$; and conſequently $x = \frac{d^2 b}{c^2 + d^2}$.

For the caſes when the wind blows in at the narrow leg of the inſtrument: Let A B $=$ E F $= b$, E G or A D $= a$, G F $=$ D B $= x$, and the diameters E H, G A, reſpectively $= d$, c, as before. Then it is evident that the column A D is to the column G F as ac^2 to $d^2 x$. But theſe columns are equal; therefore $d^2 x = ac^2$; and conſequently $x = \frac{ac^2}{d^2}$. It is alſo evident, that the column A D is equal to the difference of the columns A B, D B; but the difference of theſe columns is as $bc^2 - c^2 x$. Therefore $d^2 x = bc^2 - c^2 x$. Whence we get $x = \frac{bc^2}{d^2 + c^2}$.

The uſe of the ſmall tube of communication *a b*, fig. 5, is to check the undulation of the water, ſo that the height of it may be read off from the ſcale with eaſe and certainty. But it is particularly deſigned to prevent the water from being thrown up to a much greater or leſs altitude, than the true height of the column which the wind is able at that time to ſuſtain, from its receiving a ſudden impulſe whilſt it is vibrating either in its aſcent or deſcent. As in ſome caſes freſh water in this inſtrument might be liable to freeze, and thus break the tubes, Dr. Lind recommends a ſaturated ſolution of ſea-ſalt to be uſed inſtead of it, which does not freeze till Fahrenheit's thermometer falls to o.

7. GAGE of the AIR-PUMP. This is adapted for ſhewing the degree to which the air is rarefied, or the receiver is exhauſted, at any time by the air-pump. There are three ſuch gages in uſe; the firſt, called the *long barometer gage*; the ſecond, the *ſhort barometer gage*; the third, the *pear gage*, or *manometer*. The two firſt ſhew the elaſticity of the fluid in the receiver, but do not determine whether it be permanently elaſtic air; the third ſhews the

denſity

denſity of the air left in the receiver, without being affected by ſuch gaſes as may aſſume an elaſtic form in the vacuum. The long gage is often made in the form of an inverted ſiphon, with one leg open, and the other hermetically ſealed; and is ſometimes called *Mairan's gage*; and is delineated in the engraving at fig. 8. The ſhort gage, repreſented in the ſame engraving at A B, fig. 9, conſiſts of a tube ſix or eight inches long, filled with mercury, and inverted in a ſmall baſon thereof, in the ſame manner as the common barometer; in this the mercury does not begin to deſcend till about three-fourths of the air is exhauſted, after which it begins to ſhew the degree of exhauſtion, which is in proportion as the height of its column to the height of the mercury in the common barometer.

The pear gage, ſhewn at fig. 10, would be the moſt accurate of any, if it were not that moſt fluid ſubſtances aſſume an elaſtic form whenever the preſſure of the atmoſphere is removed; it therefore ſeldom indicates the elaſticity, or actual preſſure of the fluid, remaining in the receiver. See the reſults of various experiments with the pear gage, under the article AIR-PUMP, vol. i. p. 224.

8. GAGE OF THE BAROMETER. A contrivance for eſtimating the exact degree of the riſe and fall of the mercury in the tube of that inſtrument. It is well known that whilſt the mercury riſes in the tube, it ſinks in the ciſtern, and vice verſa; and conſequently the diviſions on the ſcale fixed near the top of the tube had their diſtance from the ſurface of the mercury in the ciſtern always various; from which there muſt often happen errors in determining the height of the mercury in the tube. To remedy this inconvenience, a line is cut upon a round piece of ivory, which is fixed near the ciſtern: this line is accurately placed at a given diſtance from the ſcale; for example at twenty-ſeven inches; and a ſmall float of cork, with a cylindrical piece of ivory fixed to its upper ſurface, on which a line is cut at the exact diſtance of two inches from the under ſide of the cork, is left to play freely on the quickſilver, and the cylinder works in a groove made in the other piece. From this conſtruction it appears, that if theſe marks are made to coincide, by raiſing or lowering the ſcrew which acts on the quickſilver, then the diviſions on the ſcale will expreſs the true meaſure of the diſtance from the ſurface. See BAROMETER, vol. ii. p. 734–741.

9. GAGE OF THE CONDENSER. A glaſs tube of a particular conſtruction, adapted to the condenſing engine, and deſigned to ſhew the exact denſity and quantity of the air contained at any time in the condenſer. *Deſaguliers's Exper. Philoſ.* vol. ii. p. 394.

10. SLIDING GAGE. A tool uſed by mathematical inſtrument makers, for meaſuring and ſetting off diſtances; conſiſting of a beam, tooth, ſliding ſocket, and the ſhoulder of the ſocket.

11. The ROD GAGE, commonly called *the four feet gauging rod*, delineated in the engraving at fig. 11. This is generally uſed in gauging liquors or caſks, explained under the article GAUGING.

GAGE, or GAGE DELIVERANCE, in law, is where he that hath taken a diſtreſs, and being ſued, hath not delivered the cattle that were diſtrained; then he ſhall not only avow the diſtreſs, but *gager deliverance*, i. e. put in ſurety, or pledges, that he will deliver them. *F. N. B.* 67. This gage deliverance is had on ſuing out replevins, upon the plaintiff's praying the ſame: and it is ſaid the parties are to be at iſſue, or there is to be a demurrer in law, before gage deliverance is allowed; and if a man claim any property in the goods, or the beaſts are dead in the pound, the party ſhall not gage. *Kitch.* 145. See the article REPLEVIN.

GA'GES, a town of France, in the department of the Aveiron, and chief place of a canton, in the diſtrict of Rhodez: two leagues north-eaſt of Rhodez.

GAGETOWN, a ſettlement and town of the American States, in Sunbury county, New Brunſwick, on the lands granted to general Gage, on the weſt ſide of St. John's river, on the northern ſhore of the bay of Fundy. The general's grant conſiſts of 20,000 acres of land; the upland of which is in general very bad. There is ſome interval on the river ſide, on which are a few ſettlers; excluſive of theſe ſettlements, there is very little good land of any kind.

To GAG'GLE, *v. n.* [*gagen, gagelen*, Dut.] To make a noiſe like a gooſe.—Birds prune their feathers, geeſe *gaggle*, and crows ſeem to call upon rain; which is but the comfort they receive in the relenting of the air. *Bacon.*

May fat geeſe *gaggle* with melodious voice,
And ne'er want gooſeberries or apple-ſauce. *King.*

GAGNA'NO, a town of Italy, in the kingdom of Naples, and province of Capitanata: ſeventeen miles eaſt of Leſina.

GA'GNEF, a town of Sweden, in the province of Dalecarlia: fifteen miles ſouth weſt of Fahlun.

GAGNI'ER (John), a diſtinguiſhed maſter of the oriental languages, born and educated at Paris. He particularly applied himſelf to the ſtudy of Hebrew and Arabic, in which he acquired uncommon ſkill. Becoming diſſatisfied with the Roman-catholic religion, in which he had been bred, he left his country, and came to England. His learning ſoon gained him friends, among whom were archbiſhop Sharp, and lord-chancellor Macclesfield. He was admitted to the degree of M. A. at Cambridge, and afterwards at Oxford, where he fixed his reſidence for the ſake of conſulting the Bodleian library, while he ſupported himſelf by teaching Hebrew. In 1706 he publiſhed Joſeph Ben Gorion's Hiſtory of the Jews in the original Hebrew, with a Latin tranſlation and notes, in a quarto volume. He afterwards aſſiſted Dr. Grabe in the peruſal of the Arabic MSS. in the Bodleian library, for the purpoſe of a controverſial work in which Grabe was engaged againſt Whiſton. He was appointed in 1717 to read the Arabic lecture at Oxford in the abſence of Dr. Wallis; and upon his death, was choſen to the profeſſorſhip in his ſtead, which office he filled with great reputation till his death. Gagnier publiſhed two valuable works, which have given occaſion to Gibbon to term him "the beſt and moſt authentic of the guides" reſpecting the hiſtory of Mahomet. Theſe are, *Iſmael Abulfeda de Vita & Rebus geſtis Mohammedis, &c. Latine vertit, Præfatione & Notis illuſtravit, Joh. Gagnier*, Oxon. 1723, folio; and, *La Vie de Mahomet, traduite & compilée de l'Alcoran, des Traditions authentiques de la Sonna, & des meilleurs Auteurs Arabes*, Amſt. 1748, three vols. 12mo.

GA'GO, a kingdom of Africa, with a town of the ſame name, in Negroland. It is fertile, and abounds in corn, rice, mines of gold, &c. Lat. 10. N. lon. 19. 40. E. Ferro.

GA'GUIN (Robert), a French hiſtorian, born at Colines in the dioceſe of Amiens. At an early age he took the habit of the order of Mathurines, and went to ſtudy in their college at Paris. He took the degree of doctor of laws, and ſoon after was made profeſſor of canon-law. In 1473 he was elected general of his order. His reputation made him known to Charles VIII. and Louis XII. who employed him in various embaſſies to Italy, Germany, and England. He returned with a broken conſtitution, and died at Paris in 1501. He wrote many works in proſe and verſe. Of theſe the principal are: 1. *Compendium ſuper Francorum geſtis a Pharamundo uſque ad annum* 1491; 1497, 4to. 2. The Chronicle of Archbiſhop Turpin, tranſlated from Latin into French by command of Charles VIII. 1527, 4to. 3. *Epiſtolæ & Orationes*, 4to. 4. *De Puritate Conceptionis Virginis Mariæ*; this is a poem in elegiac verſe, by no means free from groſſneſs of idea. A French verſion of Cæſar's Commentaries, and an indifferent Roman Hiſtory, are alſo in the liſt of his works.

GA'GUL, a river of European Turkey, which runs into the Danube: eight miles eaſt of Reni, in Beſſarabia.

GAHN'IA, *ſ.* [So named by Forſter in honour of Hen-

ry

ry Gahn, author of *Fundamenta Agroſtographiæ.*] In botany, a genus of the claſs hexandria, order monogynia. The generic characters are—Calyx: glume one-valved, ovate-lanceolate, convolute, two or five-flowered, *Forſt.*—two-valved, one-flowered; valves lanceolate, channelled, acuminate; the outer longer, broader, *Linn.* Corolla: glume two-valved, ſhorter than the calyx; valves ovate-lanceolate, acuminate, concave; the outer a little longer; nectary two-valved, hyaline, involving the filaments; outer valve larger, ovate, concave, three-toothed at the tip, *F.* (wedge-ſhaped with a point, *L.*) half the length of the corolline glume; inner ovate, entire, very ſmall. Stamina: filaments ſix, capillary, ſhort, after flowering elongated; antheræ linear, acuminate. Piſtillum: germ oblong; ſtyle filiform, erect, longer than the calyx, bifid; ſtigmas in each diviſion of the calyx two, capillary, curved back. Pericarpium: none. Seed ſingle, oblong, ſubangular, ſmooth, ſurrounded by the elongated filaments, ſo as to be double the length of the corolline glume, permanent.—*Eſſential Character.* Glume two-valved, irregular; nectary two-valved, involving the filaments; ſtigma dichotomous.

Species. 1. Gahnia procera: panicles ſpiked, ſeveral elongated, florets ſix-ſtamened. Culm half a fathom in height, round, ſmooth, upright, reclining at top, the thickneſs of a pigeon's quill; leaves ſword-ſhaped, longer than the culm, narrow, briſtle-ſhaped at the tip, reclining, concave at the baſe, ſheathing, rough at the edge with rows of minute ſpinules, alternate; panicles in ſpikes, ſtiff, ſeveral, from the ſheaths of the leaves, coming out in whorls at each joint of the culm, purple; flowers purple, in involucres half an inch in length; ſeeds brown; number of ſtamens in the lower flowers ſeven or eight, but the upper ones have always ſix; the lower panicles are often deſtitute of involucres, and therefore bear naked flowers. Native of New Zealand; found in Duſky bay, April 11, 1773.

2. Gahnia ſchoenoides: culms flexuoſe, panicles compound ſpiked rigid ſubſolitary. Native of Otaheite. It may probably be a Schoenus.

GA'IA, a town of Italy, in the Modeneſe: twenty miles ſouth of Modena.

GAICHI'ES (John), an eſteemed French writer, born in 1648. He became a prieſt of the Oratory, was made prebendary of Soiſſons, and choſen member of the academy in that city. For thirty years he officiated as a preacher in Soiſſons, and in his own life exhibited a commendable pattern of the piety and virtues which he enforced on his hearers. He ſhone in the character of a polite ſcholar; and after he became member of the academy at Soiſſons, was frequently employed to draw up the academic diſcourſes, which were annually preſented to the French academy. Some difference of opinion having ariſen between him and Langlet, biſhop of Soiſſons, which rendered his ſituation in that city leſs agreeable than formerly, he reſigned his prebend, and removed to Paris, where he died in 1731, at eighty-three years of age. The Academic Diſcourſes which he publiſhed, were ten in number; and are inſerted in the collections of the French academy. He was alſo the author of Maxims for the Uſe of Pulpit Orators. M. Gaichies' Diſcourſes, and the piece laſt mentioned, were publiſhed at Paris in 1739, with a preface by the abbé Lavarde.

GAIDAROTHY'MO, *ſ.* in botany. See STACHYS SPINOSA.

GAIDRONI'SA, a ſmall iſland in the Mediterranean, near the ſouth coaſt of Candia. Lat. 34. 48. N. lon. 43. 31. E. Ferro.

GAI'GNY, or GAGNY (John), in Latin GAGNÆUS, a learned French divine in the ſixteenth century, firſt-almoner to Francis I. and a native of Paris. He had taken the degree of bachelor in 1526, at which time he held the appointment of procureur, or attorney, for the French nation in the univerſity. In 1529 he delivered a courſe of lectures on ſcholaſtic theology in the college of Navarre, with great applauſe; was made rector of the univerſity in 1531; received the bonnet of doctor of divinity in the ſame year; and filled the poſt of chancellor of the univerſity from 1546 until his death, which took place towards the cloſe of the year 1549. He was intimately converſant with the learned languages, an able divine, and a reſpectable Latin poet. Francis I. entertained a great regard for him, and often conſulted him on ſubjects connected with the intereſts of literature. He publiſhed, in 1547, an edition of The Pſalms, in which the vulgar Latin tranſlation is accompanied with three ſorts of paraphraſtic lyric verſes; a French tranſlation of the Commentaries of Primaſius on St. Paul's Epiſtles, 1540; a French tranſlation of the Sermons of Guerricus, abbot of Igny; The Life of Alcimus Avitus; and the Hiſtory of the taking of Jeruſalem, by Apollonius Collatius, Prieſt of Novara, 1540. But his moſt important works conſiſt of ſhort Commentaries, upon the different books of the New Teſtament, in which he explains the literal ſenſe by a kind of paraphraſe, and moſt commonly follows the Greek text and the beſt Greek interpreters. He began with Scholia upon St. Paul's Epiſtles, printed in 1539. In 1543 he publiſhed a new edition of the preceding, conſiderably enlarged, and Scholia upon The general Epiſtles, and upon The Revelation. His Scholia upon The Goſpels, and The Acts of the Apoſtles, were not publiſhed till after his death in 1552. Theſe Scholia are inſerted in the *Biblia Magna* of father John de la Haye.

GAIL'DORF, or GAIL'ENDORF, a town of Germany, in the circle of Swabia, and lordſhip of Limburg: five miles ſouth of Hall, in Swabia, and thirty-eight weſt-ſouth-weſt of Anſpach.

GAILLAC', a town of France, and principal place of a diſtrict, in the department of the Tarn. It is a place of conſiderable trade, and the vine which grows on the hills in the environs is much eſteemed. It is ſituated on the Tarn, which is here navigable: nine leagues north-eaſt of Toulouſe, and eight north-north-weſt of Caſtres. Lat. 43. 53. N. lon. 19. 33. E. Ferro.

GAILLAC', a town of France, in the department of the Aveiron, and chief place of a canton, in the diſtrict of Sévérac-le-Chareau: ſeven miles north-weſt of Sévérac.

GAILLAC', *ſ.* A kind of French wine ſo called from the place where it is made. *Phillips.*

GAILLAC' TOUL'ZA, a town of France, in the department of the Upper Garonne, and chief place of a canton, in the diſtrict of Rieux: four leagues eaſt of Rieux, and ſeven ſouth of Toulouſe.

GAILLAR'DIA, *ſ.* in botany. See GALARDIA.

GAILLEFONTAI'NE, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Neufchatel: three leagues ſouth-eaſt of Neufchatel, and three ſouth-weſt of Aumale.

GAILLON', a town of France, in the department of the Eure, and chief place of a canton, in the diſtrict of Louviers. Near it is a celebrated Carthuſian monaſtery, burnt down in 1764; and ſince rebuilt with ſuperior elegance. It has been the burial-place of numbers of the royal family of France: three leagues north-weſt of Vernon, and two and a half ſouth-eaſt of Louviers.

GAILOV'SKOI, a fortreſs of Ruſſia, in the government of Caucaſus, on the Ural: twelve miles north-eaſt of Uralſk.

GAI'LY, *adv.* Airily; cheerfully. Splendidly. See GAYLY.

GAI'MERSHEIM, a town of Germany, in Upper Bavaria: two miles north-weſt of Ingolſtadt, and nine eaſt-north-eaſt of Neuburg.

GAIN, *ſ.* [*gain*, Fr.] Profit; advantage; contrary to *loſs.*—It is in praiſe of men as in gettings and *gains*; light *gains* make heavy purſes; for light *gains* come thick, whereas great come but now and then. *Bacon.*—Intereſt; lucrative views:

That,

That, ſir, which ſerves for *gain*,
And follows but for form,
Will pack, when it begins to rain,
And leave thee in the ſtorm. *Shakeſpeare.*

Unlawful advantage.—Did I make a *gain* of you by any of them whom I ſent unto you? 2 *Cor.* xii. 17.

If pride, if envy, if the luſt of *gain*,
If mad ambition, in thy boſom reign,
Thou boaſt'ſt, alas! thy ſober ſenſe in vain. *Fitzgerald.*

Overplus in a comparative computation; any thing oppoſed to loſs:

Who knows the balance of our loſs and *gain?*
Who knows, how far a rattle may outweigh
The mace or ſceptre? *Davies.*

To GAIN, *v. a.* [*gagner*, Fr.] To obtain as profit or advantage.—What reinforcement we may *gain* from hope. *Milton.*—To win; not to loſe.—A leper once he loſt, and *gain'd* a king. *Milton.*—To have the overplus in comparative computation.—If you have two veſſels to fill, and you empty one to fill the other, you *gain* nothing by that. *Brown.*—To obtain; to procure; to receive:

For fame with toil we *gain*, but loſe with eaſe,
Sure ſome to vex, but never all to pleaſe. *Pope.*

To obtain increaſe of any thing allotted.—I know that ye would *gain* the time, becauſe ye ſee the thing is gone from me. *Dan.* ii. 8.—To obtain whatever, good or bad.—Ye ſhould not have looſed from Crete, and have *gained* this harm and loſs. *Acts*, xxvii. 21.—To win againſt oppoſition:

O love! for Sylvia let me *gain* the prize,
And make my tongue victorious as her eyes. *Pope.*

To draw into any intereſt or party:

Come, with preſents, laden from the port,
To gratify the queen and *gain* the court. *Dryden.*

To obtain as a wooer:

He never ſhall find out fit mate, but ſuch
As ſome misfortune brings him, or miſtake,
Or whom he wiſhes moſt ſhall ſeldom *gain*
Through her perverſeneſs, but ſhall ſee her *gain'd*
By a far worſe. *Milton.*

To reach; to attain.—Death was the poſt, which I almoſt did *gain*. *Waller.*

Sun! found his praiſe
In thy eternal courſe, both when thou climb'ſt,
And when high noon haſt *gain'd*, and when thou fall'ſt.
Milton.

To GAIN *over*. To draw to another party or intereſt.—The court of Hanover ſhould have endeavoured to *gain over* thoſe who were repreſented as their enemies. *Swift.*

To GAIN, *v. n.* To grow rich; to have advantage; to be advanced in intereſt or happineſs.—Thou haſt taken uſury and increaſe, and thou haſt greedily *gained* of thy neighbours by extortions. *Ezek.* xxii. 12.—To encroach; to come forward by degrees; with *on*:

When watchful herons leave their wat'ry ſtand,
And mounting upward with erected flight,
Gain on the ſkies, and ſoar above the fight. *Dryden.*

So *on* the land, while here the ocean *gains*,
In other parts it leaves wide ſandy plains. *Pope.*

To get round; to prevail againſt; with *on*.—The Engliſh have not only *gained upon* the Venetians in the Levant, but have their cloth in Venice itſelf. *Addiſon.*—To obtain influence with; with *on*.—My good behaviour had *gained* ſo far *on* the emperor, that I began to conceive hopes of liberty. *Swift.*

GAIN, *adj.* [An old word now out of uſe.] Handy; ready; dexterous.

GAIN'AGE, *ſ.* [*gainagium*, Lat.] In law, the gain or profit of tilled or planted land, raiſed by cultivating it; alſo the draught, plough, and furniture, for carrying on the work of tillage, by the baſer kind of ſoke-men or villeins. Gainage was only applied to arable land, when they that had it in occupation, had nothing thereof but the profit raiſed by it from their own labour, towards their ſuſtenance, nor any other title but at the lord's will: and gainer is uſed for a ſoke-man, that hath ſuch land in occupation. *Bract. lib.* 1. c. 9. The word *gain* is mentioned by Weſt. Symb. par. 2. ſect. 3. where he ſays, Land in demeſne, but not in gain, &c. And in the 51 Hen. III. ſt. 4, there are theſe words; "No man ſhall be diſtrained by his beaſts, that gain the land." In the ſtatute of Magna Charta, c. 14, by gainage is meant no more than the plough-tackle, or implements of huſbandry, without any reſpect to gain or profit: where it is ſaid of the knight and freeholder, he ſhall be amerced *ſalvo contenemento ſuo*; the merchant or trader, *ſalvo merchandiſa ſua*; and the villein or countryman, *ſalvo gainagio ſuo*, &c. In which caſes it was, that the merchant and huſbandman ſhould not be hindered, to the detriment of the public, or be undone by arbitrary fines; and the villein had his wainage, to the end that the plough might not ſtand ſtill; for which reaſon the huſbandmen at this day are allowed a like privilege by law, that their beaſts of the plough are not, in many caſes, liable to diſtreſs. See the article DISTRESS.

GAINBATE'SA, a town of Italy, in the kingdom of Naples, and county of Moliſe: eighteen miles eaſt-ſouth-eaſt of Moliſe.

GAIN'ER, *ſ.* One who receives profit or advantage.—He that loſes any thing, and gets wiſdom by it, is a *gainer* by the loſs. *L'Eſtrange.*

GAIN'FARHN, a town of Germany, in the archduchy of Auſtria: one mile ſouth-ſouth-weſt of Baden.

GAIN'FUL, *adj.* Advantageous; profitable.—He will dazzle his eyes, and bait him in with the luſcious propoſal of ſome *gainful* purchaſe, ſome rich match, or advantageous project. *South.*—Lucrative; productive of money.—Nor knows he merchants' *gainful* care. *Dryden.*

Maro's muſe commodious precepts gives,
Inſtructive to the ſwains, nor wholly bent
On what is *gainful*. *Philips.*

GAIN'FULLY, *adv.* Profitably; advantageouſly.

GAIN'FULNESS, *ſ.* Profit; advantage.

GAIN'GIVING, *ſ.* The ſame as miſgiving; a giving againſt; as gainſaying, which is ſtill in uſe, is ſaying againſt, or contradicting.—It is but foolery; but it is ſuch kind of *gaingiving*, as would, perhaps, trouble a woman. *Shakeſpeare.*

GAIN'LESS, *adj.* Unprofitable; producing no advantage.

GAIN'LESSNESS, *ſ.* Unprofitableneſs; want of advantage.—The parallel holds too in the *gainleſſneſs* as well as laborioufneſs of the work; miners, buried in earth and darkneſs, were never the richer for all the ore they digged; no more is the inſatiable miſer. *Decay of Piety.*

GAIN'LY, *adv.* Handily; readily; dexterouſly. *Out of uſe.*

To GAIN'SAY, *v. a.* To contradict; to oppoſe; to controvert with; to diſpute againſt.—Speeches which *gainſay* one another, muſt of neceſſity be applied both unto one and the ſame ſubject. *Hooker.*

Too facile then, thou didſt not much *gainſay*;
Nay, didſt permit, approve, and fair diſmiſs. *Milton.*

To deny any thing:

I never heard yet
That any of thoſe bolder vices wanted
Leſs impudence to *gainſay* what they did
Than to perform it firſt. *Shakeſpeare.*

GAIN'SAYER, *ſ.* Opponent; adverſary.—Such as

may ſatisfy *gainſayers*, when ſuddenly, and beſides expectation, they require the ſame at our hands. *Hooker.*

GAINS'BOROUGH, a large and populous commercial town of Lincolnſhire, ſituated on the eaſtern bank of the Trent, which river parts it from the county of Nottingham. It is a very ancient place, memorable in 868 for the marriage of Alfred the Great with Ethelrid the daughter of an alderman of the Ganii. Here Swein, the Daniſh king, was ſtabbed, of which wound he died three days after in great agony. His ſon Canute was by the Saxon king Ethelred driven from hence with great ſlaughter to his ſhips, which then lay in the Humber. About a mile from the town are ſeveral acres of ground near the caſtle-hill, ſuppoſed to have been Daniſh encampments; and ſouth-by-eaſt five miles are veſtiges of the ancient city of Sidnaceſter, the ſee of Eadulfus in the ſeventh century, before it was joined to Dorcheſter and Lincoln. King Stephen created William de Rommara firſt earl of Lincoln, and gave him the caſtle of Gainſborough. This place ſuffered greatly in the civil wars. In July 1643, the earl of Kingſton, governor of the caſtle, was taken by ſurpriſe by lord Willoughby of Parham, and, for his loyalty, hurried into a pinnace to be taken to Hull for ſafety; but lord Cavendiſh, in the warmth of zeal for the king's cauſe, ordered a drake to be fired at the veſſel, with a view to retake the noble priſoner, which fatal ſhot killed both the earl and his ſervant. After this the earl of Newcaſtle came up and cannonaded the caſtle, which obliged the Oliverians to capitulate. Lately in paving the ſtreets the bones of many bodies were found, apparently buried where ſlain, being mingled together promiſcuouſly. And near a place called the Chapel-Staith, human bones of a prodigious magnitude have been dug up; and alſo in preparing the foundation for the new bridge, at the depth of twenty-one feet, a curious dagger was found, thought to be Daniſh.

The town has been lately very much improved; the inhabitants have re-built the church at their own coſt, and they may be ſaid to have completed that buſineſs with elegant ſimplicity. Acts have likewiſe been obtained for paving, cleanſing, and lighting, the town, and for building a bridge at the ſouth end of the town, over the Trent, which abounds with fiſh. The commercial concerns of Gainſborough are very conſiderable, as the inland trade by ſmall craft from ſo many different counties, and indeed the whole navigation from the Severn, Merſey, &c. to the Trent, all unite here. The town contains about 5000 inhabitants, and has ſeveral good charity ſchools. The market is on Tueſday; and the fairs, commonly called marts, hold nine days; but at preſent Tueſday and Wedneſday in Eaſter-week, and the firſt Tueſday and Wedneſday next after the 20th of October, are the principal days for buſineſs. Gainſborough is ſituated in 53. 26. north latitude, and is diſtant from London 148 miles, from Lincoln eighteen, and Newark twenty-five. About this place are thoſe uncommon high tides, at the full and change, which are called the *eager*. The Trent brings up ſhips of large burthen with the tide, though it is near forty miles from the Humber by water, and it is reckoned the moſt flouriſhing town in the county. Gainſborough gives title of earl to the noble family of Noel.

GAINS'BOROUGH (Thomas), an eminent Engliſh painter, born at Sudbury in 1727. As his father was a perſon in reduced circumſtances, he received little advantage from education, and was in truth the pupil of his own genius. Drawing after nature was one of his earlieſt propenſities, and his imitative powers were formed in his boyiſh days. He was ſent when very young to London for improvement and employment. There he practiſed modelling figures of animals, in which he attained great excellence. He alſo drew ornaments for heads, under the inſtruction of Gravelot the engraver, and painted ſmall landſcapes for ſale. At length he undertook portrait, and by his induſtry ſupported himſelf without any aſſiſtance from his family. He married at nineteen, and took up his reſidence at Ipſwich for ſome years. Thence he removed to Bath, where he attained that high reputation which accompanied him to his death. He ſettled at London in 1774, and after a ſhort time engaged the notice of his majeſty, of whom, with moſt of the royal family, he made admired portraits. No other patronage was required to raiſe him to the firſt rank in his profeſſion in point of buſineſs and emolument; but his intrinſic merits have alſo rendered him an intereſting object among eminent artiſts. His liberal contemporary, ſir Joſhua Reynolds, introduced a particular critique of his talents, in his 14th Academical Diſcourſe, by ſaying, "If ever this nation ſhould produce genius ſufficient to acquire to us the honourable diſtinction of an Engliſh ſchool, the name of Gainſborough will be tranſmitted to poſterity, in the hiſtory of the art, among the very firſt of that riſing name." Gainſborough indeed poſſeſſed all the characters of original genius. His talents for muſic were extraordinary, though marked with a capricious love of change in the inſtruments on which he practiſed. With very little knowledge of books, he wrote letters in a ſtyle which might have been thought a cloſe imitation of the manner of Sterne. His converſation was ſprightly and humorous, though confined in its topics, and he always ſhewed an impatience of ordinary ſubjects, and interrupted them by ſome ſally of wit. He beſtowed his money with great liberality, and was alive to all the emotions of a friendly and generous heart.

As an artiſt, the merit of Gainſborough cannot be more ably or candidly appreciated than it has been by ſir Joſhua Reynolds. Improvement in his art was conſtantly in his view, and he purſued it with the enthuſiaſm of a true lover, not of a mercenary profeſſor. His ſtyle and manner were peculiarly his own, and he produced effects by means which no other painter employed. For many years he was in the habit of painting by night. This cuſtom (ſays ſir Joſhua) is very improving to an artiſt. By candle-light, objects not only appear more beautiful, but from there being in a greater breadth of light and ſhadow, as well as having a greater breadth and uniformity of colour, nature appears in a higher ſtyle; and even the fleſh ſeems to take a higher and richer tone of colour. Judgment is to direct us in the uſe to be made of this method of ſtudy; but the method itſelf is advantageous. I have often imagined, that the two great coloriſts, Titian and Corregio, formed their high ideas of colouring from the effects of objects by this artificial light: and whoever attentively ſtudies the firſt and beſt manner of Guercino, will be convinced that he either painted by this light, or formed his manner on this conception. Gainſborough was alſo worthy of imitation in his manner of forming all the parts of his picture together; the whole going on at the ſame time, in the ſame manner as nature creates her works. Though this method (obſerves ſir Joſhua) is not uncommon to thoſe who have been regularly educated; yet probably it was ſuggeſted to him by his own natural ſagacity. With reſpect to Mr. Gainſborough's love of his art, without which excellence cannot be attained, it was enthuſiaſtic. We certainly know, that his paſſion was not the acquirement of riches, but excellence in his art; and to enjoy that honourable fame, which is ſure to attend it. That he felt this ruling paſſion ſtrong in death (continues ſir Joſhua), I myſelf was a witneſs.

When ſuch a man as Gainſborough arrives to great fame, without the aſſiſtance even of an academical education, without travelling to Italy, or any of thoſe preparatory ſtudies which have been ſo often recommended, he affords an inſtance, how little ſuch ſtudies are neceſſary; ſince ſo great excellence may be acquired without them. This is an inference not warranted by the ſucceſs of any individual; and I truſt it will not be thought that I wiſh to make this uſe of it. It muſt be remembered that the ſtyle of art which Gainſborough choſe, and in which he

ſo

ſo much excelled, did not require that he ſhould go out of his own country for the objects of his ſtudy; they were every where about him; he found them in the ſtreets, and in the fields; and from the models thus accidentally thrown in his way, he ſelected with great judgment ſuch as ſuited his purpoſe. As his ſtudies were directed to the living world principally, he did not pay a general attention to the works of the various maſters, though they are always of great uſe, even when the character of our ſubject requires us to depart from ſome of their principles. It cannot be denied that the department of the art which he profeſſed, may exiſt with great effect without them; that in ſuch ſubjects, and in the manner that belongs to them, they are ſupplied, and more than ſupplied, by natural ſagacity, and a minute obſervation of particular nature. If Gainſborough did not look at nature with a poet's eye, it muſt be acknowledged that he ſaw her with the eye of a painter; and gave a faithful, if not a poetical, repreſentation of what he had before him.

Though he did not much attend to the works of the great hiſtorical painters of former ages, yet he was well aware, that the language of the art, the art of imitation, muſt be learned ſomewhere; and as he knew that he could not learn it in an equal degree from his contemporaries, he very judiciouſly applied himſelf to the Flemiſh ſchool, who are undoubtedly the greateſt maſters of one neceſſary branch of art; and he did not need to go out of his own country for examples of that ſchool: from that he learnt the harmony of colouring, the management and diſpoſition of light and ſhadow, and every means which the maſters of it practiſed to ornament and give ſplendor to their works. And to ſatisfy himſelf, as well as others, how well he knew the mechaniſm and artifice which they employed to bring out that tone of colour, which we ſo much admire in their works, he occaſionally made copies from Rubens, Teniers, and Vandyck, which it would be no diſgrace to the moſt accurate connoiſſeur to miſtake, at the firſt ſight, for the works of thoſe maſters. What he thus learned, he applied to the originals of nature, which he ſaw with his own eyes; and imitated, not in the manner of thoſe maſters, but in his own.

Whether he moſt excelled in portraits, landſcapes, or fancy pictures, it is difficult to determine: whether his portraits were moſt admirable for exact truth of reſemblance, or his landſcapes for the portrait-like repreſentation of nature, ſuch as we ſee in the works of Rubens, Ryſdale, and others of thoſe ſchools. In his fancy pictures, when he had fixed on his object of imitation, whether it was the mean and vulgar form of a wood-cutter, or a child of an intereſting character, as he did not attempt to raiſe the one, ſo neither did he loſe any of the natural grace and elegance of the other; ſuch a grace and ſuch an elegance, as are more frequently found in cottages than in courts. This excellence was his own, the reſult of his particular obſervation and taſte; for this he was certainly not indebted to the Flemiſh ſchool; nor indeed to any ſchool; for his grace was not academical or antique, but ſelected by himſelf from the great ſchool of nature; and there are yet a thouſand modes of grace, which are neither theirs nor his, but lie open in the multiplied ſcenes and figures of life, to be brought out by ſkilful and faithful obſervers.

Few Engliſh pictures have attained a higher value than ſome of thoſe produced by Gainſborough. He never attempted hiſtorical painting of the higher kind, conſcious that his education had not qualified him to excel in it. Correctneſs and preciſion were no parts of his excellence, nor had he learning enough for the circumſtance and coſtume of hiſtory or allegory. Facility and ſtrength of execution were qualities which Gainſborough poſſeſſed in an uncommon degree; but he often ſacrificed too much to them. While in the vigour of his powers and the height of his reputation, he was attacked with a tumour in the neck, of the conſequences of which he died in Auguſt 1788, at the age of ſixty-one. He was buried in Kew church-yard, whither his remains were attended by the firſt artiſts, and other reſpectable friends.

The Gainſboroughs were a family of genius. The elder brother, at Sudbury, was a proficient in the arts; and a brother, who was a diſſenting-miniſter at Henley-upon-Thames, was one of the moſt ingenious mechanics of his time, as well as a man of ſingular benevolence and ſimplicity.

'GAINST, *prep.* See AGAINST:

Tremble, ye nations! who, ſecure before,
Laugh'd at thoſe arms, that *'gainſt* ourſelves we bore.
Dryden.

To GAINSTA'ND, *v. a.* To withſtand: to oppoſe; to reſiſt. A proper word, but not in uſe.—Love proved himſelf valiant, that durſt with the ſword of reverent duty *gainſtand* the force of ſo many enraged deſires. *Sid.*

To GAINSTRI'VE, *v. n.* To reſiſt:

Whoſe bodies chaſt, whenever in his powre
He may them catch, unable to *gainſtrive*,
He with his ſhameful luſt doth firſt deflowre,
And afterwards themſelves doth cruelly devoure. *Spenſ.*

GAIR'ISH, *adj.* [ȝeyrnian, to dreſs fine, Sax.] Gaudy; ſhowy; ſplendid; fine.—Three or four will outrage in apparel, huge hoſe, monſtrous hats, and *gairiſh* colours. *Aſcham.*

There in cloſe covert by ſome brook,
Where no profaner eye may look,
Hide me from day's *gairiſh* eye. *Milton.*

Extravagantly gay; flighty.—Fame and glory tranſport a man out of himſelf: it makes the mind looſe and *gairiſh*, ſcatters the ſpirits, and leaves a kind of diſſolution upon all the faculties. *South.*

GAIR'ISHNESS, *ſ.* Finery; flaunting gaudineſs. Flighty or extravagant joy.—Let your hope be without vanity, or *gairiſhneſs* of ſpirit, but ſober, grave, and ſilent. *Taylor.*

GAIR'SA, one of the ſmaller Orkney iſlands, about half a league north-eaſt from Pomona iſland.

GAIS'SERN, a town of Germany, in the duchy of Stiria: twelve miles eaſt of Rottenmanns.

GAIT, *ſ.* [*gat*, Dut.] Away; as, Gang your *gait*:

Good youth, addreſs thy *gait* unto her;
Be not denied acceſs, ſtand at her door. *Shakeſpeare.*

March; walk:

Thou art ſo lean, and meagre waxen late,
That ſcarce thy legs uphold thy feeble *gait*. *Hubbard.*

The manner and air of walking.—Great Juno comes; I know her by her *gait*. *Shakeſpeare.*

Leviathans
Wallowing, unwieldy, enormous in their *gait*. *Milton.*

GA'LA, *ſ.* [from *cala*, or *caloat*, Arabic; a robe of honour.] A royal banquet; a diſplay of chivalry; a grand feſtival, attended with ſumptuous dreſs and pageantry.

GA'LA WATER, a river of Scotland, which runs into the Tweed, about two miles above Malcroſs, in Roxburgſhire.

GA'LAAD, or GALEAD. See GILEAD.

GALAC'TIA, *ſ.* in botany. See CLITORIA.

GALACTIRRHŒ'A, *ſ.* [γαλακτιῤῥοια, from γαλα, milk, and ῥεω, to flow.] The medical term for an exceſs or overflowing of the milk in women.

GALAC'TITES, *ſ.* A precious ſtone as white as milk, a kind of white clay.

GALACTOPH'AGI, *ſ.* In antiquity, perſons who lived wholly on milk, without the uſe of any other food. The words are compounded of γαλακτ-, milk, and φαγειν, to eat. Certain nations in Scythia Aſiatica, as the Getæ, Nomades, &c. are famous, in ancient hiſtory, in quality of *galactophagi*, or milk-eaters. Homer makes their eloge, Iliad, lib. iii. Ptolemy, in his geography, places the

Galactophagi

Galactophagi between the Riphæan mountains on one ſide, and the Hircanian ſea on the other.

GALACTOPH'AGIST, *ſ.* [*galactophagus*, Lat. of γαλακτοφαγος, of γαλα, milk, and φαγω, to eat.] A milk-eater, a milk-ſop.

GALACTOPH'ORA, *ſ.* [γαλακτοφορα, from γαλα, milk, and φερω, to carry.] Medicines which increaſe or purify the milk. The lacteal veſſels are alſo called *ductus galactophori*.

GALACTOPO'SIA, *ſ.* [γαλακτοποσια, from γαλα, milk, and πινω, to drink.] The practice of curing diſeaſes by a milk-diet.

GA'LACZ, or GALASI, or GALATZ, a town of European Turkey, in Bulgaria, near the Danube: one hundred and twenty miles ſouth-ſouth-weſt of Bender, and fifty-four weſt of Iſmael. Lat. 45. 24. N. lon. 46. 10. E. of Ferro.

GALA'GE, *ſ.* A ſhepherd's clog. *Not in uſe:*

My heart-blood is well nigh froſne, I feel;
And my *galage* grown faſt to my heel. *Spenſer.*

GALAM', a fort of Africa, built by the French on the river Senegal, ceded to the Engliſh by the peace of Verſailles, in 1763. During the American war it was taken by the French, in whoſe poſſeſſion it remained by the peace of 1783.

GALAM. See GALLAM.

GALAN', or GALLAN, a town of France, in the department of the Higher Pyrenées, and chief place of a canton, in the diſtrict of Tarbes: five leagues eaſt of Tarbes.

GALAN'GA, and GA'LANGALE, *ſ.* in botany. See KÆMPFERIA and MARANTA.

GALAN'THIS, in mythology, a ſervant of Alcmena, whoſe ſagacity eaſed the labours of her miſtreſs. When Juno reſolved to retard the birth of Hercules, and haſten the labours of the wife of Sthenelus, ſhe ſolicited the aid of Lucina; who immediately repaired to the houſe of Alcmena, and in the form of an old woman, ſat near the door with her legs croſſed, and her fingers joined. In this poſture ſhe uttered ſome magical words, which ſerved as a charm to prolong the labours of Alcmena, and render her ſtate the more miſerable. Alcmena had paſſed ſome days in the moſt excruciating torments, when Galanthis began to ſuſpect the jealouſy of Juno; and concluded that the old woman, who continued at the door always in the ſame unchanged poſture, was the inſtrument of the anger of the goddeſs. With ſuch ſuſpicions Galanthis ran out of the houſe, and with a countenance expreſſive of joy, ſhe informed the old woman that her miſtreſs had juſt brought forth. Lucina, at the words, roſe from her poſture, and that inſtant Alcmena was ſafely delivered. The loud laugh which Galanthis raiſed upon this, made Lucina ſuſpect that ſhe had been deceived. She ſeized Galanthis in a rage, and threw her on the ground; but while ſhe attempted to reſiſt, ſhe was changed into a weaſel, and condemned to bring forth her young, in the moſt agonizing pains, by the mouth, by which ſhe had uttered falſehood. This transformation alludes to a vulgar notion among the antients, who believed this of the weaſel, becauſe ſhe carries her young in her mouth, and continually ſhifts them from place to place. The Bœotians paid great veneration to the weaſel, which, as they ſuppoſed, facilitated the labours of Alcmena. *Ælian.*

GALAN'THUS, *ſ.* [from γαλα and ανθος, milk and flower: ſo called from the milky whiteneſs of the corolla.] In botany, a genus of the claſs hexandria, order monogynia, natural order of ſpathaceæ, (narciſſi, *Juſſ.*) The generic characters are—Calyx: ſpathe oblong, obtuſe, compreſſed, gaping on the flat ſide, withering. Corolla: petals three, oblong, obtuſe, concave, lax, patulous, equal: nectary cylindric, three-leaved, half the length of the petals; leaflets petal-ſhaped, parallel, emarginate, obtuſe. Stamina: filaments capillary, very ſhort: antheræ oblong, acuminate, ending in a briſtle, convergent. Piſtillum: germ globular, inferior: ſtyle filiform, longer than the ſtamens: ſtigma ſimple. Pericarpium: capſule oval-globular, obtuſely three-ſided, three-celled, three-valved. Seeds ſeveral, globular.—*Eſſential Character.* Petals: three concave; nectary of three ſmall emarginate petals; ſtigma ſimple.

Galanthus nivalis, or ſnow-drop, a ſingle ſpecies. The bulb of the ſnowdrop is coated and truncate. Leaves yelloviſh at the baſe, callous at the tips. Scape half a foot or a ſpan in height, ancipital, ſtriated, involved at the baſe in a pair of leaves: ſheath whitiſh, truncate, involving the leaves and ſcape. The peduncle uſually comes out from the left cell of the ſpathe, is weak, and wrinkled below the germ. Flowers ſolitary, pendulous: petals milk-white. Nectary (or inner ſmaller petals) having on the outſide above the middle a green heart-ſhaped ſpot, and on the inſide ſix yelloviſh green lines. Antheræ opening at the tip; filaments twice their length, and ſpringing each from a cavity which has a rim round it. Capſule half an inch long. Seeds oblong, four to twelve in one cell, each adhering to the receptacle by its proper hook. It varies with double flowers. Native of Swiſſerland, Auſtria, Sileſia, England, &c. in meadows. Common in orchards, where it is probably a relique of cultivation. At the foot of Malvern hills, where no traces of buildings or gardens are to be found. Near Cirenceſter, &c. but it is very doubtful whether this, and ſeveral other bulbous plants were originally indigenous. It flowers uſually in February, hence its name in ſome places of Fair Maids of February. In the Rev. Gilbert White's Naturaliſt's Calendar, the ſnowdrop is marked to blow from Jan. 10 to Feb. 5.

Theſe flowers are valued for their early appearance in the ſpring, for they uſually flower in February, when the ground is often covered with ſnow. The ſingle ſort comes out the firſt, and though the flowers are but ſmall, yet when they are in bunches, they make a very pretty appearance; therefore theſe roots ſhould not be planted ſingle, as is ſometimes practiſed by way of edging to borders; for when they are ſo diſpoſed, they make very little appearance. But when there are twenty or more roots growing in a cloſe bunch, the flowers have a very good effect; and as theſe flowers thrive well under trees or hedges, they are very proper to plant on the ſides of the wood-walks, and in wilderneſs quarters; where, if they are ſuffered to remain undiſturbed, the roots will multiply exceedingly. Theſe may be taken up at the end of June, when the leaves decay, and may be kept out of the ground till the end of Auguſt; but they muſt not be removed oftener than every third year. See LEUCOIUM.

GALA'NUS (Clement), an Italian who was ſent miſſionary into Armenia, where he continued for ſeveral years. After his return to Rome he publiſhed, in 1650, a laborious work in two volumes folio, conſiſting of treatiſes in the Armenian language, accompanied with Latin tranſlations, and a great variety of notes, argumentative, hiſtorical, and theological, entitled, *Conciliationes Eccleſiæ Armenæ cum Romana*, &c. and is intended to ſhew, that the Armenians differ very little from the Latins in their religious opinions. It was publiſhed in aid of a ſyſtem, according to which the miſſionaries were directed, by artful compliances, and explanations adapted to the prejudices of the Greeks, to ſoften their antipathy againſt the Latin church, and inſenſibly to bring them under the papal juriſdiction. Galanus was alſo the author of a Grammar of the Armenian Language, and a Syſtem of Logic, in the ſame, publiſhed at Rome in 1645.

GALAR'DIA, *ſ.* [named firſt *Gaillardia*, by Monſ. Fougeroux de Bondaroy, from Monſ. *Gaillard* of Charentonneau.] In botany, a genus of the claſs ſyngeneſia, order polygamia fruſtranea, natural order corymbiferæ. The generic characters are—Calyx: common of two rows of ſcales; ſcales linear, flat, acute, about twelve in each row; the outer longer, reflex: the inner erect. Corolla: compound radiate; corollets hermaphrodite, numerous

rous in the convex diſk; females about twelve, much longer, ſpreading, in the ray. Proper in the hermaphrodites tubular-funnel-form, with a five-toothed border: in the females ligulate, wider outwards, half-three-cleft. Stamina: to the hermaphrodites filaments five, capillary, very ſhort; antheræ cylindric, tubular. Piſtillum: to the hermaphrodites germ turbinate-angular; ſtyle filiform, the length of the corollet; ſtigmas two, ſpreading; females germ very ſmall; ſtyle none; ſtigma none. Pericarpium: none; calyx unchanged. Seeds in the hermaphrodites ſolitary, angular, crowned with the five-leaved calycle; leaflets lanceolate, erect, awned: in the females none. Receptacle: convex, (flat, *Juſſ.*) chaffy; chaffs briſtle-ſhaped.—*Eſſential Character.* Receptacle chaffy; ſeed crowned with the five-leaved calycle (eight-chaffed, *Juſſ.*) calyx of two rows of ſcales, almoſt equal.

Galardia alternifolia, a ſolitary ſpecies. Stem from a foot to eighteen inches high, ſtraight, branched, ſlightly hiſpid, tinged with purple; root-leaves oblong-ſpatulate, with large notches, a little rough to the touch, ſpread on the ground; ſtem-leaves alternate, embracing, oblong, having a few blunt indentures along the edge, bright green, and ſlightly villoſe; the upper ones are almoſt entire; peduncles ſimple, naked, long, terminating, bearing one handſome flower, purple and yellow, two inches in diameter; ſcales of the calyx ciliate or hiſpid at the baſe, the inner ones ſmalleſt; hermaphrodite florets hiſpid on the outſide; receptacle ſlightly convex; ſeeds turbinate, crowned with from five to eight ſharp ſcarioſe chaffs which form the egret. This fine plant has been cultivated a few years in the royal garden at Paris. M. Fougeroux informs us that the comte d'Eſſales brought the ſeeds from Louiſiana, and that the plants had produced ſeeds in the Paris garden in 1784 or thereabouts. It is an annual, and flowers in July and Auguſt, and continues to the end of October.

GALA'RED, a town of Sweden, in the province of Blekingen: twenty-eight miles north of Halmſtadt.

GAL'ARIPS, *ſ.* in botany. See ALLAMANDA.

GALAR'QUE, a town of France, in the department of the Gard: two leagues ſouth-eaſt of Sommieres.

GALA'RS, a town of Tranſilvania: ſixteen miles ſouth-eaſt of Hunvad.

GALASHI'ELS, a flouriſhing town of Scotland, in the county of Selkirk, on a ſmall river called the *Gala*, at its union with the Tweed, with a conſiderable woollen manufacture: five miles north of Selkirk.

GALA'SO, a river of Italy, in the kingdom of Naples, which runs into the ſea near Tarento.

GAL'ATA, the principal fauxburg or ſuburb of Conſtantinople; formerly an extenſive city, which roſe under the auſpices of the Genoeſe republic, from the connivance, rather than the encouragement, of the Greek emperors. In 1261 certain Genoeſe merchants obtained a right of ſettlement here, with the privilege of being governed by their own podeſta or chief magiſtrate, ſubject to the empire. As they increaſed in commercial conſequence, they became involved in a war with Cantacuzene; and from Michael Paleologus extorted a licence to ſurround Galata with a ſtrong wall and gates, which were completed in 1348. Four years after, they defeated the navy of the Greeks and their Venetian allies; and, had not petty conteſts for ſuperiority among themſelves waſted their power, they might have become maſters of the imperial territory. In the laſt ſiege of Conſtantinople, their unextinguiſhed jealouſy of the Greeks induced them to give a covert aſſiſtance to the ſultan Mohammed II. and it is obſerved by Gibbon, that the colony of Galata awed the capital, and navigated the Euxine, till it was involved in the final ſervitude of Conſtantinople itſelf. In 1446, the walls, with their twelve gates, were completely repaired, and the citadel, or tower of Chriſt, firſt built by Anaſtaſius, was raiſed to double its former height; which, beſide a very lofty conical roof, exceeds 140 feet. As it crowns a hill, the elevation is uncommonly grand. The Turks uſe it only for the purpoſe of ſounding the tocſin, or great drum, in caſe of fire; to the ravages of which it yielded in the conflagration of 1794, but has been ſince improved as a proſpect-room by the ſultan Selim III. The city of Galata is at preſent the reſidence of merchants of all nations and religions; the ſtreets are chiefly formed by ſhops and magazines for articles of European commerce. The circuit incloſes about four miles. Its juriſdiction has always been claimed by the Venetians, whoſe ambaſſadors are ſtyled *bailo*, and whoſe public entrance through the gates has been uſually attended with a ceremony of preſenting the keys. Imperfect remains are yet to be ſeen of the Genoeſe fort, from which the chain was drawn acroſs to the ſeraglio point, during the ſieges of Conſtantinople which happened in the reigns of Leo III. Michael II. and Conſtantine the laſt.

GAL'ATA, a ſmall iſland in the Mediterranean, near the coaſt of Tunis. Lat. 38. 15. N. lon. 9. 30. E. Greenwich.

GALATÆ'A, or GALATHÆA, in mythology, a ſea-nymph, daughter of Nereus and Doris. She was paſſionately loved by the cyclop Polyphemus, whom ſhe treated with diſdain; while Acis, a ſhepherd of Sicily, enjoyed her unbounded favours. The happineſs of the lovers was deſtroyed by the jealouſy of the cyclop, who cruſhed his rival with a piece of a broken rock, while repoſing on the boſom of Galatæa. The nymph was inconſolable for the loſs of Acis; and as ſhe could not reſtore him to life, ſhe changed him into a fountain. *Ovid.*

GALATE'O (Antony), an Italian philoſopher, who takes his name from his birth-place Galatona, in the Salentine. His family was named Ferrari, originally from Greece. He was born in 1444, and received his firſt education at Nardo. Thence he went for the ſtudy of medicine to Ferrara, and after taking his degree of doctor, he ſettled at Naples, where he was much eſteemed by Ferdinand I. and his ſucceſſors, and appointed their phyſician. The air not agreeing with him, he removed to Gallipoli, where he married. He alſo reſided long at Lecce, at which place he founded an academy, on the model of that of Naples, of which he was a member. He died at Lecce in 1516. As a philoſopher, he adhered to the opinions of the ancients, but with an elevation above vulgar prejudices. As a phyſician, he publiſhed ſome valuable obſervations on the cauſes of epidemic diſeaſes in the countries where he practiſed, and alſo on the gout, rheumatiſm, &c. His moſt celebrated work is an elegant and learned performance, *De ſitu Iapygiæ*, to which is annexed a deſcription of the city of Gallipoli; the whole containing much curious matter in geography and civil and natural hiſtory. His other principal works are, *De Situ Elementorum*; *De Situ Terrarum*; *De Mari & Aquis*; *Succeſſi dell' armata Turcheſca nella citta d'Otranto dell' anno* 1480.

GALATE'O, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra: eight miles eaſt-ſouth-eaſt of Nicotera.

GALA'TI, a town of the iſland of Silily, in the valley of Demona: twelve miles ſouth-weſt of Patti.

GALA'TIA, in ancient geography, a province of Aſia Minor, now called *Amaſia*; bounded on the eaſt by Cappadocia, on the weſt by Bithynia, on the ſouth by Pamphylia, and on the north by the Euxine ſea. It was known as the north part of Phrygia Magna; but upon being occupied by the Gauls, was called *Galatia*; and becauſe ſituated in the midſt of Greek colonies, it obtained the name of *Gallogræcia*. Strabo calls it *Galatia*, and *Gallogræcia*: hence a twofold name of the people; *Galatæ* and *Gallogræci*. The Greeks called it *Gallia Parva*; to diſtinguiſh it from the *Tranſalpina*, both which they called *Galatia*. It was reduced under the ſubjection of the Romans in the time of Auguſtus, and is now in the hands of the Turks. Here St. Paul founded a church, to which he directed that epiſtle known by the name of the *Epiſtle to the Galatians*, written with a view to reclaim them from the obſervation of Jewiſh ordinances. *Acts* xvi. 6.

GAL'ATIN (Peter), a learned Franciſcan monk, who flouriſhed at the beginning of the ſixteenth century. He acquired conſiderable reputation by different theological and literary productions, particularly by *De Arcanis Catholicæ Veritatis, Libri XII. quibus pleraque Religionis Chriſtianæ Capita contra Judæos, tam ex Scripturis veteris Teſtamenti authenticis, quam ex Talmudicorum Commentariis, confirmare & illuſtrare conatus eſt.* The firſt edition of this work appeared in 1518, and met with ſo favourable a reception, that it afterwards underwent ſeveral impreſſions at Baſil, Frankfort, &c. The beſt editions are thoſe of Frankfort in 1612 and 1672, in folio, to which is added a treatiſe of the learned John Reuchlin, entitled *De Cabala, ſeu de ſymbolica Receptione, Dialogus tribus Libris abſolutus.*

GALATO'LA, a town of Italy, in the kingdom of Naples, and province of Otranto: four miles eaſt-ſouth-eaſt of Nardo.

GA'LATZ. See GALACZ.

GA'LAX, *ſ.* [γαλαξ, Gr. milk.] In botany, a genus of the claſs pentandria, order monogynia. The generic characters are—Calyx: perianth ten-leaved; outer leaflets alternate, ſhorter, lanceolate, reflex; inner longer, lanceolate, acute, upright. Corolla: one-petalled, ſalver-ſhaped; tube cylindric, length of the calyx; border flat, five-cleft, ſegments obtuſe. Stamina: filaments ſhort; antheræ roundiſh, converging within the throat of the corolla. Piſtillum: germ ovate, villoſe; ſtyle filiform, ſemibifid, length of the ſtamens; ſtigmas roundiſh. Pericarpium: capſule ovate, one-celled, two-valved, coloured, elaſtic. Seeds two, large, convex, ovate, callous, as it were ſingle two-lobed.—*Eſſential Character.* Calyx: ten-leaved; corolla ſalver-ſhaped; capſule one-celled, two-valved, elaſtic.

Galax aphylla, the only ſpecies. This plant is a native of Virginia, as yet very rare and little known in Europe; leaves all radical; ſtem naked, ſimple, probably woody; flowers in a looſe terminating ſpike.

GALAX'IA, *ſ.* [γαλαξιος, Gr. milky.] In botany, a genus of the claſs monadelphia, order triandria, natural order enſatæ, (irides, *Juſſ.*) The generic characters are—Calyx: ſpathe one-valved, membranaceous, converging. Corolla: one-petalled, ſuperior; tube filiform, long, erect, a little widened at top; border ſix-parted; parts obovate, obtuſe, ſpreading; the three outer ones having a nectareous pit. Stamina: filaments three, united in a cylinder; antheræ ovate. Piſtillum: germ inferior, obtuſely triangular, ſmooth; ſtyle filiform, a little longer than the ſtamens; ſtigmas three, filiform, many-parted, ſpreading. Pericarpium: capſule oblong-ſubcylindric, three-grooved, three-celled, three-valved. Seeds very many, globular, very ſmall.—*Eſſential Character.* Spathe one-valved; corolla one-petalled, ſix-cleft; tube capillary; ſtigma many-parted.

Species. 1. Galaxia ovata, or ovate galaxia: leaves ovate. Root filiform, fixed to an ovate netted comoſe bulb; there are uſually ſeveral of theſe conglomerate; ſtem none; root-leaves heaped, ſheathing, ovate, obtuſe, ſlightly veined longitudinally, flat, ſmooth, the edge ſomewhat cartilaginous: the calyx is a very thin ſheath; corolla variegated with yellow, purple, and violet; capſule ſmooth; it flowers from June to September.

2. Galaxia graminea, or graſſy galaxia: leaves linear-filiform. Root as in the preceding; leaves radical, in bundles, broader at the baſe, then linear, briſtle ſhaped at the tip, entire, channelled, ſmooth, very nearly an inch in length; flowers radical, among the ſheathing leaves, in bundles, ſeſſile, with a long capillary tube, the length of the leaves; corolla yellow, varying with a yellow tube and a violet-coloured border. Theſe are both natives of the Cape of Good Hope, where they were found by Thunberg.

Cavanilles adds a third ſpecies, found by Commerſon in the Straits of Magellan. Being doubtful whether it belongs to this genus, he names it *Galaxia obſcura.*

GALAXI'A, a feſtival, in which they boiled a mixture of barley, pulſe, and milk, called γαλαξια by the Greeks.

GAL'AXY, *ſ.* [γαλαξια, Gr. *galaxie*, Fr.] The MILKY-WAY, or VIA LACTEA, in aſtronomy, that whitiſh, luminous track, which ſeems to encompaſs the heavens like a ſwarth or girdle; and which is eaſily ſeen in a clear night, eſpecially when the moon is not up. It is of a conſiderable, though unequal, breadth; being alſo in ſome parts double, but in others ſingle:

A broad and ample road, whoſe duſt is gold,
And pavement ſtars, as ſtars to thee appear,
See in the *galaxy*, that milky way,
Which nightly, as a circling zone thou ſeeſt
Powder'd with ſtars. *Milton.*

The galaxy paſſes through many of the conſtellations in its circuit round the heavens, and keeps its exact place or poſition with reſpect to them.

Many fabulous ſtories concerning the milky-way have been invented by the ancient poets and philoſophers, ſome of whom ſpeak of it as the road by which the heroes went to heaven. The Egyptians called it the *way of ſtraw*, from the ſtory of its riſing from burning ſtraw thrown behind the goddeſs Iſis in her flight from the giant Typhon. The Greeks, who affected to derive every thing in the heavens from their fabled intercourſe with the gods, have two origins for it: the one, that Juno, without perceiving it, accidentally gave ſuck to Mercury when an infant; but that as ſoon as ſhe turned her eyes upon him, ſhe threw him from her; and, as the nipple was drawn from his mouth, the milk ran round the heavens, and effaced the ſplendour of the ſtars over which it paſſed; the other, that the infant Hercules being laid by the ſide of Juno when aſleep, on waking, ſhe gave him the breaſt; but ſoon perceiving who it was, ſhe threw him from her, and the heavens were marked by the flowing current of milk.

Philoſophers, however, gave it a different turn, and a different origin, from the poets; theſe deemed it to be a track of liquid fire, ſpread in this manner along the ſkies: and others again, ſuppoſing a celeſtial region beyond all that was viſible, and imagining that fire, at ſome time let looſe from thence, was to conſume the world, made this a part of that celeſtial fire, and appealed to it as preſage of what eventually would ſurely happen. This diffuſed brightneſs they conſidered as a crack in the vault or wall of heaven, and fancied they ſaw a glimmering of celeſtial flame through it; and that there required nothing more than the opening of this crack by ſome accident of nature, or by the fiat of the gods, to make the whole frame ſtart, and thus diſſolve the earth by liquid fire.

Ariſtotle makes the galaxy a kind of meteor, formed of a crowd of vapours, drawn into that part by certain large ſtars diſpoſed in the region of the heavens anſwering to it. Others, on a more rational hypotheſis, finding that the galaxy was ſeen all over the globe, that it always correſponded to the ſame fixed ſtars, and that it was far above the higheſt planets, ſet Ariſtotle's opinion aſide, and placed the galaxy in the firmament or region of the fixed ſtars; concluding it to be an aſſemblage of an infinite number of minute ſtars. And ſince the invention of teleſcopes, and the reſearches made by the indefatigable Dr. Herſchel, this opinion has been confirmed. See the article ASTRONOMY, vol. ii. p. 344–350.

GAL'BA (Servius Sulpicius), a Roman emperor, deſcended from the ancient family of Sulpicii, and ſucceeded to the throne on the death of Nero. See the article ROME.

GALBANE'TUM, *ſ.* [with phyſicians.] A medicinal compound in which the chief ingredient is *galbanum.*

GAL'BANUM, *ſ.* [χαλβανη, Gr. from חלבנה, *chalbanah*, Heb.] A concrete, gummy, reſinous, juice of an evergreen plant, with leaves like thoſe of aniſe, growing in Syria, the Eaſt Indies, and Ethiopia. It is the *bubon galbanum* of Linnæus. See BUBON, vol. iii. p. 471. This drug is brought to us in pale-coloured, ſemitranſparent, ſoft,

ſoft, tenacious, maſſes, of different ſhades, from white to brown; the better ſorts of which, on being opened, appear compoſed of clear whitiſh tears, often intermixed with little ſtalks or ſeeds of the plant. It partakes more of the reſinous than of the gummy quality, though it is nearly all ſoluble in water. It hath a ſtrong unpleaſant ſmell, and bitteriſh warm taſte, is unctuous to the touch, and ſoftens in the fingers. In medical virtue and ſenſible qualities it reſembles the gum ammoniacum, but is leſs efficacious in aſthmas, though more efficacious than it in hyſteric diſorders. Great part of the virtue of galbanum conſiſts in its eſſential oil, and is carried up in diſtillation, either with water or with ſpirit, whence great care is required in purifying it. For making of plaſters, and ſuch like inferior purpoſes, the beſt method is to expoſe it in winter to a ſharp froſt, and whilſt it is brittle to powder it; thus the impurities may in ſome meaſure be ſeparated in the ſearce; for internal uſes, it is beſt managed by including it in a bladder, and keeping it in hot water, until it is ſoft enough to be ſtrained by preſſure through an hempen cloth. Beſides the eſſential oil yielded by diſtillation with water, an empyreumatic oil is obtained, by diſtilling in a retort without mixture. This empyreumatic oil is of a fine blue colour, but changes in the air to a purple.

GALBE'UM, *ſ.* [from the emperor Galba, who is ſaid to have worn it.] A medical bracelet worn round the neck.

GAL'BULUS, *ſ.* [from *galbus*, Lat. yellow.] The cone or nut of the cypreſs-tree; ſo called from its colour. Alſo the medical term for a natural yellowneſs of the ſkin.

GAL'DER, a town of the iſland of Canary.

GALE, *ſ.* [*gahling*, Germ. haſty, ſudden.] A wind not tempeſtuous, yet ſtronger than a breeze.—Freſh *gales* and gentle air. *Milton.*

Umbria's green retreats,
Where weſtern *gales* eternally reſide. *Addiſon.*

GALE (Roger), a learned antiquarian, eldeſt ſon of dean Gale, born in 1672, and educated at Trinity college, Cambridge, of which he became fellow in 1697. He poſſeſſed a conſiderable eſtate at Scruton in Yorkſhire, and was repreſentative of North Allerton in that county, during three parliaments. He was a fellow of the royal and antiquarian ſocieties, of which laſt he was vice-preſident and treaſurer. He died at Scruton, in June, 1744. Mr. Gale publiſhed *Antonini Iter Britanniarum Commentariis illuſtratum Thomæ Gale, S. T. P. nuper Decani Ebor. Opus poſthumum reviſit, edidit R. G. Acceſſit Anonymi Ravennatis Britanniæ Chorographia*; Lond. 1709, 4to. Alſo, The Knowledge of Medals, &c. tranſlated from the French of Joubert; *Regiſtrum Honoris de Richmond*, 1722, folio; A Diſcourſe on the four Roman Ways in Britain, printed in Leland's Itinerary, vol. vi. and ſeveral papers in the Memoirs of the Royal and Antiquarian Societies, and other publications. He bequeathed his MSS. and a cabinet of Roman coins to Trinity college, Cambridge.—His brother, SAMUEL GALE, was alſo eminent for antiquarian learning, and was the author of ſome eſſays in the Archæologia.

GALE (Theophilus), a learned Engliſh nonconformiſt divine, born at King's-Teinton in Devonſhire, in 1628. In 1647 he was entered a commoner of Magdalen college, in the univerſity of Oxford, where his great diligence and exemplary behaviour recommended him to the eſteem of the preſident, Dr. John Wilkinſon. To the ſame recommendations he was probably indebted for his election to a fellowſhip of his college, in 1650, when ſeveral of his ſeniors proved unſucceſsful candidates. In 1652 he took his degree of M. A. and became an eminent tutor, and a diſtinguiſhed preacher. While he diligently diſcharged the duties of theſe functions, he applied himſelf cloſely to theological ſtudies, and collected materials for his grand work The Court of the Gentiles, the plan of which he had begun to form at an early period of his academic life. For ſeveral years a conſiderable part of his theological reſearches was directed in ſubſerviency to this deſign; while at the ſame time he ſedulouſly diſcharged the duties of the miniſterial office, and was juſtly admired for the happy mixture of ſolid reaſoning, learning, and piety, by which his pulpit diſcourſes were diſtinguiſhed. In 1657 he ſettled as a ſtated preacher at Wincheſter, where he acquired univerſal eſteem by his exemplary life and converſation. When, after the reſtoration of Charles II. the act of uniformity was paſſed in 1661, Mr. Gale not being able conſcientiouſly to ſubſcribe to the terms required under it, found himſelf compelled to embrace the hard lot of many other diſtinguiſhed clergymen, who were excluded from the public exerciſe of their function; and he was likewiſe deprived of his fellowſhip. In theſe circumſtances he was received into the family of Philip lord Wharton, in the capacity of tutor to his two ſons Thomas and Godwin. As lord Wharton was on principle a non-conformiſt, his views of things would not permit him to ſend his ſons to either of the Engliſh univerſities; on which account he determined to place them in ſome foreign public academy. In purſuance of this reſolution, he ſent them under the care of Mr. Gale, in 1662, to Caen in Normandy, where there was a celebrated ſeminary of learning, under the direction of the moſt diſtinguiſhed profeſſors of the reformed religion in France. In this ſituation Mr. Gale had an opportunity of forming an acquaintance with many of the foreign literati, among whom was the famous Bochart, and of improving himſelf by their converſation and literary communications. In 1665 he returned with his pupils to England, and ſoon after renewed his literary purſuits. When he had finiſhed his work, as a member of the univerſity he applied to Dr. Fell, the vice-chancellor of Oxford, for his licence to commit it to the preſs; which being granted with much readineſs, Mr. Gale printed the firſt part, with the view of trying what reception it was likely to meet with in the learned world. This was publiſhed in 1669, in 4to. and entitled The Court of the Gentiles; or, A Diſcourſe touching the Original of Human Literature, both Philology and Philoſophy, from the Scriptures and Jewiſh Church, &c. It was received with great applauſe, both at home and abroad; which it certainly merited on account of the profound erudition, ingenuity, and labour, which it diſplayed. The ſecond part was publiſhed in 1671, and the third and fourth in 1677. The whole was ſpeedily tranſlated into Latin, and ſpread the author's fame over every part of Europe. Before the appearance of the fourth part, Mr. Gale had publiſhed, in 1676, another learned work, intended to exhibit a compendious view of the ancient philoſophy in general, and entitled *Philoſophia Generalis, in duas partes diſterminata: Una, de Ortu & Progreſſu Philoſophiæ*, &c. The leading deſign of it is the ſame with that in The Court of the Gentiles; only it is written with more conciſeneſs, and particularly intended for the uſe of perſons engaged in a regular courſe of philoſophical ſtudies. In 1678 he printed propoſals for publiſhing by ſubſcription, *Lexicon Græci Teſtamenti Etymologicum, Synonymum ſive Gloſſarum & Homonymum*; which, as the title imports, was intended both for a lexicon and concordance. In this work, which was meant to form one large folio volume, Mr. Gale had made conſiderable progreſs; and it promiſed, according to Dr. Calamy, to be a much more complete and valuable performance than any then extant. The author, however, was prevented from finiſhing it by his death, which took place in 1678, when in the fiftieth year of his age. Beſides the works already mentioned, he was the author of Theophily; or, a Diſcourſe of the Saints' Amity with God in Chriſt, &c. 8vo. 1671; The True Idea of Janſeniſm, both Hiſtoric and Dogmatic, 8vo. 1669; The Anatomy of Infidelity, or an Explication of the Nature, Cauſes, Aggravations, and Puniſhment of Unbelief, 8vo. 1672; The Life of Mr. Thomas Tregoſſe, with his Character,

racter, 8vo. 1671; A Diſcourſe of Chriſt's Coming, &c. 8vo. 1673; *Idea Theologiæ tam contemplativæ quam activæ, ad Formam S. Scripturæ delineata*, 8vo. 1673.

GALE (Thomas), a learned Engliſh divine, claſſical ſcholar, critic, and antiquary, born at Scruton in Yorkſhire, in 1636. His claſſical education he received in Weſtminſter ſchool, where he was admitted king's-ſcholar, and elected thence to Trinity college, Cambridge, of which he afterwards became a fellow. In 1658 he took his degree of B. A. and that of M. A. in 1662. To the reputation which he had acquired in the Greek tongue, he was indebted for his appointment to the regius-profeſſorſhip of the Greek language in that univerſity, in 1666. At the opening of the Sheldonian theatre at Oxford, in 1669, he was incorporated M. A. in that univerſity. In 1671 his fame was conſiderably extended, by an accurate edition which he publiſhed of the ancient mythological writers, entitled *Opuſcula Mythologica, Ethica, & Phyſica, Græcè & Latinè*, 8vo. with notes, various readings, &c. In 1672, he was choſen head-maſter of St. Paul's ſchool, in London, over which he preſided for five-and-twenty years, diſcharging with great fidelity and reputation the duties of his laborious office, and affording evidence at the ſame time of his uncommon induſtry, as well as erudition, by new and accurate editions of ſeveral valuable Greek authors. In 1666, he was employed by the city of London to write the inſcriptions on the monument erected in memory of the dreadful fire; for which ſervice the corporation voted him a preſent of plate. In 1675 he took the degree of doctor in divinity at Cambridge; and in the following year was collated to a prebend in the cathedral church of St. Paul. In 1677 he was elected a fellow of the royal ſociety; and in 1685, when the ſociety reſolved to have honorary ſecretaries, who would undertake the office without expectation of reward, Dr. Gale was choſen to that ſituation, jointly with ſir John Hoſkins; and they had for their clerk-aſſiſtant, or under-ſecretary, the celebrated Halley, who had been one of Dr. Gale's moſt diſtinguiſhed ſcholars at St. Paul's ſchool. In 1697, Dr. Gale preſented to the library in Trinity college, Cambridge, a number of curious Arabic MSS. and in the ſame year he was rewarded for his exertions in the cauſe of literature, by being preferred to the deanery of York. The remainder of his life he ſpent in that city, attentive to the preſervation and beautifying of the noble cathedral, and commendable for his generous hoſpitality. To the great regret of his numerous friends, he did not ſurvive his exaltation to this dignity quite five years, but died at York, in 1702, in the ſixty-eighth year of his age. Beſides the Collection of Mythologiſts, already noticed, he publiſhed: 1. *Hiſtoriæ Poeticæ Antiqui Scriptores, Græcè & Latinè*, printed at Paris in 1675, 8vo. 2. *Rhetores Selecti, Græcè & Latinè*, 1676, 8vo. 3. *Jamblicus Chalcidenſis de Myſteriis, Epiſtola Porphyrii de eodem Argumento, Gr. & Lat.* 1678, folio. 4. *Pſalterium juxta Exemplar Alexandrinum, Gr. & Lat.* 1678, 8vo. 5. *Herodoti Halicarnaſſenſis Hiſtoriarum, Lib. X.* &c. 1679, folio: 6. An edition of Cicero's Works, reviſed by him, and printed in 1681 and 1684, in two volumes folio. 7. *Hiſtoriæ Anglicanæ Scriptores Quinque, ex vetuſtis Codicibus nunc primum in Lucem editi*, 1687, folio. 8. *Hiſtoriæ Britannicæ, Saxonicæ, Anglo-Danicæ, Scriptores XX. ex vetuſt. Cod. MSS. editi*, &c. 1691, folio. The two laſt-mentioned publications are a continuation of the *Rerum Anglicarum Scriptorum Veterum*, tom. i. publiſhed in 1684, under the direction of Dr. Fell, biſhop of Oxford. After the author's death, a volume of his Sermons was publiſhed in 1704, 8vo. and *Antonini Iter Britanniarum, Commentariis illuſtratum Thomæ Gale*, &c. with large additions, by his ſon Roger Gale, 1709, 4to.

GALE (John), a learned Engliſh non-conformiſt divine of the baptiſt perſuaſion, born in London in 1680. At ſeventeen years of age he was not only accompliſhed in the Latin and Greek languages, but alſo well acquainted with the Hebrew; and he was now ſent to the univerſity of Leyden, to complete that literary progreſs which he had ſo happily begun. In this ſeminary he applied to his ſtudies with uncommon ardour, and in leſs than two years had made ſuch rapid improvement, that he was honoured with the degrees of M. A. and doctor of philoſophy when only nineteen years of age. The theſis which he maintained upon this occaſion, *De Ente, ejuſque Conceptu*, he publiſhed, with a dedication to his father, and his two uncles, ſir John and ſir Joſeph Wolf; and it was alſo accompanied with a Latin panegyric, in teſtimony of the author's merit, by the famous Adrian Reland. From Leyden Dr. Gale went to Amſterdam, where he purſued his theological ſtudies under the celebrated Limborch. Upon his return to his native country, he carefully improved himſelf in the knowledge of the oriental languages; and then undertook a critical examination both of the Old and New Teſtament in their originals, comparing his own obſervations with the remarks of the beſt commentators, ancient and modern, and conſulting the different ancient verſions. About this time an occaſion offered for the exertion of his talents in a controverſy, which held him out to public notice in a very conſpicuous point of view. The Rev. Mr. Wall, vicar of Shoreham, having publiſhed The Hiſtory of Infant Baptiſm, he was honoured by the thanks of the houſe of convocation which ſat in 1705, as a teſtimony to the great merit of his performance. This treatiſe was handed to Dr. Gale by one of his friends, as perfectly convincing and unanſwerable; but the doctor, after peruſing it, drew up a ſeries of letters, in the years 1705 and 1706, which, after being long handed about in manuſcript, were at length publiſhed, under the title of Reflections on Mr. Wall's Hiſtory of Infant Baptiſm, in ſeveral Letters to a Friend, 8vo. The merit of this performance ſoon made the author generally known and reſpected. He was ſoon after choſen one of the miniſters of the baptiſt congregation in Paul's-alley, near Barbican, London; where, as his ſermons were chiefly practical, and his voice and manner extremely pleaſing, he was much followed and admired by perſons of all perſuaſions. Some time after the appearance of Dr. Gale's Reflections on Mr. Wall's Hiſtory, the two antagoniſts held a perſonal conference on the ſubject, which ended, as ſuch conferences generally do, in each perſon retaining his own opinion, and a perſuaſion of his advantage in the diſpute. Mr. Wall, however, was determined to appeal to the public againſt the Reflections, to which he drew up an anſwer that was committed to the preſs in 1719, under the title of A Defence of the Hiſtory of Infant Baptiſm, &c. 8vo. Dr. Gale was preparing an anſwer to this defence, when he was prevented by a premature death; being ſuddenly attacked by a fever, in 1721, which proved fatal to him, when only in the forty-ſecond year of his age. Soon after his death, four volumes of "Sermons upon ſeveral Subjects, by the late Reverend Dr. John Gale," were given to the public, and met with ſuch a reception as might be expected from the author's known reputation and learning.

GALE, a river of Ireland, in the county of Kerry, which, by its union with the Feal, forms the river Caſhin.

GALE, *ſ.* in botany. See LIQUIDAMBAR and MYRICA.

GA'LEA, *ſ.* in antiquity, a light caſque, or helmet, commonly made of braſs; but Camillus, according to Plutarch, ordered thoſe of his army to be made of iron, as the ſtronger metal. The lower part of it was called *buccula*, and on the top was a creſt. The Velites wore a light galea, made of the ſkins of wild beaſts, to make them appear more terrific to an enemy.

GALE'A, *ſ.* in anatomy, the amnios; ſo called becauſe it ſurrounds the fœtus like a helmet. In ſurgery, it means a bandage for the head. In botany, it is the upper lip of a labiated flower which reſembles a creſt or helmet. A ſpecies of head-ach is ſo termed by medical men, when it ſurrounds the head like a helmet.

GALEA'NO (Joſeph), a phyſician of Palermo, born

in 1605. He became eminent in his profeſſion throughout the iſland of Sicily, and was employed by the viceroys and nobility, who regarded him as the Hippocrates of his country. He taught medicine near fifty years at Palermo, and had a great number of diſciples, who carried his fame over Italy, and to other parts of Europe. He wrote ſeveral works on medical ſubjects, which, however, have probably been little read elſewhere; for Haller contents himſelf with giving a bare liſt of their titles. Galeano was a man of general knowledge, and diſtinguiſhed himſelf among his countrymen as a philoſopher, divine, and poet, as well as a phyſician. Of his poetical works ſeveral are dedicated to the celebration of Santa Roſalia, the patroneſs of Palermo. He likewiſe collected the fugitive pieces of Sicilian poetry by other writers, and publiſhed five volumes under the title of *Le Muſe Siciliane*. He has met with many panegyriſts, who have extolled him as one of the great men of his age. He died at Palermo in 1675.

GALEANTHRO'PIA, *ſ.* [γαλεανθρωπια, Gr. from γαλη, a cat, and ανθρωπος, a man.] A ſpecies of madneſs, in which the patient fancies himſelf to be like a cat.

GALEAS'SE, or GALLEASS, *ſ.* [*galeas*, Fr.] A Venetian low-built veſſel, uſing both ſails and oars, and is the largeſt of all veſſels that moves with oars. It will carry twenty guns, and has a ſtern capable of holding a great number of marines. It has three maſts, which are never lowered or taken down. It has alſo thirty-two benches of rowers; and to each bench ſix ſlaves, who ſit under cover.

GA'LEATED, *adj.* [*galeatus*, Lat.] Covered as with a helmet.—A *galeated* eſchinus, copped, and in ſhape ſomewhat more conic than any of the foregoing. *Woodward.*—[In botany.] Such plants as bear a flower reſembling an helmet, as the monk's-hood, &c.

GALE'ED, [i. e. the heap of witneſs.] A heap of ſtones reared by the patriarch Jacob, and his uncle Laban, in mount Gilead, as a witneſs of the ſolemn covenant made with each other in the ſight of heaven that neither ſhould paſs that heap to the injury of the other; Laban gave it the name of *jegarſabadutha*, and it was the ſpot on which the city of Mizpah was afterwards built. *Gen.* xxxi. 47, 48.

GAL'EGA, *ſ.* [Italian, q. *herba gallica*.] In botany, a genus of the claſs diadelphia, order decandria, natural order papilionaceæ or leguminoſæ. The generic characters are—Calyx: perianth one-leafed, tubular, ſhort, half-five-cleft; teeth ſubulate, nearly equal. Corolla: papilionaceous; banner large, ovate, reflex at the end and on the ſides; wings oblong, having an appendage, and being almoſt the length of the banner; keel oblong, compreſſed, ſtraight towards the end, gibbous below, ſharp above. Stamina: filaments diadelphous (ſimple and nine-cleft); antheræ oblong. Piſtillum: germ ſlender, oblong; ſtyle ſlender, ſhorter than the germ, aſcending; ſtigma a very ſmall dot at the end. Pericarpium: legume very long, compreſſed, acuminate, ſcored with oblong ſtreaks between the ſeeds. Seeds ſeveral, oblong-kidney-ſhaped.—*Eſſential Character.* Calyx: with ſubulate teeth, nearly equal; legume with oblique ſtreaks, between the ſeeds.

Species. 1. Galega officinalis, officinal galega, or goat's-rue: legumes ſtiff upright; leaflets lanceolate, ſtreaked, naked. Root perennial, compoſed of many ſtrong fibres, which are frequently jointed; ſtems channelled, hollow, from two to three, or even five, feet in height; leaves unequally pinnate, compoſed of five or ſeven (Haller ſays nine or ten) pairs of ſmooth entire leaflets; flowers terminating, in looſe ſpikes; they are of a pale blue colour, appear in June, and are ſucceeded by taper pods, about an inch and half in length, and ripening towards the end of Auguſt. There is a variety with white, and another with variegated, flowers. Goat's-rue is accounted cordial, ſudorific, and alexipharmic. Mr. Boyle celebrates its virtues in peſtilential and malignant diſeaſes. It is a native of Spain, Italy, Hungary, and Africa, it was cultivated by Gerarde in 1596. By ſome miſtake, this plant is ſet down by Parkinſon, as having been found wild near Linton in Cambridgeſhire, where it was certainly never ſeen growing wild by any perſon.

β. G. Africana has larger leaves, compoſed of eight or ten pairs of leaflets, broader and blunter; the flowers are larger, the ſpikes longer, and the ſeed-pods much thicker.

2. Galega cinerea, or cinereous galega: legumes ſtiff ſpreading, racemes oppoſite to the leaves, pedicels ſolitary; leaflets villoſe underneath, ſtipules lanceolate. This is a ſmall herbaceous plant, ſomewhat of an aſh colour, ſeldom growing above eleven or twelve inches in height; it is common among the buſhes in all the ſavannas about Kingſton in Jamaica.

3. Galega littoralis, or ſhore galega: legumes in racemes, the whole villoſe-tomentoſe. Stems round, branched, villoſe, procumbent unleſs it be ſupported by neighbouring ſhrubs; flowers fleſh-coloured, inodorous; ſeeds variegated. Native of Carthagena in America, on ſandy ſhores; and every where between the tropics.

4. Galega Virginiana, or Virginian galega: legumes back-ſickled compreſſed villoſe ſpiked, calyxes woolly, leaflets oval-oblong acuminate. Root perennial; ſtem annual, three feet high, erect. The whole plant is covered with a ſilvery down; flowers red, in ſpikes at the ends of the branches. Inhabits North America.

5. Galega villoſa, or hairy galega: legumes back-ſickled villoſe pendulous racemed lateral, leaflets ſmooth lanceolate. Procumbent. Native of the Eaſt Indies.

6. Galega ſpinoſa, or prickly galega: legumes ſolitary back-ſickled compreſſed, ſtipules ſpineſcent, leaflets wedge-ſhaped hoary, ſtem diffuſed. Found in Coromandel by Konig.

7. Galega maxima, or great galega: legumes ſtiff aſcending ſmooth, ſtipules lanceolate, leaflets oblong ſmooth ſtreaked. This is the largeſt of the genus; and a native of Ceylon.

8. Galega grandiflora, or roſe-coloured galega: legumes ſpreading, ſtipules ovate-lanceolate, leaflets oblong almoſt naked awned. Stem ſhrubby, round, branched, having very minute hairs ſcattered over it. Native of the Cape of Good Hope, whence it was introduced by Mr. Francis Maſſon in 1774.

9. Galega palleus, or pale-coloured galega: legumes ſtiff ſpreading ciliate, ſtipules awl-ſhaped, leaflets (nine to eleven) oblong ſharp pubeſcent underneath. Native of the Cape of Good Hope; flowers in July.

10. Galega piſcatoria, or woolly galega: legumes ſtiff aſcending ſubvilloſe, ſtipules awl-ſhaped, leaflets (eleven to thirteen) oblong blunt ſomewhat hairy underneath, peduncles ancipital. Native of India and the South Sea iſlands; introduced in 1778, by Patrick Ruſſel, M. D. It flowers in June and July.

11. Galega purpurea, or purple galega: legumes ſtiff aſcending ſmooth racemed terminating, ſtipules awl-ſhaped, leaflets oblong ſmooth. Perennial; ſtem leſs angular and ſtraighter than the ſeventh, reddiſh. Mr. Miller ſays, this plant was annual here; that it had an herbaceous ſtalk, two feet high; that the leaves had eight or nine pairs of leaflets; that the peduncles came out oppoſite to theſe; and that the flowers were ſmall, purple, in a looſe ſpike, and ſucceeded by ſlender erect pods. He received the ſeeds from Ceylon and many other parts of the Eaſt Indies. It was cultivated in 1768, by him; and flowers in July and Auguſt.

12. Galega Caribæa, or Caribbean galega: legumes ſtiff ſmooth pendulous racemed, leaflets ſmooth mucronate, ſtem ſhrubby. This is an upright branched ſlender ſhrub, two feet high; flowers inodorous, red and white variegated; the two upper ſegments of the calyx leſs deeply cut, and ſhorter than the others, and the loweſt ſegment longer than any; ſeeds black, ſhining. Native of the Caribbee iſlands.

13. Galega cœrulea, or blue galega: racemes terminating many-flowered contracted, leaflets (eight to ten pairs)

pairs) elliptic, ſtem ſcabrous. Flowers numerous, heaped, blue. Found in South America by Mutis.

14. Galega tinctoria, or dying galega: ſpikes lateral peduncled, legumes ſtiff pedulous, leaflets emarginate villoſe underneath. A very handſome plant; ſtems naked, flexuoſe, ſmooth, angular. From this plant the inhabitants of Ceylon prepare their indigo.

15. Galega ſenticoſa, or ſweet galega: legumes in pairs lateral ſmooth, leaflets emarginate ſilky underneath; ſtem ſhrubby. This is a woody ſhrub, with a roundiſh ſtem, and a brown bark. Native of Ceylon.

16. Galega pulchella, or fair galega: legumes ſtraight villoſe; pendulous, racemed; ſtipules awl-ſhaped; ſtandards above and leaves underneath villoſe. It differs from G. tinctoria in having the leaflets villoſe on both ſides, and not all emarginate; the flowers not in ſpikes, and the legumes by no means pendulous; nor can it be referred to G. ſenticoſa, as appears from the deſcription in Flora Zeylanica; it flowered at Pavia the 21ſt of July, 1783, and the ſeeds ripened on the 5th of September. Native of the Cape of Good Hope, whence it was introduced here in 1787.

17. Galega fruteſcens, or ſhrubby galega: leaflets ovate, flowers panicled axillary, ſtem ſhrubby. Mr. Miller has not deſcribed this; but informs us that it was diſcovered by Dr. Houſtoun at Campeachy, whence he ſent the ſeeds to Europe.

18. Galega tomentoſa, or rough galega: legumes ſtiff aſcending villoſe racemed oppoſite to the leaves, pedicels in threes, leaflets ſilky underneath, ſtipules awl-ſhaped. Differs from G. cinerea only in having narrower ſtipules, and the legumes in threes at each tooth of the peduncle.

19. Galega toxicaria, or poiſoning galega: ſpikes terminating peduncled, legumes cylindric pedicelled ſpreading, ſtem and leaflets hoary-tomentoſe. This is a ſpreading ſhrubby plant, riſing generally to the height of five or ſix feet; the leaves and branches, well pounded, and thrown into a river or pond, very ſoon affects the water, and intoxicates the fiſh, ſo as to make them float on the ſurface, as if dead; moſt of the large ones recover after a ſhort time, but the greateſt part of the ſmall fry periſh on theſe occaſions. It is a native of South America, whence it has been introduced to Jamaica, and cultivated there, on account of its intoxicating qualities.

Propagation and Culture. The firſt ſpecies is propagated by ſeeds, ſown either in ſpring or autumn in an open ſituation. When the plants come up, keep them clean from weeds till they are ſtrong enough to remove; then take them carefully up, and plant them in a ſpot well dug and cleared, in rows a foot and a half diſtant, and one foot aſunder in the rows; watering them till they have taken new root. Hoe the ground frequently between the plants; and dig it in the ſpring between the rows. If the ſtalks are cut down every year, before the ſeeds are formed, the roots will continue the longer, eſpecially on a light dry ſoil. Or, if the ſeeds be permitted to ſcatter, the plants will come up without any care. The fourth ſort, though tolerably hardy, is with difficulty preſerved in gardens; for the ſeeds rarely ripen in England, and the plants are often deſtroyed by froſts in winter. The other ſorts from the Eaſt and Weſt Indies may be propagated by ſeeds ſown on a hot-bed in the ſpring. When the plants are ſtrong enough, tranſplant each of them into a ſeparate ſmall pot, and plunge them into a hot-bed of tanner's bark, ſhading them till they have taken new root. Then treat them as other tender plants, preſerving them through the winter in the bark-ſtove. They will flower in July, and perfect their ſeeds in September. If the plants are brought forward early in the ſpring, and the ſummer proves warm, the ſeeds may ripen here. See ÆSCHYNOMENE, CASSIA, OROBUS, and SAPHORA.

GAL'EGOS, a town of Portugal, in the province of Entre Duero e Minho: four miles north-eaſt of Barcelos.

GA'LEN (Claudius), the moſt eminent of the ancient phyſicians next to Hippocrates, born at Pergamus in Aſia, in 131, during the reign of Adrian. His father, Nicon, was an architect, and converſant in the mathematical ſciences. The education of Galen was liberal, comprifing all the branches of ſcience then cultivated by the Greeks. He, at length, through the admonition of a dream (as he himſelf aſſerts), turned his ſtudies to medicine, in which his maſters were Satyrus and Pelops. In purſuit of knowledge he travelled to the principal cities of that part of the Roman empire, as Smyrna, Corinth, and Alexandria; and in his twenty-eighth year returned to his native place, where, for ſome time, he undertook the chirurgical care of gladiators. He firſt viſited Rome about his thirty-third year, and obtained great reputation from his anatomical and practical ſkill. After remaining there about four years, he quitted it on occaſion of a deſtructive peſtilence, and returned to his native country. He was, however, ſoon afterwards recalled by the preſſing letters of the joint emperors, Marcus Aurelius and Lucius Verus. The former, on leaving Rome for the German war, confided the medical care of his ſon Commodus to Galen. It is not known where he paſſed the remaining part of his life, or when he died, but it is conjectured that it was in the reign of Severus. Galen, as might be ſuppoſed of one ſo eminent in his profeſſion, had many rivals and enemies, whom he ſeems to have taken no care to conciliate, but, on the contrary, treated with contempt. He was, indeed, confident in his own powers; and in his writings ſpeaks much and boaſtingly of himſelf, and with little moderation of thoſe from whom he differed. No phyſician had ever a better right, from the vaſt extent of his knowledge, to arrogate ſuperiority over his contemporaries; and perhaps in the whole hiſtory of the ſcience, no example is to be found of one who took a wider range, or carried his reſearches and improvements into more branches. In fact, he ſet limits to medicine, which no one for a number of centuries ventured to paſs over; and the works of Galen were the received medical code down to the time of the revival of experimental enquiry. His writings were exceedingly numerous. In his own enumeration of them he reckons two hundred, which were burnt in the temple of Peace; but thoſe which are come down to our times are ſufficient to compoſe a very voluminous body of practical and theoretical medicine. Merely to recite the titles of theſe would occupy much room to little purpoſe; we ſhall therefore content ourſelves with a ſhort notice of ſome of the moſt important.

Though a diligent anatomiſt, it does not appear that he ever diſſected human bodies: and many errors in his deſcriptions may be traced to his transferring to men what he had obſerved in brutes. He, however, inſtituted a great many experiments upon living bodies, ſome of them of a very nice and delicate kind. He is the firſt writer who has any thing of conſequence on the blood-veſſels, and he diſcovered by experiment that the arteries always contain blood, and that their contraction propels it into the veins. One of the beſt and moſt capital of his works is his treatiſe *De Uſa Partium*, in ſeventeen books, in which he conſiders at large the action and uſes of all the principal parts of the body, with the philoſophical view of ſupporting the doctrine of final cauſes in oppoſition to the Epicureans. Many nice and curious obſervations in this piece prove the minute accuracy with which he had examined thoſe animals to which his diſſections were confined. Other valuable works upon anatomical and phyſiological topics are thoſe entitled *De Facultatibus Naturalibus*; *De Motu Muſculorum*; *De Fetuum Formatione*; and *De Pulſuum Differentiis*. In the practice of medicine it is doubtful whether his writings have done more good or harm. He added much to the fund of obſervation, and improved the art of pharmacy; but he eſtabliſhed as the baſis of his practice a theory, ſimple indeed, but founded upon falſe hypotheſes. This was the ſyſtem, ſo long famous in the ſchools, of plethora and cacochymy, and of the three humours and their four qualities, to which all his curative indications were accommodated. This was the

the parent of that abundance and ſubtility of diviſion and complication which ſo long obſcured the reaſonings of phyſicians, and made their whole art rather the reſult of logical inference from pre-conceived opinions, than of the inveſtigation of cauſes and effects as really exiſting in nature. His works, *De Temperamentis*; *De Differentiis & Cauſis Morborum*; and *Methodus Medendi*; are among the moſt conſiderable of this claſs; and that entitled *De Locis Affectis* is very valuable in a pathological view. His works on diet, and on the choice and compoſition of medicines, added much to the ſtock of knowledge then poſſeſſed on thoſe ſubjects. It would be almoſt endleſs to enumerate all the ſeparate pieces of this author, with their editions and the commentaries that have been made upon them. His whole works have been ſeveral times publiſhed in Latin tranſlations. The only complete edition in Greek and Latin is that of Chartier, together with the works of Hippocrates, in thirteen volumes folio, Paris, 1660, which, however, is reckoned not to owe much to the learning of the editor. The ſtyle of Galen is polite and eloquent, but prolix and diffuſe, and he frequently repeats himſelf in his works. He ſhows himſelf well acquainted with philoſophy and ſcience in general, and deſerves to be reckoned one of the moſt univerſal ſcholars of antiquity. Modern improvements have now in a great meaſure conſigned his writings to neglect; but his fame can only periſh with the ſcience itſelf.

GA'LEN (Bernard-Chriſtopher Van), biſhop of Munſter, in whom we find a ſingular inſtance of the union of the military with the epiſcopal character. He was born in 1604, of one of the principal families of Weſtphalia. In his youth he followed the profeſſion of arms, and for ſome time commanded a regiment in the ſervice of the elector of Cologne. At length he obtained a canonry in the cathedral of Munſter, and afterwards the provoſtſhip of the ſame. His uncle, who brought him up, expected to be choſen prince biſhop of that ſee, but the nephew ſupplanted him, and, in 1650, cauſed the election to fall upon himſelf. The pope refuſed to confirm it; but ſuch was the vigour of Bernard's character, that he eſtabliſhed his authority, and cauſed it to be reſpected by his neighbours. His attempt to introduce a garriſon of his own troops into Munſter, occaſioned a quarrel with that city, which he beſieged and furiouſly bombarded; but the interpoſition of the United Provinces obliged him to enter into a compromiſe. He built, however, a ſtrong citadel in order to bridle it for the future. In 1664 he was choſen one of the directors of the army of the empire againſt the Turks; but a peace ſoon following put an end to an employ ſo congenial to his diſpoſition. The ill-will he bore the United States for their interference between him and his ſubjects, together with a ſubſidy from Charles II. of England, induced him, in 1665, to take up arms againſt the republic, and he made an irruption into Overyſſel, and took ſeveral places; but the interpoſition of France obliged him to withdraw his forces and make peace. In 1672 he joined the league between France and England againſt the United States, and took ſeveral places from them and their ally the elector of Brandenburg; but the imperial arms turned the fortune of war againſt him, and he was obliged to ſign another peace in 1674. In the next year he entered into an alliance with the king of Denmark againſt Sweden, from which power he made ſome conqueſts in Bremen and Verden. At length he peaceably terminated a life which he had ſpent in quarrels with his neighbours, and in maintaining the character of a brave and able commander, and enterpriſing prince, but certainly not of an exemplary chriſtian biſhop. He died in 1678, at the age of ſeventy-four.

GA'LEN, or GALIEN (Matthew), a learned catholic divine in the ſixteenth century, born at Weſt Capelle, in the iſland of Walcheren, in the province of Zealand. He purſued his ſtudies at Douay, where he acquired much reputation as a preacher, and as a lecturer in theology. Afterwards he filled the chair of profeſſor in that faculty at the univerſity of Dillingen, during the ſpace of three years. At the expiration of that period he was recalled to Douay, where he received the bonnet of doctor, and contributed by his exertions to raiſe that univerſity to high credit in the catholic world. A ſenſe of the obligations which by theſe means he conferred on their city, induced the inhabitants to recommend him to the notice of the king of Spain, who nominated him to the provoſtſhip of St. Peter's; afterwards to that of St. Amatus; and finally appointed him chancellor of the univerſity. He died in 1573. He was the author of ſeveral works, which are much eſteemed for the erudition diſplayed in them. In this number are, *Commentarium de Chriſtiano & Catholico Sacerdote*, 4to. *De Originibus Monaſticis*; *De Miſſæ Sacrificio*; *De Sæculi noſtri Choreis*, &c.

GA'LEN, a military townſhip of America, in the ſtate of New-York, ſituated on Canadaque creek: twelve miles north-weſt of the north end of Cayuga lake, and thirteen ſouth by eaſt of Great Sodus. It is bounded ſouth by Junius.

GALE'NA, *ſ.* an ore of *plumbum*, or lead; for which ſee MINERALOGY.

GALEN'GARRIF HARBOUR, a bay at the northern part of Bantry Bay, in the county of Cork in Ireland.

GALE'NIA, *ſ.* [So named by Linnæus from the famous phyſician Claudius Galenus.] In botany, a genus of the claſs octandria, order digynia, natural order ſuculentæ, (atriplices, *Juſſ.*) The generic characters are —Calyx: perianth very ſmall, four-cleft, concave; diviſions oblong. Corolla: none. Stamina: filaments eight, capillary, ſcarcely the length of the calyx; antheræ twin. Piſtillum: germ roundiſh; ſtyles two, ſimple, reflex; ſtigmas ſimple. Pericarpium: capſule roundiſh, two-celled: ſeeds two, oblong, angular.—*Eſſential Character.* Calyx four-cleft; corolla none; capſule roundiſh, two-ſeeded.

Species. 1. Galenia Africana, upright or ſhrubby galenia: erect, ſhrubby; leaves linear, fleſhy. Stem four or five feet high, ſending out many weak branches; leaves very narrow, placed irregularly on every ſide, of a light green, with a furrow running longitudinally through the middle; flowers in looſe panicles from the ſides and at the ends of the branches, very ſmall, and making little appearance. It is a ruſtic ſhrub, with the air of Tetragonia, but all the parts minute, and the whole of it obſcurely papilloſe or bladdery; ſtem round, with a few reflex little briſtles; leaves oppoſite, ſeſſile, perennial; flowers ſeſſile, white, in a dichotomous panicle. Native of the Cape; flowering from June to Auguſt.

2. Galenia procumbens, or trailing galenia: procumbent; leaves ovate channelled, patulous and recurved at the tip. Found at the Cape of Good Hope, by Thunberg.

Propagation and Culture. Theſe plants will not live through the winter in the open air in England, but muſt be placed in the green-houſe, or under a frame, with other hardy exotic plants, where they may have a large ſhare of air in mild weather, for they only require to be protected from froſt. In the ſummer they may be expoſed in the open air, with other plants of the ſame country, and in dry weather they muſt be frequently watered. They may be propagated by cuttings, which if planted during any of the ſummer months and watered frequently, will take root in five or ſix weeks, and may then be treated as is directed for the old plants.

GALEN'IC, or GALENICAL, *adj.* In medicine, was a method of treating diſeaſes, founded on the principles f Galen. It is alſo uſed as contradiſtinguiſhed from *chemical*. The terms *galenical* and *chemical* were occaſioned by a diviſion of the practitioners of medicine into two ſects, which happened on the early introduction of chemiſtry into medicine.

GALEOB'DOLON, *ſ.* in botany. See GALEOPSIS.

GA'LENISTS, or GALENITES, in eccleſiaſtical hiſto-

ry, a branch of Mennonites, or Anabaptiſts, who adopt ſeveral of the opinions of the Socinians, or Arians, touching the divinity of our Saviour. In 1664 the Waterlandians were divided into two parties, of which the one were called *Galeniſts*, and the other *Apoſtolians*. They are thus called from their leader Abr. Galenus, a learned and eloquent phyſician of Amſterdam, who conſidered the Chriſtian religion as a ſyſtem that laid much leſs ſtreſs on faith than practice; and who was for taking into the communion of the Mennonites all thoſe who acknowledged the divine origin of the books of the Old and New Teſtament, and led holy and virtuous lives.

GAL'EON, or GALOO'N, *ſ.* See GALLEON.

GALEOP'SIS. *ſ.* [from γαλη, Gr. a cat, and οψις, aſpect; the flowers gaping like the open mouth of an animal.] In botany, a genus of the claſs didynamia, order gymnoſpermia, natural order verticillatæ or labiatæ. The generic characters are—Calyx: perianth one-leafed, tubular, five-toothed, ending in awns the length of the tube, permanent. Corolla: monopetalous, ringent; tube ſhort; border gaping; throat a little wider than the tube, at the length of the calyx above the baſe of the upper lip putting out on each ſide an acuminate toothlet, concave underneath; upper lip roundiſh, concave, ſerrate at the tip; lower trifid, the lateral diviſions roundiſh, the middle one larger, emarginate, notched. Stamina: filaments four, ſubulate, concealed beneath the upper lip, two of them ſhorter; antheræ roundiſh, bifid. Piſtillum: germ quadrifid; ſtyle filiform, length and ſituation of the ſtamens; ſtigma bifid, acute. Pericarpium: none; calyx ſtiff, ſtraight, containing the ſeeds in the bottom: ſeeds four, three-ſided, truncate.—*Eſſential Character.* Corolla upper lip notched a little, vaulted; lower has two teeth above.

Species. 1. Galeopſis ladanum, red dead-nettle, or nettle-hemp; narrow-leaved allheal, or ironwort: internodes of the ſtem equal, whorls remote, calyxes not pungent; leaves linear-lanceolate, almoſt naked. Theſe have in general the ſtem herbaceous, four-cornered; leaves oppoſite; flowers in whorls. The firſt ſpecies has an upright ſtem, a foot high, purpliſh, ſomewhat hairy or nearly ſmooth, brachiate, the knots ſcarcely ſwoln; leaves petioled, entire or ſlightly and diſtantly toothed, acuminate, naked or a little hairy, of a pale green colour; about eighteen flowers in a whorl. It is frequent in corn fields, in a calcareous ſoil, flowering from June to Auguſt.

Monſ. Villars has a ſpecies, which he calls *intermedia*, becauſe it ſeems to be a connecting link between this and G. tetrahit; the calyx has no awns like this, but the flowers are only half the ſize of thoſe of tetrahit, which are ſmaller than thoſe of ladanum; the whole plant is viſcid; it is not ladanum ſegetum of Rivinus, but it approaches to it a little; the ſtem is from eight to ten inches high; the branches leſs frequent than in ladanum; the leaves oval, blunt, villoſe and toothed; the flowers red, ſeldom white, extending little beyond the calyx.

2. Galeopſis villoſa, hairy dead-nettle or nettle-hemp, or yellow ironwort: internodes equal, whorls remote, leaves lanceolate ſerrate, villoſe. Root annual branched; ſtem thicker, higher, and more branched, than the foregoing, purpliſh, obſcurely quadrangular, grooved and villoſe; leaves much broader, the ſerratures more in number and more regular, thoſe next the root ovate, thoſe on the ſtem lanceolate, acuminate, villoſe or ſilky, with ſtraight veins; whorls more and nearer to each other. This has very much the air of the foregoing, of which Linnæus makes it only a variety; it differs however in breadth, ſerratures, veins, and hairineſs of the leaves, as well as in the colour of the flowers. Native of Germany, Swiſſerland, and England, as in ſandy corn-fields of Cambridgeſhire, Nottinghamſhire, Yorkſhire and Lancaſhire, and about Bangor in Wales; flowering in July and Auguſt.

3. Galeopſis tetrahit, common or hemp-leaved dead-nettle: internodes thickened at top; upper whorls almoſt contiguous; calyxes ſomewhat pungent. Every part of the plant is rough with very ſharp prickles, and has a ſtrong ſmell when bruiſed. Grows in corn fields, and on the borders of them, on waſte grounds, in coppice woods, &c. flowering in July and Auguſt.

There are ſeveral varieties, as, β. G. canabina: the flower large and elegant, above double the ſize of the foregoing, the corolla four times as long as the calyx, ſtraw-coloured, and the lower lip ſpotted with purple. Haller, Miller, Pollich, and Krocker, make it a ſeparate ſpecies; but the ſtructure of the whole plant being the ſame, Linnæus will not allow it to be any thing more than a variety; all the parts are much larger and ſofter. Inhabits Germany, Switzerland, Sweden, &c. in Great Britain, in the northern counties, as about Keighley, Settle, &c. alſo in Eſſex, at the bottom of Ribton lane, near Woodford.

γ. Corolla white ſlightly tinged with red, and the lip marked with yellow, riſing from a purple calyx; joints of the ſtem red; leaves narrower, of a deeper green, and the whole air different from the common ſort. Mr. Doody obſerved this many years near the Neat-houſes, and in the way from thence to Cheſſea.

δ. Corolla white and very large; obſerved by Merret along the ditches from Scrooby to Sherwood foreſt, and by Mr. Lawſon on the ſkirts of Croſs-Fell and other places of Weſtmoreland and Cumberland.

Villars has a new ſpecies, under the name of G. proſtrate. He refers to Merret, but ſays that the flowers are yellow; its low, ſimple, villoſe, ſtem, and its large flowers, ſeem to make it a diſtinct ſpecies, in the opinion of Villars; but it ſeems much diſpoſed to vary.

Dr. Smith obſerved a remarkable variety at Matlock in 1788, with the terminating flowers always regularly four-cleft and ſalver-ſhaped, with four equal ſtamens, whilſt all the reſt had their proper form.

4. Galeopſis galeobdolon, yellow dead-nettle, or nettle-hemp: ſix flowers in a whorl; involucre of four leaves; (flowers ſix to twelve, with an involucre of as many leaves as flowers.) With reſpect to this ſpecies there has been a great diverſity of opinion. Haller makes it a *cardiaca*, Scopoli a *leonurus*, and Crantz, a *lamium*. Mr. Hudſon has created a new genus for it under the name of *galeobdolon*, in which he has been followed by Mr. Curtis and Mr. Relhan. Native of Sweden, Germany, Swiſſerland, Auſtria, Carniola, Italy, Britain, &c. In ſome parts of the iſland frequent, as in Charlton, Hampſtead, and ſome other woods near London; in Kent, Eſſex, Cambridgeſhire, Suffolk, Norfolk, Worceſterſhire, Staffordſhire, Warwickſhire. It flowers in May and June. It is found with variegated leaves.

Propagation and Culture. All the ſpecies, except the laſt, being annual, muſt be propagated from ſeeds, but being common weeds, are ſeldom cultivated in gardens; though the firſt variety of the third ſpecies makes no bad appearance, and was therefore not unaptly named *ſpecioſa* by Mr. Miller. As weeds among corn they are not very injurious, nor difficult of extirpation. The fourth ſort is perennial, and may be propagated plentifully by the runners, which it throws out too abundantly. When the foliage is variegated, it makes a beautiful appearance in a garden. This being a wood plant, ſhould not be too much expoſed to the ſun. See LAMIUM, NEPETA, PHLOMIS, SPERMACOCE, and STACHYS.

GALE'OTI (Nicholas), an Italian Jeſuit, who died in 1748. He is celebrated for a collection of "Lives of the Generals of the Society of Jeſus, with their Portraits," folio, in Latin and Italian, publiſhed at Rome in 1748. He was alſo the author of learned notes on the Muſæum Odeſcalcum, in 2 vols. folio, which were publiſhed at Rome after the author's death, in 1751.

GAL'ERA, a town of Spain, in the province of Grenada: five miles ſouth-ſouth-eaſt of Hueſca.

GAL'ERA, a town of Spain, in the province of Catalonia: five miles ſouth-ſouth-weſt of Tortoſa.

GAL'ERA,

GAL'ERA, a town of Italy, in the patrimony of St. Peter, between Bracciano and Rome.

GALE'RIA (Gulf of), on the north-weſt coaſt of the iſland of Corſica. Lat. 42. 27. N. lon. 26. 30. E. Ferro.

GALERI'CULATE, *adj.* [from *galerus*, Lat.] Covered as with a hat.

GALERI'CULUM, *ſ.* in antiquity, a cap worn both by men and women amongſt the Romans. It conſiſted of ſkin, which was ſo neatly dreſſed with human hair, that the artificial covering could with difficulty be diſtinguiſhed from the natural. It was uſed by thoſe whoſe hair was thin; and by wreſtlers, to prevent their antagoniſts from pulling their hair. This appears to have been the origin of wigs.

GALE'RIUS (C. Valerius Maximianus), a Roman emperor, native of Dacia; for whoſe exploits ſee the article ROME.

GAL'ERON, a town of the iſland of Celebes, celebrated for its fiſhery: five leagues from Macaſſar.

GALESI'NI, in Latin GALESINIUS (Peter), a native of Milan, where he exerciſed the office of apoſtolical prothonotary under popes Gregory XIII. and Sixtus V. He underſtood the learned languages, and was converſant in eccleſiaſtical antiquities. He beſtowed much labour on illuſtrating and correcting the Roman Martyrology, giving it a new dreſs, and adding to it a great number of hiſtorical facts. It was firſt publiſhed at Milan, in 1577, under the patronage of St. Charles Borromeo, with the title of A Martyrology adapted to the Uſe of the Church of Rome, for all the Days in the Year; and the next year it was reprinted at Venice. Beſides that work, Galeſini publiſhed: 1. The Lives of the Saints that are mentioned in the Church of Milan, 1582. 2. Notes upon the Greek Text of the LXX, 1567. 3. A Commentary upon the Pentateuch, 1587. 4. A Treatiſe concerning the Obeliſk which Sixtus V. raiſed in 1586. 5. A Diſcourſe concerning the Tomb which Sixtus V. erected to the Memory of Pius V. 6. A hiſtory of the popes, entitled, *Theatrum Pontificale*. 7. Tranſlations from the Greek into Latin of ſome Diſcourſes of St. Gregory Nyſſen, and Theodoret. 8. The hiſtories of Sulpitius Severus, and of Aimon of Halberſtadt; and ſome other pieces of ancient authors.

GALE'SUS, in ancient geography, a river of Calabria, flowing into the bay of Tarentum; now *Galeſo*. The poets have celebrated it for the ſhady groves in its neighbourhood, and the fine ſheep which feed on its fertile banks, and whoſe fleeces were ſaid to be rendered ſoft when they bathed in the ſtream. *Martial.*—The name alſo of a diſtinguiſhed perſon of Latium, killed as he attempted to make a reconciliation between the Trojans and Rutulians, when Aſcanius had killed the favourite ſtag of Tyrrheus: which was the prelude of all the enmities between the hoſtile nations. *Virgil.*

GA'LETS, an iſland at the eaſt end of lake Ontario, and in the ſtate of New-York: five miles ſouth-weſtward of Roebuck iſland, five northerly of Point Gaverſe, and thirty one ſouth-eaſt of Point au Goelans.

GALET'TE (La), a neck of land in the river of St. Lawrence, in Canada. From the point oppoſite to l'Iſle de Montreal, a road is projected to Galette, ſo as to ſave forty leagues of navigation, which the falls render almoſt impracticable, and always very tedious. The land about la Galette is very good; and in two days time a barque may ſail thence to Niagara, with a good wind. La Galette is a league and a half above the fall called *les Galots*.

GAL'GALA, or GALILEA. See GALILEE.

GAL'GON, a town of France, in the department of the Gironde, and chief place of a canton, in the diſtrict of Libourne: five miles north of Libourne.

GALHA'RA, a town of Portugal, in the province of Beira: four leagues north-eaſt of Coimbra.

GA'LI POU'RI, an iſland of the Indian Sea. See ELEPHANTA.

GALIAN'CON, *adj.* [from γαλεος, Gr. a weaſel, and αγκων, the elbow.] Having one arm ſhorter than the other, or ſhaped like the weaſel.

GALIA'NI (Ferdinand), an Italian abbé, born in 1728, at Chieti, a town of Abruzzo, where his father was aſſeſſor of the royal court of juſtice. In his eighth year he was taken under the protection of his uncle, Cæleſtin Galiani archbiſhop of Tarento, and after receiving the neceſſary education, he applied to the ſtudy of the law along with his eldeſt brother Bernardo. A ſatirical piece, which he wrote at the age of eighteen againſt the academy *Degli Emuli*, who refuſed to admit him into their ſociety, made him firſt known as a writer; and this was ſoon followed by his principal work, in five books, On Money and Specie, which was publiſhed in 1750. There are few works of this kind which diſplay ſo much order, preciſion, and boldneſs of thought, and where the ſubject is treated in ſo clear and elegant language. The work was printed without the author's name, and it remained for a conſiderable time unknown. It was received with the greateſt approbation; and when its fame was fully eſtabliſhed, he diſcovered himſelf as the author, to the great joy of his friends. He now obtained ſome preferment in the church; and made a tour through Italy, which procured him an acquaintance with the moſt eminent men of letters in that country. About the year 1755 he began to form a collection of all the kinds of ſtones found in the neighbourhood of Veſuvius. The ſpecimens he collected amounted to 141, and in 1772 he publiſhed a treatiſe in which he gave an explanation of them, entitled *Catalogo delle Materie appartenenti al Veſuvio, contenute nel Muſeo, con alcune brevi Oſſervazioni*, &c. *Londra*, 1772. This collection he ſent to Pope Benedict XIV. together with the printed deſcription; and on one of the boxes he inſcribed the following words: "*Beatiſſime Pater, fac ut lapides iſti panes fiant.*" The holy father received the preſent with great ſatisfaction, and in return gave Galiani the living of Canonica, at Amalphi, worth 400 ducats per annum. As a member of the academy of Herculaneum, the object of which was to make known and illuſtrate the antiquities of Herculaneum, Pompei, and Stabia, he had a ſhare in the well-known works on the antiquities of theſe and other deſtroyed cities, and explained a great many antique paintings which had been aſſigned to him for that purpoſe. On the death of his patron, pope Benedict XIV. in 1758, out of gratitude for the kindneſs received from him, he wrote his eulogy, in which he exerted the whole power of his eloquence. In 1759 he was appointed ſecretary to the French embaſſy; and it was at this period that his public career commenced. During his reſidence in France, he did not neglect the ſtudy of the belles-lettres. He began in Paris to write annotations on Horace, in which he examined the occaſion and ſubject of each poem, in order to enable the claſſical reader to comprehend the allegories and obſcure alluſions. Beſides explaining many dark paſſages, he arranged the poems in a new order according to time and place, and exhibited the progreſs which Horace himſelf made in poetry, till he attained to a perfection, which has never ſince been imitated. He amended alſo many errors, which in the courſe of time had crept into the text; and in his labour he was greatly aſſiſted by the manuſcripts in the king's library. He next wrote in the French language a work on the corn trade, conſiſting of eight dialogues. He undertook it in conſequence of the great ſcarcity of corn which had prevailed in France for many years, and which often occaſioned not only a famine in the kingdom, but commotions and inſurrections. With a view to encourage agriculture, the king, in 1764, permitted by an edict, the free exportation of corn from all the provinces of the kingdom. Galiani, in his work, endeavoured to ſhew that this edict, and other regulations eſtabliſhed by the court, were the cauſes of the ſcarcity, and of the numerous diſorders which attended it. While he remained

at Paris he kept the work a ſecret, for fear of incurring the reſentment of the nation; but after his departure it appeared under the title of *Dialogues ſur le Commerce des Bleds*; *Londres*, 1770–8; and excited a great deal of attention in France. The means propoſed by Galiani againſt the abuſe of free exportation and monopoly found a great many partiſans among thoſe who aſcribed all the diſorders which had taken place to the government. The economiſts, on the other hand, adhered to their favourite opinions, and wiſhed that the old ſyſtem might be continued. The abbé Morellet, who had obtained great conſideration among them, took up his pen to refute the Dialogues; and all the gazettes, journals, and other periodical works of the day, teemed with articles which related to this literary diſpute. But the court ſeemed inclined to favour the ſyſtem of Galiani; for it moderated the prohibitions before impoſed, and forbade the abbé Morellet, or any other perſon, to write againſt him. Soon after his return to Naples, the greateſt men whom France at that time poſſeſſed entered into an epiſtolary correſpondence with him: their letters form nine thick volumes in quarto. He died loaded with honours and offices on the 30th of October, 1787, in the fifty-ninth year of his age. Beſides the above-mentioned commentary, he wrote alſo, in three books, A Treatiſe on the innate Propenſities or Inclinations of Men, or the Principles of the Law of Nature and Nations, deduced from the Poems of Horace. In 1779 he publiſhed a book on the Neapolitan dialect, in which he explains the grammatical rules of it, and aſſerts that the pronunciation of none of the other Italian dialects is ſo harmonious, ſo expreſſive, and ſo agreeable to the muſes. Beſides his labours in conjunction with Zannoni, in conſtructing a Map of the kingdom of Naples on a large and improved ſcale; Galiani was employed alſo on an important work On the natural Duties of Princes to other belligerent Powers, which made its appearance in 1782, and was tranſlated into German, with ſome additions, by C. A. Cæſar. A life of Galiani, written by Louis Diodati, was publiſhed at Naples in 1788.

GAL'IBIS, or CHARAIBES, a nation of Indians, inhabiting near New-Andaluſia, in South America; from which the Charaibes of the Weſt Indies are thought to be deſcended.

GALICA'NA, a town of Italy, in the republic of Lucca: thirteen miles north of Lucca.

GALI'CIA, a province of Spain, bounded on the north and weſt by the ſea, on the eaſt by Auſtria and Leon, and on the ſouth by Portugal, from which it is ſeparated by the river Minho. The ſoil in general is unequal and mountainous, with ſome ſmall plains on the ſea coaſt. There are ſome excellent ports, nevertheleſs it has but little commerce. Induſtry is not excited, and the Galician is rather laborious than active. The air in general is moiſt; temperate on the coaſts; colder inland. The inhabitants ſow but little wheat, plant many vineyards and fruit trees, and cultivate rye and flax. The ſea coaſts abound with fiſh, particularly ſardines, anchovies, ſalmon, and a peculiar ſpecies which the fiſhermen call *bezugos*. The foreſts ſupply good ſhip timber. In the mountains are found mines of gold, copper, iron, lead, and vermilion. It has likewiſe ſome excellent paſtures. It contains ſixty-four cities and towns, but few conſiderable ones, 3242 pariſhes, 242,264 families, 12,637 religious, eleven cathedrals, thirty-four hoſpitals, fourteen colleges, ſeventy-nine convents of men, and twenty-four of women. The inhabitants are conſtant and courageous: poverty compels great numbers of them to ſeek a living in the neighbouring provinces, where they hire themſelves to the moſt ſervile and laborious employments, for which they are deſpiſed by the other Spaniards. Galicia was anciently a kingdom, under the Suevi, the Viſigoths, and Moors. In 1037, it was united to the kingdom of Caſtile. The principal towns are Corunna, and Compoſtella, or St. Jaques de Compoſtella. The principal rivers are the Ulla, Tambra, Mandeo, and Lours.

GALI'CIA (New). See GUADALAJARA.

GALI'CIA, a name given to a part of Poland, ſeized on by the houſe of Auſtria, heretofore a part of Red Ruſſia, and palatinate of Lemberg, ſeparated from Hungary by the Carpathian mountains, about 280 miles in length, and from ſixty to one hundred in breadth. Lemberg, or Leopol, is the capital. It is watered by the Dnieſter, the San, and ſeveral other rivers.

GALIGNA'NA, a town of Venetian Iſtria: fourteen miles north-eaſt of Rovigno.

GAL'ILEE (Land of), one of the principal diviſions of Paleſtine, ſituated in the north of that country; bounded on the north by Syria; on the eaſt by Baſhan, the river Jordan, and the Sea of Galilee; on the ſouth by Samaria; and on the weſt by the Mediterranean: containing, within theſe limits, the provinces of the tribes of Aſher, Naphtali, part of Dan, Zebulon, and Iſſachar; the three former were denominated Upper, and the two latter Lower, Galilee.

It was known by this name even in the days of Joſhua the ſucceſſor of Moſes. *Joſh.* xx. 7. xxi. 32. We read of Solomon's giving Hiram twenty cities thereof in return for his ſervice in building the temple, &c. but as they did not give ſatisfaction to Hiram, they were probably the ſame cities he reſtored to Solomon; 1 *Kings*, ix. 11, 12. 2 *Chron.* viii. 2. After the defection of the ten tribes from the houſe of David, it formed a part of the kingdom of Iſrael, and continued ſuch until the total conqueſt of that kingdom by Tiglath-pileſer, king of Aſſyria, in conſequence of their idolatry. 2 *Kings*, xv. 29. xvii. 6. xviii. 11. 1 *Chron.* v. 26. In the Maccabean wars Galilee is frequently introduced, (not only by its general name, but alſo by that of Galgala or Galilea, 1 *Macc.* ix. 2.) many of their battles being fought in various parts of it. 1 *Macc.* v. 21. In the time of our Saviour it was governed by Herod the tetrarch, and it is on account of the Saviour's reſidence here, that Galilee principally claims our attention; the particular circumſtances of which are fully detailed in the writings of the four evangeliſts, to which we refer the reader.

GAL'ILEE (Sea of, or Lake of GENNESARETH), a lake of Paleſtine, ſituated between the land of Galilee and that of Genneſareth, from which circumſtance it derived both thoſe names: it was alſo called the Sea of Tiberias, probably in honour of that prince, and is the Sea of Chinnereth of the Old Teſtament; alſo Genneſſar Water, 1 *Macc.* xi. 67. The river Jordan paſſes through it in its courſe towards the Dead Sea; it is memorable for the miracles wrought upon it by the Saviour. *Numb.* xxxiv. 11. *Matth.* viii. 26. *Luke*, v. 1–6, 7. *John*, vi. 1–19. xxi. 6.

GALILE'I (Galileo), a moſt eminent philoſopher, mathematician, and aſtronomer, the ſon of a Florentine nobleman, born at Piſa in 1564. The earlieſt ſubjects of his ſtudies were poetry, muſic, and drawing; but his genius ſoon led him to the cultivation of ſublimer ſciences, by his proficiency in which he has immortaliſed his name. His father was deſirous of educating him as a phyſician; and with this view he entered him as a ſtudent in philoſophy and medicine at the univerſity of Piſa; but Galileo became ſoon diſſatisfied with the obſcurity of the Ariſtotelian ſyſtem, then taught in the ſchools, and conceived an unconquerable diſlike to medical purſuits. He therefore betook himſelf to the ſtudy of the mathematics, and, without the aſſiſtance of a tutor, made a rapid progreſs in thoſe ſciences, commencing with Euclid, and afterwards making himſelf maſter of the works of Archimedes, and of other ancient mathematicians. When his father perceived that his improvement indicated uncommon talents for mathematical diſquiſitions, he prudently ſuffered him to follow the natural bias of his mind without reſtraint. So great was the reputation that he acquired as a mathematician, that in 1589 the duke of Tuſcany appointed

pointed him to the mathematical chair in the univerſity of Piſa. He diſcharged the duties of this appointment for about three years, with the applauſe and admiration of the liberal and more enlightened; but not without exciting the jealouſy and oppoſition of the violent Ariſtotelians, who, becauſe he ventured to queſtion ſome of the hypothetical maxims of their maſter, held him out in the odious light of a viſionary and dangerous innovator. Becoming diſguſted with the obſtructions which their bigotry threw in the way of his promoting juſt principles of ſcience, in 1592 he reſigned his profeſſorſhip at Piſa, and accepted an invitation that was ſent him to fill the mathematical chair in the univerſity of Padua. In this ſeminary he continued for eighteen years, raiſing the credit of the univerſity as a ſchool of ſound philoſophy. By degrees Tuſcany felt an increaſing ardour for improvement; and no ſooner was it known that Galileo's patriotiſm inclined him to devote his ſervices to his native country, than Coſmo II. grand-duke, ſent for him to Piſa in 1611, where he made him profeſſor of mathematics, with a very conſiderable penſion. With the ſtudy of mathematics Galileo united that of phyſics, particularly the doctrines of mechanics and optics. Before he had ſettled at Padua, he had written his Mechanics, or treatiſe on the benefits derived from that ſcience and its inſtruments; and alſo his Balance, for finding the proportion of alloy or mixed metals. Theſe he had introduced into his lectures at that univerſity. Being informed at Venice, in 1609, that Janſen, a Dutchman, had invented a glaſs by means of which diſtant objects appeared as if they were near, he turned his attention to this ſubject, and from the imperfect accounts which he had received, and his own reflections on the nature of refraction, diſcovered the conſtruction of that inſtrument. The next day, after he had ſolved the problem of its conſtruction, he made ſuch an inſtrument, and by the attention which he paid to its perfection and improvement, may juſtly be conſidered as the ſecond inventor of the teleſcope. He now turned his inſtrument towards the heavens, and then firſt diſcovered the ſurface of the moon not to be ſmooth, but rough, and full of prominences and cavities. The milky-way he found to be an aſſemblage of fixed ſtars, inviſible to the naked eye. Venus he found to vary in its phaſes like the moon. The figure of Saturn he obſerved to be oblong, and imagined that it conſiſted of three diſtinct parts, one ſpherical in the midſt, and two leſſer ones on the ſides, which afterwards appeared to be only the *anſæ*, or extreme parts of Saturn's ring. Jupiter he ſaw ſurrounded with four moons, which in honour of the duke de Medici he called *Medicean ſtars*, and ſoon perceived that by means of their frequent eclipſes geographical longitudes might be found. On the ſun's diſk he perceived ſpots, from the motion of which he inferred that the ſun revolved on its axis. It was while he was purſuing theſe diſcoveries, that he was invited to Florence, where he had leiſure afforded him to devote himſelf to his mathematical and philoſophical ſtudies, without being obliged to attend to the duties of his profeſſorſhip. In a very few years, however, his tranquillity was diſturbed by the ignorant and bigotted clergy, on account of the zeal which he diſcovered for illuſtrating and confirming the truth of the Copernican ſyſtem. That ſyſtem they maintained to be falſe and heretical, as being contrary to the plain and expreſs language of the ſcriptures; and by their complaints againſt him to the inquiſition at Rome, rendered it neceſſary for him, in 1615, to appear in that city to juſtify himſelf. According to letters written from Rome by the learned Anthony Querenghi, Galileo did not loſe his courage on this occaſion, but in numerous companies of men of letters and others, defended the Copernican doctrine with a force of argument which perſuaded many of its truth and reaſonableneſs, and ſilenced the objections of others who would not be convinced. When he attended the inquiſition, however, he was not ſuffered to enter into any explanations, but was directly accuſed of hereſy for maintaining the two propoſitions, that the ſun is the centre of the world, and immoveable by a local motion; and that the earth is not the centre of the world, nor immoveable, but moves with a diurnal motion. Theſe propoſitions he was by a decree of the inquiſitors ordered to renounce, and not to defend them either in converſation or writing, or even to inſinuate them into the minds of any perſons whomſoever. Moſt accounts concur in ſtating, that on this occaſion he was committed to the priſon of the holy office, where he was confined for about five months; but according to other accounts he was treated with greater mildneſs, and only threatened with impriſonment if he ſhould prove refractory. Be that as it may, he was not permitted to quit Rome until he had promiſed to conform himſelf to the decree of the inquiſition; and it is probable that his ſentence would have been more ſevere, had not the grand-duke of Tuſcany warmly intereſted himſelf on his behalf, as well as ſome perſons of high rank and influence at the papal court. Galileo now returned to his ſtudies, in which his aſtronomical obſervations and other diſcoveries ſerved to eſtabliſh moſt completely and ſatisfactorily the truth of his opinions. At length, in 1632, he ventured to publiſh at Florence his Dialogues on the two greateſt Syſtems of the World, the Ptolemaic and Copernican; in which he produced the ſtrongeſt arguments in favour of both ſyſtems; without expreſſing a decided opinion which of them was the true one, but not without ſuch inſinuations in favour of the Copernican as ſufficiently indicated its ſuperior reaſonableneſs, and his own belief in it. Scarcely had this work made its appearance, before the cry of hereſy was raiſed more loudly than ever againſt Galileo, and he was again cited to appear before the tribunal of the inquiſition, in 1633. Though now ſeventy years of age, he was obliged to ſubmit to the perſecuting mandate, and on his arrival at Rome was at firſt committed priſoner to the apartments of the fiſcal of the holy office. Afterwards, through the interceſſion of the grand-duke, he was permitted to reſide in the houſe of his ambaſſador while the proceſs was carrying on againſt him. After his trial had laſted about two months, he was brought up to receive ſentence in full congregation; when he was ordered, in the moſt ſolemn manner, to abjure and condemn the Copernican ſyſtem, as contrary to the ſcriptures, and to bind himſelf by oath no longer to teach or ſupport it, either directly or indirectly. As a puniſhment for having diſobeyed the former decree of the court, he was condemned to be detained in the priſons of the holy office, during the pleaſure of the cardinal inquiſitors; and enjoined as a ſaving penance, for three years to come, to repeat once a-week the ſeven penitential pſalms, the court reſerving to themſelves the power of moderating, changing, and taking away, altogether, or in part, the above-mentioned puniſhment and penance. His Dialogues were alſo ordered to be burnt at Rome. Pope Urban VIII. who at that time ſat on the pontifical throne, leſſened the rigour of his ſentence, by confining him for a time to the palace and garden de Medici at Rome; after which he was ſent to the archiepiſcopal palace at Sienna, where the air was more favourable to his ſtate of health; and in 1634 he was permitted to reſide at his country-houſe at Arcetri, in the vicinity of Florence. In this place he ſpent the remainder of his days, diligently applying himſelf to his celeſtial obſervations. By his continual uſe of the teleſcope, however, and the injuries which his eyes had received from the nocturnal air, his ſight was gradually impaired, till he became entirely blind about three years before his death. This calamity he bore with a truly chriſtian reſignation, employing himſelf in conſtant meditation and enquiry, the reſult of which he intended to communicate to the world. He had digeſted much matter, and had begun to dictate his conceptions, when he was attacked by a diſtemper which terminated in his death, in 1642, when in the ſeventy-eighth year of his age. Galileo unqueſtionably rendered the higheſt ſervice to ſci-

ence, by treating, in a clear and geometrical manner, the doctrine of motion, which has been juſtly called the Key of Nature. The rational part of mechanics had been ſo much neglected, that ſcarcely any improvement was made in it for almoſt two thouſand years; but Galileo has given us fully the theory of equable motions, and of ſuch as are uniformly accelerated or retarded, and of theſe two compounded together. He, firſt, demonſtrated, that the ſpaces deſcribed by heavy bodies from the beginning of their deſcent are as the ſquares of the times; and that a body, projected in any direction that is not perpendicular to the horizon, deſcribes a parabola. Theſe were the beginnings of the doctrine of the motion of heavy bodies, which has been ſince carried to ſo great a height by ſir Iſaac Newton. In geometry, he invented the cycloid, or trochoid; though the properties of it were afterwards chiefly demonſtrated by his pupil Torricelli. He invented the ſimple pendulum, and made uſe of it in his aſtronomical experiments: he had alſo thoughts of applying it to clocks; but did not execute that deſign. The glory of that invention was reſerved for his ſon Vincenzo, who made the experiment at Venice in 1649; and Huygens afterwards carried the invention to perfection. Of Galileo's invention alſo was the machine with which the Venetians render their Laguna fluid and navigable. He alſo diſcovered the gravity of the air, and endeavoured to compare it with that of water; and opened ſeveral other enquiries in natural philoſophy. He was not eſteemed and followed by philoſophers only, but was honoured by perſons of the greateſt diſtinction of all nations. Galileo had ſcholars worthy of ſo great a maſter, by whom the gravitation of the atmoſphere was eſtabliſhed fully, and its varying preſſure accurately and conveniently meaſured, by the column of quickſilver of equal weight ſuſtained by it in the barometrical tube. The elaſticity of the air, by which it perpetually endeavours to expand itſelf, and, while it admits of condenſation, reſiſts in proportion to its denſity, was a phenomenon of a new kind, (the common fluids having no ſuch property,) and of the utmoſt importance to philoſophy. Theſe principles opened a vaſt field of new and uſeful knowledge, and explained a great variety of phenomena, which had been accounted for in an abſurd manner before that time. It ſeemed as if the air, the fluid in which men lived from the beginning, had been then firſt diſcovered. Philoſophers were every where buſily enquiring into the various properties and their effects; and valuable diſcoveries rewarded their induſtry. Of the great number who diſtinguiſhed themſelves on this occaſion, we cannot but mention Torricelli and Viviani in Italy, Paſcal in France, Otto Guerick in Germany, and Boyle in England. Galileo wrote a number of treatiſes, of which the principal, publiſhed during his life-time, beſides his Mechanics, Balance, and Dialogues, already mentioned, were: 1. The Operations of the Compaſs, geometrical and military, 1606. 2. A Diſcourſe addreſſed to the moſt ſerene Coſmo II. Grand-duke of Tuſcany, concerning the Swimming of Bodies upon, and their Submerſion in, Water, 1612. 3. *Nuncius Sidereus*, 1610, of which, 4. A Continuation, or An Eſſay on the Hiſtory of Galileo's laſt Obſervations on Saturn, Mars, Venus, and the Sun, &c. was afterwards collected from letters between Galileo and his correſpondents. 5. A Letter concerning the Trepidation of the Moon, inſcribed to Alphonſo Antonini, with Antonini's Anſwer, 1638. 6. A Diſcourſe of the ſolar Spots, &c. with Predictions and Ephemerides of the Mediœan Planets, 1613. 7. The famous Italian piece entitled, *Il Saggiatore*, written in defence of Guiducci's Diſcourſe on Comets, 1623. 8. A Letter to Prince Leopold of Tuſcany, examining the fiftieth Chapter of Licetus's *Lethoſphoros*. 9. A Letter to Chriſtopher Greinbergius, concerning the Montuoſity of the Moon, 1611. 10. Mathematical Diſcourſes and Demonſtrations concerning two new Sciences, relating to Mechanics and local Motions, together with an Appendix concerning the Centre of Gravity in ſome Solids, 1638, &c. The preceding articles, together with ſome other treatiſes written either by Galileo, or by ſome of his diſciples in defence of his doctrines and obſervations, were collected and publiſhed by Menoleſſi, in 1656, under the title of *L'Opere de Galileo Galilei Lynceo, nobile Fiorentino*, &c. in 2 vols. quarto. Several of theſe pieces were tranſlated into Engliſh, and publiſhed by Thomas Saliſbury, in his Mathematical Collections, in 2 vols. folio. A volume alſo of his Letters to ſeveral learned men, and ſolutions of a variety of problems, was publiſhed at Bologna, in quarto. His laſt diſciple, Vincenzo Viviani, who proved a very eminent mathematician, methodiſed a piece of his maſter's, and publiſhed it under the title of *Quinto Libro de gli Elementi d'Euclide*, &c. 1674, quarto; and he alſo publiſhed ſome other pieces of Galileo, including extracts from his Letters to a learned Frenchman, in which the author gives an account of the works which he intended to have publiſhed, and an extract of a letter to John Camillo, a mathematician of Naples, concerning the angle of contact. Many other of Galileo's writings were unfortunately loſt to the world, owing to the ſuperſtition of one of his ignorant nephews; who, conſidering that his uncle died a priſoner of the holy office, though permitted to reſide in his own houſe, ſuſpected that his papers might contain dangerous hereſies, and therefore committed them to the flames. Sir John Finch, in a letter to Thomas Saliſbury, attributes the deſtruction of Galileo's MSS. to his widow's devotion, and the fanaticiſm of her confeſſor; but the beſt authorities maintain that Galileo was never married. His ſon *Vincenzo Galilei*, who honourably ſupported his father's reputation, by firſt applying his invention of the pendulum to clock-work, was of illegitimate birth.

VINCENZO GALILEI, the father of Galileo, was a man of letters, not unſkilled in the mathematics, and particularly converſant in the ſcience of muſic. He wrote ſome elaborate works, of which the moſt eſteemed conſiſt of five dialogues concerning harmony, and its meaſures and tones, with rules for compoſing, and other practical parts of ancient and modern muſic. The firſt book is entitled, *Foromino, o Dialogo, nel quale ſi contengono le vere & neceſſarie Regole di intavolare la Muſica nel Lutto*, 1569, folio. He likewiſe wrote a defence of it, entitled, *Dialogo della Muſica antica & moderna in ſuo Diſeſo contra Joſeffo Zarlino*, 1602, folio.

GALI'NA POINT, a cape of the iſland of Jamaica, on the north coaſt. Lat. 18. 26. N. lon. 76. 41. W. Greenwich.

GALINA'GO, *ſ.* [dim. of *gallus*, a cock.] The woodcock. An eminence within the proſtrate gland is called *caput gallinaginis*, from its fancied reſemblance to a woodcock's head.

GAL'INGEN, a town of Pruſſia, in the province of Natangen: four miles ſouth of Bartenſtein.

GAL'INHAS, a river of Africa, which riſes in the country of Hondo, and runs into the Atlantic: eleven leagues from Scherbro. The Portugueſe call it *Magualbari*.

GALINSO'GEA, *ſ.* in botany, a genus of the claſs ſyngeneſia, order polygemia ſuperflua. The generic characters are—Receptacle chaffy; down many-leaved, chaffy; calyx imbricate.

Species. 1. Galinſogea parviflora: leaves ovate, triply nerved, ſerrate; peduncles one or two flowered. Inhabits Peru.

2. Galinſogea trilobata: leaves oblong-lanceolate, toothed, triply nerved; lower-ones halbert-ſhaped and three-lobed; flowers ſomewhat corymbed. Inhabits Peru.

GALINTHIA'DIA, a feſtival at Thebes, in honour of Galinthias, a daughter of Prœtus. It was celebrated before the feſtival of Hercules, by whoſe orders it was firſt inſtituted.

GALIPA'GOS, a cluſter of uninhabited iſlands in the South Sea, on both ſides the equator, not far from the coaſt

coaſt of Terra Firma; belonging to Spain. They lie between 3° N. and 4° S. lat. and between 83° 40′ and 89° 30′ W. lon. There are only nine of them of any conſiderable ſize; ſome of which are ſeven or eight leagues long, and three or four broad. Dampier ſaw fourteen or fifteen of them. The chief of theſe are, Norfolk neareſt the continent, Wenmore among the north weſternmoſt, and Albemarle the weſternmoſt of all. A number of ſmall iſlands lie weſt from theſe, on both ſides the equator; one of which, Gallego I. lies in the 1ſt degree of N. lat. and 102° of W. lon. Many of theſe iſles are well wooded, and ſome have a deep black mould. Vaſt quantities of the fineſt turtle are to be found among theſe iſlands, where they live the greateſt part of the year; yet they are ſaid to go from thence over to the main to lay their eggs, which is at leaſt one hundred leagues diſtant.

GALIPE'A, *ſ.* in botany, a genus of the claſs diandria, order monogynia. The generic characters are—Calyx: four or five-ſided, four or five-toothed. Corolla: ſalver-ſhaped, deeply four or five-parted. Stamina: four, two of them barren.

Galipea trifoliata, a ſingle ſpecies; it is a ſhrub ſix feet high; leaves alternate, in threes; leaflets ſeſſile, lanceolate, entire; flowers ſmall, in a terminal, few-flowered, cyme. Inhabits Guiana, on the banks of rivers.

GALISTE'O, a town of Spain, in Eſtremadura: ten miles eaſt of Coria.

GA'LITSCH, a town of Ruſſia, in the government of Koſtrom, on the ſouth ſide of a lake to which it gives name: fifty-ſix miles eaſt-north-eaſt of Koſtrom. Lat. 57. 56. N. lon. 60. 40. E. Ferro.

GA'LITSCH, a lake of Ruſſia, about fifty miles in circumference, in the government of Koſtrom: fifty miles from St. Koſtrom.

GA'LIUM, *ſ.* [from γαλα, Gr. milk, ſome ſpecies having the property of curdling milk.] LADIES BEDSTRAW; in botany, a genus of the claſs tetrandria, order monogynia, natural order ſtellatæ, (rubiaceæ, *Juſſ.*) The generic characters are—Calyx: perianth very ſmall, four-toothed, ſuperior; in ſome ſpecies none. Corolla: one-petalled, wheel-ſhaped, four-parted, ſharp, without any tube. Stamina: filaments four, ſubulate, ſhorter than the corolla; antheræ ſimple. Piſtillum: germ twin, inferior; ſtyle filiform, half-two-cleft, length of the ſtamens; ſtigmas globular. Pericarpium: berries two, dry, globular, united: ſeeds ſolitary, kidney-form, large. —*Eſſential Character.* Corolla one-petalled, flat, ſeeds two, roundiſh.

Species. I. *With a ſmooth fruit.* 1. Galium rubioides, or madder-leaved ladies bedſtraw: leaves in fours, lanceolate-ovate, equal, ſcabrous underneath; ſtem erect. This has the appearance of G. boreale, but the leaves are double the breadth, with the nerves three in number, and ſcabrous underneath; the ſtem firm and upright, a foot high and more, ſlender, ſwelling at the joints, purpliſh brown, rough when rubbed from the bottom upwards. Native of the Palatinate, Sileſia, Idria, &c. flowering in July; perennial.

2. Galium paluſtre, or white ladies bedſtraw: leaves in fours, obovate, unequal; ſtems diffuſed. Root ſlender, creeping, perennial; ſtem flaccid, branched from the joints, a foot or more in length, the corners ſet with ſharp hooked prickles, pointing downwards; flowers numerous, white, on lateral and terminating peduncles, which are uſually trifid, and ſubdivided. Common on the banks of rivers and ditches, and in moiſt meadows; flowering in July.

Dr. Withering has obſerved a dwarf variety, ſimilar to the foregoing, but ſcarcely a foot in length; reſembling the figure of G. trifidum in the Hora Danica, but readily diſtinguiſhable by the corolla of four diviſions, and the divided peduncles.

Dr. Withering has alſo obſerved another variety, reſembling the paluſtre, except that the leaves grow in ſixes. It is not unlikely but it may turn out to be a diſtinct ſpecies.

3. Galium trifidum, or trifid galium: leaves in fours, linear; ſtem procumbent, ſcabrous; corollas trifid. Root annual, very ſmall and ſlender; ſtem ſlender, bent back, ſtiffiſh, hairy, very much branched from the bottom almoſt to the top; the branches three or four together, divaricate. Native of Denmark, Sileſia, Canada; flowers in July.

4. Galium montanum, or mountain ladies bedſtraw: leaves in fours, or thereabouts, linear, ſmooth, and even; ſtem weak, ſcabrous. Stature between G. mollugo and glaucum; ſtem weak, rough; leaves in fives on the ſtem, reflex ſublinear; on the branches in fours; flowers in trifid corymbs, white, purpliſh on the outſide before they expand. According to Haller, the leaves are in eights; Pollich makes them eight on the ſtem, and ſix on the branches; Krocker, five to eight on the ſtem, and four to ſix on the branches. Haller deſcribes the ſtem to be three feet high, round, firm, upright, ſwelling under the leaves, not much branched; leaves narrow, hollow and glaucous underneath, ending in a ſhort awn, ſharper towards the top of the ſtem; ovate-lanceolate, and ſmaller under the flowers. Pollich adds, that the ſtem is very ſmooth, glaucous-green, and ſays that it is divided into many branches; that the leaves are hardiſh, a little rolled back on the edge, ſmooth and glaucous above, ſcabrous, whitiſh, and grooved, beneath. The root, according to Krocker, is reddiſh; the ſtem eighteen inches high, ſcabrous, branched very ſmooth, glaucous, upright, obſcurely four-cornered. Theſe deſcriptions do not perfectly agree; and after all, Gouan is of opinion that this and the glaucum are but one ſpecies. Native of Germany and Swiſſerland.

5. Galium procumbens, or trailing ladies bedſtraw: leaves on the flowering ſtem in ſixes, lanceolate and ſlightly hairy; the reſt generally in fours, obovate; ſtem proſtrate, ſmooth. Diſtinguiſhable from G. paluſtre (ſays Ray) by its ſmallneſs, ſmoothneſs of its ſtems and leaves, and place of growth, namely on hills; perennial; ſtems and branches matted together, and ſpreading on the ground; flowering ſtem from two to ſix inches high, twiſted, appearing cylindrical to the naked eye, but when magnified to have four rounded corners; leaves often in fours at the bottom of the ſtem, five about the middle, and ſix at the top, unequal in ſize in the ſame whorl, ſometimes obovate-lanceolate, the edges beſet with minute prickly hairs pointing towards the end, the keel ſmooth; thoſe of the branches ſometimes in fives. Lightfoot takes this to be only a variety of G. uliginoſum, growing in dry and mountainous paſtures; but Dr. Stokes has found it to be the ſame in marſhes as on hills. Found on heaths and mountains, alſo in marſhy places; in Dudley wood; it flowers from June to Auguſt.

6. Galium lucidum, or tranſparent ladies bedſtraw: leaves four to ſix, rigid, ſubulate, bowed upwards: flowers panicled terminating; larger than the fruit, which is wrinkled. Perennial; ſtem very much branched next the root; the whole plant ſhining; leaves in ſixes, then fives or fours, half round, ſubulate, ſomewhat ſcabrous about the edge, but hardly to be known by the touch, bowed upwards; flowers in a terminating panicle; corolla white, larger than the fruit, which is oblong-ovate, bowed in, black and wrinkled. Native of the county of Nice, &c. in dry places; alſo probably in Dauphiné.

7. Galium tinctorium, or dyeing ladies bedſtraw; leaves on the ſtem in ſixes and linear, on the branches in fours; ſtem flaccid, one or two flowers on a peduncle. This abounds in the woods of Canada; the roots are employed by the Indians in dying the quills of the American porcupines red. The French women there ſometimes dye their clothes with theſe roots, which are but ſmall, like thoſe of G. luteum. Neither air, ſun, nor water, change the colour.

8. Galium uliginoſum, or marſh ladies bedſtraw: leaves in ſixes, lanceolate, ſerrate-prickly backward, mucronate ſtiff: corollas larger than the fruit. Root perennial, creeping, ſlender; ſtems from procumbent erect, often putting out roots at the baſe, from a finger's length to a foot or eighteen inches, the corners rough, with very minute prickles; two or more branches ſpringing from each joint; leaves ſix, ſometimes ſeven or eight, or even nine, in a whorl; five lines long, and one broad, lanceolate, not much bent back at the edge, which is ſet with very minute prickles; in other parts they are ſmooth, of a bright green above, but glaucous underneath; flowers in panicles at the ends of the ſtem and branches, in trifid diviſions, the peduncles very ſhort; at the baſe of theſe a pair of leaflets or bractes; corolla white, larger than the fruit; Haller ſays it has a tinge of roſe colour; antheræ very ſmall, purpliſh; fruits rough, according to Tournefort. Native of Sweden, France, Germany, Swiſſerland, Great Britain; on wet heaths, in bogs, low meadows, by river ſides, and other watery places; it flowers in July and Auguſt.

9. Galium ſpurium, or corn ladies bedſtraw: leaves in ſixes, lanceolate keeled, ſcabrous, prickly backwards; joints ſimple. Stem quadrangular, proſtrate, hardly branched, prickly downwards at the corners; leaves uſually in ſixes, ovate-lanceolate, prickly backwards, keeled; peduncles axillary and terminating, bowed in, three-flowered, all the flowers hermaphrodite: ſeeds globular, ſmoothiſh. It is very common in the corn in Cambridgeſhire, eſpecially where the ſoil is calcareous, as about Gogmagog hills, Linton, &c. alſo in various parts of Oxfordſhire. According to Hudſon, in the iſle of Thanet; about Leatherhead and elſewhere in Surrey; and near Stamford. In the Iſle of Wight, as Dr. Withering ſays; it is an annual plant, and flowers in June and July, and even later in the ſtubble after the corn is off.

10. Galium tricorne, or three-horned ladies bedſtraw: leaves from ſix to eight; peduncles lateral, almoſt naked, trifid, pedicels bowed back; fruit tubercled. Leaves from ſix to eight, the upper ſurface ſmooth, the rib underneath rough.

11. Galium Anglicum, or Engliſh ladies bedſtraw: leaves about ſix, lanceolate, acuminate, reflex, ciliate prickly; ſtems ſpreading, rough with prickles, pointing backwards; corollas ſmaller than the fruit. Root annual, branched; ſtems from a foot to eighteen inches in height, the corners rough with prickles pointing backwards, jointed, branched, branches alternate, flowering branches oppoſite. Found by Sherard on a wall at Hackney, and at Eltham; by Hudſon, in ſandy ground between Dartford and Northfleet, and on a wall at Farningham in Kent; by Mr. Crowe, on the walls of Binham church in Norfolk.

12. Galium ſaxatile, or rock ladies bedſtraw: leaves in ſixes, obovate, obtuſe; ſtem very much branched, procumbent. Scarcely a hand high; root large, producing a prodigious number of ſtems, which are angular; leaves in great abundance, without any prickle at the end: ſeeds very large, wrinkled. This is Haller's deſcription, who doubts very much whether his plant be the ſame with that of Linnæus; Krocker ſays that it has a ſmall, ſlender, creeping, root; a ſmooth ſtem, a hand or a foot in height; five or ſix leaves, oblanceolate or obovate, ſmooth, ending in a ſlender tip; the flowers axillary, the peduncles ſuſtaining one to four flowers in a corymb, the corymbs four to ſix-flowered, ſhort; corollas white: ſeeds large; it is an annual. Native of Spain and Swiſſerland, on mountain rocks.

13. Galium Pyrenaicum, or Pyrenean ladies bedſtraw: leaves in ſixes, flowers lateral, oppoſite, ſubſeſſile, ſolitary. Stems weak, of a finger's length, and branched; the internodes ſcarcely the length of the leaves, which are ſmooth, ſomewhat convex, and mucronate. Native of the Pyrenees.

14. Galium minutum, or ſmall ladies bedſtraw: leaves in eights, lanceolate, mucronate, ſerrate-prickly, ſmooth, incurved, fruits reflex. This very much reſembles G. verum, but it is leſs than a hand in height, and is decumbent; ſtem quite ſmooth, not ſcabrous even about the edge; leaves a little convex, not bent back on the edge; fruit fleſhy, large, with the peduncles reflex, whence they are conglomerate; perennial. Native of Ruſſia.

15. Galium puſillum, or dwarf ladies bedſtraw: leaves in eights, hiſpid, linear, acuminate; fruit ſmooth; peduncles dichotomous. Root branched, perennial; ſtems numerous, from three to ten inches high, branched, the corners commonly rough with prickles; they form large tufts, covered with innumerable milk-white flowers, very conſpicuous at a diſtance. Not only the corners of the ſtem, but the edges and midribs of the leaves, are rough, with ſhort ſpreading hairs; leaves rarely up to eight; in the Engliſh Botany it is ſaid from ſix to eight, or even nine, in a whorl, equally ſpreading. Native of Provence; on the limeſtone hills near Kendal in Weſtmoreland; Matlock-bath, Derbyſhire; flowers in July and Auguſt.

16. Galium verum, yellow ladies bedſtraw, or cheeſe-rening: leaves in eights, linear grooved; flowering branches ſhort. Root perennial, creeping, ſlender, ſomewhat woody, of a yellow colour; ſtem from one to two feet high; leaves about an inch in length, bluntiſh with a ſlight point, narrowed at the baſe, the edges rolled back, and rough with minute prickles turned upwards, viſible only with a magnifier, above ſlightly wrinkled, dark green and gloſſy, underneath hollowed and paler; the lowermoſt uſually eight in a whorl, but not unfrequently ten, the upper ones decreaſing to ſeven, and ſo down to two, and even one at the extremities of the branches; flowers in a panicle, numerous, ſmall, fragrant with a peculiar odour. It is common in moſt parts of Europe, in paſtures, and by the ſides of fields and roads, in a dry ſoil; flowering from June to Auguſt and September; it will flouriſh in the moſt unremitting drought, when not a blade of graſs is to be ſeen. Beſides the names ſet down in the title, Gerarde ſays it is called *maid's-hair*, and *petty mugwet*, which laſt is from the French *petit muguet*. I muſt obſerve that the common name *bedſtraw*, (which we have from the German) is from the verb *to ſtrew* or *ſtrow*, anciently written ſtraw; thus the multitude *ſtrawed* branches in the way before Chriſt. Before the invention of feather-beds, a variety of herbs were uſed to ſtrew beds with; among theſe doubtleſs this was one.

It is an inveterate notion that the flowers and herb of this plant will curdle milk. Dioſcorides names it γαλιον, from this property; the ſame property is attributed to it by Galen; Matthiolus informs us that in Tuſcany they uſe it for this purpoſe, in order that their goat and ſheep's milk cheeſe may eat the ſweeter: Gerarde, who was a Cheſhire man, ſays, that in his country, eſpecially about Namptwich, they uſe it in their rennet, eſteeming that the beſt cheeſe which is made with it; and in ſome of the Weſtern Iſles they curdle milk with a ſtrong decoction of this herb. But Bergius and Krocker could not ſucceed in coagulating milk with this herb alone. The Galium has probably been put into milk deſtined to make cheeſe, not ſo much for the purpoſe of curdling it, as of giving it a flavour, or, as Matthiolus expreſſes it, to make it eat the ſweeter. The French preſcribe the flowers in hyſteric and epileptic caſes; both theſe and the leaves diſcover a ſenſible acidity to the taſte; and the flowery tops committed to the ſtill as ſoon as gathered, give over (ſays Lewis) a pretty ſtrong acid liquor in a moderate heat. The reſtringent and refrigerating virtues therefore aſcribed to this plant appear to have ſome foundation. Boiled in alum-water, the flowering ſtems dye of a good yellow colour; the roots dye a very fine red, not inferior to madder, but they are ſmall. An ingenious gentleman, however, converſant in dying, aſſured Mr. Curtis, that the roots produced a brighter colour than madder; and

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on that account they may be worth trying, eſpecially as the reſt of the plant may be ſucceſsfully uſed in dying yellow. They were cultivated a few years ſince under the direction of the committee of privy council for trade; the roots were ſuppoſed on an average to weigh ſeven ounces; and the produce, when dry, to be twelve hundreds and an half on an acre; the roots of moſt of the plants belonging to the natural order of ſtellatæ yield more or leſs of a red dye. Not only this ſpecies, but G. ſylvaticum, mollugo, and aparine, are recommended for this purpoſe. So alſo are aſperula arvenſis, tinctoria, and cynanchica.

17. Galium erectum, or upright ladies bedſtraw: leaves moſtly in eights, lanceolate, with fine prickly ſerratures; panicles, trichotomous; ſtem flaccid. Root perennial, branched; ſtems ſeveral, rather upright, ſwelled at the joints, roughiſh at the corners, a little hairy, branched; flowering branches oppoſite; leaves eight, ſometimes ſix only, in a whorl, lanceolate or linear-lanceolate, naked; flowers white; ſeeds ſmall. Dr. Stokes adds, that the whorls of leaves are from four to five inches diſtant, and bent back; that the ſerratures are directed towards the point of the leaf, and not bowed back as in the other rough-leaved ſpecies; and that his ſpecimen agrees with Mr. Hudſon's deſcription in every reſpect, except that the ſtem is ſmooth. Inhabits meadows and moiſt paſtures; found in Heydon common, Norfolk, by Mr. Bryant; it flowers in June and July.

18. Galium mollugo, or great ladies bedſtraw: leaves in eights, ovate-linear, ſubſerrate, ſpreading very much, mucronate; ſtem flaccid, branches ſpreading. The whole plant is ſmooth to the touch; root perennial, creeping; ſtem two, three, and four, feet high, and even more, generally depreſſed, unleſs ſupported by the weight of the branches, quadrangular, (by which it is diſtinguiſhed from the next ſpecies,) thickeſt juſt above the joints; one ſeed is generally much larger than the other. Common in hedges and buſhy places; flowering from June to Auguſt; it is called *wild madder*, and *great baſtard madder*; the roots yield a red dye, like the true madder, and of a brighter colour; like that alſo, they dye the bones of animals, that feed on them, red.

Scopoli enumerates four varieties: 1. With the bottom leaves emarginate. 2. With the leaves rounded at the end, the nerve ending in a point or prickle. 3. With the leaves toothletted or ſerrulate, each indentation ending in a prickle, which correſponds with our common plant. 4. With the leaves quite entire and reflex, a ſmall alpine plant, only a finger's length. This Dr. Stokes has obſerved on Malvern hills.

19. Galium ſylvaticum, or wood ladies bedſtraw: leaves in eights, ſmooth and even, but ſcabrous underneath; a pair of floral leaves on capillary peduncles; ſtem ſmooth and even. Stems lofty, weak, ſmooth and even, very obſcurely cornered or roundiſh; leaves in a whorl from eight to ten, ſometimes only ſix, mucronate; the keel not always ſcabrous; ſeed round, black, wrinkled; uſually only one in a pair comes to maturity; the whole plant is ſomewhat glaucous; the root is perennial, yelloviſh on the outſide; and affords a very fine red dye like the laſt. Native of Germany, Swiſſerland, and the South of Europe, in woods; flowering from June to Auguſt.

20. Galium linifolium, or flax-leaved ladies bedſtraw: leaves in ſevens or thereabouts; linear-lanceolate, ſmooth and even; peduncles capillary; ſtem upright, four-cornered. Native of the South of Europe; it flowers in June and July; and is perennial.

21. Galium rigidum, or rigid ladies bedſtraw: leaves whorled, linear, ſcabrous above; panicles divaricate; ſtem upright, round, hairy and roughiſh. Perennial; flowering in June.

22. Galium ariſtatum, or bearded ladies bedſtraw: leaves in eights, lanceolate, ſmooth and even; panicle capillary, petals awned. Perennial; the whole plant ſmooth and even; ſtem a foot high; leaves eight or nine in a whorl, nicely lanceolate, by no means ſtiff. Native of Italy, on Monte Baldo, and Cenſio; it flowers in July.

23. Galium ſcabrum, or rough ladies bedſtraw: leaves about eight, ſcabrous, mucronate; flowering, branches ſubtrichotomous. Perennial; ſtems upright, cloſely beſet with very ſhort ſoft hair. Found by Dr. Stokes in a hedge-row, in a marly ſoil, on the ſide of Red Houſe Lane, near Worceſter; flowering in Auguſt. In Auſtria, by profeſſor Jacquin.

24. Galium ſylveſtre, or field ladies bedſtraw: leaves ſix to nine; linear-lanceolate, quite entire, awned; ſtems angular, decumbent. Root ſmall, very ſlender, creeping; ſtems from a ſpan to a foot in length, and more, brittle, ſlender, proſtrate, a little hairy at bottom; leaves quite entire, ending in a fine long prickle; the lower ones ſomewhat rough, with hairs about the edge, the upper ones ſmooth, but ſometimes they are all hairy. Native of France, Germany, and Swiſſerland, where Haller informs us it is frequent by way-ſides in corn-fields and ſtony places; it is alſo found in the Alps, and there becomes a more humble creeping plant. He mentions ſeveral varieties.

25. Galium Hieroſolymitanum, or Jeruſalem ladies bedſtraw: leaves in tens, lanceolate-linear, umbels faſtigate. In ſtature this approaches very near to G. rubrum. Native of Paleſtine.

26. Galium glaucum, or glaucous ladies bedſtraw: leaves linear; peduncles dichotomous; ſtem ſmooth and even. Root perennial, ſomewhat creeping, branched; ſtems ſlender, weak, proſtrate, gloſſy; leaves gloſſy, glaucous underneath, hardly ſcabrous on the edge, the lower ones turned back. According to Haller and Jacquin, there are eight leaves in a whorl; according to Allioni, ſix or ſeven, ſerrate on the edge; according to Krocker, eight or even nine in the lower ones, but five or ſix in the upper ones; Scopoli aſſigns only ſix to the lower whorls, four to the upper ones, and two only to thoſe on the branches. It is a native of the South of Europe, Tartary, and Siberia, in mountain woods and fiſſures of rocks; it flowers in our gardens from June to September.

27. Galium cinereum, or cinereous ladies bedſtraw: leaves in ſixes, linear, rigid, ſerrate-prickly; ſtems ſmooth, flexuoſe, filiform, ſomewhat woody at bottom; branchlets upright, leafleſs, with abont three flowers. Perennial; this is an elegant ſpecies covered with a glaucous bloom; when this bloom is wiped off, the plant is of a ſhining, not a dark, green; ſtems obſcurely quadrangular; leaves of a long elliptic form, wider at the end, and terminating in a remarkable white prickle. Native of Piedmont and Dauphiné.

28. Galium tenuifolium, or thin leaved ladies bedſtraw: leaves ſix to eight, linear, grooved, rigid, ſlightly and finely ſerrate, with a ſmall prickle at the end; ſtems diffuſely branched, each branch terminated by a panicle; peduncles two or three-flowered. Perennial; ſtems eighteen inches high, ſmooth, ſharply quadrangular; branches oppoſite, one longer than the other; leaves eight at bottom, diminiſhing till they come to two, or even one; truly rigid, not ſoft and flexible, ſmooth; but not ſhining; ſeeds ſlightly wrinkled, but neither hairy nor rough; colour of them black. Native of Nice, Provence, and Dauphiné.

29. Galium purpureum, or purple ladies bedſtraw: leaves linear-briſtle-ſhaped, peduncles, capillary, longer than the leaves. Stem upright, very much branched, and ſo leafy that the leaves can hardly be numbered; they are uſually in eights, ſmooth, and keeled underneath. The roots dye red. Found by Lago Lugano; near Ripa and Chiavenna; Nice, Montferrat, &c. perennial.

30. Galium rubrum, or red ladies bedſtraw: leaves linear, patulous; peduncles very ſhort. Root perennial, ſlender; the whole plant pale green; ſtems ſlender, proſtrate, near a foot in length, rough with ſmall prickles;

leaves on the ſtem ſix or ſeven in a whorl, on the branches four or five, bent down, lanceolate, quite entire, duſky green, ſmooth, but the edge very rough with prickles, and a little prickle at the end; they are three lines in length, and half a line in breadth; the upper leaves are in pairs; the flowers are very ſmall, of a pale purple colour (fuſco-rubri, *Scop.*) or white, diſpoſed in panicles at the end of the ſtem and branches; this differs from the foregoing ſpecies, with which it ſeems to have been confounded by ſeveral authors, by the leaves not being elliptic, nor ſpreading out; alſo by the ſhortneſs of the peduncles, and its manner of flowering; for in G. purpureum the flowers are terminating, rather panicled; purple, not reddiſh brown. Native of the Palatinate, Sileſia, Carniola, and Italy; flowers in July and Auguſt.

II. *With a hiſpid fruit.* 31. Galium boreale, or croſs-leaved ladies bedſtraw: leaves in fours, lanceolate, three-nerved, ſmooth; ſtem upright. Root perennial, long, ſlender, dark purple; ſtems a foot or eighteen inches in height, obſcurely quadrangular, ſtout, much branching at top; the lower part ſmooth, the upper ſlightly hairy. Native of Lapland, Sweden, Sileſia, Swiſſerland, Carniola, Britain; as in the mountains of Weſtmoreland and Wales; near Pooley bridge by Ulſwater, in Cumberland; near the ferry at Winander-meer; in the county of Durham; in Scotland not unfrequent on rocks by the ſides of rivers and lakes; it flowers in July and Auguſt. This is one of the ſpecies whoſe roots afford a beautiful red dye. The proceſs is thus deſcribed by Haller: the roots are gathered in ſpring, they are ground with malt duſt, and infuſed in ſmall beer, the woollen yarn is macerated, and then boiled in this liquor. Gunner adds that the yarn is firſt dyed yellow in a decoction of birch leaves.

32. Galium piloſum, or hairy ladies bedſtraw: leaves in fours, nearly oval, hairy, nerveleſs; ſeeds hairy. Perennial. Native of North America; flowers in June and July.

33. Galium rotundifolium, or round-leaved ladies bedſtraw: leaves in fours, ovate, obtuſe, terminating in a very ſhort prickle, ciliate about the edge, three-nerved; ſtem procumbent. Root perennial, ſlender, creeping, cinnamon-coloured; ſtem weak, a foot long, ſlightly grooved; branches alternate, green at the bottom, pubeſcent, with very ſhort hairs, and leafy, frequently purpliſh above, naked, and jointed; leaves ſubpetioled, four or very ſeldom five in a whorl, ſpreading, broad, with very ſhort hairs on the nerves and at the edges; towards the top of the ſtem, where it terminates in two or three almoſt dichotomous peduncles, is placed a pair of lanceolate leaves. Native of Sileſia, Swiſſerland, Savoy, Auſtria, &c. It flowers in July and Auguſt.

34. Galium maritimum, or ſea ladies bedſtraw: leaves in fours, hiſpid; peduncles one-flowered; fruits villoſe. Root perennial; leaves in fours, rarely fives. Obſerved in the Levant, by Schreber: if it be Gouan's plant, it is alſo native of Montpellier, the Pyrenées, and Nice: but according to Gouan, the leaves are eight in a whorl.

35. Galium Bermudianum, or Bermuda ladies bedſtraw: leaves in fours, linear, obtuſe; branches very much ſub-divided. Native of Virginia and Maryland.

36. Galium Græcum, or Candia ladies bedſtraw: leaves about ſix, linear-lanceolate; ſtems woody; the whole plant rough with hairs. Native of the iſlands of the Archipelago.

37. Galium aparine, or common rough ladies bedſtraw, cleavers, or gooſegraſs: leaves in eights, lanceolate; keels ſcabrous, with prickles pointing backwards; joints villoſe. Root annual; ſtem four feet high or more, weak, and ſupporting itſelf on other plants, brittle, jointed, the joints villoſe at the baſe; the angles are ſet with pellucid prickles pointing downwards; it is very much branched, and the branches are oppoſite; leaves ſix or eight in a whorl, (eight or ten, *Linn.* four to ſeven or more, *With.* ſix to eight, *Hall. Poll. Krock.* ſeven, *Bauh.* Ray ſays, eight on the lower, ſix on the upper, whorls of the ſtem; on the branches fewer, from ſix to three, two, and even one.) Common in hedges, and cultivated grounds; flowering from May and June through the ſummer and part of the autumn. Its well-known property of adhering to whatever it comes in contact with, acquired it the names of *cleavers, clevers, clivers*, and *catchweed* or *ſcratchweed*; from the ſame idea it had the more elegant appellation of *philanthropon* among the Greeks and Romans; from its roughneſs it has been called *hariff*, or rather *hairrough*; and from being a favourite food or medicine of geeſe, *gooſe-graſs, gooſe-ſhare*, and *goſling-weed.*

Linnæus informs us that they uſe the ſtalks in Sweden as a filtre to ſtrain their milk through. Dioſcorides relates that the ſhepherds made the ſame uſe of it in his time; and certainly it is no bad thing to take out hairs from the milk, where a ſieve is not at hand. It is reckoned to purify the blood, and for that purpoſe the tops are an ingredient in ſpring broth. The expreſſed juice of the herb, taken to the amount of four ounces or a quarter of a pint, night and morning, during ſeveral weeks, is very efficacious in removing many of thoſe cutaneous eruptions, which are called, although improperly, ſcorbutic. It has been much celebrated in ſcrophulous and cancerous ſores, but experiments made in our hoſpitals have not turned out in its favour. The ſeeds have been ſubſtituted for coffee; the roots, like moſt of the genus, will dye red, and eaten by birds, have tinged their bones of that colour. It is a troubleſome weed, particularly in young quick-ſet hedges, which it will entirely overgrow and choke. Linnæus ſays it is very apt to infeſt their crops of peaſe. Being an annual weed, it is eaſily deſtroyed, if it be cut or plucked up early, for it begins to ſeed in June.

38. Galium Pariſienſe, or Parva ladies bedſtraw: leaves linear; peduncles two-flowered. Root annual; ſtems a foot high, weak, ſcabrous backward; leaves in ſevens, lanceolate, mucronate, ſcabrous eſpecially on the edge.

39. Galium megaloſpermum, or large-ſeeded ladies bedſtraw: leaves in fives, elliptic, acuminate, finely ſerrate; peduncles two-flowered; fruits large wrinkled. This forms a tuft; the ſtems are not more than a finger's length; flowers pale yellow; fruits dirty white. Native of Monte Cenifio.

40. Galium ſaccharatum, or ſweet ladies bedſtraw. Suppoſed to be a variety of G. aparine. Parkinſon ſays it differs from aparine lævis only in having the ſeed rough like unto a coriander comfit. Ray, that the leaves are ſmooth, and the fruits warted, but not lappaceous or tenacious.

41. Galium umbroſum, or ſhady ladies bedſtraw. Native of New Zealand.

42. Galium viſcoſum, or clammy ladies bedſtraw: lower leaves in fours, obovate; upper ones in ſixes, linear-lanceolate, ſerrate, keel and ſtem ſmooth. Root annual; ſtems ſeveral, aſcending, a finger or a hand in height, ſmooth, even, made four-cornered by a pale decurrent line, branched from all the lower axils, ending at length towards the top in oppoſite peduncles, an inch long. In a rich ſoil the ſtems are frequently a ſpan high, and ſpreading. Native of Tunis, in the mountains.

43. Galium paſchal: leaves in nines or thereabouts, linear-lanceolate, rugged backwards, peduncles axillary, elongated, trichotomous. Stems weak, a foot and half high or more, ſimple, ſmooth, even; perhaps not different from G. hieroſolymitanum.

44. Galium aparinoides: leaves in ſixes, oblong, on the edge and along the keel, prickly backwards, joints ſmooth. Stem herbaceous, weak, half a foot high, prickly backwards at the corners, with equal joints; ſeeds as in G. aparine, from which it differs in the ſize, number, and form, of the leaves.

45. Galium album, or white ladies bedſtraw: leaves in eights, or thereabouts, oblong, unarmed, rugged on the edge; ſtem pubeſcent, even. Stem the thickneſs of a pigeon's quill, erect, branched, a cubit in height, pubeſcent,

ſcent, unarmed, purpliſh brown at the joints, the internodes a ſpan in length; leaves ſeſſile, commonly in ſevens, mucronate, ſcarcely ſerrulate at the edge, ſmooth above, villoſe underneath, eſpecially on the keel; fruit hiſpid. Native of Smyrna.

46. Galium microcarpum, or ſmall-fruited ladies bedſtraw: leaves in ſixes or thereabouts, lower ones oblong, upper ones briſtle-ſhaped; peduncles trifid. Stems ſeveral, filiform, a hand and ſometimes a finger high, erect, rugged at the corners below, but even above, branched at the baſe, dichotomous or trichotomous at top; lower leaves in fours, petioled, obovate, ſmall; the middle ones in ſixes, a little longer, marked with two lines, oblong, ſharp at both ends; flowers purple; fruit minute, whitiſh-hiſpid. Native of the dry mountains of Tunis; and of Spain, but not ſo common there.

47. Galium tuberoſum, or tuberous ladies bedſtraw: leaves in fives, lanceolate; peduncles heaped, axillary. The root is a ſmall, oblong, irregularly-ſhaped, white, farinaceous, tuber; ſtem herbaceous, a foot and a half high, rufous, procumbent, ſimple; flowers white; fruit roundiſh, rough. It is cultivated in China and Cochinchina for the roots, which are eaten boiled, either whole or in meal.

48. Galium cruciatum, or croſs-wort: leaves in fours, ovate hairy; ſtem ſimple above, hairy, bunches of flowers, lateral with two leaves; flowers polygamous; fruit ſmooth. Root perennial, creeping, ſlender; ſtems branched only at the baſe, weak and ſupporting themſelves on buſhes, quadrangular, very hairy, jointed; having at every joint four ovate, entire, ſoft, hairy, leaves, from the axils of theſe all the way up the ſtem ariſe ſeveral ſlender, forked, many-flowered, peduncles, each furniſhed with two ſmall leaves at the firſt diviſion. The flowers are yellow, formed exactly like the galiums, except that ſome are only male, and ſome of the hermaphrodites are five-cleft. Croſſwort is not uncommon about hedges and in thickets, flowering early in ſummer.

Propagation and Culture. Moſt of theſe plants, being deſtitute of beauty, and being ſubject to ſpread, and overrun whatever plants grow near them, are ſeldom cultivated except in botanic gardens. The perennial ſorts may eaſily be propagated, by parting their roots either in ſpring or autumn; and they will grow in almoſt any ſoil and ſituation. If the annual ſorts are permitted to ſcatter their ſeeds, they will maintain themſelves in a garden without any culture, except that of preventing other weeds from overgrowing them. The common gooſegraſs propagates itſelf prodigiouſly, by the adheſion of its fruits to the hairy coats of cattle, &c. If it ſhould be thought adviſeable to propagate the galium verum for the uſe of the roots in dyeing, the beſt ſoil is a ſandy loam; heavy ſoils will not anſwer. Prepare the land as for flax; ſow four pounds of ſeed on an acre. In April hoe out the plants to ſix inches ſquare; the crop will require three or four hoeings more the firſt ſeaſon. In May or June take up as many plants as will leave the reſt at the diſtance of one foot ſquare; in March following take up again as many as will leave the reſt ſtanding at two feet ſquare; and in the fourth take up the whole crop in March; keeping it all the while clean from weeds. See ASPERULA, RUBIA, SHERARDIA, and VALANTIA.

GALL, *ſ.* [ȝealа, Sax. *galle*, Dut.] The bile, an animal juice remarkable for its ſuppoſed bitterneſs.—*Gall* is the greateſt reſolvent of curdled milk: Boerhaave has given at a time one drop of the *gall* of an eel with ſucceſs. *Arbuthnot.*

A honey tongue, a heart of *gall*,
Is fancy's ſpring, but ſorrow's fall. *Shakeſpeare.*

The part which contains the bile.—The married couple, as a teſtimony of future concord, did caſt the *gall* of the ſacrifice behind the altar. *Brown.*—Any thing extremely bitter:

Poiſon be their drink!
Gall, worſe than *gall*, the daintieſt meat they taſte. *Shakeſ.*

Rancour; malignity.—They did great hurt unto his title, and have left a perpetual *gall* in the mind of the people. *Spenſer on Ireland.*—Anger; bitterneſs of mind:

Suppoſe your hero were a lover,
Though he before had *gall* and rage;
He grows diſpirited and low,
He hates the fight, and ſhuns the blow. *Prior.*

A ſlight hurt by fretting off the ſkin.—This is the fataleſt wound; as much ſuperior to the former, as a gangrene is to a *gall* or ſcratch. *Government of the Tongue.*—The *gall* or bile of animals, being of a ſaponaceous quality, is found particularly uſeful in cleanſing or waſhing coloured ſtuffs, the dye of which is apt to fade. It was alſo employed by the ancients for removing diſcolourations or ſpots of the ſkin. For its mode of ſecretion, and chemical properties, ſee CHEMISTRY, vol. iv. p. 361; and ANATOMY, vol. i. p. 616.

The juice of animal gall was generally given amongſt the Jews, to perſons ſuffering death under the execution of the law, to aſſuage thirſt, and alleviate pain; but gall and myrrh, in thoſe caſes, are ſuppoſed to have been the ſame thing; becauſe at our Saviour's crucifixion, St. Matthew ſays, they gave him vinegar to drink mingled with gall; whereas St. Mark calls it wine mingled with myrrh: the truth is, that they diſtinguiſhed every thing *bitter* by the name of *gall*. The Greeks and Romans alſo gave ſuch a mixture to perſons ſuffering death by torture.

GALL, in natural hiſtory, a protuberance or nut, produced on plants and trees of different kinds, by the puncture of inſects. They are of various forms and ſizes, and no leſs different with regard to their internal ſtructure. Some have only one cavity, and others a number of ſmall cells communicating with each other. Some of them are as hard as the wood of the tree they grow on, whilſt others are ſoft and ſpongy; the firſt being termed *gall-nuts*, and the latter *berry-galls*, or *apple-galls*. The *gall-nut* is nothing more than the nidus of the cynipides, in which the eggs of theſe inſects are depoſited. See the article CYNIPS, vol. v. p. 519. They afford a ſecure lodgment for the larvæ of the fly, until they are capable of eating a paſſage through, in order to aſſume the winged ſtate. The tear which iſſues from the punctured leaf wounded for this purpoſe by the parent inſect, gradually increaſing by acceſſions of freſh matter, forms a covering to the egg and ſucceeding larva. Thoſe *galls* which have no hole, are found to have the dead worm remaining in them. Two ſorts are diſtinguiſhed in the ſhops, one brought from Aleppo, called Oriental, or Aleppo nut, or *galla* ſpinoſa; the other from the ſouthern parts of Europe, called European galls. The former are generally of a bluiſh colour, or greyiſh or blackiſh, verging to a blue; unequal in their ſurface, hard to break, and of a cloſe texture: the others are of a pale browniſh or whitiſh colour, ſmooth, round, eaſily broken, leſs compact, and of a much larger ſize. The two ſorts differ in ſtrength, but in other reſpects are of the ſame quality. The beſt are the ſmall, protuberant, bluiſh, and heavy ones.

Galls are a powerful aſtringent, ſuppoſed to be one of the ſtrongeſt in the vegetable kingdom. They have no peculiar ſmell or taſte; their medical character is ſimple aſtringency. Both water and ſpirit take up nearly all their virtue. The ſpirituous extract is the ſtrongeſt medical preparation; but the ſimple powder is as good as any other mode of adminiſtering them. The doſe of the powder is from a few grains to a dram. They are not, however, much uſed in medicine, though they have been ſaid to be beneficial in intermittents, and one of the moſt powerful of the vegetable aſtringents. Dr. Cullen has cured intermittents, by giving half a dram of the powder of galls every two or three hours, during the intermiſſion; and both by itſelf, and joined with camomile flowers, has

prevented the return of the paroxyſms. The following fomentation is recommended for the piles, &c. Take of bruiſed galls ʒ ſs. boiling water, ℔ ii. macerate them for an hour, and then ſtrain off the liquor. This is alſo ſerviceable in the prolapſus ani, and the fluor albus, applied cold. An injection merely aſtringent is made, by adding two ounces of diſtilled water to the ſame quantity of the fomentation above, and uſed in gleets and leucorrhœa. Againſt the piles alſo, the ointment called camphorated ointment of galls has been found ſerviceable after the uſe of leeches, and is thus made: Incorporate half a dram of camphor with one ounce of hog's lard, and then add two drams of galls in very fine powder. Galls are of extenſive uſe in preparing the black dye; for which ſee the article DYING, vol. vi. p. 162, 163.—And alſo for making the beſt and moſt durable writing ink; for the preparation of which ſee the article INK.

To GALL, *v. a.* [*galer*, Fr.] To hurt by fretting the ſkin.—Tyrant, I well deſerv'd thy *galling* chain. *Pope.*

I'll touch my point
With this contagion, that, if I *gall* him ſlightly,
It may be death. *Shakeſpeare.*

To impair; to wear away.—If the rain ſhould fall down in a continual ſtream like a river, it would *gall* the ground, waſh away plants by the roots, and overthrow houſes. *Ray.*—To teaze: to fret; to vex.—No man commits any ſin but his conſcience ſmites him, and his guilty mind is frequently *galled* with the remembrance of it. *Tillotſon.*—To haraſs; to miſchief; to keep in a ſtate of uneaſineſs.—In our wars againſt the French of old, we uſed to *gall* them with our long bows, at a greater diſtance than they could ſhoot their arrows. *Addiſon.*

Light demi-lances from afar they throw,
Faſten'd with leathern thongs, to *gall* the foe. *Dryden.*

To GALL, *v. n.* To fret.—I have ſeen you glecking and *galling* at this gentleman twice or thrice. *Shakeſpeare.*

"Touch a GALL'D horſe and he'll winch:"—That is, accuſe a perſon of what his conſcience ſmites him with being guilty of, and he will be ſenſibly touched to the quick. This proverb is generally applied to thoſe moroſe and touchy creatures, who conſider every thing that is ſaid as if deſignedly levelled at them, when perhaps the perſon who is ſpeaking has no ſuch thing in view.

GALL-FLY. See CYNIPS, vol. v. p. 519.

GAL'LA, an Ethiopian nation, originally dwelling, as Mr. Bruce ſuppoſes, under the line, and exerciſing the profeſſion of ſhepherds, which they ſtill follow. For a number of years they have been conſtantly migrating northwards. At firſt they had no horſes; the reaſon of which was, that the country they came from did not allow thoſe animals to breed: but as they proceeded northward, and conquered ſome of the Abyſſinian provinces, they ſoon furniſhed themſelves with ſuch numbers, that they are now almoſt entirely a nation of cavalry. On advancing to the frontiers of Abyſſinia, the multitude divided, and part directed their courſe towards the Indian Ocean; after which, having made a ſettlement in the eaſtern part of the continent, they turned ſouthward into the countries of Bali and Dawaw, which they conquered, and ſettled there in 1537. Another diviſion having taken a weſterly courſe, ſpread themſelves along the banks of the Nile; ſurrounding the country of Gojam, and paſſing eaſtward behind the country of the Agows, extended their poſſeſſions as far as the territories of the Gongas and Gafats. Since that time the Nile has been the boundary of their poſſeſſions; though they have frequently plundered, and ſometimes conquered, the Abyſſinian provinces on the other ſide of the river, but have never made any permanent ſettlement in thoſe parts. A third diviſion ſettled to the ſouthward of the low country of Shoa, which the governor of that province permitted, in order to form a barrier betwixt him and the territories of the emperor of Abyſſinia, on whom he ſcarcely acknowledges any dependence.

The Galla on the hills are of a brown complexion; but thoſe who live in the valleys are entirely black. Each of the three diviſions above-mentioned has a king of its own; and they have alſo a kind of nobility, from among whom the ſovereign can only be choſen: however, the commonalty are not excluded from riſing to the rank of nobles if they diſtinguiſh themſelves in battle. Theſe nations have all a great veneration for a tree that grows plentifully in their country, called *wanzey*, which the people are ſaid to adore as a god. Their aſſemblies for the choice of a king are all held under one of theſe trees; and when the ſovereign is choſen, they put a bludgeon of this wood in his hand by way of ſceptre, and a garland of its bloſſoms on his head. Their principal arms are lances made of wood ſharpened at the end and hardened in the fire; and their ſhields are compoſed only of one ſingle fold of bull's hide, which are extremely apt to warp by heat, or become too ſoft in wet weather. They are exceedingly cruel; and make a horrid yell on going into battle. According to Mr. Bruce's account, the women are fruitful; and ſuffer ſo little in child-bearing, that they do not even confine themſelves for a ſingle day after delivery. They plough, ſow, and reap the corn, which is trodden out by the cattle; but the men have all the charge of the cattle in the fields. Beſides the wanzey, they worſhip the moon and ſtars at particular ſeaſons of the year. They all believe in a reſurrection; and have ſome faint notions of a ſtate of happineſs, but no idea of future puniſhment. Some of them, to the ſouthward, profeſs the Mahometan religion, but thoſe to the eaſt and weſt are pagans. Polygamy is allowed among them; and it is ſingular, that among theſe people the women ſolicit their huſbands to take others to their embraces. The reaſon of this cuſtom is, that the men may have numerous families of children, who may be capable of defending them againſt their enemies; as the Galla, according to Bruce, always fight in families, whether againſt foreign enemies, or with one another.

GAL'LA, a town of Arabia Felix: twenty-four miles ſouth-eaſt of Taas.

GAL'LAM, a town of Africa, the capital of a kingdom of the ſame name, on the river Senegal. Lat. 14. 25. N. lon. 9. 55. W. Greenwich.

GAL'LAN, a ſmall iſland on the coaſt of Peru, in lat. 14, ſouth five miles north of the high land *Morro Veijo*, or Old Man's Head; between which iſland and the high land, is a moſt eligible ſtation to cruize for veſſels bound for Callao, north or ſouth.

GAL'LAND (Antony), eminent for oriental knowledge, born at Rollo in Picardy, in 1646. He received his early education at the college of Noyon, whence he was taken to be put to ſome trade. But his inclination for literature carried him to Paris, where he purſued his ſtudies under M. Petitpied, a doctor of the Sorbonne, and afterwards at the college of Mazarin. Becoming particularly converſant with the oriental languages, he was engaged as a companion by M. de Nointel in his embaſſy to Conſtantinople and the Levant, where he collected a rich treaſure of antiquities. Returning to Paris in 1675, he made acquaintance with Vaillant and other medaliſts, with whom he made a ſecond voyage to the Levant. He went thither a third time in 1679, partly at the expence of the French Eaſt-India company, and partly at that of Colbert. On his return, he was employed by Thevenot, the king's librarian; and after the death of d'Herbelot he continued the publication of his *Biblioth. Orientale*, and wrote the preface of it. He was appointed royal profeſſor of Arabic in 1709. He died in 1715, at the age of ſixty-nine. Of his works, none is ſo well known as his verſion of the Arabian tales, called the Thouſand and One Nights, which became a popular book throughout Europe. He publiſhed various other pieces tranſlated from

from the eaſtern languages, and ſeveral explanations of medals and other matters of antiquity in the Mem. of the Academy of Inſcriptions, Mem. de Trevoux, and other collections.

GAL'LAND (Auguſtus), a French lawyer and hiſtorian of the ſeventeenth century. He was extremely well verſed in legal and hiſtorical antiquities, as he proved by ſeveral learned writings. One of the moſt celebrated of his works was that which he compoſed againſt the allodial rights pretended by ſome of the provinces of written law, to which he added the laws given to the Albigenſes by Simon de Montfort. This was firſt publiſhed at Paris in 1629, and he gave a much augmented edition in 1637. He likewiſe publiſhed in 1637, ſeveral treatiſes relative to the ancient banners of France. He is ſuppoſed to have died about 1644. His ſon, in 1648, publiſhed his Memoirs for the hiſtory of Navarre and Flanders. A *Diſcours au Roi*, concerning the origin, progreſs, &c. of the city of Rochelle, publiſhed anonymouſly in 1628 and 1629, is aſcribed to this author. Many genealogies of noble families, drawn up by his hand, are preſerved in different libraries.

GAL'LANT, *adj.* [*galant*, Fr. from *gala*, fine dreſs, Span.] Gay; well dreſſed; ſhowy; ſplendid; magnificent. —A place of broad rivers, wherein ſhall go no galley with oars, neither ſhall *gallant* ſhips paſs thereby. *If.* xxxiii. 21.

The gay, the wiſe, the *gallant*, and the grave,
Subdu'd alike, all but one paſſion have. *Waller.*

Brave; high ſpirited; daring; magnanimous.—Fare thee well, thou art a *gallant* youth. *Shakeſpeare.*—A *gallant* man, whoſe thoughts fly at the higheſt game, requires no further inſight. *Digby.*—Fine; noble; ſpacious:

There are no tricks in plain and ſimple faith;
But hollow men, like horſes hot at hand,
Make *gallant* ſhew and promiſe of their mettle. *Shakeſ.*

Courtly with reſpect to ladies:

When firſt the ſoul of love is ſent abroad,
The gay troops begin
In *gallant* thought to plume their painted wings. *Tillotſ.*

GAL'LANT, *ſ.* A gay, ſprightly, airy, ſplendid, man. —The *gallants* and luſty youths of Naples came and offered themſelves unto Vaſtius. *Knolles.*

The *gallants*, to protect the lady's right,
Their faulchions brandiſh'd at the griſly ſpright. *Dryden.*

One who careſſes women to debauch them.—Though worn to pieces with age, he ſhews himſelf a young *gallant*. *Shakeſpeare.*—She left the good man at home, and brought away her *gallant*. *Addiſon.*—A wooer; one who courts a woman for marriage. In the two latter ſenſes it has commonly the accent on the laſt ſyllable, as in the French.

GAL'LANT, a town of Hungary, three miles ſouth-ſouth-weſt of Serat.

To GAL'LANTISE, *v. a.* [*galantiſer*, Fr.] To court, to play the gallant.

GAL'LANTLY, *adv.* Gaily; ſplendidly. Bravely; nobly; generouſly.—You have not dealt ſo *gallantly* with us as we did with you in a parallel caſe: laſt year a paper was brought here from England, which we ordered to be burnt by the common hangman. *Swift.*

GAL'LANTRY, *ſ.* [*galanterie*, Fr.] Splendour of appearance; ſhow; magnificence; glittering grandeur; oſtentatious finery:

Make the ſea ſhine with *gallantry*, and all
The Engliſh youth flock to their admiral. *Waller.*

Bravery; nobleneſs; generoſity.—The eminence of your condition, and the *gallantry* of your principles, will invite gentlemen to the uſeful and ennobling ſtudy of nature. *Glanville.*—A number of gallants.—Hector, Deiphobus, and all the *gallantry* of Troy, I would have arm'd to-day. *Shakeſpeare.*—Courtſhip; refined addreſs to women:

The martial Moors, in *gallantry* refin'd,
Invent new arts to make their charmers kind. *Granville.*

Vicious love; lewdneſs; debauchery.—It looks like a ſort of compounding between virtue and vice, as if a woman were allowed to be vicious, provided ſhe be not a profligate; as if there were a certain point where *gallantry* ends, and infamy begins. *Swift.*

GALLARA'TO, a town of Italy, in the duchy of Milan: twenty miles weſt-north-weſt of Milan.

GAL'LARDON, a town of France, in the department of the Eure and Loire, and chief place of a canton, in the diſtrict of Chartres: four leagues weſt of Dourdan, and three north-eaſt of Chartres.

GALL'BRUNN, a town of Germany, in the archduchy of Auſtria: ſeven miles north-weſt of Brugg.

GALLE', in Latin *Gallæus* (Servatius), a learned Dutch divine, paſtor of the Walloon church at Haarlem, died at Campen in 1709. He was the editor of a beautiful and excellent edition of *Lactantius, cum notis variorum*, printed by Hackius, 1660, 8vo. and the author of *Diſſertationes de Sybillis, earumque Oraculis*, 1688, 4to. and of a new impreſſion, with enlargements and corrections, of Opſopæus's edition of the Sybilline oracles, entitled *Sybillina Oracula, ex veteribus Codicibus emendata & reſtituta, &c. accedunt Oracula Magica Zoroaſtris, Jovis, Apollinis, &c. Gr. & Lat. cum notis variorum, &c.* 1689, 4to.

GAL'LE, or PONTE GALLE, a ſeaport town and fort of the iſland of Ceylon, ſituated on the ſouth-weſt coaſt, about half a league in circumference within the walls; defended by baſtions towards the land; on the ſide towards the ſea are banks and rocks; the fortreſs is on a tongue of land: the bay is expoſed only to the weſterly winds; but is ſaid not to be large, nor convenient, and the entrance dangerous on account of the rocks. The Dutch took it from the Portugueſe in 1640. The air is healthy, and the heat of the climate moderated by the land and ſea breezes: ninety-eight miles ſouth of Candy. Lat. 6. N. lon. 80. 20. E. Greenwich.

GAL'LEASS. See GALEASSE.

GALLE'GO, a town of Spain, in the province of Leon: eighteen miles ſouth-ſouth-eaſt of Salamanca.

GAL'LEGO, a river of Spain, which riſes in the Pyrenees, and runs into the Ebro, oppoſite Saragoſſa.

GAL'LEGOS, a town of Spain, in the province of Leon: twenty-four miles ſouth of Salamanca.

GAL'LEMBERG, a town of Germany, in the duchy of Carniola: thirty miles eaſt of Laubach.

GAL'LENBU'LON, a town of the iſland of Madagaſcar. Lat. 17. 20. S. lon. 71. 50. E. of Ferro.

GAL'LENEK, a town of Germany, in the duchy of Carniola: fourteen miles ſouth-eaſt of Stein.

GAL'LENSTAIN, a town of Germany, in the duchy of Stiria: three miles weſt of Reiffling.

GAL'LEON, *ſ.* [*galeon*, Fr.] A lofty or high built ſhip of great capacity, peculiar to Spain, and employed in the commerce of the Indies. The Spaniards ſend annually two fleets; the one for Mexico, which they call the *flota*; and the other for Peru, which they call the *galleons*. They are appointed to ſail from Cadiz in January, and arrive at Porto Bello about the middle of April; where, the fair being over, they take on board the plate, and reach Havannah about the middle of June; where they are joined by the flota, in order to return to Spain with the greater ſafety.

GALL'EOT. See GALIOT.

GAL'LERY, *ſ.* [*galerie*, Fr. derived by Du Cange from *galeria*, low Latin, a fine room.] A kind of walk along the floor of a houſe, into which the doors of the apartments open; in general, any building of which the length much exceeds the breadth.—Nor is the ſhape of our cathedrals proper for our preaching auditories, but rather the figure of an amphitheatre, with *galleries* gradually overlooking

overlooking each other; for into this condition the pariſh churches in London are driving apace, as appears by the many *galleries* every day built in them. *Graunt.*

High lifted up were many lofty towers,
And goodly *galleries* fair overlaid. *Spenſer.*

A private *gallery* 'twixt th' apartments led,
Not to the toe yet known. *Denham.*

The ſeats in the playhouſe above the pit, in which the meaner people ſit:

While all its throats the *gallery* extends,
And all the thunder of the pit aſcends. *Pope.*

GAL'LESE, a town of Italy, in the ſtate of the church, and province of Patrimonio: twenty-five miles north of Rome.

GAL'LEY, *ſ.* [*galea*, Ital. *galere*, Fr. derived, as ſome think, from *galea*, Lat. a helmet, pictured anciently on th prow; as others from γαλεωτης, the ſword-fiſh; as others from *galleon*, expreſſing in Syriac men expoſed to the ſea. From *galley* come *galleaſs*, *galleon*, *galliot*, &c.] A veſſel driven with oars, much uſed in the Mediterranean, but found unable to endure the agitation of the main ocean:

Great Neptune grieved underneath the load,
Of ſhips, hulks, *gallies*, barks, and brigandines. *Fairfax.*

It is proverbially conſidered as a place of toilſome miſery, becauſe criminals are condemned to row in them.—The moſt voluptuous perſon, were he tied to follow his hawks and his hounds, his dice and his courtſhips, every day, would find it the greateſt torment that could befal him: he would fly to the mines and the *gallies* for his recreation, and to the ſpade and the mattock for a diverſion from the miſery of a continued uninterrupted pleaſure. *South.*

GAL'LEY-FOIST, *ſ.* The London city barge, which conveys the new lord mayor to Weſtminſter.—When the *gally foiſt* is afloat to Weſtminſter. *B. Jonſon.*

GAL'LEY-SLAVE, *ſ.* A man condemned for ſome crime to row in the gallies.—Hardened *galley ſlaves* deſpiſe manumiſſion. *Decay of Piety.*

The ſurges gently daſh againſt the ſhore,
Flocks quit the plains, and *galley-ſlaves* their oar. *Garth.*

GAL'LI, in ancient geography, a nation of Europe, naturally fierce, and inclined to war. They were very ſuperſtitious; and in their ſacrifices often immolated human victims. In ſome places, they had large ſtatues made with twigs, which they filled with men, and reduced to aſhes. They believed themſelves deſcended from Pluto; and from that circumſtance they always reckoned their time, not by the days, as other nations, but by the nights. Their obſequies were ſplendid; and not only the moſt precious things, but even ſlaves and oxen, were burnt on the funeral pile. Children, among them, never appeared in the preſence of their fathers, before they were able to bear arms in the defence of their country. *Strabo.*—The name of Galli was alſo applied to the prieſts of Cybele, from the river Gallus, in Phrygia, where they celebrated their feſtivals. They mutilated themſelves before they were admitted to the prieſthood, in imitation of Atys, the favorite of Cybele. The chief among them was called Archigallus. *Lucian.*

GAL'LI, five ſmall deſolate iſlands on the coaſt of the Principato Citra of Naples. They are ſuppoſed to be the Syrenuſæ, or iſlands once inhabited by the Sirens, which Ulyſſes is ſaid to have paſſed with ſo much caution and hazard. Great revolutions, however, have been occaſioned in their ſhape, ſize, and number, by the effects of ſubterranean fire; and ſome writers aſſert, that theſe rocks have riſen from the bottom of the ſea ſince the time of Homer. The tradition of Sirens having reſided here, is very ancient; but what they really were, diveſted of their fabulous and poetical diſguiſe, it is not eaſy to diſcover. See the article SIREN.

GALLI-HALFPENCE, an ancient coin, which, with ſuſkins and doitkins, were forbidden by the ſtatute of Hen. III. c. 5. It is ſaid they were brought into England by the Genoeſe merchants, who trading hither in galleys, lived commonly in a lane near Tower-ſtreet, and were called galley-men, landing their goods at galley-key, and traded with their own ſmall ſilver coin termed *galli-halfpence*. *Stow's Survey*, 137.

GAL'LIA, in ancient geography, a large country of Europe, called *Galatia* by the Greeks. The inhabitants were called *Galli*, *Celtæ*, *Celtiberi*, and *Celtoſcythæ*. Ancient Gaul was divided into four different parts by the Romans, called *Gallia Belgica*, *Narbonenſis*, *Aquitania*, and *Celtica*. Gallia Belgica was the largeſt province, bounded by Germany, Gallia Narbonenſis, and the German ocean; and contained the modern diſtricts of Alſace, Lorraine, Picardy, part of the low countries, and of Champagne, and of the Iſle of France. Gallia Narbonenſis, which contained the provinces afterwards called Languedoc, Provence, Dauphiné, and Savoy, was bounded by the Alps and Pyrenean mountains, by Aquitania, Belgicum, and the Mediterranean. Aquitania Gallica, which afterwards formed the provinces of Poitou, Santonge, Guienne, Berry, Limoſin, Gaſcogny, Auvergne, &c. was ſituated between the Garumna, the Pyrenean mountains, and the ocean. Gallia Celtica, or Lugdunenſis, was bounded by Belgium, afterwards Gallia Narbonenſis, the Alps, and the ocean. It contained the country afterwards known by the name of Lyonnois, Touraine, Franche Comté, Senenois, Swiſſerland, and part of Normandy. Beſides theſe grand diviſions, there is often mention made of Gallia Ciſalpina or Citerior, Tranſalpina or Ulterior, which refers to that part of Italy which was conquered by the Gauls who croſſed the Alps. By Gallia Ciſalpina, the Romans underſtood that part of Gaul which lies in Italy, and by Tranſalpina, that which lies beyond the Alps, in regard only to the ſituation of Rome. Gallia Ciſpadana, and Tranſpadana, is applied to a part of Italy conquered by the Gauls; and then it means the country on this ſide of the Po, or beyond the Po, with reſpect to Rome. By Gallia Togata, the Romans underſtood Ciſalpine Gaul, where the Roman gowns, *togæ*, were uſually worn. Gallia Narbonenſis was called *Braccata*, on account of the peculiar covering of the inhabitants for their thighs. The epithet of Comata is applied to Gallia Celtica, becauſe the people ſuffered their hair to grow to an uncommon length. The inhabitants were great warriors, and their valour overcame the Roman armies, took the city of Rome, and invaded Greece in different ages. They ſpread themſelves over the greateſt part of the world. They were very ſuperſtitious in their religious ceremonies, and revered the ſacerdotal order as if they had been gods. They long maintained a bloody war againſt the Romans, and Cæſar reſided ten years in their country before he could totally ſubdue them. See GAUL.

GALLIA'NO, a town of Italy, in the duchy of Milan: ſix miles ſouth-ſouth-eaſt of Como.

GAL'LIARD, *ſ.* [*gaillard*, Fr. ſuppoſed to be derived from the Gauliſh *ard*, genius; and *gay*.] A gay, briſk, lively, man; a fine fellow.—Selden is a *galliard* by himſelf. *Cleaveland.*—An active, nimble, ſpritely, dance. It is now in both ſenſes obſolete.—The tripla's and changing of times have an agreement with the changes of motion; as when *galliard* time and meaſure time are in the medley of one dance. *Bacon.*

There's nought in France
That can be with a nimble *galliard* won:
You cannot revel into dukedoms there. *Shakeſpeare.*

GAL'LIARDISE, *ſ.* [French.] Merriment; exuberant gaiety. *Not in uſe.*—I am no way facetious, nor diſpoſed for the mirth and *galliardiſe* of company. *Browne.*

GAL'LICAN, *ſ.* & *adj.* [*Gallicanus*, Lat.] Belonging to France or the French nation.

GAL'LICISM,

GAL'LICISM, *f.* [*gallicifme*, Fr. from *gallicus*, Lat.] A mode of ſpeech peculiar to the French language: ſuch as, he *figured* in controverſy; he *held* this conduct; he *held* the ſame language that another had *held* before: with many other expreſſions to be found in the pages of Bolingbroke.—In Engliſh I would have *Galliciſms* avoided, that we may keep to our own language, and not follow the French mode in our ſpeech. *Felton on the Claſſics.*

GAL'LICO, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra; five miles north of Reggio.

GALLIE'NUS (P. Licinius), Roman emperor, ſon of Valerian, raiſed to the purple in 253, at only twenty years of age. See the article ROME.

GALLIGAS'KINS, *f.* [*Caligæ Gallo-Vaſconum. Skinner.*] Large open hoſe. Uſed in ludicrous language:

My *galligaſkins*, that have long withſtood
The winter's fury, and encroaching froſts,
By time ſubdu'd, (what will not time ſubdue?)
An horrid chaſm diſcloſe. *Philips.*

GAL'LIM, [Heb. one who heaps up.] A town of Paleſtine, ſuppoſed to be ſituated near the land of Moab. 1 *Sam.* xxv. 44. *Iſaiah* x. 30.

GALLIMA'TIA, *f.* [*galimathias*, Fr.] Nonſenſe; talk without meaning.

GALLIMAU'FRY, *f.* [*galimafrée*, Fr.] A hoch-poch, or haſh of ſeveral ſorts of broken meat; a medley. *Hanmer.*—They have made of our Engliſh tongue a *gallimaufry*, or hodgepodge of all other ſpeeches. *Spenſer.*—Any inconſiſtent or ridiculous medley.—The painter who, under pretence of diverting the eyes, would fill his picture with ſuch varieties as alter the truth of hiſtory, would make a ridiculous piece of painting, and a mere *gallimaufry* of his work. *Dryden.*—It is uſed by *Shakeſpeare* ludicrouſly of a woman:

Sir John affects thy wife.
—Why, ſir, my wife is not young.
—He wooes both high and low, both rich and poor;
He loves thy *gallimaufry*, friend. *Shakeſpeare.*

GALLI'NÆ, in ornithology, an order of birds. See ORNITHOLOGY.

GALLINA'CEOUS, *adj.* [from *gallus*, Lat. a cock.] Partaking of the nature of poultry. An appellation given to the birds of the order of the gallinæ.

GALLINA'RA, a ſmall iſland in the Mediterranean, near the coaſt of Genoa: ten miles ſouth of Finale. Lat. 44. 2. N. lon. 25. 50. E. Ferro.

GALLINA'RIA, in ancient geography, an extenſive wood near Cumæ in Italy, famous as being the retreat of robbers. *Juvenal.*

GALLINA'RIA, *f.* in botany. See CASSIA.

GALLI'NAS (Las). See BISSAGOTS.

GALLINA'ZO, *f.* in mineralogy, a vitrified lava, the ſame with the *lapis obſidianus* of the ancients. It is of a moſt beautiful jet black, capable of receiving a very high poliſh; and of this ſubſtance the native Americans and Incas of Peru made their plane, concave, and convex, mirrors.

GAL'LINULE. See FULICA.

GAL'LIO, a man's name. *Acts* xviii. 12, 17.

GALLIOP'OLIS, a poſt town of the American States, in the north-weſt territory, ſituated on a bend of the Ohio, and nearly oppoſite to the mouth of the great Kanhaway. It contains about one hundred houſes, nearly all inhabited by French people. It is one hundred and forty miles eaſtward of Columbia, three hundred ſouth-weſt of Pittſburg, and five hundred and fifty ſouth-weſt of Philadelphia. Lat. 39. 2. N. lon. 83. 9. W.

GAL'LIOT. See GALIOT.

GALLIP'OLI, a ſeaport town of European Turkey, in the province of Romania, on the ſea of Marmora, with a good harbour; the reſidence of a pacha, and the ſee of a Greek biſhop, ſuffragan of Heraclea. It was taken from the Chriſtians in 1357 by Soliman: eighty miles ſouth of Adrianople, and one hundred and eight weſt-ſouth-weſt of Conſtantinople. Lat. 40. 24. N. lon. 44. 28. E. Ferro.

GALLIP'OLI, a ſeaport town of Italy, in the kingdom of Naples, and province of Otranto, ſituated on a rock ſurrounded by the ſea, and attached to the land only by a bridge; the ſee of a biſhop, ſuffragan of Otranto. The environs are planted with olive and cotton-trees, which produce the chief articles of its commerce; but the inhabitants are not well acquainted with the method of making the beſt oil, their's being principally purchaſed for manufactures: twenty-one miles weſt of Otranto. Lat. 40. 18. N. lon. 35. 37. E. Ferro.

GAL'LIPOT, *f.* [*gleye*, Dut. ſhining earth. *Skinner.*—The true derivation is from *gala*, Spaniſh, finery. *Gala*, or gallipot, is a fine painted pot.] A pot painted and glazed, commonly uſed for medicines.—Plato ſaid his maſter Socrates was like the apothecary's *gallipots*, that had on the outſide apes, owls, and ſatyrs; but within, precious drugs. *Bacon.*

Here phials in nice diſcipline are ſet;
There *gallipots* are rang'd in alphabet. *Garth.*

GALLIVAT', *f.* a large row boat, of about ſeventy tons burden, much uſed in the ſhallows on the coaſt of Hindooſtan from Bombay to Goa; as they are frequently uſed by pirates, they are conſtructed ſo as to carry ſix or eight large cannon, beſide petteraroes; and are furniſhed with forty or fifty ſtout oars, by which means they are rowed at the rate of four miles an hour. They will carry from two to three hundred men in each, who fight and row by turns.

GAL'LIUM, in botany. See GALIUM.

GAL'LO, an iſland in the province of Popayan, South America, in N. lat. 2. 40. Captain Dampier ſays it is ſituated in a deep bay, and that off this iſland there is not above four or five fathom water; but at Segnetta, which is on the north ſide, a veſſel may ride in deep water, free from any danger. The iſland is high, provided with wood and good water, and having good ſandy bays, where a ſhip may be cleaned.—Alſo, the name of an iſland of the South Sea, near the coaſt of Peru, which was the firſt place poſſeſſed by the Spaniards, when they attempted the conqueſt of Peru.

GALLOGRÆ'CIA, a country of Aſia Minor, near Bithynia and Cappadocia. It was inhabited by a colony of Gauls, who aſſumed the name of *Gallogræci*, becauſe a number of Greeks had accompanied them in their emigration. *Strabo.*

GAL'LON, *f.* [from *gelo*, low Lat.] An Engliſh meaſure of capacity, for things both liquid and dry, containing two pottles, or four quarts, or eight pints. But thoſe pints and quarts, and conſequently the gallon itſelf, are different, according to the quality of the things meaſured: the wine gallon, for inſtance, contains two hundred and thirty-one cubic inches, and holds eight pounds five ounces and two thirds, avoirdupois, of pure water; the beer and ale gallon contains two hundred and eighty-two cubic inches, and holds ten pounds three ounces and one fifth of water; and the gallon dry meaſure, for grain, meal, &c. contains two hundred and ſixty-eight cubic inches and four fifths, and holds nine pounds eleven ounces and a half of water.

GALLO'NIUS (Anthony), a prieſt of the congregation of the oratory at Rome, who flouriſhed in the ſixteenth century, was a native of that city, and died there in 1605. He was the author of a Hiſtory of Virgins, 1591, 4to. The Lives of certain Martyrs, 1597, 4to. The Life of St. Philip Neri, founder of the congregation of the oratory, in 8vo. and, *Apologeticus Liber pro Aſſertis in Annalibus Eccleſiaſticis Baronianis de Monachatu Sancti Gregoriæ Papæ, &c.* 1604, 4to. But the moſt celebrated of his works, is a treatiſe on the different kinds of cruelties inflicted by the pagans on the martyrs of the primi-

tive church; illuſtrated by engravings of the inſtruments of torture made uſe of by them. The firſt edition was in Italian, entitled *Trattato de gli Inſtrumenti di Martirio, &c.* 1591, 4to. with copper-plates executed by the celebrated Anthony Tempeſta. This work the author tranſlated into Latin, and publiſhed at Rome in 1594, 4to. with the title, *De Sanctorum Martyrum Cruciatibus, &c.* illuſtrated with wooden prints. Afterwards it underwent different impreſſions at Paris, Antwerp, &c.

GALLOO'N, *ſ.* [*galon*, Fr.] A kind of cloſe lace made of gold or ſilver, or of ſilk alone.

To GAL'LOP, *v. n.* [*galoper*, Fr. derived by all the etymologiſts, after *Budæus*, from καλπαζειν; but perhaps it comes from *gant*, all, and *loopen*, to run, Dut. that is, to go on full ſpeed.] To move forward by leaps, ſo that all the feet are off the ground at once.—*Gallop* lively down the weſtern hill. *Donne.*

In ſuch a ſhape grim Saturn did reſtrain
His heav'nly limbs, and flow'd with ſuch a mane,
When half ſurpriz'd, and fearing to be ſeen,
The leacher *gallop'd* from his jealous queen. *Dryden.*

To ride at the pace which is performed by leaps.—He who fair and ſoftly goes ſteadily forward, in a courſe that points right, will ſooner be at his journey's end than he that runs after every one he meets, though he *gallop* all day full ſpeed. *Locke.*—To move very faſt:

The golden ſun
Gallops the zodiac in his gliſt'ring coach. *Shakeſpeare.*

GAL'LOP, *ſ.* The motion of a horſe when he runs at full ſpeed; in which, making a kind of a leap forwards, he lifts both his forelegs very near at the ſame time; and while theſe are in the air, and juſt upon the point of touching the ground, he lifts both his hind legs almoſt at once.

GALLOPA'DE, *ſ.* in the manege, the ſhort gallop.

GALLOPA'VO, *ſ.* A name for the peacock. See PAVO.

GAL'LOPER, *ſ.* A horſe that gallops.—Mules bred in cold countries are much better to ride than horſes for their walk and trot; but they are commonly rough *gallopers*, though ſome of them are very fleet. *Mortimer.*—A man that rides faſt, or makes great haſte. [In artillery,] the name of a carriage ſerving for the ſmalleſt guns, and having ſhafts ſo as to be drawn without a limber.

To GAL'LOW, *v. a.* [aȝælþan, to fright, Sax.] To terrify; to fright:

The wrathful ſkies
Gallow the very wand'rers of the dark,
And make them keep their caves. *Shakeſpeare.*

GAL'LOWAY, *ſ.* A horſe not more than fourteen hands high, much uſed in the north; probably as coming originally from Galloway, a ſhire in Scotland.

GALLOWAY, a townſhip of the American States, in Glouceſter county, New Jerſey.

GAL'LOWAY (New), a town of Scotland, in the county of Kircudbright, near the Ken: fifteen miles north of Kircudbright.

GAL'LOWAY (Upper, or Weſt), a name ſometimes given to the county of Wigton, in Scotland. See WIGTONSHIRE.

GAL'LOWAY (Mull of), a cape of Scotland, on the ſouth coaſt of the county of Wigton, at the eaſt of the entrance into Glenluce-bay. Lat. 54. 44. N. lon. 1. 43. W. Edinburgh.

GAL'LOWGLASSES, *ſ.* Foot-ſoldiers—It is worn of footmen under their ſhirts of mail, which footmen the Iriſh call *gallowglaſſes*: the which name doth diſcover them alſo to be ancient Engliſh; for *gallogla* ſignifies an Engliſh ſervitor or yeoman. And he being ſo armed in a long ſhirt of mail, down to the calf of his leg, with a long broad ax in his hand, was then *pedes gravis armaturæ*; and was inſtead of the footman that now weareth the corſlet, before the corſlet was uſed, or almoſt invented. *Spenſer.* [*Hanmer*, otherwiſe than *Spenſer.*] Soldiers among the wild Iriſh, who ſerve on horſeback:

A puiſſant and mighty pow'r
Of *gallowglaſſes* and ſtout kernes,
Is marching hitherward in proud array. *Shakeſpeare.*

GAL'LOWS, *ſ.* [It is uſed by ſome in the ſingular; but by more only in the plural, or ſometimes it has another plural, *gallowſes*. *Golgo*, Gothic; ȝealȝa, Sax. *galge*, Dut. which ſome derive from *gabalus furca*, Lat. others from גבה, Heb. high; others from *gallu*, Welſh, power: but it is probably perived, like *gallow*, to fright, from aȝælpan, Sax. the gallows being the great object of legal terror.] A beam laid over two poſts, on which malefactors are hanged.—I would that we were all of one mind, and one mind good; O, there were deſolation of gaolers and *gallowſes*. *Cymbeline.*

I propheſied if a *gallows* were on land,
This fellow could not drown. *Shakeſpeare.*

A wretch that deſerves the gallows:

Cupid hath been five thouſand years a boy.
—Ay, and a ſhrewd unhappy *gallows* too. *Shakeſpeare.*

GAL'LOWS-FREE, *adj.* Exempt by deſtiny from being hanged:

Let him be *gallows-free* by my conſent,
And nothing ſuffer, ſince he nothing meant. *Dryden.*

GAL'LOWS-MAKER, *ſ.* One that makes a gallows.—What is he that builds ſtronger than the maſon, the ſhipwright and the carpenter? The *gallows-maker*. *Shakeſp.*

GAL'LOWTREE, *ſ.* The tree of terror; the tree of execution:

He hung their conquer'd arms, for more defame,
On *gallowtrees*, in honour of his deareſt dame. *Spenſer.*

GALL'STAD, a town of Sweden, in the province of Weſt Gothland: fifty miles eaſt of Gothenburg.

GALLUC'CI (John-Paul), a learned Italian aſtronomer, fellow of the academy at Venice, who contrived an inſtrument which was found ſerviceable in obſerving the celeſtial phenomena before the invention of the teleſcope. He was the author of ſeveral aſtronomical works, and ſome on phyſic, which diſplay a conſiderable acquaintance with the ſtate of ſcience as it exiſted in his time, and a commendable ardour for its improvement; but not unmixed with the fanciful notions which then prevailed concerning the influence of the heavenly bodies, in their different poſitions, on the human frame and conſtitution. The principal of them are: 1. *Theatrum Mundi & Temporis*, 1589, folio. 2. *De Themate Erigendo, Parte Fortunæ, Diviſione Zodiaci, Dignitatibus Planetarum & Temporibus ad Medicandum accommodatis*, &c. 1584, folio. 3. *Speculum Uranicum*, 1593, folio. 4. *Cæleſtium Corporum, & Rerum ab ipſis pendentium, Explicatio*, 1605, folio. 5. *Della Fabrica del nuovo Orologio univerſale, e Uſo di nuovo Stromento per fare gli Orologi ſolari*, 1590, 4to. 6. *Della Fabrica & Uſo di diverſi Strometi di Aſtronomia & Coſmographia*, 1597, 4to.

GAL'LUS, [from γαλλος, Gr. caſtrated, becauſe this bird was dedicated to Cybele, whoſe prieſts were all eunuchs; or from *galea*, a helmet, which its comb in ſome manner repreſents.] A cock. It is alſo a term for an eunuch.

GAL'LUS (Cornelius), a Roman poet, born in the year before Chriſt 69, at Forum Julii, which may be either Frejus in Provence, or Friuli in Italy. Of his life few incidents are known. One of the moſt intereſting circumſtances in it was his intimacy with Virgil, whom he was probably the means of introducing to Mæcenas. That poet has inſcribed his tenth eclogue with the name of Gallus, whoſe deſertion by his miſtreſs Lycoris is the ſubject of the compoſition. Gallus himſelf wrote four books of elegies to the honour of this miſtreſs, which raiſed him to a high rank among the poets of this claſs, and appear

to

to have been extremely popular. Propertius, Martial, and other ancients, mention him with applauſe. His Lycoris is ſuppoſed to have been the Cytheris who captivated Mark Antony, and was carried about by him in ſuch indecent triumph. Gallus was intimately connected with Aſinius Pollio; and he was employed by Auguſtus in his war againſt Antony and Cleopatra, and ſo well approved his valour and conduct that he was afterwards appointed to the government of Egypt. But this elevation proved his ruin; for, being charged with peculation, and, as ſome aſſert, with conſpiracy, he was deprived of all his property, and condemned to exile. Unable to bear this diſgrace, he put an end to his life in his forty-third year. None of his writings have reached modern times; but Servius affirms that there are ſeveral of his lines inſerted in the eclogue of Virgil above-mentioned. Some elegies, which were publiſhed under his name in the beginning of the ſixteenth century, are undoubtedly ſuppoſititious. Beſides his pieces on Lycoris, it is known that he tranſlated into Latin verſe ſome books of the Greek poet Euphorion.

GAL'LUS (C. Vibius Trebonianus), one of the Roman emperors. See ROME.

GAL'LUS (Cæſar), ſon of Julius-Conſtantius, the brother of Conſtantine the Great, born in 326. His true name was Flavius Claudius Conſtantius, nor is it known why hiſtorians have called him Gallus. He, with his brother Julian (afterwards emperor), were the only princes of the collateral Flavian race who were ſpared in the maſſacre which took place after the death of Conſtantine. See the article ROME.

GAL'LY (Henry), a learned Engliſh divine, born at Beckenham in Kent, in 1696, and admitted a penſioner of Bene't college, Cambridge, in 1714. He took his degree of M. A. in 1721; and was in the ſame year choſen lecturer of St. Paul's, Covent-garden, London, and inſtituted to the rectory of Wavenden in Buckinghamſhire. In 1725 he was appointed chaplain to the lord-chancellor King, who preferred him to a prebend in the cathedral church of Glouceſter, in 1728. In the ſame year he was admitted to the degree of doctor of divinity at Cambridge, when George II. honoured that univerſity with his preſence. In 1730 the lord-chancellor preſented him to the rectory of Aſhton in Northamptonſhire, and not long afterwards promoted him to a prebend in the cathedral church of Norwich. Dr. Gally's next preferment was the rectory of St. Giles's in the Fields, in 1732; and in 1735 he was nominated chaplain in ordinary to his majeſty. He died in 1769. Beſides Two Sermons on the Miſery of Man, publiſhed in 1723, and A Sermon preached before the Houſe of Commons upon the Acceſſion, in 1739, he was the author of a tranſlation from the Greek of The Morals of Theophraſtus, with Notes, and a Critical Eſſay on Characteriſtic Writing, 1728, 8vo. The Reaſonableneſs of Church and College Fines aſſerted, and the Right which Churches and Colleges have in their Eſtates defended, 1731, 8vo. Conſiderations on Clandeſtine Marriages, 1750, 8vo. A Diſſertation againſt pronouncing the Greek Language according to Accents, 1754, 8vo. and A Second Diſſertation on the ſame Subject, in Anſwer to Mr. Forſter's Eſſay on the different Nature of Accent and Quantity, 1763, 8vo.

GAL'LY, *ſ.* with chemiſts, an oblong reverberatory furnace, in which a row of retorts is placed beſide each other, with their necks protruding through lateral openings.

GAL'LY, *ſ.* with printers, a frame into which the compoſitor empties the lines out of his compoſing-ſtick, and in which he ties up the page when it is completed. The gally is formed of an oblong ſquare board, with a ledge on three ſides, and a groove to admit a falſe bottom, called a *gally-ſlice*; or of braſs, without a ſlice.

GALLYHEAD', a cape on the ſouthern coaſt of Ireland, in the county of Cork: eighteen miles ſouth-ſouth-weſt of Bandonbridge. Lat. 51. 31. N. lon. 8. 54. W. Greenwich.

GALNEIKIR'CHEN, a town of Germany, in the archduchy of Auſtria: five miles north of Steyregg.

GALO'CHE, *ſ.* [French.] A man's ſhoe (without ſtraps or other faſtening) made to wear over another ſhoe.

GAL'OMBATZ, a town of Servia: twenty miles weſt-ſouth-weſt of Orſova.

GALOPI'NA, *ſ.* in botany, a genus of the claſs tetrandria, order digynia, natural order rubiaceæ. The generic characters are—Calyx: none. Corolla: monopetalous, quadrifid, ſuperior, revolute. Stamina: filaments four, capillary, long, inſerted into the receptacle, deciduous. Piſtillum: germ inferior; ſtyles two, a little ſhorter than the ſtamens, growing out; ſtigmas ſimple. Pericarpium: none: ſeeds in pairs, naked, ſubglobular, muricate.—*Eſſential Character.* Calyx none; corolla four-cleft; ſeeds two, naked.

Galopina circæoides, a ſingle ſpecies. The root is annual; ſtem herbaceous, round, red, ſmooth, ſeldom branched, erect but weak, about two feet high; branches alternate, ſpreading, reſembling the ſtem; leaves oppoſite, petioled, oblong, acute, entire, ſmooth, pale underneath, an inch or a little more in length. In the axiis of the leaves are others, ſimilar, but ſmaller; flowers terminating in a looſe diffuſed panicle; peduncles and pedicels oppoſite, capillary, ſmooth, with two oppoſite briſtle-ſhaped bractes. Native of the Cape of Good Hope. In the ſyſtematic arrangement it has its place before aphanes; from which it differs in having the filaments inſerted into the receptacle, and a ſuperior corolla. It differs from galium in having no calyx, and two ſtyles. Thunberg, who conſtituted this genus, has thought fit, in his Prodromus Plantarum Capenſium, to ſink it, and make this plant a ſpecies of anthoſpermum.

GALO'TS, the loweſt of the falls on the river St. Lawrence in Canada. Between the neck of land la Galette and les Galots is an excellent country, and no where can there exiſt finer foreſts.

GALO'TS (l'Iſle aux), an iſland in the river St. Lawrence, in Canada: three leagues beyond l'Iſle aux Chevres, in N. lat. 43. 33.

GAL'OVSKOI, a fortreſs of Ruſſian Siberia, in the government of Kolivan: eighty ſix miles ſouth-weſt of Büſk.

GALOU'WAH, or GHALVAH, a town of Africa, in the country of Nubia, ſituated on the Nile.

GAL'STA, a town of Sweden, in the province of Weſt Gothland: twenty-three miles eaſt-north-eaſt of Uddevalla.

GAL'TEES, mountains of Ireland, between the counties of Limerick, Tipperary, and Cork: twenty-five miles north of Cork.

GALTEL'LA, a town of the iſland of Sardinia: fourteen miles ſouth of Lode.

GALVA'NI (Louis), an eminent modern phyſiologiſt, born in 1737 at Bologna, where ſeveral of his relations had diſtinguiſhed themſelves in juriſprudence and theology. He early devoted himſelf to the ſtudy of medicine, under Beccari, Tacconi, Galli, and profeſſor Galeazzi, who received him into his houſe, and gave him his daughter in marriage. In 1762 he ſuſtained with reputation an inaugural theſis, *De Oſſibus*, and was then created public lecturer in the univerſity of Bologna, and appointed reader in anatomy to the inſtitute in that city. His excellent method of lecturing drew a crowd of auditors; and he employed his leiſure in experiments and in the ſtudy of comparative anatomy. He made a number of curious obſervations on the urinary organs, and on the organ of hearing in birds, which were publiſhed in the Memoirs of the Inſtitute. His reputation as an anatomiſt and phyſiologiſt was eſtabliſhed in the ſchools of Italy, when accident gave birth to the diſcovery which after him has

has been named GALVANISM. His concluſion from the whole of his experiments was, that all animals are endued with an electricity of a peculiar nature, and inherent in their economy, to which he gives the name of *animal electricity*. See the particulars of the Galvanic theory, under ELECTRICITY, vol. vi. p. 434–448. The firſt publication of Galvani on this ſubject was, *Aloyſii Galvani de Viribus Electricitatis in Motu Muſculari Commentarius*, 1791, 4to. printed for the inſtitute of Bologna. It immediately excited the notice of philoſophers both in Italy and other countries, and was followed by numerous publications, in which new experiments were related, and different opinions maintained, particularly by the celebrated M. Volta. Galvani, however, proceeded in his enquiries, and made many new experiments upon the innate electricity in the torpedo, as a ſubject intimately connected with his diſcovery. He alſo examined with minuteneſs into the different effects of the homogeneity and heterogeneity of the metals employed in forming the arch of communication by which the galvanic phenomena are excited; a circumſtance which has been ſince particularly purſued by M. Volta. A peculiar kind of inflexible attachment to political opinions had long influenced the mind of Galvani, which cauſed him ſteadily to refuſe taking the civic oath exacted by the new conſtitution of the Ciſalpine republic, and in conſequence he incurred the deprivation of his poſts and dignities. A prey to melancholy, and reduced in conſequence almoſt to indigence, he retired to the houſe of his brother James, a man of very reſpectable character, and there fell into a ſtate of debility and extenuation. The republican governors, probably aſhamed of their conduct towards ſuch a man, paſſed a decree for his reſtoration to his profeſſorial chair and its emoluments; but it was now too late. He expired on November 5, 1798, at the age of ſixty.

GAL'VANISM, *ſ.* [from *Galvani*.] The doctrine of animal electricity; for which ſee the article ELECTRICITY, vol. vi. p. 433–448.

GAL'VEAS, a town of Portugal, in the province of Alentejo: eight leagues weſt-north-weſt of Eſtremoz.

GAL'WAY, a county of Ireland, in the province of Connaught, next to Cork the moſt conſiderable in point of ſize in the kingdom, but the leaſt populous; bounded on the north by Mayo and Roſcommon; on the eaſt by Roſcommon, King's County, and Tipperary; on the ſouth by the county of Clare, and an arm of the ſea called *Galway Bay*, and on the weſt by the Atlantic ocean, about ſeventy-ſix miles from eaſt to weſt, and forty from north to ſouth, containing one hundred and ſixteen pariſhes, and twenty-eight churches. The number of houſes is twenty-eight thouſand two hundred and twelve, and about one hundred and forty-two thouſand ſouls. The ſoil is warm and fertile, with a lime-ſtone bottom. This lime-ſtone riſes ſometimes ſo near the ſurface as to render it unfit for tillage, but yielding excellent paſture. Some parts are mountainous, with quarries of black and white marble. Great quantities of kelp are made along the coaſt, and ſea-weed gathered for manure, of great advantage to the families that dwell there, who are little farmers, and hardy fiſhermen. See the article FUCUS, vol. viii. p. 89. On the ſea coaſt is a large bay, ſheltered by the three ſouthern iſlands of Arran. The ſound between theſe iſlands is a ſafe road, and a number of creeks, as well as the harbour of Galway, are deep enough to admit merchant ſhips, but are more frequented by coaſters and fiſhing boats than by veſſels in the foreign trade. There are ſeveral other well ſheltered harbours on the coaſt of Galway. The principal towns are Galway, Tuam, Ballinaſloe, and Loughrea.

GAL'WAY, a town of Ireland, and capital of the county to which it gives name, ſituated on a river, which runs from Lough Corrib into the ſea. It is ſurrounded with ancient walls, which are haſtening to decay. The houſes are generally well built, in number nine hundred and fifty, and containing about twelve thouſand inhabitants. It was formerly the moſt commercial town in Ireland, and has now a conſiderable trade. The port is very commodious and ſafe, but ſo diſtant from the city that lighters are neceſſary to carry goods into the town. Galway is governed by a mayor, recorder, and ſheriff. In the civil war of 1641, it refuſed to admit either Engliſh or Iriſh, till the rebels became maſters of the adjoining country, when they were joined by the citizens. At the cloſe of the rebellion it ſubmitted to the duke of Ormond, but, in 1651, it ſurrendered to major-general Ireton. In 1690, it declared for king James, but next year ſurrendered to general Ginkle: ninety-ſix miles weſt of Dublin. Lat. 53. 15. N. lon. 8. 58. W. Greenwich.

GAL'WAY, a townſhip of the American States, in the county of Saratoga, ſtate of New York. By the cenſus of 1796, it appears that 491 of its inhabitants were qualified to be electors.

GALWAY BA'Y, a large bay in the Atlantic, on the weſt coaſt of Ireland, ſheltered at the entrance by the South Arran iſlands, about twenty miles long, and ſeven broad.

GA'MA (Vaſco or Vaſques de), a celebrated navigator and naval commander, born of a noble family at Sines, in the Portugueſe province of Alentejo. When king Emanuel reſolved to puſh the diſcoveries already made of the ſouthern parts of Africa and the interjacent ſeas to the Eaſt Indies, de Gama's reputation for courage and prudence cauſed him to be fixed upon to conduct the enterpriſe. He ſet ſail from Liſbon with a ſquadron of three ſmall armed veſſels and a ſtore-ſhip, in July, 1497, and was four months contending with contrary winds before he reached the Cape of Good Hope. He doubled that promontory, and coaſted along the ſouth-eaſtern ſide of Africa, touching at various ports, till he reached Melinda. There he procured a mahometan pilot, who conducted him to the Malabar coaſt, and in May he arrived at Calicut. He was at firſt received in a friendly manner by the zamorin or prince; but the intrigues of the mahometan merchants at length cauſed a plot to be laid for his deſtruction, upon the diſcovery of which he ſet ſail upon his return to Europe. He entered the port of Liſbon in September, 1499, after having loſt the greater part of his crew by diſeaſe and fatigue. He was received with great favour by the king, who rewarded him liberally with pecuniary advantages, and the title of count of Videgueria. This expedition completely eſtabliſhed the practicability of a new road to the Indies; and he was employed in a ſecond voyage, in which he commanded a fleet of twenty ſhips, and bore the title of admiral of the Indian, Perſian, and Arabian, ſeas. He ſailed in February, 1502; and after compelling tribute from ſome of the petty princes in his route, he arrived at Cochin, where he received a deputation from the Chriſtians of St. Thomas, to whom he promiſed protection. The zamorin, whoſe ſuſpicions of theſe new viſitors were thoroughly awakened, fitted out a fleet to intercept the Portugueſe; but de Gama, boldly beginning the attack, boarded and took two of the largeſt ſhips, which proved to be prizes of immenſe value. After this ſucceſs, leaving a ſquadron at Cananor, he himſelf ſailed homewards, and arrived at Liſbon in September, 1503. The ſucceſs of this voyage occaſioned great triumph in Portugal, and the policy of the nation was directed towards ſecuring the eſtabliſhments it had made in the Indies, and extending them by conqueſt. After the acceſſion of John III. de Gama, though in a very advanced age, was prevailed upon, in 1524, to undertake a third voyage, with the high rank of viceroy of the Indies. He defeated the people of Calicut by ſea, and again proceeded to Cochin, where he died in 1525.

GAMA'CHES, a town of France, in the department of the Somme, and chief place of a canton, in the diſtrict of Abbeville: four leagues ſouth-weſt of Abbeville, and two and a half ſouth-eaſt of Eu.

GAMA'CHES (Philip de), a learned French divine and profeſſor, born in 1568. He received the degree of doctor from the faculty of the Sorbonne, in 1598, and was appointed profeſſor of theology in the univerſity of Paris during the following year. After having diſcharged the duties of his office for twenty-five years, with the reputation of being one of the moſt able divines of his time, he died in 1625, at fifty-ſeven years of age. He was a zealous and able ſupporter of Edmund Richer, in the oppoſition which he made to the encroachments of the papal power on the liberties of the Gallican church. His Commentaries on the *Summa Theologiæ* of Aquinas, printed at Paris in 1625, in two volumes folio, are held in much eſtimation.

GAMA'CHES (Stephen-Simon), a French eccleſiaſtic, born at Meulan about the year 1672. He became one of the canons of the holy croſs *de la Bretonniere*, and acquired ſuch reputation by his proficiency in ſcience and literature, that he was choſen an early member of the French academy of ſciences. He died in 1756, in the eighty-fourth year of his age. He was the author of Phyſical Aſtronomy, &c. 1740, in two volumes 4to. Literary and Philoſophical Diſſertations, 1755, 8vo. the Syſtem of a Chriſtian Philoſopher, 1721, 8vo. the Syſtem of the Heart, 1708, 12mo. publiſhed under the aſſumed name of Clarigny; and the Elegancies of Language reduced to their Principles, 1757, 12mo. This work has obtained conſiderable reputation, and has been denominated, "a dictionary of fine thoughts." It is recommended as worthy of the peruſal of every perſon who wiſhes to write well.

GAMA'LIEL, [of גמול a reward, and אל Heb. God, i. e. God's reward.] A Jewiſh rabbi, tutor to St. Paul.

GAMA'ZE, a town of Egypt: twelve miles north of Atfieh.

GAM'BACH, a town of Germany, in the circle of the Upper Rhine, and principality of Solms Braunfels: two miles weſt of Munzenberg.

GAMBAI'S, a town of France, in the department of the Seine and Oiſe: one league eaſt of Houdan.

GAMBA'LA, or GAMBOULO, a town of Italy, in the Milaneſe: two miles from Vigevano.

GAMBALOO'K, *ſ.* A riding gown worn in the eaſtern parts.

GAMBA'RA, a town of Italy, in the Breſſan: eighteen miles ſouth of Breſcia.

GAMBA'RA (Lorenzo), a Latin poet, born at Breſcia in 1496. He acquired conſiderable reputation, and is mentioned with honour by Manutius, Lipſius, Gyraldus, and others. His works, of which ſeveral editions have been given, conſiſt of ſmaller and larger pieces. Of the latter the moſt known is his Columbus, written at the inſtigation of cardinal Granvelle. It is a poem in four cantos, the ſubject of which is the diſcovery of America by Columbus. Others of his pieces are deſcriptive, as his Venetiæ, and Caprarola. He died at the age of ninety, in 1586.

GAMBA'RA (Veronica), an Italian lady of poetical fame, daughter of count Gianfranceſco Gambara, born at Breſcia in 1485. She received a liberal education, and was particularly aided in her literary purſuits by cardinal Bembo, who formed her taſte, and directed her in the rules of Italian verſe. In 1509 ſhe married Giberto the lord of Corregio, with whom ſhe lived nine years. After his death ſhe devoted herſelf to the education of her two ſons, and to the compoſition of thoſe works which have perpetuated her memory. When her brother Uberto was made governor of Bologna in 1528, ſhe fixed her reſidence in that city; and at the time of the coronation of the emperor Charles V. her houſe was the reſort of a number of the moſt diſtinguiſhed geniuſes in Europe who followed his court. She afterwards returned to Corregio, where ſhe died in 1550. Her poems were firſt publiſhed in various collections; but a complete edition of them, with her letters, was printed at Breſcia in 1759. They certainly rank with the moſt elegant and poliſhed productions of the time.

GAMBA'RE, a village, near Venice, with a parochial church, ſituated nearly four miles and a half from it, to the pariſh of which the whole diſtrict belongs. It has a fine market-place ſituated on the Brenta, and is ſurrounded with elegant country-ſeats. A chapel ſtands now on the ruins of the formerly celebrated abbey of Benedictine monks, called St. Ellero or Ilario, which was deſtroyed in the thirteenth century by Ezzelin.

GAMBA'RO, a town of Italy, in the duchy of Piacenza: twenty-four miles ſouth of Piacenza.

GAMBAS'CA, a town of Piedmont, in the marquiſate of Saluzzo, on a ſmall river which runs into the Po: ſix miles weſt of Saluzzo.

GAMBE'RIA, or GAM'BRIA, *ſ.* A military boot or defence for the legs.

GAM'BEYSON, *ſ.* [*gambezonum*, Lat.] A horſeman's coat uſed anciently in war, which covered the legs: or rather a quilted coat, *cento*, *veſtimentum ex coactili lana confectum*, to put under the armour, to make it ſit eaſy. *Fleta*, lib. i. c. 24.

GAM'BIA, a country of Africa, which takes its name from the river which paſſes through it; ceded to the Engliſh by the peace of 1783.

GAM'BIA, GAMBRA, or GAMBA, a celebrated river of Africa, which takes its riſe from a vaſt chain of mountains, in N. lat. 11° (which were obſerved by Mr. Park to paſs acroſs that continent,) and empties itſelf into the ſouth Atlantic ocean; being navigable for ſloops and ſmall craft, for more than two hundred leagues up the country. The earlieſt European eſtabliſhment known to have been formed on this celebrated river, was a factory of the Portugueſe; and to this muſt be aſcribed the introduction of the numerous words of that language which are now in uſe among the Foulahs and Mandingoes, who chiefly inhabit the towns and villages on its banks. The Dutch, French, and Engliſh, afterwards ſucceſſively poſſeſſed themſelves of ſettlements on the coaſt; though the trade of the Gambia became, and continued for many years, a ſort of monoply in the hands of the Engliſh. In the travels of Francis Moore, is preſerved an account of the Royal African company's eſtabliſhments on this river, as early as 1730, at which time James's factory alone conſiſted of a governor, deputy governor, and two other principal officers; eight factors, thirteen writers, twenty inferior attendants and tradeſmen; a company of ſoldiers, and thirty-two negro ſervants, beſides ſloops, ſhallops, and boats, with their crews; and there were no leſs than eight ſubordinate factories in other parts of the river. But its trade with Europe, by being afterwards laid open, was almoſt annihilated; inſomuch that the ſhare which the ſubjects of England at this time hold in it, ſupports not more than two or three annual ſhips; and the groſs value of Britiſh exports is ſaid to be under twenty thouſand pounds. The French and Danes ſtill maintain a ſmall ſhare, and the Americans have lately ſent ſome veſſels to the Gambia by way of experiment. The commodities exported to the Gambia from Europe conſiſt chiefly of fire-arms and ammunition, iron-ware, ſpirituous liquors, tobacco, cotton caps, a ſmall quantity of broad cloth, and a few articles of the manufacture of Mancheſter; a ſmall aſſortment of India goods, with ſome glaſs beads, amber, and other trifles: for which has been uſually taken in exchange ſlaves, gold-duſt, ivory, bees-wax, and hides. Slaves for a long time conſtituted the chief article of traffic on the Gambia, for which reaſon the Moors and Arabs call it *Neel Abeed*, the River of Slaves, but the aboriginal negroes call it *Neel Kibbeer*, the Great River.

Mr. Park croſſed in his way ſix different ſtreams that fall into the Gambia from the north-eaſt. Among theſe the principal one is the Nerico, which flows from the quarter of Bondou; and is reckoned the eaſtern boundary of a tract which the Africans of this region ſtyle the Country of the Weſt, expreſſed by that of the ſetting ſun. This tract is on a lower level than that to the eaſt; is flat, and the ſoil compoſed of clay and ſand. The Gambia has a

ſmall impediment to its navigation at Baraconda, in the country of Woolli; but although this is uſually termed a fall, Mr. Park was informed that it did not impede the paſſage of canoes: ſo that it ought more properly to be termed a *rapide*, according to the American phraſe; that is to ſay, a ſlope, down which the water runs with more ordinary rapidity, but which does not, however, totally impede the paſſage of canoes, or ſmall boats. The Gambia abounds with numerous varieties of fiſh, ſome of which are excellent food. At the entrance from the ſea, ſharks are found in great abundance; and, higher up, alligators and the hippopotamus or river horſe are very numerous.

GAM'BLER, *ſ.* [A cant word for *game* or *gameſter*.] He whoſe practice it is to invite the unwary to game, in order to cheat them.

GAMBO'GE, *ſ.* A concrete vegetable juice, the produce of an Eaſt-Indian tree, called by the natives *caracapulli*, the *cambogia gutta* of Linnæus; and is partly of a gummy and partly of a reſinous nature. It is brought to us either in form of orbicular maſſes, or of cylindrical rolls of various ſizes; and is of a denſe, compact, and firm, texture, and of a beautiful yellow. For many years it was uſed in medicine as a draſtic purge; but being found to injure the ſtomach, it has been abandoned in modern practice. It gives a beautiful and durable citron yellow ſtain to marble, whether rubbed in ſubſtance on the hot ſtone, or applied as dragon's blood; or in form of a ſpirituous tincture. When it is applied on cold marble, the ſtone muſt afterwards be heated to make the colour penetrate. It is now chiefly uſed as a pigment.—See the article CAMBOGIA, vol. iii. 640.

To GAM'BOL, *v. n.* [*gambiler*, Fr.] To dance; to ſkip; to friſk; to jump for joy; to play merry frolics:

The king of elfs, and little fairy queen,
Gambol'd on heaths, and danc'd on ev'ry green. *Dryden.*

To leap; to ſtart:

'Tis not madneſs
That I have utter'd; bring me to the teſt,
And I the matter will record, which madneſs
Would *gambol* from. *Shakeſpeare.*

GAM'BOL, *ſ.* A ſkip; a hop; a leap for joy:

Bacchus through the conquer'd Indies rode,
And beaſts in *gambols* friſk'd before their honeſt god.
Dryden.

A frolic; a wild prank:

For who did ever play his *gambols*,
With ſuch unſufferable rambles? *Hudibras.*

GAM'BOLD (John), a pious Engliſh divine among the Moravian brethren, or ſect known by the name of *Unitas Fratrum*. He was born near Haverfordweſt in Pembrokeſhire, and became a member of Chriſt-church college, in the univerſity of Oxford. Of that inſtitution he was made one of the chaplains, and took his degree of M. A. in 1734. About the year 1739, he was preſented by Dr. Secker, then biſhop of Oxford, to the vicarage of Stanton Harcourt, in Oxfordſhire. When Peter Boehler, a diſciple of count Zinzendorf, viſited Oxford in 1738, and held frequent conferences with John and Charles Weſley, who were then laying the foundations of what was afterwards called *methodiſm*, Mr. Gambold interpreted his diſcourſes, which were delivered in the Latin language in certain meetings of learned and unlearned perſons, who aſſumed to themſelves the title of *awakened people*. From this time his mind appears to have been influenced by an inclination towards the tenets of the Moravian ſchool; and in 1742 he became ſo thoroughly a convert and enthuſiaſt, that, without giving any notice to his dioceſan and patron, he deſerted his flock, and joined himſelf to the new ſect, which, by an act of the legiſlature in 1749, was permitted to erect its eſtabliſhments in this country. For many years he was the regular miniſter of the congregation ſettled in London, and preached at the chapel of the brethren in Fetter-lane. In 1754 he was conſecrated a biſhop at an Engliſh provincial ſynod held at Lindſay-houſe, Chelſea, and was greatly eſteemed for his piety and learning by ſeveral Engliſh biſhops, who were his contemporaries in the univerſity of Oxford. In 1768 he retired to his native country, where he died, at Haverfordweſt, in 1771. As he was a good ſcholar, the celebrated Mr. Bowyer frequently employed him in correcting the preſs; in which capacity he ſuperintended the beautiful and very accurate edition of Lord Chancellor Bacon's works in 1765; and in 1767 he was profeſſedly the editor of David Crantz's Hiſtory of Greenland, containing a deſcription of the country and its inhabitants, and particularly of the miſſion carried on for above thirty years by the *Unitas Fratrum*, &c. in two volumes 8vo. He was alſo the author of the following pieces: a neat edition of the Greek Teſtament, but without his name, *Textu per omnia Milliano, cum Diviſione Pericoparum & Interpunctura A. Bengelii*, 1742, in two volumes 12mo. A ſhort Summary of Chriſtian Doctrine in the way of Queſtion and Anſwer, &c. intended to ſhew the conſiſtency of his connection with, and miniſtry in, the church of the brethren, with a ſteady attachment to the church of England; Maxims and Theological Ideas, collected out of the ſeveral Diſſertations and Diſcourſes of count Zinzendorf, from 1738 till 1747; Sixteen Diſcourſes on the ſecond article of the Creed, preached at Berlin, by the Ordinary of the Brethren, 1752, 12mo. Twenty-one Diſcourſes, or Diſſertations upon the Augſburg Confeſſion, tranſlated from the high Dutch, 1753; The Martyrdom of Ignatius, a Tragedy, publiſhed after his death by the Rev. Benjamin La Trobe, in 1773, with the Life of Ignatius, &c. with ſome ſingle Sermons, and other devotional pieces.

GAM'BON, a river of France, which runs into the Seine, near Andely.

GAM'BREL, *ſ.* [from *gamba*, *gambarella*, Ital.] The leg of a horſe.—What can be more admirable than for the principles of the fibres of a tendon to be ſo mixed as to make it a ſoft body, and yet to have the ſtrength of iron? as appears by the weight which the tendon, lying on a horſe's *gambrel*, doth then command, when he rears up with a man upon his back. *Grew.*

GAM'BRIA, *ſ.* [In old writings.] A kind of military boot.

GAMBRO'N, or GOMBRON, or GOMRON, a ſeaport town of Perſia, in the province of Lariſtan, called alſo *Beuder Abbas*, famous throughout many ages, as the port of Schiras, and of all the ſouth of Perſia. Its trade was formerly very extenſive; but at preſent it is very trifling, nor is there a ſingle European factory in the city. This decline has been occaſioned by the domeſtic diſturbances in Perſia, and the wars and diſputes between the French and the Engliſh. The Dutch, for a while, continued to carry on a conſiderable trade here; but ſince they formed a ſettlement in the iſland of Karek, they have entirely deſerted Gambron. Lat. 27. 20. N. lon. 57. E. Greenwich.

GAMBROVIS'SA, a town of Venetian Iſtria: nine miles eaſt of Capo d'Iſtria.

GAME, *ſ.* [*gaman*, a jeſt, Iſlandic.] Sport of any kind.—We have had paſtimes here, and pleaſing *game*. *Shakeſp.*—Jeſt; oppoſed to earneſt or ſerioufneſs:

Then on her head they ſet a garland green,
And crowned her 'twixt earneſt and 'twixt *game*. *Spenſer.*

Inſolent merriment; ſportive inſult:

Do they not ſeek occaſion of new quarrels,
On my refuſal, to diſtreſs me more;
Or make a *game* of my calamities? *Milton.*

A ſingle match at play. Advantage in play:

Mutual vouchers for our fame we ſtand,
And play the *game* into each other's hand. *Dryden.*

Scheme

Scheme purſued; meaſures planned.—This ſeems to be the preſent *game* of that crown, and that they will begin no other 'till they ſee an end of this. *Temple.*—Solemn conteſts, exhibited as ſpectacles to the people.—The *games* are done, and Cæſar is returning. *Shakeſpeare.*

Milo, when ent'ring the Olympic *game*,
With a huge ox upon his ſhoulders came. *Denham.*

To GAME, *v. n.* [gaman, Sax.] To play at any ſport. To play wantonly and extravagantly for money.

The invention of *games*, for the double purpoſe of recreation and of health, and of thus giving vigour both to body and mind, ranks among the moſt ancient, as well as moſt laudable, of the innocent exerciſes and amuſements of mankind. The firſt games would be naturally of the athletic kind, and of the moſt inoffenſive and harmleſs nature; but as ſuperior ſkill in the ſports and paſtimes thus early adopted, would quickly beget jealouſy and envy between competitors, the trial of ſtrength, by wreſtling and boxing, would in conſequence follow, and muſt have exiſted at a very early period of the world. Hence Mr. Bryant, in his Analyſis of Ancient Mythology, mentions Cercyon of Megara, Hercules, and Pollux, as famous wreſtlers, verſed in all the exerciſes and feats of the athletæ, from whoſe cuſtoms were derived the Iſthmian, Nemean, Pythic, Olympic, and Delian, games, which were ſolemniſed by the ancient Greeks with infinite pomp and magnificence. In theſe games were exhibited running, leaping, wreſtling, boxing, and throwing the quoit, which all together were termed πενταθλον. Beſides theſe, there were horſe and chariot races; and contentions alſo in oratory, poetry, and muſic: for particulars of which, ſee under each of the above-mentioned titles in this work.

From theſe feſtivals of the Greeks, the Romans unqueſtionably derived their ſecular games, and all the exerciſes performed by the Roman youth in the Campus Martius. Theſe conſiſted, like thoſe of the Greeks, in throwing the diſcus or quoit, hurling the javelin, wreſtling, boxing, riding a fiery horſe, driving a military car, &c. After their inſtitution by Auguſtus, they were celebrated by Claudius, Domitian, and Severus; and were ſolemniſed a fifth time, A. D. 248, on the completion of the full period of a thouſand years from the foundation of Rome. The ſecular games, like the ſacred Olympics, were calculated to inſpire the ſuperſtitious mind with deep and ſolemn reverence. The myſtic ſacrifices were performed during three ſucceſſive nights on the banks of the Tiber; and the Campus Martius reſounded with muſic and dances, and was illuminated with innumerable lamps and torches.

But as the Romans advanced in military fame and univerſal conqueſt, ſo their games and paſtimes partook more of a warlike and ferocious character, until they were diſgraced by the brutal and ſavage combats of the Arena. Here wild beaſts of the moſt untamable kind were exhibited in ſolemn ſhows, and encountered by convicts and ſlaves, whoſe life or liberty was decreed as the reward of their victory; and here the gladiators were expoſed to public view, and engaged in thoſe cruel and inhuman conflicts, which were decreed on purpoſe for them to deſtroy each other; while ſand or ſaw-duſt was ſtrewed under foot, as the word *arena* imports, in order to conceal the effuſion of human gore, which would otherwiſe have offended the eyes and ſhocked the feelings of the deluded ſpectators. See the article GLADIATOR, in this volume.

Though the firſt Chriſtian emperors of Rome, at the commencement of the fifth century, had ſucceeded in aboliſhing the inhuman combats of gladiators, yet the idle multitude ſtill depended for their amuſements on the frequent exhibition of public games and ſpectacles; and theſe were now celebrated in the circus and amphitheatre with redoubled magnificence and ſplendour. The taſte was turned from the unnatural and cruel extirpation of fellow men in cold blood by rules of tactical ſcience, to the taming of wild beaſts, horſe and chariot races, and the various modes of theatrical repreſentation; and ſo faſcinated were the Roman people with theſe ſplendid ſhows, that they conſidered the circus as their ſacred temple, and the only ſeat of pleaſure and delight. The impatient crowd ruſhed at the dawn of day to ſecure their places; and there were many who paſſed a ſleepleſs and anxious night in the porticoes of the building. From the morning to the evening, careleſs of the ſun or of the rain, theſe giddy votaries of pleaſure, who ſometimes amounted to the number of four hundred thouſand, would remain with ſtedfaſt attention, their eyes rivetted on the horſes and charioteers, and their minds agitated between hope and fear, as if the fate of Rome had depended on the event of a ſingle race. Theſe games were exhibited at the expence of the republic, or of the emperors. The race in its firſt inſtitution, was a ſimple conteſt of two chariots, whoſe drivers were diſtinguiſhed by white and red liveries; but two additional colours, a light green, and a cærulean blue, were afterwards introduced; and as the races were repeated twenty-five times, one hundred chariots contributed in the ſame day to the pompous amuſements of the circus. Theſe colours ſoon became the foundation of four different parties or factions, whoſe fortunes and beſt intereſts were laviſhed upon theſe games, and in ſupporting and abetting the colour which they had eſpouſed. So prevalent and ſo ſumptuous did theſe equeſtrian ſports become, that Conſtantinople at length endeavoured to emulate the pageantry of Rome, and the colours and factions of the hippodrome became as violent and tumultuous as thoſe which agitated the circus. Other great cities caught in time the flame and folly of ſumptuous races and ſplendid ſhows; and theſe, as it is ſuppoſed, gave life, and ſpring, and action, to the juſts and tournaments of more modern times; as did the pantomimical exhibitions of the amphitheatre, the baiting of wild beaſts, and the muſic and the military dances which accompanied them, give birth to the various amuſements at country wakes and revels, which were afterwards inſtituted and ſupported by the nobility and gentry in almoſt every part of Europe.

The games and paſtimes which early diſtinguiſhed the character and manners of the Engliſh people, have recently appeared under the title of ÐLIÐ-ÐAMENA ÆNÐEL-ÐEOÐ, by the ingenious Mr. Strutt; a work which highly merits the regard of the curious reader. When the Romans invaded Britain, they found her inhabitants bold, active, and warlike, and engaged in thoſe games or amuſements which beſt accorded with their nature, ſuch as running, leaping, wreſtling, ſwimming, &c. Perhaps the ſkill which the natives of Devonſhire and Cornwall retain to the preſent day in hurling and wreſtling, may properly be conſidered as an early veſtige of the games which manifeſted Britiſh ſtrength and activity. Under the Saxon heptarchy, when the times were extremely turbulent, we might naturally expect that ſuch exerciſes as enured the body to fatigue, and biaſſed the mind to military purſuits, ſhould have conſtituted the chief part of a young nobleman's education: accordingly, we find that leaping, wreſtling, caſting of darts, and other paſtimes which required great exertions of bodily ſtrength, were taught them in their adoleſcence. Theſe amuſements engroſſed the whole of their attention, every one ſtriving to excel his fellow; for, hardineſs, ſtrength, and valour, out-balanced, in the public eſtimation, the accompliſhments of the mind; and therefore literature, which flouriſhes beſt in tranquillity and retirement, was conſidered as a purſuit unworthy the notice of a ſoldier, and only requiſite in the gloomy receſſes of the cloiſter. But here, poſſibly, might be traced the early propenſity to the more vicious ſedentary games of the Anglo-Saxons, and eſpecially with the dice; which they appear to have derived from their anceſtors; for, Tacitus aſſures us that the ancient Germans would not only hazard all their wealth, but even ſtake their liberty, upon the turn of the dice; "and he who loſes, (ſays the author,) ſubmits to ſervitude, though younger and ſtronger than his antagoniſt, and patiently permits himſelf to be bound, and ſold

in the market; and this madneſs they dignify by the name of *honour*." Cheſs was alſo a favourite game with the Saxons; as was likewiſe backgammon. It appears that amongſt them a large portion of the night was appropriated to the purſuit of theſe unprofitable amuſements. In the reign of Canute, this practice was ſanctioned by the example of royalty, and followed by the nobility: the clergy, however, were prohibited from playing at games of chance, by the eccleſiaſtical canons eſtabliſhed in the reign of Edgar.

Among the paſtimes introduced by the Norman nobility, none engaged the general attention ſo much as the tournaments and the juſts. Theſe amuſements, in the middle ages, which may be denominated the ages of chivalry, were in high repute among the nobility of Europe, and produced in reality much of the pomp and gallantry that we find recorded with poetical exaggeration in the legends of knight-errantry. We are not, however, to conceive, that martial exerciſes were confined entirely to the education of young noblemen: the ſons of citizens and yeomen had alſo their games and ſports reſembling military combats. Thoſe practiſed at an early period by the young Londoners ſeem to have been derived from the Romans: they conſiſted of various attacks and evolutions performed on horſeback, the youth being armed with ſhields and pointleſs lances, and was denominated *ludus Trojæ*, or Troy game. Theſe amuſements, according to Fitz Stephen, were appropriated to the ſeaſon of Lent; but at other times they exerciſed themſelves in archery, fighting with clubs and bucklers, and running at the quintain; and in winter, when the froſt ſet in, they aſſembled on the ice, and run againſt each other with poles, in imitation of lances, in a juſt; and frequently one or both were beaten down, "not always without hurt; for, ſome break their arms, and ſome their legs; but youth, (ſays this author,) emulous of glory, ſeeks theſe exerciſes preparatory againſt the time that war ſhall demand their preſence." Henry VIII. not only countenanced the practice of military paſtimes by permitting them to be exerciſed without reſtraint, but alſo endeavoured to make them faſhionable by his own example. Hall aſſures us, that, even after his acceſſion to the throne, he continued daily to amuſe himſelf in archery, caſting of the bar, wreſtling, or dancing, and frequently in tilting, tournaying, fighting at the barriers with ſwords and battle-axes, and ſuch like martial recreations, in moſt of which there were few that could excel him. The purſuits and amuſements of a nobleman are, however, placed in a different view by an author of the ſucceeding century; who, deſcribing the perſon and manners of Charles lord Mountjoy, regent of Ireland, ſays, "He delighted in ſtudy, in gardens, in riding on a pad to take the aire, in playing at ſhovelboard, at cardes, and in reading of play-books for recreation, and eſpecially in fiſhing and fiſh-ponds, ſeldome uſeing any other exerciſes, and uſeing theſe rightly as paſtimes, only for a ſhort and convenient time, and with great variety of change from one to the other." Thus, by degrees, the diſcontinuation of bodily exerciſes afforded a proportionable quantity of leiſure time for the cultivation of the mind; ſo that the manners of the people were ſoftened by degrees, and learning, which had been ſo long neglected, became faſhionable, and was eſteemed an indiſpenſable mark of a polite education. Many of the paſtimes that had been countenanced by the nobility, and ſanctioned by their example, in the middle ages, grew into diſrepute in more modern times, and were condemned as vulgar and unbecoming the notice of a gentleman. "Throwing the hammer and wreſtling, (ſays an author of the ſeventeenth century,) I hold them exerciſes not ſo well beſeeming nobility, but rather the ſoldiers in the camp and the prince's guard."

Burton, in his Anatomy of Melancholy, gives us a general view of the ſports moſt prevalent in the ſeventeenth century. "Cards and dice (ſays he) are rocks upon which men loſe themſelves, when they are imprudently handled, and beyond their fortunes. Ringing, bowling, ſhooting, playing with keel-pins, tronks, quoits, pitching of bars, hurling, wreſtling, leaping, running, fencing, muſtering, ſwimming, playing with waſters, foils, football, balowns, running at the quintain, and the like, are common recreations of country folks; riding of great horſes, running at rings, tilts and tournaments, horſe-races, and wild gooſe chaſes, which are diſports of greater men, and good in themſelves, though many gentlemen by ſuch means gallop quite out of their fortunes." Speaking of the Londoners, he ſays, "They take pleaſure to ſee ſome pageant or fight go by, as at a coronation, wedding, and ſuch like ſolemn niceties; to ſee an ambaſſador or a prince received and entertained with maſks, ſhows, and fireworks. The country hath alſo his recreations, as may-games, feaſts, fairs, and wakes." The following paſtimes he conſiders as common both in town and country, namely, "bull-baitings and bear-baitings, in which our countrymen and citizens greatly delight, and frequently uſe, dancers on ropes, jugglers, comedies, tragedies, artillery gardens, and cock-fighting." He then goes on: "Ordinary recreations we have in winter, as cards, tables, dice, ſhovelboard, cheſs-play the philoſopher's game, ſmall trunks, ſhuttlecock, billiards, muſic, maſks, ſinging, dancing, ule-games, frolics, jeſts, riddles, catches, croſs purpoſes, queſtions and commands, merry tales of errant knights, queens, lovers, lords, ladies, giants, dwarfs, thieves, cheaters, witches, fairies, goblins, and friars." To this catalogue he adds: "Dancing, ſinging, maſking, mumming, and ſtage-plays, are reaſonable recreations, if in ſeaſon; as are may-games, wakes, and whitſonales, if not at unſeaſonable hours, are juſtly permitted. Let them, (that is, the common people,) freely feaſt, ſing, dance, have puppet-plays, hobby-horſes, tabers, crowds, (fiddles,) and bagpipes;" let them "play at ball and barley-brakes;" and afterwards, "plays, maſks, jeſters, gladiators, tumblers, and jugglers, are to be winked at, leſt the people ſhould do worſe than attend them." In addition to the may-games, morris-dancings, pageants, and proceſſions, which were commonly exhibited throughout the kingdom in all great towns and cities, the Londoners had peculiar and extenſive privileges: they had large portions of ground allotted to them in the vicinity of the city for the practice of ſuch paſtimes as were not prohibited by the government, and for thoſe eſpecially that were beſt calculated to render them ſtrong and healthy. In the holidays during the ſummer ſeaſon, the young men of London exerciſed themſelves in the fields with "leaping, ſhooting with the bow, wreſtling, caſting the ſtone, playing with the ball, and fighting with their ſhields." The laſt ſpecies of paſtime is the ſame that Stow calls "*practiſing with their waſters and bucklers*;" which in his day was exerciſed by the apprentices before the doors of their maſters. The city damſels had alſo their recreations on the celebration of theſe feſtivals, according to the teſtimony of both the authors above-mentioned. The firſt tells us that they played upon citherns, and danced to the muſic; and, as this amuſement did not take place before the cloſe of the day, they were occaſionally permitted to continue it by moonlight. We learn from the other, who wrote at the diſtance of more than four centuries ago, that it was then cuſtomary for the maidens, after evening prayers, to dance in the preſence of their maſters and miſtreſſes, while one of their companions played the meaſure upon a timbrel; and, in order to ſtimulate them to purſue this exerciſe with alacrity, the beſt dancers were rewarded with garlands, the prizes being expoſed to public during the whole of the performance.

A general view of the games and paſtimes practiſed by the Londoners ſoon after the commencement of the ſeventeenth century, occurs in Strype's edition of Stow's Survey. The modern ſports of the citizens, ſays the editor, beſides drinking, are cock-fighting, bowling upon greens, playing at tables, or backgammon, cards, dice, and billiards

liards; alſo muſical entertainments, dancing, maſks, balls, ſtage-plays, and club-meetings, in the evening. The lower claſſes divert themſelves at foot-ball, wreſtling, cudgels, ninepins, ſhovelboard, cricket, ſtowball, ringing of bells, quoits, pitching the bar, bull and bear baitings, throwing at cocks, and, what is worſt of all, lying at alehouſes. To theſe are added, by an author of later date, ſailing, rowing, ſwimming and fiſhing, in the river Thames, horſe and foot races, leaping, archery, bowling in allies, and ſkittles, tennis, cheſs, and draughts. The paſtimes here enumerated were by no means confined to the city of London, or its environs: the larger part of them were in general practice throughout the kingdom.

The courts of princes, and the caſtles of noblemen, formerly vied with each other in ſumptuous games and entertainments; eſpecially on days of public feſtivity, when, in every one of the apartments opened for the reception of the gueſts, were exhibited variety of entertainments, which accorded to the taſte of the times, but in which propriety had very little ſhare; the whole forming a ſcene of pompous confuſion, where feaſting, drinking, muſic, dancing, tumbling, ſinging, and buffoonery, were often exhibited at the expence of common decency. If we turn to the third book of Fame, written by Chaucer, we ſhall find a curious picture of theſe tumultuous court entertainments, drawn from reality, and perhaps without any great exaggeration. It may be thus expreſſed in modern language: Minſtrels of every kind were ſtationed in the receptacles for the gueſts; among them were jeſters, that related tales of mirth and of ſorrow; excellent players upon the harp, with others of inferior merit ſeated on various ſeats below them, who mimicked their performances like apes to excite laughter; behind them, at a great diſtance, was a prodigious number of other minſtrels, making a great ſound with cornets, ſhaulms, flutes, horns, pipes of various kinds, and ſome of them made with green corn, ſuch as are uſed by ſhepherds' boys; there were alſo Dutch pipers to aſſiſt thoſe who choſe to dance either love-dances, ſprings, or rayes, or any other new-deviſed meaſures. Apart from theſe were ſtationed the trumpeters and players on the clarion; and other ſeats were occupied by different muſicians playing variety of mirthful tunes. There were alſo preſent large companies of jugglers, magicians, and tregetors, who exhibited ſurpriſing tricks by the aſſiſtance of natural magic.

The pageantry of courts and caſtles was ſoon emulated in all great towns and cities, on occaſions of rejoicing, or of ſolemnity. In London, where they were moſt frequently required, a conſiderable number of different artificers were kept, at the city's expence, to furniſh the machinery for the pageants, and to decorate them. The elegance diſplayed at juſts and tournaments was imitated in theſe temporary exhibitions, by men riding in armour, and ſome adorned with ribbons, flags, banners, and other reſemblances of ſplendour. The fronts of the houſes in the ſtreets were covered with rich adornments of tapeſtry, arras, and cloth of gold; the chief magiſtrates and opulent citizens appeared on horſeback in ſumptuous habits, and joined the cavalcade; while the ringing of bells, the ſound of muſic from various quarters, and the ſhouts of the populace, nearly ſtunned the ears of the ſpectators. At certain diſtances, in places appointed for the purpoſe, pageants were erected, which were temporary buildings repreſenting caſtles, palaces, gardens, rocks, or foreſts, as occaſion required, where nymphs, fawns, ſatyrs, gods, and goddeſſes, appeared in company with giants, ſavages, dragons, ſaints, knights, buffoons, and dwarfs, ſurrounded by minſtrels and choriſters; the heathen mythology, the legends of chivalry, and chriſtian divinity, were abſurdly jumbled together, and the exhibitions uſually concluded with pedantic harangues, replete with the groſſeſt adulation. Some faint traces of the proceſſional parts of theſe exhibitions were retained at London about thirty years ago, in the lord-mayor's ſhow; but the pageants and orations have been long diſcontinued, and the ſhow itſelf is now ſo much contracted, that it is in reality altogether unworthy of ſuch an appellation.

The people of this country, in all ages, delighted in ſecular muſic, ſongs, and theatrical performances; which is abundantly evident from the great rewards they gave to the bards, the ſcalds, the gleemen, and the minſtrels, who were ſucceſſively the favourites of the opulent, and the idols of the vulgar. The continual encouragement given to theſe profeſſors of muſic, poetry, and pantomime, in proceſs of time, ſwelled their numbers beyond all reaſonable proportion, inflamed their pride, increaſed their avarice, and corrupted their manners; ſo that at length they loſt the favour they had ſo long enjoyed among the higher claſſes of ſociety; and, the donations of the populace not being ſufficient for their ſupport, they fell away from affluence to poverty, and wandered about the country in a contemptible condition, dependent upon the caſual rewards they might occaſionally pick up at church-ales, wakes, and fairs. Hence the origin of ſtrolling players, rope-dancers, ſhowmen, &c.

Hentzner, who wrote at the concluſion of the ſixteenth century, ſays, "the Engliſh excell in dancing and muſic, for they are active and lively." He alſo adds, "they are vaſtly fond of great noiſes that fill the ear, ſuch as the firing of cannon, beating of drums, and the ringing of bells, ſo that it is common for a number of them to get up into ſome belfry and ring the bells for hours together for the ſake of exerciſe." Polydore Virgil, lib. v. cap. 2, mentions another remarkable ſingularity belonging to the Engliſh, who celebrated the feſtival of Chriſtmas with plays, maſques, and magnificent ſpectacles, together with games at dice and dancing, which, he tells us, *was not cuſtomary with other nations*; and with reſpect to the Chriſtmas prince, or lord of the miſrule, he was, as the ſame author informs us, a perſonage almoſt peculiar to this country.

It were well if theſe ſingularities were the only vulnerable parts of the national character of our anceſtors; but it muſt be confeſſed that there are other paſtimes which equally attracted their attention, and manifeſted a great degree of barbariſm, which will admit of no defence. A modern author, reprobating the inhumanity of throwing at cocks, makes theſe pertinent obſervations: "Some French writers have repreſented this diverſion of the common people much to our diſadvantage, and imputed it to a natural fierceneſs and cruelty of temper, as they do ſome other entertainments peculiar to our nation; I mean thoſe elegant diverſions of bull-baiting, and prize-fighting, with the like ingenious recreations of the bear-garden. I wiſh I knew how to anſwer this reproach which is caſt upon us, and excuſe the death of ſo many innocent cocks, bulls, dogs, and bears, as have been ſet together by the ears, or died an untimely death, only to make us ſport." The ladies of the preſent day will probably be ſurpriſed to hear, that all, or the greater part, of theſe barbarous recreations, were much frequented by the fair ſex, and countenanced by thoſe among them of the higheſt rank and moſt finiſhed education, being brought by degrees, no doubt, to ſacrifice their feelings to the prevalency of a vicious and vulgar faſhion, which even the ſanction of royalty, joined with that of ancient cuſtom, cannot reconcile with decency or propriety."

The celebration of the *May-games* in England, on account of their ſimplicity and antiquity, are not unworthy of notice in this place. "On the calands or firſt of May, (ſays Bourne,) commonly called *May-day*, the juvenile part of both ſexes were wont to riſe a little after midnight, and walk to ſome neighbouring wood, accompanied with muſic and blowing of horns, where they break down branches from the trees and adorn them with noſegays and crowns of flowers; when this is done, they return with their booty homewards about the riſing of the ſun, and make their doors and windows to triumph with their flowery ſpoils; and the after-part of the day is chiefly ſpent in

dancing round a tall poll, which is called a *may-poll*; and being placed in a convenient part of the village, ſtands there, as it were, conſecrated to the goddeſs of flowers, without the leaſt violation being offered to it in the whole circle of the year." This cuſtom, no doubt, is a relic of one more ancient, practiſed by the heathens, who obſerved the laſt four days in April, and the firſt of May, in honour of the goddeſs Flora. To this we may add the following extract from Stow. "In the month of May the citizens of London of all eſtates, generally in every pariſh, and in ſome inſtances two or three pariſhes joining together, had their ſeveral mayings, and did fetch their may-poles with divers warlike ſhews; with good archers, morrice-dancers, and other devices for paſtime, all day long; and towards evening they had ſtage-plays and bonfires in the ſtreets. Theſe great mayings and may-games were made by the governors and maſters of the city, together with the triumphant ſetting up of the great ſhaft or principal may-pole in Cornhill before the pariſh church of Saint Andrew;" thence called *St. Andrew Under-ſhaft*. No doubt the May-games are of longer ſtanding, though the time of their inſtitution cannot be traced. Mention is made of the may-pole at Cornhill, in a poem called the *Chaunce of the Dice*, attributed to Chaucer. Stow has paſſed over unnoticed the manner in which the may-poles were uſually decorated; but this deficiency is ſupplied by a contemporary writer, who ſaw theſe paſtimes in a different point of view; he writes thus: "Againſt Maie-day, every pariſh, towne, or village, aſſemble themſelves, both men, women, and children; and either all together, or dividing themſelves into companies, they goe ſome to the woods and groves, ſome to the hills and mountaines, ſome to one place, ſome to another, where they ſpend all the night in pleaſant paſtimes, and in the morning they return bringing with them birch boughes and branches of trees to deck their aſſemblies withal. But their chiefeſt jewel they bring from thence is the maie-pole, which they bring home with great veneration, as thus; they have twentie or fourtie yoake of oxen, every oxe having a ſweete noſegaie of flowers tied up to the tip of his hornes, and theſe oxen drawe home the may-poale, which they covered all over with flowers and hearbes, bound round with ſtrings from the top to the bottome, and ſometimes it was painted with variable colours, having two or three hundred men, women, and children, following it with great devotion. And thus equipped it was reared with handkerchiefes and flagges ſtreaming on the top, they ſtrawe the ground round about it, they bind green boughs about it, they ſet up ſummer halles, bowers, and arbours, hard by it, and then fall they to banquetting and feaſting, to leaping and dauncing about it, as the heathen people did at the dedication of their idols. I have heard it credeblie reported, by men of great gravity, credite, and reputation, that of fourtie, threeſcore, or an hundred, maides going to the wood, there have ſcarcely the third part of them returned home againe as they went!" *P. Stubbs's Anatomie of Abuſes*, 1595.

It ſeems to have been the conſtant cuſtom, at the celebration of the may-games, to elect a lord and lady of the may, who probably preſided over the ſports. "On the thirtieth of May, in the fourth year of queen Mary, A. D. 1557, (ſays Strype,) was a goodly may-game in Fenchurch-ſtreet, with drums, and guns, and pikes; and with the nine worthies, who rode, and each of them made his ſpeech, there was alſo a morrice dance, and an elephant and caſtle, and the lord and lady of the may appearing to make up the ſhow." We alſo read that the lord of the may, and no doubt his lady alſo, was decorated with ſcarfs, ribbands, and other fineries. Hence a citizen, in the old comedy called *the Knight of the Burning Peſtle*, addreſſing himſelf to the other actors, ſays, "Let Ralph come out on may-day in the morning, and ſpeak upon a conduit, with all his ſcarfs about him, and his feathers, and his rings, and his knacks, as lord of the may." His requeſt is complied with, and Ralph appears upon the ſtage in the aſſumed character, where he makes his ſpeech, beginning in this manner: "With gilded ſtaff and croſſed ſcarf the may-lord here I ſtand."

At the commencement of the ſixteenth century, or perhaps ſtill earlier, the ancient ſtories of Robin Hood and his merry companions ſeem to have been new-modelled, and divided into ſeparate ballads, which much increaſed their popularity; for this reaſon it was cuſtomary to perſonify this famous outlaw, with ſeveral of his moſt noted aſſociates, and add them to the pageantry of the may-games. He preſided as lord of the may, and a female, or rather, perhaps, a man habited like a female, called the *Maid Marian*, his faithful miſtreſs, was the lady of the may. His companions were alſo equipped in appropriate dreſſes, and diſtinguiſhed by the title of *Robin Hood's Men*. Biſhop Latimer, in a ſermon which he preached before Edward VI. relates the following anecdote, which proves the great popularity of theſe pageants: "Coming (ſays he) to a certain town on a holiday to preach, I found the church door faſt locked. I taryed there half an houre and more, and at laſt the key was found, and one of the pariſh comes to me and ſayes, Syr, this is a buſy day with us, we cannot hear you; it is *Robin Hoode's day*; the pariſh are gone abroad to gather for Robin Hood; I pray you let [hinder] them not. I was fayne, therefore, to give place to Robin Hood. I thought my rochet would have been regarded; but it would not ſerve, it was faine to give place to *Robin Hoode's men*."

It has been obſerved, that the May-games were not confined to the firſt day of the month, neither were they always concluded in one day; on the contrary, there is an ancient manuſcript, written apparently in the reign of Henry VII. wherein a number of gentlemen, profeſſing themſelves to be the ſervants of the lady May, promiſe to be in the royal park at Greenwich, day after day, from two o'clock in the afternoon till five, in order to perform the various ſports and exerciſes ſpecified in the agreement, that is to ſay,—On the fourteenth of May they engage to meet at a place appointed by the king, armed with the *harneis* thereunto accuſtomed, to kepe the fielde, and to run with every commer eight courſes. Four additional courſes were to be granted to any one who deſired it, if the time would permit, or the queen was pleaſed to give them leave.—On the fifteenth the archers took the field to ſhoot at the ſtandard with flight arrows.—On the ſixteenth they held a tournament with ſwords rebated to ſtrike with every commer eight ſtrokes, according to the accuſtomed uſage.—On the eighteenth, (for Sunday intervened,) they were to be ready to "wreſtle with all commers all manner of ways," according to their pleaſure.—On the nineteenth they were to enter the field, to fight on foot at the barriers, with ſpears in their hands and ſwords rebated by their ſides, and with ſpear and ſword to defend their barriers.—On the twentieth they were to give additional proof of their ſtrength by caſting "the barre on foote, and with the arme, bothe heavit and hight."—On the twenty-firſt they recommenced the exerciſes, which were to be continued daily, Sundays excepted, through the remaining part of May, and a fortnight in the month of June.

Henry VIII. when young, delighted much in pageantry, and the early part of his reign abounded with gaudy ſhows; moſt of them were his own deviſing, and others contrived for his amuſement; among the latter we may reckon a May-game at Shooter's-hill, which was exhibited by the officers of his guards: they in a body amounting to two hundred, all of them clothed in green, and headed by their captain, who perſonated Robin Hood, met the king one morning as he was riding to take the air, accompanied by the queen and a large ſuite of the nobility of both ſexes. The fictitious foreſters firſt amuſed them with a double diſcharge of their arrows; and then, their chief approaching the king, invited him to ſee the manner

manner in which he and his companions lived. The king complied with the requeſt, and the archers, blowing their horns, conducted him and his train into the wood under the hill, where an arbour was made with green boughs, having a hall, a great chamber, and an inner chamber, and the whole was covered with flowers and ſweet herbs. When the company had entered the arbour, Robin Hood excuſed the want of more abundant refreſhment, ſaying to the king, "Sir, we outlaws uſually breakfaſt upon veniſon, and have no other food to offer you." The king and queen then ſat down, and were ſerved with veniſon and wine; and, after the entertainment, with which it ſeems they were well pleaſed, they departed, and on their return were met by two ladies riding in a rich open chariot, drawn by five horſes. Both of theſe ladies were ſplendidly apparelled, one of them perſonifying lady May, and the other lady Flora; "who," we are told, "ſaluted the king with divers goodly ſongs, and ſo brought him to Greenwich."—We may, however, juſt obſerve, that the May-games had attracted the notice of the nobility long before the time of Henry; and, agreeable to the cuſtom of the times, no doubt, was the following curious paſſage in the old romance called the Death of Arthur: "Now it befell in the moneth of luſty May, that queene Guenever called unto her the knyghtes of the round table, and gave them warning that, early in the morning, ſhe ſhould ride *on maying* into the woods and fields beſide Weſtminſter." The knights were all of them to be clothed in green, to be well horſed, and every one of them to have a lady behind him, followed by an eſquire and two yeomen, &c.

"It is at this time" (that is, in May), ſays the author of one of the papers in the Spectator, "we ſee the briſk young wenches, in the country pariſhes, dancing round the maypole. It is likewiſe on the firſt day of this month that we ſee the ruddy *milkmaid* exerting herſelf in a moſt ſprightly manner under a pyramid of ſilver tankards, and, like the virgin Tarpeia, oppreſſed by the coſtly ornaments which her benefactors lay upon her." Theſe decorations of ſilver cups, tankards, and ſalvers, were borrowed for the purpoſe, and hung round the milkpails, with the addition of flowers and ribands, which the maidens carried upon their heads when they went to the houſes of their cuſtomers, and danced in order to obtain a ſmall gratuity from each of them. Of late years the plate, with the other decorations, were placed in a pyramidical form, and carried by two chairmen upon a wooden horſe. The maidens walked before it, and performed the dance without any incumbrance. In other places, inſtead of theſe weighty ornaments, they ſubſtituted a cow. The animal had her horns gilt, and was nearly covered with ribands of various colours, formed into bows and roſes, and interſperſed with green oaken leaves and bunches of flowers.

The *chimney-ſweepers* of London, it muſt alſo be remembered, have fingled out the firſt of May for their feſtival; at which time they parade the ſtreets in companies, diſguiſed in various manners. Their dreſſes are uſually decorated with gilt paper, and other mock fineries; they have their ſhovels and bruſhes in their hands, which they rattle one upon the other; and to this rough muſic they jump about in imitation of dancing. Some of the larger companies have a fiddler with them, and a jack in the green, as well as a lord and lady of the may, who follow the minſtrel with great ſtatelineſs, and dance as occaſion requires.

On the vigil of Saint John the Baptiſt, commonly called *Midſummer Eve*, it was uſual in moſt country places, and alſo in towns and cities, for the inhabitants, both old and young, and of both ſexes, to meet together, and make merry by the ſide of a large fire made in the middle of the ſtreet, or in ſome open and convenient place, over which the young men frequently leaped by way of frolic, and alſo exerciſed themſelves with various ſports and paſtimes, more eſpecially with running, wreſtling, and dancing. Theſe diverſions they continued till midnight, and ſometimes till cock-crowing. At London, in addition to the bonfires, "on the eve of this ſaint, as well as upon that of Saint Peter and Saint Paul, every man's door was ſhaded with green birch, long fennel, Saint John's wort, orpin, white lilies, and the like, ornamented with garlands of beautiful flowers. They (the citizens) had alſo lamps of glaſs with oil burning in them all night; and ſome of them hung out branches of iron, curiouſly wrought, containing hundreds of lamps lighted at once, which made a very ſplendid appearance." This information we receive from Stow, who tells us that, in his time, New Fiſh-ſtreet and Thames-ſtreet were peculiarly brilliant upon theſe occaſions.

The reaſons aſſigned for making bonfires upon the vigil of Saint John in particular are various, for many writers have attempted the inveſtigation of their origin; but unfortunately all their arguments, owing to the want of proper information, are merely hypothetical, and of courſe cannot be much depended upon. Thoſe who ſuppoſe theſe fires to be a relique of ſome ancient heatheniſh ſuperſtition engrafted upon the variegated ſtock of ceremonies belonging to the Romiſh church, are not, perhaps, far diſtant from the truth.

The Anglo-Saxons, and the Danes, as we have obſerved already, were much addicted to ſedentary games; and the ſame deſtructive propenſity was equally prevalent among the Normans. The evil conſequences ariſing from the indulgence of this pernicious pleaſure have in all ages called loudly for reprehenſion, and demanded at laſt the ſerious interference of the legiſlature. The vice of gambling, however, is by no means peculiar to the people of England; its influence is univerſally diffuſed among mankind; and in moſt nations the ſame ſtrong meaſures that have been adopted here, are found neceſſary to prevent its extenſion beyond the limits of reaſon and propriety. Dice, and thoſe games of chance dependent upon them, have been moſt generally decried; and cards, in later times, are added to them as proper companions. Cards, when compared with dice, are indeed of modern invention, and originally, we doubt not, productive only of innocent amuſement: they were, however, ſoon converted into inſtruments of gambling equally dangerous as the dice themſelves, and more enticing from the variety of changements they admit of, and the pleaſing mixture of chance with ſkill, which often gives the learner an advantage over the more experienced player. Towards the cloſe of the twelfth century, we meet with a very curious edict relative to gaming, which ſhews how generally it prevailed even among the lower claſſes at that period. This edict was eſtabliſhed for the regulation of the Chriſtian army under the command of Richard I. of England, and Philip of France, during the cruſade: it prohibits any perſon in the army beneath the degree of a knight from playing at any ſort of game for money; knights and clergymen might play for money, but no one of them was permitted to loſe more than twenty ſhillings in one whole day and night, under the penalty of one hundred ſhillings, to be paid to the archbiſhops in the army; the two monarchs had the privilege of playing for what they pleaſed; but their attendants were reſtricted to the ſum of twenty ſhillings, and, if they exceeded, they were to be whipped naked through the army for three days. The decrees eſtabliſhed by the council held at Worceſter, in the twenty-fourth year of Henry III. prohibited the clergy from playing at dice, or at cheſs: but neither the one nor the other of theſe games are mentioned in the ſucceeding penal ſtatutes, before the twelfth year of Richard II. when diceing is particulariſed, and expreſsly forbidden; though perhaps they were both of them included under the general title of "games of chance, and diſhoneſt games," mentioned in the proclamation of Edward III.

In the eleventh year of Henry VII. cards are firſt mentioned among the games prohibited by law; and at that time they ſeem to have been very generally uſed; for, the edict expreſsly forbids the practice of card-playing to apprentices,

prentices, excepting the duration of the Chriſtmas holidays, and then only in their maſters houſes. We learn from Stow, that theſe holidays extended "from All-Hollows evening to the day after Candlemas-day, when, (ſays the hiſtorian,) there was, among other ſports, playing at cards for counters, nailes, and points, in every houſe, more for paſtime than for gain." The recreations prohibited by proclamation in the reign of Edward III. excluſive of the games of chance, are thus ſpecified: throwing of ſtones, wood, or iron, playing at hand-ball, foot-ball, club-ball, and *cambucam*, which is ſuppoſed to have been a ſpecies of goff, and probably received its name from the crooked bat with which it was played. Theſe games were not forbidden from any particular evil tendency in themſelves, but becauſe they engroſſed too much of the leiſure and attention of the populace, and diverted their minds from the purſuits of a more martial nature. We ſhould add, that "bull-baiting and cock-fighting" are included with "other diſhoneſt games, as trivial and uſeleſs." In the reign of Edward IV. we find quoits, cloſh or claiſh, kayles or nine-pins, half-bowl, hand-in and hand-out, with quick-borde, claſſed among the unlawful amuſements; which liſt was conſiderably augmented in the ſucceeding reigns, and eſpecially in the eighteenth year of Henry VIII. when bowling, loggating, playing at tennis, dice, cards and tables, or back-gammon, were included.

In modern times, the penal laws have been multiplied, and much invigorated, in order to reſtrain the licentious ſpirit of gambling; and in ſome meaſure they have had a ſalutary effect; but the evil is ſo faſcinating and ſo general, that in all probability it will never be totally eradicated from the minds of the people. The frequent repetition and enforcement of the ſtatutes in former times, proves that they were then, as they are now, inadequate to the ſuppreſſion of gaming for a long continuance; and, when one paſtime was prohibited, another was preſently invented to ſupply its place, and perhaps of an equally deſtructive tendency. The general decay of thoſe manly and ſpirited exerciſes, which formerly were practiſed in the vicinity of the metropolis, has not ariſen from any want of inclination in the people, but from the want of places proper for the purpoſe: ſuch as in times paſt had been allotted to them are now covered with buildings, or ſhut up by encloſures, ſo that, if it were not for ſkittles, dutch-pins, four-corners, and the like paſtimes, they would have no amuſements for the exerciſe of the body; and theſe amuſements are only to be met with in places belonging to common drinking-houſes, for which reaſon their play is ſeldom productive of much benefit, but more frequently becomes the prelude to idleneſs and debauchery. This evil has been increaſing for a long ſeries of years; and honeſt Stow laments the retrenchments of the grounds appropriated for martial paſtimes which had begun to take place in his day: "Why (ſays he) ſhould I ſpeak of the ancient exerciſes of the long bow, by the citizens of this city, now almoſt clean left off and forſaken? I over-paſs it; for, by the means of cloſeing in of common grounds, our archers, for want of room to ſhoot abroad, creep into bowling-alleys and ordinarie dicing-houſes near home, where they have room enough to hazard their money at unlawful games." He then exclaims, "Oh, what a wonderful change has taken place! our wreaſtling at armes is turned to wallowing in ladies' laps, our courage to cowardice, our running to royot, our bowes into bowls, and our darts into diſhes."

The evils complained of in former times, were then only in their infancy: they have in the preſent day attained to a gigantic ſtature; and we may add to them E. O. tables, alſo other tables for gambling, diſtinguiſhed by the appellation of *noir et rouge*; pharo-banks, and many more faſhionable novelties, are equally as detrimental to morality, and as deſtructive to the fortunes of thoſe who purſue them, as any of the games of former ages. Even horſe-racing, which anciently was conſidered as a liberal ſport, and proper for the amuſement of a gentleman, as well as to encourage that uſeful and noble breed of animals, has been of late years degraded into a dangerous ſpecies of gambling, by no means the leſs deſerving of cenſure, becauſe it is faſhionable, and countenanced by perſons of the higheſt rank and fortune.—See all theſe games and tables explained under their reſpective titles in this Encyclopædia.

The laws now in force for prohibiting unlawful games, and for puniſhing gamblers, are as follows: By ſtatute 33 Hen. VIII. c. 9. juſtices of peace, and head officers in corporations, are impowered to enter houſes ſuſpected of unlawful games; and to arreſt and impriſon the gameſters, till they give ſecurity not to play for the future: alſo the perſons keeping unlawful gaming-houſes, may be committed by a juſtice, until they find ſureties not to keep ſuch houſes; who ſhall forfeit forty ſhillings, and the gameſters ſix ſhillings and eight-pence a time: and if the king licenſe the keeping of gaming-houſes, it is againſt law, and void.—The ſame ſtatute alſo provides that, no artificer, apprentice, labourer, or ſervant, ſhall play at any tables, tennis, dice, cards, bowls, &c. out of Chriſtmas time, on pain of twenty ſhillings for every offence; and at Chriſtmas, they are to play in their maſter's houſe, or preſence: but any nobleman, or gentleman, having one hundred pounds per annum eſtate, may licenſe his ſervants or family to play within the precincts of his houſe, or garden, at cards, dice, tables, or other games, as well among themſelves, as others repairing thither. This act is to be proclaimed once a quarter, in every market-town, by the reſpective mayors, &c. and at every aſſizes and ſeſſions.—A perſon was convicted of keeping a cock-pit; and the court reſolved it to be an unlawful game, within the ſtatute 33 Hen. VIII. c. 9. and fined him forty ſhillings a day. *Keb.* 510. But if the gueſts in an inn or tavern, call for a pair of dice, or tables, and for their recreation play with them, or if any neighbours play at bowls, for their recreation, or the like, theſe are not within the ſtatute; if the houſe be not kept for gaming, nor the gaming be for lucre or gain. *Dalt. c.* 46.

By the ſtatute 16 Car. II. c. 7. if any perſon, of what degree ſoever, ſhall by fraud, deceit, or unlawful device, in playing at cards, dice, tables, bowls, cock-fighting, horſe-races, foot-races, or other games or paſtimes, or bearing a ſhare in the ſtakes, betting, &c. win any money or valuable thing, he ſhall forfeit treble the value, one moiety to the crown, and the other to the party grieved, proſecution being in *ſix months*; in default whereof, the laſt mentioned moiety is to go to ſuch other perſon as will proſecute within one year, &c. And by the ſaid ſtatute, if any perſon ſhall play at cards, &c. other than for ready money; or bet, and ſhall loſe above one hundred pounds at one time or meeting, upon tick (i. e. ticket), he ſhall not be bound to make it good, but the contract or tick and ſecurity ſhall be void, and the winner ſhall forfeit treble the value.

By the ſtatute 9 Ann. cap. 14. all notes, bills, bonds, judgments, mortgages, or other ſecurities, given for money won by playing at cards, dice, tables, tennis, bowls, or other games; or by betting on the ſides of ſuch as play at any of thoſe games, or for repayment of any money knowingly lent for ſuch gaming or betting, ſhall be void. And where lands are granted by ſuch mortgages or ſecurities, they ſhall go to the next perſon who ought to have the ſame, as if the grantor were actually dead, and the grants had been made to the perſon ſo intitled after the death of the perſon ſo incumbering the ſame. If any perſon playing at cards, dice, or other game, or betting, ſhall loſe the value of ten pounds at one time, to one or more perſons, and ſhall pay the money, he may recover the money loſt by action of debt, within *three months* afterwards; and if the loſer do not ſue, any other perſon may do it, and recover the ſame, and treble the value with coſts, one moiety to the proſecutor, and the other to the poor: and the perſon proſecuted ſhall anſwer upon oath,

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on preferring a bill to diſcover what ſums he hath won. —Perſons by fraud or ill practice, in playing at cards, dice, or by bearing a ſhare in the ſtakes, &c. or by betting, winning any ſum above ten pounds, ſhall forfeit five times the value of the thing won, and ſuffer ſuch infamy and corporal puniſhment, as in caſes of wilful perjury, being convicted thereof on indictment or information; and the penalty ſhall be recovered by action, by ſuch perſon as will ſue for the ſame. And if any one ſhall aſſault and beat, or challenge to fight, any other perſon, on account of money won by gaming, upon conviction thereof, he ſhall forfeit all his goods and ſuffer impriſonment for two years. Alſo by this ſtatute, any two or more juſtices of peace may cauſe ſuch perſons to be brought before them as they ſuſpect to have no viſible eſtates, &c. to maintain them; and if they do not make it appear that the principal part of their expences is got by other means than *gaming*, the juſtices ſhall require ſecurities for their good behaviour for twelve months; and in default of ſuch ſecurity, commit them to priſon until they find it: and playing or betting during the time, to the value of twenty ſhillings, ſhall be deemed a breach of good behaviour, and a forfeiture of their recognizances.

Where it ſhall be proved before any juſtice of peace, that any perſon hath uſed unlawful games contrary to ſtatute 33 Hen. VIII. c. 9. the juſtice may commit ſuch offender to priſon, till he enter into a recognizance that he ſhall not from thenceforth, at any time to come, play at any unlawful game. *Stat.* 2 *Geo.* II. *c.* 28.—For better preventing exceſſive and deceitful gaming; the ace of hearts, faro, faron, baſſet, or hazard, are declared to be lotteries by cards or dice; and perſons ſetting up theſe games are liable to the penalty of two hundred pounds. And every perſon who ſhall be an adventurer, or play or ſtake therein, forfeits fifty pounds. Likewiſe the ſale of any houſe, plate, &c. in the way of lottery by cards, &c. is adjudged void, and the things to be forfeited to any perſon that will ſue for the ſame. 12 *Geo.* II. *c.* 28.—The game of paſſage, and all other games with one or more dice, or any thing in that nature, having figures or numbers thereon, back-gammon and games now played with thoſe tables only excepted, ſhall be deemed games or lotteries by dice, within the ſtatute 12 Geo. II. c. 28: and ſuch as keep any office or table for the ſaid game, &c. or play thereat, are ſubject to the penalties in that act. *Stat.* 13 *Geo.* II. *c.* 19.—Playing at, or keeping any houſe or place for playing at, the game of roulet, otherwiſe roly-poly, or any other game with cards or dice already prohibited, incurs the penalties in ſtat. 12 Geo. II. cap. 28. Perſons loſing ten pounds, and paying the ſame, may ſue the winner, and recover the money with coſts: and on a bill in equity the court may decree the ſame to be paid. The perſons who have juriſdiction to determine informations on the ſtatutes againſt gaming, may ſummon witneſſes, who, on refuſing to appear and give evidence, ſhall forfeit fifty pounds. No privilege of parliament ſhall be allowed on proſecutions for keeping a gaming-houſe. Perſons loſing or winning ten pounds at one time, or twenty pounds in twenty-four hours, may be indicted and fined five times the value, to be paid to the poor. 18 *Geo.* II. *c.* 34.

By ſtatute 30 Geo. I. c. 24. If any perſon licenſed to ſell liquors ſhall knowingly ſuffer any *gaming* in their houſe or grounds, with cards, dice, draughts, ſhuffle boards, miſſiſſippi, or billiard-tables, ſkittles, or ninepins, by any journeymen, labourers, ſervants, or apprentices, he ſhall forfeit forty ſhillings for the firſt, and ten pounds for every ſubſequent offence; three-fourths to the poor, and one-fourth to the informer.—Any journeyman, &c. ſo gaming, ſhall forfeit from twenty ſhillings to five ſhillings.—No *certiorari* to be granted; but appeal given to the next ſeſſions; and perſons puniſhed by this act, not to be puniſhed by any other law. See the ſtatute 25 Geo. II. c. 36. againſt unlicenſed houſes for muſic, dancing, &c. the keeper of which, ſhall forfeit 100l.

From the above ſtatutes and the ſeveral determinations in the books, it may be obſerved, that at common law, the playing at cards, dice, &c. when practiſed innocently, and as a recreation, was not unlawful. 2 *Vent.* 175. But common *gaming-houſes* were always conſidered as nuiſances in the eye of the law. 1 *Hawk.* P. C. c. 75. and as the practice was found to encourage idleneſs and debauchery, the ſtat. 33 Hen. VIII. c. 9. was paſſed to reſtrain it among the inferior ſort of people. And on this ſtatute Noy had a writ to remove bowling-allies as common nuiſances. 3 *Keb.* 465. Gentlemen were however ſtill left free to purſue their pleaſure in this way, until the ſtatute 16 Car. II. c. 7. the preamble of which ſtates the inconveniences to be remedied as ariſing from the immoderate uſe of gaming. The proviſions of this ſtatute however were ſoon found to be inſufficient; and the ſtatute 9 Ann. c. 14. was made for the more effectually ſuppreſſing this pernicious vice. The ſubſequent ſtatutes, already enumerated above, ſuperadded further penalties to reſtrain this faſhionable crime: which may ſhew, ſays Blackſtone, that our laws againſt *gaming* are not ſo deficient, as our magiſtrates in putting thoſe laws in execution. 4 *Comm.* 173.

Betting on horſe-races is within the general words of the ſtatute 9 Ann. c. 14. 2 *Stra.* 1159: *Black. Rep.* 706. So is cricket. 1 *Wilſ.* part 1. p. 220. So is a foot-race: and a footman running againſt time is a foot-race: but to bring it within the ſtatute, it muſt appear that a perſon was engaged in ſuch game, and a wager was laid on his ſide. 2 *Wilſ.* 36.—But on a wager between two perſons on the lives of their two fathers, the winner has been allowed to maintain an action. *Burr.* 2802.—Where two perſons played at all-fours for two guineas a game, from Monday evening to Tueſday evening, without any interruption, except for an hour or two at dinner, the plaintiff loſt fourteen guineas, for which he brought his action on ſtatute 9 Ann. c. 14. and this was held to be one ſitting. —One time in the act means one ſtake or bet; and is diſtinguiſhed from one ſitting, which means a courſe of play where the company never parts, though the party may not be actually gaming the whole time. 2 *Black. Rep.* 1226.

On a conviction for gaming under ſtatute 9 Ann. c. 14. the judgment is only that the defendant is convicted: and the court cannot ſet a fine of five times the value, but a new action muſt be brought upon that judgment for the forfeiture. 2 *Stra.* 1048. But the ſtatutes againſt gaming have rendered it now leſs frequently neceſſary to reſort to courts of equity, which appear to have often interpoſed, prior to the ſtatute 16 Car. II. for the purpoſe of reſtraining the winner from proceeding at law againſt the loſer upon the ſecurity which he had obtained for the money won. See 14 *Vin. Ab.* 8. *pl.* 1. 3. *Chan. Rep.* 47.

It is obſervable that the ſtatute 16 Car. II. declares that the contract for money loſt at play, and all ſecurities given for it ſhall be utterly void; but the ſtatute 9 Ann. confines itſelf to the ſecurities for money won or lent at play. Upon which it has been determined, that though both the ſecurity and the contract are void as to money won at play, only the ſecurity is void as to money lent at play: and that the contract remains, and the lender may maintain his action for it. 2 *Burr.* 1077. 2 *Stra.* 1249.—The ſtatutes having declared the ſecurity void, a bill of exchange given for money won at play cannot be recovered upon, even by an indorſee for valuable conſideration, and without notice; the original vice of the conſideration affecting the ſecurity, even in the hands of an innocent and *bonâ fide* holder. 2 *Stra.* 1155. *Dougl.* 636. And it ſeems that if money be paid on ſuch ſecurity, it may be recovered back: for payment under a void ſecurity cannot be ſupported: nor does the limitation of three months, within which time the loſer of money actually paid at the time it is loſt muſt bring his action to recover it back, extend to payments on account of ſuch void ſecurities. *Ambl.* 269. —For further information relative to the laws for the puniſhment of *gaming*, ſee the articles LOTTERY, NUISANCE, and WAGER.

GAME, *ſ.* [*Aucupia*, Lat. from *auceps*, *aucupis*, i. e. *avium captio.*] Birds, or prey, got by fowling and hunting. From the commencement of time, the taking of *veniſon*, or *game*, formed one of the moſt favourite purſuits of man. In the early ſtate of things, this muſt naturally have been the caſe in every country upon the ſurface of the globe, becauſe it was one of the moſt obvious and ready means of procuring food. In all thoſe remote and uncultivated regions where the inhabitants yet remain in a ſtate of nature, we find this practice is ſtill in full force; and that every wild animal is conſidered as the abſolute property of the individual who can take it, let his ſituation in rank or life be what it may. We might even look up to the books of the ſacred ſcriptures,—to the command of Jacob to his ſon Eſau,—for this primeval right of individuals to take and ſeize *game* wherever they can find it at large, allowing game to conſiſt of, what it certainly does, both in the ancient and modern acceptation, all beaſts, *feræ naturæ*, "that are fit for food,"—for ſuch "*are given to man, and ſhall be food for him.*"—*Geneſis.*

Upon this principle of reaſoning, the early judicature of this country with reſpect to game, appears to have been founded. Tame animals, which fly not the dominion of man, but are domeſticated and reared in his fields or incloſures, are not *feræ naturæ*, but his own proper goods and chattels, which no man can take or drive away, without committing felony. Wild animals, on the contrary, which by flight or ſwiftneſs of foot, avoid the dominion of man, and lurk and hide in uncultivated waſtes and foreſts, are thoſe over which, by the common law of the land, no individual could claim an excluſive right, until he had firſt taken, ſeized, or reclaimed them, and had them in his poſſeſſion. For as property in a thing means the power which a man hath over it for his own uſe, and the ability he hath of applying it to the ſuſtentation of his exiſtence; ſo when that power ceaſeth, his property in it ceaſeth alſo; and hence if an animal of this kind, after ſeizure, eſcapes again into the wild common of nature, and aſſerts its freedom or liberty by its ſwiftneſs and ſubtilty, it remains no longer his, any more than a wild creature in the deſert; becauſe he has it not within his power, nor at his diſpoſal.

When Cæſar invaded Britain, he obſerved the hardy natives were fond of the chace, and found that *veniſon* conſtituted a great portion of their food. Yet he aſſerts, *Bel. Gal.* lib. 6, that "the Britons did not eat the fleſh of hares, notwithſtanding the iſland abounded with them." This, he adds, proceeded from a principle of religion, which, as among the Jews, prohibited the uſe of that animal as food. The Saxons and Danes, who afterwards ſubjugated the country, were alike prone to the purſuits of game, "*with ſharp-ſcented dogs and coſtly hawks*;" yet it no where appears that even the commoneſt among the people were then reſtrained from killing the game in wilds and foreſts, and converting it to their own uſe as food. It ſeems to have been reſerved for king Canute, about the year 1025, to be the firſt *general preſerver* of the game in England: he impoſed ſeveral reſtrictions, not only upon the common people, but upon the nobles likewiſe, forbidding them to hunt or kill the game, except upon their own eſtates; and he inflicted various fines and puniſhments, which, as they were novel and unprecedented, were deemed the more unjuſt and tyrannical. But it was to William ſurnamed the Conqueror, about the year 1070, upon the introduction of the feudal law, that we are to date the commencement of the moſt arbitrary reſtrictions and prohibitions reſpecting the game in this country. From that era the ſubject has been taken up, and moſt ably diſcuſſed, by ſir William Blackſtone, in his "Commentaries on the Laws of England;" and which for greater correctneſs and preciſion, we ſhall ſtate in the learned commentator's own words:

"In the Saxon times, though no man was allowed to kill or chaſe the *king's* deer, yet he might ſtart any game, purſue, and kill it, in the wilds, and on his own eſtate. But ſoon after the Norman conqueſt, a new doctrine took place; and the right of purſuing and taking all beaſts of chaſe or *venary*, and ſuch other animals as were accounted *game*, was then held to belong to the king, or to ſuch *only* as were authoriſed under him. And this, as well upon the principles of the feodal law, that the king is the ultimate proprietor of all the lands in the kingdom, they being all held of him as the chief lord, or *lord paramount of the fee*; and that therefore he has the right of the univerſal ſoil, to enter thereon, and to chaſe and take ſuch creatures at his pleaſure: as alſo upon another maxim of the common law, viz. that theſe animals are *bona vacantia*, and, having no other owner, belong to the king *by his prerogative*. As therefore the former reaſon was held to veſt in the king a *right* to purſue and take them any where; the latter was ſuppoſed to give the king, and ſuch as he ſhould authorize, a *ſole* and *excluſive* right.

"This right, thus newly veſted in the crown, was exerted with the utmoſt rigor, at and after the time of the Norman eſtabliſhment; not only in the ancient foreſts, but in the new ones which the conqueror made, by laying together vaſt tracts of country, depopulated for that purpoſe, and reſerved ſolely for the king's royal diverſion; in which were exerciſed the moſt horrid tyrannies and oppreſſions, under colour of *foreſt law*, for the ſake of preſerving the beaſts of chaſe; to kill any of which, within the limits of the foreſt, was as penal *as the death of a man.* And, in purſuance of the ſame principle, king John laid a total interdict upon the *winged* as well as the *fourfooted* creation: "*capturam avium per totam Angliam interdixit.*" The cruel and inſupportable hardſhips, which theſe foreſt laws created to the ſubject, occaſioned our anceſtors to be as zealous for their reformation, as for the relaxation of the feodal rigors, and the other exactions introduced by the Norman family; and accordingly we find the immunities of *Charta de Foreſta* as warmly contended for, and extorted from the king with as much difficulty, as thoſe of Magna Charta itſelf. By this charter, confirmed in parliament, many foreſts were diſafforeſted, or ſtripped of their oppreſſive privileges, and regulations were made in the regimen of ſuch as remained; particularly killing the king's deer was made no longer a capital offence, but only puniſhed by a fine, impriſonment, or abjuration of the realm. And by a variety of ſubſequent ſtatutes, together with a long acquieſcence of the crown without exerting the foreſt laws, this prerogative is now become no longer a grievance to the ſubject.—See the article FOREST, vol. vii. p. 565.

"As the king reſerved to himſelf the *foreſts* for his own excluſive diverſion, ſo he granted out from time to time other tracts of land to his ſubjects, under the names of *chaſes* or *parks*, or gave them licence to make ſuch in their own grounds; which indeed are ſmaller foreſts, in the hands of a ſubject, but not governed by the foreſt laws; and by the common law no perſon is at liberty to take or kill any beaſts of chaſe, but ſuch as hath an ancient chaſe or park; unleſs they be alſo beaſts of prey. As to all inferior ſpecies of game, called beaſts and fowls of warren, the liberty of taking or killing them is another franchiſe or royalty, derived likewiſe from the crown, and called *free warren*; a word, which ſignifies preſervation or cuſtody: as the excluſive liberty of taking and killing fiſh in a public ſtream or river is called a *free fiſhery*; of which however no new franchiſe can at preſent be granted, by the expreſs proviſion of Magna Charta, c. 16. See the article FISHERY, vol. vii. p. 406. The principal intention of granting to any one theſe franchiſes or liberties, was in order to protect the game, by giving the grantee a ſole and excluſive power of killing it himſelf, provided he prevented other perſons. And no man, but he who has a chaſe or free warren, by grant from the crown, or preſcription which ſuppoſes one, can juſtify hunting or ſporting upon another

other man's ſoil; nor indeed, in thorough ſtrictneſs of common law, *either hunting or ſporting at all.*

"However novel this doctrine may ſeem to ſuch as call themſelves *qualified* ſportſmen, it is a regular conſequence from what has been before delivered; that the ſole right of taking and deſtroying game belongs exclusively to the king. This appears, as well from the hiſtorical deduction here made, as becauſe he may grant to his ſubjects an excluſive right of taking them; which he could not do, unleſs ſuch a right was firſt inherent in himſelf. And hence it will follow, that no perſon whatever, but he who has ſuch derivative right from the crown, is by common law entitled to take or kill any beaſts of chaſe, or other game whatſoever. It is true, that, by the acquieſcence of the crown, the frequent grants of free warren in ancient times, and the introduction of new penalties of late by certain ſtatutes for preſerving the game, this excluſive prerogative of the king is little known or conſidered; every man, that is *exempted* from theſe modern penalties, looking upon himſelf as at liberty to do what he pleaſes with the game: whereas the contrary is ſtrictly true, that no man, however *well qualified* he may vulgarly be eſteemed, has a right to encroach on the royal prerogative by the killing of game, unleſs he can ſhew a particular grant of free warren; or a preſcription, which preſumes a grant; or ſome authority under an act of parliament. As for the latter, (ſays ſir William Blackſtone,) I recollect but two inſtances wherein an expreſs permiſſion to kill game was ever given by ſtatute; the one by 1 Jac. I. cap. 27. altered by 7 Jac. I. cap. 11. and virtually repealed by 22 & 23 Car. II. c. 25. which gave authority, ſo long as they remained in force, to the owners of free warren, to lords of manors, and to all freeholders having 40l. per annum in lands of inheritance, or 80l. for life or lives, or 400l. perſonal eſtate, (and their ſervants,) to take partridges and pheaſants upon their own, or their maſter's, free warren, inheritance, or freehold: the other by 5 Ann. c. 14. which empowers lords and ladies of manors to appoint gamekeepers to kill game for the uſe of ſuch lord or lady; which with ſome alteration ſtill ſubſiſts, and plainly ſuppoſes ſuch power not to have been in them before. The truth of the matter is, that theſe game laws do indeed *qualify* nobody, except in the inſtance of a gamekeeper, to kill game: but only, to ſave the trouble and formal proceſs of an action by the perſon injured, who perhaps too might remit the offence, theſe ſtatutes inflict *additional* penalties, to be recovered either in a regular or ſummary way, by any of the king's ſubjects, from certain perſons of inferior rank who may be found offending in this particular. But it does not follow that perſons, excuſed from theſe additional penalties, are therefore *authoriſed* to kill game. The circumſtance of having 100l. per annum, and the reſt, are not properly *qualifications*, but *exemptions*. And theſe perſons, ſo exempted from the penalties of the game ſtatutes, are not only liable to actions of treſpaſs by the owners of the land; but alſo, if they kill game within the limits of any royal franchiſe, they are liable to the actions of ſuch who may have the right of chaſe or free warren therein.

"Upon the whole it appears, that the king, by his prerogative, and ſuch perſons as have, under his authority, the royal franchiſes of chaſe, park, free warren, or free fiſhery, are the *only* perſons who may acquire any property, however fugitive and tranſitory, in theſe animals *feræ naturæ*, while living; which is ſaid to be veſted in them, *propter privilegium*. And it muſt alſo be remembered, that ſuch perſons as may thus lawfully hunt, fiſh, or fowl, *ratione privilegii*, have only a qualified property in theſe animals: it not being abſolute or permanent, but laſting only ſo long as the creatures remain within the limits of ſuch reſpective franchiſe or liberty, and ceaſing the inſtant they voluntarily paſs out of it."

Thus far we have ſtated the authority of ſir William Blackſtone. But E. Chriſtian, eſq. profeſſor of the laws of England in the univerſity of Cambridge, in his "Notes on the Commentaries," has with great judgment and candour pointed out the inſufficiency of ſeveral parts of that authority. He obſerves, that "the learned judge has frequently, and even zealouſly, inculcated the poſition, that the common law has *veſted the ſole property of all the game in England in the king alone*; and of conſequence that no man, let his rank and fortune be what they may, is qualified to kill game, or is exempt from the *original* penalties, unleſs he poſſeſſes ſome peculiar privilege *derived from the king*. This doctrine, enforced by ſo celebrated an author, apparently the reſult of mature deliberation, and which has been ſo long acquieſced in, he (Mr. Chriſtian) would have queſtioned with diffidence, if he had not been fully perſuaded that it was unſupported by any prior authority, and that the authorities to the contrary were numerous and irreſiſtible.

"The learned judge himſelf admits, that this is a *novel* doctrine to ſuch as call themſelves *qualified* ſportſmen; yet he has referred to no preceding authority whatever in any part of the Commentaries; but in p. 415. vol. ii. he has deduced this doctrine from two general principles, viz. *that the king is the ultimate proprietor of* ALL *the lands in the kingdom, and therefore he has the right of the univerſal ſoil to enter thereon, and to chaſe and take ſuch creatures at his pleaſure.* From the king's right to the univerſal ſoil, it is not evident why he ſhould have a better right to take ſuch creatures, than to take any other production of that ſoil. And even, if the king's majeſty ſhould have a right to enter all the lands of the kingdom in purſuit of game, this affords no inference that the land-owner may not enjoy this right concurrently with the king. But although no complaint can perhaps be made againſt the king for entering the lands of his ſubjects, it has been determined that this power cannot be given to his foreſters and ſervants.

"The other general principle relied upon by the learned commentator is, *another maxim of the common law, which he ſays he has frequently cited and illuſtrated, that theſe animals are* bona vacantia, *and having no other owner, belong to the king by his prerogative.* It has been determined, that fiſh, if not confined as in a trunk, cannot be called *bona et catalla*; and ſo game, till it is taken, is every where ſaid to be *nullius in bonis*. But I am inclined to think that the very reverſe of the maxim is true, and that *bona vacantia* belong to the *firſt* occupant or finder, except in thoſe inſtances particularly ſpecified by the law, and in which they are expreſsly given to the king. A perſon might have acquired by occupancy, even in the laſt century, an eſtate in real property. If a pearl ſhould be found in an oyſter, no lawyer would ſay, that it was the property of the king. If all wild animals had belonged to the crown, it would have been ſuperfluous to have ſpecified whales, ſturgeons, and ſwans. Lord Coke tells us, that "a "ſwan is a royal fowl; and all thoſe the property "whereof *is not known*, do belong to the king by his pre-"rogative: and ſo whales and ſturgeons are royal fiſh, "and belong to the king by his prerogative." Caſe of ſwans, 7 *Co.* 16. And the king may grant wild ſwans unmarked, *ib.* 18. But theſe are the only animals which our law has conferred this honour upon.

"It is true that our kings, prior to the *carta de foreſta*, claimed and exerciſed the prerogative of making foreſts wherever they pleaſed over the grounds of their ſubjects: within the limits of theſe foreſts certain wild animals were preſerved, by ſevere laws, for the recreation of the ſovereign. A diſtrict thus bounded at the king's pleaſure, might have been granted by the king to any of his ſubjects, who enjoyed the excluſive privilege either of a foreſt, chaſe, park, or free warren, according to the extent of the juriſdiction and powers conferred by the royal grant; but beyond the boundaries of theſe privileged places neither the king, nor any of his grantees, claimed a property in the game: for, according to the

law

law of king Canute, *quilibet homo dignus venatione sua in sylva, et in agris sibi propriis, et in dominio suo*; which law Manwood declares was confirmed by many succeeding kings. *Tit. For. pl.* 3. If this were so, it cannot be correct what the learned commentator has advanced, that *upon the Norman conquest a new doctrine took place.* By the *carta de foresta* all the new-made forests were disafforested and thrown open again; but besides the creation of new forests by the Norman kings, they had also made great additions and encroachments to the ancient Saxon forests; these encroachments were called *purlieus*, and as these were the same grievance to the owners of the land as the new forests, they also were disafforested, but with this distinction, that as the grievance extended only to the landowner, he was allowed to enjoy his lands in as full a manner as he had done before the encroachment; but they still continued with respect to the rest of the world under the forest law jurisdiction. Hence it followed as a consequence, that the owner of a purlieu might hunt and kill game within the limits of the purlieu, as any other man might have done in his own grounds: and the authorities of lord Coke and Manwood concur, if deer come out of the forest into the purlieu, the purlieu-man may hunt and kill them, provided he does it fairly and without *forestalling*. And this distinction is made; if a stag can recover the *filum forestæ*, the border of the forest, before the purlieu-man's dogs fasten upon him, he then belongs to the king, or to the owner of the forest, and the purlieu-man must call his dogs back; but if they fasten upon him before he gains the forest, and he drags them into it, he belongs to the owner of the purlieu, who may enter the forest and carry him away. 4 *Inst.* 303. *Manw. Purlieu.* This alone is decisive; but there are various authorities to the same effect. In the Year-book, 12 Hen. VIII. fo. 10. it is held, if a man drive a stag out of a forest and kill him, he shall gain no property in him, because he shall derive no advantage from his own wrongful act; yet if the stag comes of himself beyond the limits of the forest, then any one (if qualified) may kill and take him, for they are animals *feræ naturæ, et nullius in bonis*; and the maxim is *capiat qui capere potest*, i. e. catch that catch can.

"That the king has no property in deer or other game, when they are out of a forest, was determined also in a case reported by Keilway, 30, and copied by Manwood, 202. In that case an action of trespass was brought for entering the plaintiff's close; the defendant pleaded, that the place in which the trespass was supposed to be committed was adjoining to the king's forest, and that the plaintiff was bound to impale the said forest, and that for want of paling four deer escaped out of the forest into the plaintiff's land, and that he the defendant entered by the command of the forester to drive them back to the forest. The court held that this plea was not good; "for though the plaintiff was in fault for not paling, yet "it was not lawful for the forester, or any person, to "drive the deer out of the ground, or to take them; "and the reason was, *because the king had no property in them*; "and this was different from the case of *tame* cattle, "where the property still remains in the owner though "they are out of his ground, for which reason he may "retake them wherever he finds them; but it is not so "when the beasts are wild."

"The learned judge frequently intimates that no person is exempt from the *original* penalties; but I am inclined to think that no authority whatever can be found that any penalties were ever inflicted for killing game *out of* privileged grounds, except those which have been introduced by modern game laws, or the qualification acts. Lord Coke reports that the court held in the case of monopolies, 11 *Co.* 87, that "it is true that none can "make a park, chase, or warren, without the king's "licence, for that is *quodam modo* to appropriate those "creatures, which are *feræ naturæ et nullius in bonis*, to "himself, and to restrain them of their natural liberty, "which he cannot do without the king's licence; but "for hunting, hawking, &c. which are matters of pas- "time, pleasure, and recreation, there needs no licence, "but every one may in his own land use them at his "pleasure, *without any restraint to be made unless by parliament*, "as appears by the statutes of 11 Hen. VII. c. 17. 23 "Eliz. c. 10. and 3 Jac. I. c. 13." These authorities are also recognized and confirmed in *Bro. Abr. tit. Propertie*, and in Hales's Commentary to *F. N. B.* 197. And the following may serve as a specimen of the authorities collected by Brooke: *quant beasties savages le roye aler hors del forrest, le property est hors del roy*; and again, *filz sount hors del parke capient conceditur.*

"In a great case which was brought in 1791 from the courts of Scotland before the house of lords, the question was, whether by the law of Scotland the proprietor of an estate has a right to monopolize the game upon that estate, for the use of himself and particular friends, authorized by his licence, and to exclude all gentlemen, legally qualified, from following that amusement over his waste and other grounds, not specially protected by any particular statute? The printed cases of the appellant and respondent contain much curious learning upon the Scotch game-laws: but no idea was suggested that the game in Scotland belonged to the king. For the appellant, who insisted that he had a right to enter as a sportsman upon the respondent's estate, the authority of president Balfour in his Practics, was chiefly relied upon; *viz.* "it is leisome and permitted to all men to "chase hares, foxes, and all other beistis, beand with- "out forestis, warrenis, parkis, or wardis." But the judgment of the lords being for the respondent, this permission of course must be confined to a man's own estate. *Livingstone, appellant*, v. *Lord Breadalbane, respondent.*"

To these remarks we might add, that the learned commentator appears to have overlooked entirely the rights of allodial estates in England, and to have confined his observations chiefly to the feodal tenure established by the conqueror, and to *the right of the king as lord paramount of the fee.* But over allodial property, and the ancient ecclesiastical tenures, *where there is no fee*, this claim could not exist; and therefore, upon those lands, no superior lord, or owner of free warren, or purlieu, have claimed to exercise the right of pursuing or killing the game; nor can it be done without incurring the penalties of the law in an action of trespass. Allodial estates are those pure freeholds, which during the feodal government, were holden by the possessors, without being subjected to military service, fine, or fee; and, according to Dr. Stuart, in his "View of Society," 4to. edit. p. 211, "allodial proprietors, to avoid military service or fee, devised the fraud of assigning their lands to the church, and of holding them under its exemptions and immunities. Those who held possessions purely allodial, could only be called out in foreign wars; and as they held of no superior, or lord of a manor, so they had no part in the feodal associations, were subject to no homage, nor liable to any suit or service at the manerial courts." Over such land, therefore, no person can claim to pursue the game, but by licence of the owner.

Of what constitutes GAME in ENGLAND.

The animals which constitute *game*, in England, or such at least as are under the protection of the *game-laws*, are as follow: viz. the four-footed, include red or fallow deer, hares, and conies: the winged are, swans, partridges, pheasants, pigeons, wild-ducks, wild-geese, and other water-fowl, grouse (commonly called *red-game*), moor-birds or heath-fowl (commonly called *black game*), bustards, and herons. Fish, in ponds, and in private or manerial fisheries, are also protected by the game-laws, as hath been already noticed under the article

FISHERY, vol. vii. p. 419, to which we beg to refer the reader.

OF DEER.

For the general preſervation of the deer in parks, foreſts, and chaſes, ſeveral ancient ſtatutes were put in force, ſuch as ſtat. 3 Edward I. c. 20, by which thoſe treſpaſſers who had been convicted, and could not find ſurety, were compelled to abjure the realm. Alſo, 21 Ed. I. ſt. 2, intitled *De male factoribus in parcis*; by which it was made juſtifiable homicide to kill deer-ſtealers who ſhould defend themſelves by force of arms, or flee their purſuers to avoid the law. Alſo, 1 Hen. VII. c. 7, by which it was made felony in any perſon *wilfully to conceal* the hunting or killing of deer in the royal foreſts and parks. This was followed by ſtat. 1 J. c. 27. which made it penal in thoſe who ſhould *buy* or *ſell* any veniſon or deer. And by 5 G. c. 28, thoſe who ſhould be convicted of killing or wounding any red or fallow deer, were ſubjected to tranſportation for ſeven years.

By the 16 Geo. III. c. 30, (which repeals in whole or in part, the preceding ſtatutes,) and by the 42 Geo. III. c. 107, (which repeals the 1ſt act of the 16 Geo. III.) the law now in force for the preſervation of deer, is as follows:—If any perſon ſhall courſe or hunt, or ſhall take in any ſlip, nooſe, toyle, or ſnare, or ſhall kill, wound, or deſtroy, or ſhall ſhoot at, or otherwiſe attempt to kill, wound, or deſtroy, or ſhall carry away, any red or fallow deer, in the *incloſed* part of any foreſt, chaſe, purlieu, or ancient walk, or in any incloſed park, paddock, wood, or other incloſed ground, where deer are, have been, or ſhall be, uſually kept; without the conſent of the owner, or without being otherwiſe duly authoriſed; or ſhall be aiding, abetting, or aſſiſting therein or thereunto: every perſon ſo offending ſhall be guilty of felony, and adjudged to be tranſported for ſeven years. 42 *Geo.* III. *c.* 107. And every perſon who ſhall commit any of the ſaid offences in the *uninclofed* part of any ſuch foreſt or other ground, or ſhall be abetting therein as aforeſaid, ſhall for every ſuch offence forfeit 5ol. And if the offender ſhall be a keeper of or intruſted with the cuſtody or care of ſuch deer, he ſhall forfeit double.

It ſhall be lawful for one juſtice, on complaint to him made on oath by any credible perſon, that there is reaſon to ſuſpect any perſon of having in his cuſtody or poſſeſſion, or in any dwelling-houſe, out-houſe, yard, garden, or place, any red or fallow-deer which ſhall have been unlawfully killed, or the head, ſkin, or other part thereof, or any ſlip, nooſe, toyle, ſnare, or other engine, for the unlawfully taking of deer, by his warrant to cauſe ſuch perſon, and ſuch dwelling-houſe, out-houſe, garden, or place, to be ſearched; and if any ſuch ſhall be found, to cauſe the ſame, and ſuch perſon ſo having poſſeſſion, or in whoſe dwelling-houſe, out-houſe, garden, or other place, the ſame ſhall be found, to be brought before any juſtice having juriſdiction: and if ſuch perſon ſhall not produce before ſuch juſtice the party of whom he received the ſame, or ſatisfy ſuch juſtice that he came lawfully by ſuch deer, or the head, ſkin, or other part thereof, or had a lawful occaſion for ſuch ſlip, nooſe, toyle, ſnare, or other engine, or did not keep the ſame for any unlawful purpoſe; he ſhall forfeit not exceeding 3ol. nor leſs than 10l. at the diſcretion of ſuch juſtice. 16 *Geo.* III. *c.* 30.

And if any red or fallow deer ſuſpected to have been unlawfully killed, or the head, ſkin, or other part of ſuch deer, ſhall, on ſearch under a warrant from a juſtice, be found in the poſſeſſion or cuſtody of any perſon, or in any dwelling-houſe, out-houſe, garden, or other place, or ſhall be proved to have been in the poſſeſſion, houſe, out-houſe, garden, or place, of any perſon who may be juſtly ſuſpected to have come diſhoneſtly or unlawfully by the ſame as aforeſaid; and ſuch perſon ſo in poſſeſſion, or the owner or occupier of ſuch dwelling-houſe, out-houſe, garden, or other place, ſhall not, under the proviſions aforeſaid, be liable to conviction; in ſuch caſe, for the diſcovery of the party who actually killed or ſtole ſuch deer, it ſhall be lawful for any juſtice having juriſdiction, as the evidence given and the circumſtance of the caſe ſhall require, to ſummon before him every perſon through whoſe hands ſuch deer, or the head, ſkin, or other part thereof, ſhall appear to have paſſed; and if the perſon from whom ſuch deer, or the head, ſkin, or other part thereof ſhall appear to have been firſt received, or who having had poſſeſſion thereof, ſhall not give proof to the ſatisfaction of ſuch juſtice, that he came lawfully by the ſame, ſuch perſon ſhall, on every conviction, forfeit not exceeding 3ol. nor leſs than 10l.

And if it ſhall appear on the oath of one witneſs, that any perſon hath, or hath had, in his poſſeſſion, houſe, out-houſe, garden, or place, any red or fallow deer, or the ſkin, head, or other part thereof, and ſhall be reaſonably ſuſpected to have come diſhoneſtly or unlawfully thereby; every ſuch perſon, and all others through whoſe hands the ſame ſhall appear to have paſſed under the like ſuſpicion, may be proceeded againſt in like manner and form, and on conviction ſhall be ſubject and liable to the ſame penalty, as if ſuch deer, or the head, ſkin, or other part thereof, had been found in the poſſeſſion, houſe, out-houſe, garden, or place, of ſuch perſon, on ſearch made by warrant as aforeſaid.

If any perſon ſhall ſet, lay, or uſe, any net, wire, ſlip, nooſe, toyle, or other engine, for the purpoſe of taking or killing deer, within or upon any foreſt, chaſe, purlieu, or ancient walk, or in the ring or outer fence or bank dividing the ſame from the adjoining lands; or in any incloſed park, paddock, wood, or ground, where deer are, have been, or ſhall be, uſually kept, and ſhall be convicted of any ſuch offence; he ſhall forfeit for the firſt offence not exceeding 10l. nor leſs than 5l. and for every other offence any ſum not exceeding 20l. nor leſs than 10l.

If any perſon, carrying any gun or other fire arms, or any ſword, ſtaff, or other offenſive weapon, ſhall come into any foreſt, chaſe, purlieu, or ancient walk, or into any incloſed park, paddock, wood, or into any other ground where deer are uſually kept, be the ſame incloſed or not incloſed, with an intent unlawfully to ſhoot at, courſe, or hunt, or to take in any ſlip, nooſe, toyle, ſnare, or other engine, or to kill, wound, deſtroy, or to take away, any red or fallow deer; it ſhall be lawful for the ranger or keeper or perſon intruſted with the care of ſuch deer, to ſeize and take from ſuch perſon, in and upon ſuch foreſt, chaſe, purlieu, ancient walk, park, paddock, wood, or other ground, for the uſe of the owner thereof reſpectively, all ſuch guns, fire arms, ſlips, nooſes, toyles, ſnares, or other engines, and all dogs there brought for courſing deer, in like manner as the gamekeepers of manors are impowered by law within their reſpective manors, to ſeize and take dogs, nets, or other engines, in the cuſtody of perſons not qualified by law to keep the ſame. And if any ſuch perſon ſhall there unlawfully beat or wound any ranger or keeper, or his ſervants or aſſiſtants, in the execution of their office, or ſhall attempt to reſcue any perſon in the lawful cuſtody of any ſuch ranger, keeper, ſervant, or aſſiſtant; he ſhall be guilty of felony, and being convicted on indictment, ſhall be tranſported to one of his majeſty's plantations in America for ſeven years.

And it ſhall be lawful for any keeper or under-keeper, and their ſervants or aſſiſtants, to ſeize and apprehend upon the ſpot any perſon whom they ſhall diſcover in the actual fact of hunting, courſing, killing, wounding, ſhooting at, taking, deſtroying, or carrying away, any red or fallow deer, from any foreſt, chaſe, purlieu, or ancient walk, whether incloſed or not, or in any incloſed park, paddock, wood, or in any other incloſed ground, or attempting ſo to do; or in ſetting or laying any net, wire, ſlip, nooſe, toyle, ſnare, or other engine therein,

for the taking, killing, or deſtroying, of deer; and to carry ſuch offender before ſome neighbouring juſtice, to be dealt with according to law.

The pecuniary penalties on this act may be recovered before one juſtice, on the oath of one witneſs or confeſſion; half to the king, to be paid for his uſe into the hands of ſuch perſon as the juſtice ſhall direct, and half to the informer. And in caſe of non-payment thereof, with the charges incident to the conviction, immediately upon the conviction, the ſame ſhall be levied by warrant of ſuch juſtice by diſtreſs; and for want of ſufficient diſtreſs, the offender, except in ſuch caſes where it is otherwiſe provided by this act, ſhall be committed to the common gaol for ſix months, 42 Geo. III. c. 107. unleſs the ſaid penalty and charges ſhall be ſooner paid. And if upon conviction he doth not immediately pay the penalty, the juſtice may order him into cuſtody during ſuch time, not exceeding three days, as ſuch juſtice ſhall think proper to allow for return of the warrant of diſtreſs.

Provided, that if it ſhall appear to the ſatisfaction of ſuch juſtice, either by confeſſion of the party or otherwiſe, that he hath not goods or chattels ſufficient whereon to levy the penalty; the juſtice may, without iſſuing any warrant of diſtreſs, commit the party convicted, as if a warrant of diſtreſs had been iſſued, and a *nulla bona* returned thereon.

Provided alſo, that if any perſon committed for any firſt offence againſt this act ſhall, before his commitment to priſon, procure ſecurity to be given by two ſufficient ſureties, to the ſatisfaction of ſuch juſtice, for payment of the penalty with the charges incident, within ſix days, incluſive of the day of conviction; the juſtice may accept of ſuch ſecurity, and on non-payment thereof at the time, may cauſe the party and his ſaid ſureties to be apprehended by warrant, and commit them to the common gaol, for ſuch time as the party convicted was liable to have been impriſoned if no ſuch ſecurity had been given, unleſs the penalty [*or*] charges ſhall be ſooner paid.

Finally; if an offender for his firſt offence be committed for want of ſufficient diſtreſs, and ſhall, whilſt in gaol, obtain the conſent in writing of the proſecutor, and alſo of the owner, ranger, foreſter, keeper, or other perſon chiefly intruſted with the care of the deer in the foreſt or other place, for his enlargement; the juſtices in ſeſſions may cauſe him to be brought before them, and by their order may direct the gaoler to ſet him at liberty. If any offender ſhall make diſcovery of any other offender, ſo as he be convicted; he ſhall be diſcharged of all the penalties of this act by him incurred previous to ſuch diſcovery.

No certiorari ſhall be allowed to remove any conviction or other proceedings on this act, unleſs the party convicted ſhall before the allowance of ſuch certiorari, become bound to the proſecutor in 100l. with ſufficient ſureties as the juſtice before whom the offender was convicted [*ſhall approve of*], with condition to pay to the proſecutor within thirty days after ſuch conviction confirmed, [*on*] a procedendo granted, his full coſts and damages to be aſcertained upon his oath;—and ſhall alſo become bound to the juſtice before whom the conviction was made, with ſuch ſufficient ſureties as the juſtice ſhall approve of, in the penalty of 60l. with condition to proſecute ſuch writ of certiorari with effect, and to pay the juſtice the forfeiture to be diſtributed as by this act is directed, or to render to the juſtice ſuch perſon convicted, within thirty days after the conviction ſhall be confirmed, or a procedendo granted: and in default thereof, it ſhall be lawful to proceed to levy the penalty, as if no certiorari had been awarded. And after confirmation of the conviction by any of the ſuperior courts at Weſtminſter, and delivering to the juſtice the rule whereby the conviction hath been confirmed, he may proceed againſt the party in the ſame manner as if a procedendo had been granted.

But by a ſubſequent clauſe in the ſaid act, it is enacted, that no conviction ſhall be removed or removeable by certiorari, or any other writ or proceſs whatſoever, into any of his majeſty's courts of record at Weſtminſter; any law or ſtatute to the contrary notwithſtanding.

[How far theſe ſeemingly contradictory clauſes are reconcileable, or whether either, or which of them is in force, may afford matter of ſerious conſideration. Indeed, there ſeems to be a fatality attending theſe game laws; ſeveral of the moſt conſiderable of them not having been digeſted with that care and preciſion which may be deemed requiſite, eſpecially in caſes penal. And in the preſent caſe, the rolls have been conſulted; and every one of the miſtakes or omiſſions here ſpecified and placed between [ ], are to be found in the original roll; otherwiſe ſome of them might have been ſuppoſed to be only errors of the preſs.]

If any perſon ſhall think himſelf aggrieved by the determination of the juſtice, and ſhall not have ſought his remedy by removing the matter by certiorari as aforeſaid, he may appeal to the general quarter ſeſſions next after the expiration of twenty days from the time of the conviction; giving to the proſecutor ſix days' notice in writing, of his intention of bringing and proſecuting ſuch appeal, and of the matter thereof; and entering into recognizance before a juſtice, with two ſufficient ſureties to be approved by the ſaid juſtice on [*conviction,*] to appear and try the appeal at ſuch ſeſſions, and to abide by the order or determination of ſuch court, and for payment of ſuch coſts and charges as ſhall be awarded at the ſaid court. And if the conviction ſhall be there affirmed, the appellant ſhall pay to the proſecutor his full coſts, to be aſcertained by order of the ſaid court.

In the caſe of the K. *v.* Chandler, *T.* 12 Will. *Holt*, Ch. J. in delivering the opinion of the court, upon a conviction for deer ſtealing, ſaid, that in theſe convictions by juſtices of the peace in a ſummary way, where the ancient courſe of proceeding by indictment and trial by jury is diſpenſed with, the court may more eaſily diſpenſe with forms; and it is ſufficient for the juſtices, in the deſcription of the offence, to purſue the words of the ſtatute, and they are not confined to the legal forms requiſite in indictments for offences by the common law. 1 *L. Raym.* 581.

In the caſe of the K. *v.* Eaton, it was determined, that a certiorari to remove a conviction by a juſtice on the above act, a return that "the record is returned to the ſeſſions, and that a copy is annexed to the writ," is ſufficient. *D. & E.* 2 *V.* 285.

Provided, that if any perſon, thinking himſelf aggrieved as aforeſaid, ſhall have paid the penalty, or ſhall be then impriſoned; he may appeal againſt ſuch conviction as aforeſaid on entering into recognizance by himſelf only, without ſurety, conditioned as before-mentioned; the ſaid penalty remaining in the hands of ſuch juſtice, or ſuch perſon continuing in priſon in the mean time, and until the merits of the appeal ſhall be determined. 16 *Geo.* III. *f.* 30.

Provided alſo, that no conviction ſhall be ſet aſide by the ſaid ſeſſions for want of form, or for want of ſtating, or through the mis-ſtating, of any facts, circumſtances, or matter whatſoever, in caſe the facts alleged in the conviction, or on which the ſame ſhall be grounded, ſhall be proved to the ſatisfaction of the court; but the appeal ſhall be decided on the merits of the caſe only. *f.* 23.—Proſecutions on this act ſhall be commenced within *twelve calendar months* from the time of the offence committed, and not afterwards. *f.* 25.—Though the ſtatute mentions only red or fallow deer, yet the croſs breeds, ſuch as what is called a baſtard menald, bred from a menald buck and a fallow doe, are within the act, 2 *Eaſt's P. C.* c. 16.

The

The provisions of the 16 Geo. III. c. 30, respecting the seizing and conviction of offenders, and the recovery and application of penalties, and the appeal, &c. are extended to the 42 Geo. III. c. 107, by *s.* 3.—And if any person who hath been duly convicted of any offence for which a pecuniary penalty is imposed either by the 16 Geo. III. or by this act, shall offend a second time by committing any offence against this act for which a pecuniary forfeiture is imposed, such second offence, whether it be the same offence as the first, or be any other of the said offences, be deemed a felon [a felony], and the person guilty thereof shall be transported for seven years. And for the more ready conviction of persons for a second offence, the justice before whom he shall be convicted for the first offence, (if any offence against this act for which a pecuniary penalty is imposed,) shall transmit the conviction to the next sessions, to be there filed amongst the records; and such conviction so filed, or a true copy thereof certified and subscribed by the clerk of the peace, shall be sufficient evidence to prove the conviction of such first offence.

By the 9 Geo. I. c. 22, (commonly called the Black act,) if any person or persons, being armed with swords, fire arms, or other offensive weapons, and having his or their faces blacked, or being otherwise disguised, shall appear in any forest, chase, park, paddock, or grounds inclosed with any wall, pale, or other fence, wherein any deer have been or shall be usually kept, or shall unlawfully and wilfully hunt, wound, kill, destroy, or steal, any red or fallow deer: or if any person or persons (whether armed and disguised or not) shall unlawfully and wilfully hunt, wound, kill, destroy, or steal, any red or fallow deer, fed or kept in any places in any of the king's forests or chases which are or shall be inclosed with pales, rails, or other fences; or in any park, paddock, or grounds inclosed, where deer have been or shall be usually kept; or shall forcibly rescue any person, being lawfully in custody of any officer or other person, for any of the said offences; or shall by gift or promise of money, or other reward, procure any to join him or them in any such unlawful act: every person so offending, being thereof lawfully convicted, (in any county in England,) shall be guilty of felony without benefit of clergy; but not to work corruption of blood, nor forfeiture of lands or goods.—See the article BLACK ACT, vol. iii. p. 76.

By the 28 Geo. II. c. 19.—Whereas the burning and destroying of gofs, furze, and fern, in forests and chases, doth destroy the cover necessary for the preservation of the deer and game there; therefore if any person not having a right or legal licence to do the same, shall set fire to, burn, or destroy, (or be aiding therein,) any gofs, furze, or fern, in any forest or chase, without the consent of the owner or person chiefly intrusted with the custody of such forest or chase, or of some part thereof, and being brought before a justice shall be thereof convicted by confession, or oath of one witness, or on view of the justice, he shall forfeit not exceeding 5l. nor less than 40s. half to the informer, and half to the poor; if not forthwith paid, to be levied by distress; and if no sufficient distress can be found, the justice shall commit him to the common gaol, for any time not exceeding three months, nor less than one month. See the article CERVUS, vol. iv. p. 51, &c.

OF HARES.

No person, of what estate, degree, or condition, he be, shall trace, destroy, and kill, any hare *in the snow*, with any dog, birch, bow, nor otherwise. And the sessions or leet may inquire thereof; and after inquisition found, they shall for every hare so killed, cess upon every offender 6s. 8d. to be forfeited to the king, if in the sessions; and to the lord of the leet, if in the leet. 14 & 15 *Hen.* VIII. c. 10.

And by the 1 Jac. c. 27.—Every person who shall trace or course any hares in the snow, shall on conviction before two justices, by confession, or oath of two witnesses, be committed to gaol for three months, unless he pay to the churchwardens for the use of the poor, 20s. for every hare; or after one month after his commitment become bound by recognizance with two sureties in 20l. a-piece, before two justices, not to offend again in like manner.—And by the said last-mentioned act, every person who shall at any time take or destroy any hares, with hare-pipes, cords, or any such instruments or other engines, shall forfeit for every hare 20s. in like manner.

And by the 22 & 23 Car. II. c. 25.—If any person shall be found or apprehended setting or using any snares, hare-pipes, or other like engines, and shall be thereof convicted, by confession, or oath of one witness, before one justice, in *one month* after the offence; he shall give to the party injured such damages, and in such time, as the justice shall appoint, and shall pay down presently to the overseers for the use of the poor, such sum, not exceeding 10s. as the justice shall appoint; which, if he shall not do, the justice shall commit him to the house of correction not exceeding one month.

By the 9 Anne, c. 25.—If any person whatsoever shall take or kill any hare *in the night time*; he shall on conviction before one justice, on the oath of one witness, forfeit 5l. half to the informer, and half to the poor, by distress; for want of distress, to be sent to the house of correction for three months for the first offence, and for every other offence four months.

And by the 13 Geo. III. c. 80.—If any person shall knowingly and wilfully kill, take, or destroy, or use any gun, dog, snare, net, or other engine, with intent to kill, take, or destroy, any hare *in the night*, that is to say, between the hours of seven at night and six in the morning from the 12th day of October to the 12th day of February, and between the hours of nine at night and four in the morning from the 12th day of February to the 12th day of October; or in the *day time*, upon a *Sunday*, or *Christmas-day*; he shall on conviction on oath of one witness before one justice, forfeit for the first offence not exceeding 20l. nor less than 10l. and for the second offence not exceeding 30l. nor less than 20l.

But in case any information shall be made upon oath as aforesaid before a justice against an offender, and it shall appear that such offender hath already been convicted of a *first* and *second* offence; in such case the justice shall commit him to the common gaol or house of correction till the next general quarter sessions, unless he shall have entered into recognizance with two sufficient sureties to appear at such sessions, then and there to be tried by indictment for the said offence; and such justice shall also bind over the informer to prosecute the said offender by indictment as aforesaid; and if upon such indictment, the offender shall be convicted; he shall forfeit and pay in court the sum of 50l. and if he shall neglect or refuse to pay the same, he shall be committed to the common gaol or house of correction for not less than six nor more than twelve calendar months, unless such penalty shall be sooner paid; and the said offender shall, if the justices think proper, be once publicly whipped at the expiration of such commitment, in the town or place where such gaol or house of correction shall be, between the hours of twelve and one in the day.—Provided that no proceeding shall be upon this act, unless information on oath be made before a justice, within *one calendar month* after the offence committed.

The said forfeitures for the first and second offence, and also for the third offence on conviction at the sessions, together with the costs and charges previous to and attending such conviction (to be ascertained by the justice or justices before whom the offender shall be convicted), shall be forthwith paid, half to the informer, and

and half to the poor. And if ſuch perſon ſhall refuſe or neglect to pay the ſame, or to give ſecurity for the payment thereof, ſuch juſtice ſhall by his warrant cauſe the ſame to be levied by diſtreſs: and the ſaid juſtice may order ſuch offender to be detained in cuſtody, until return may conveniently be had to the warrant of diſtreſs, unleſs the party give ſufficient ſecurity, by recognizance or otherwiſe, to the ſatisfaction of ſuch juſtice, for his appearance before the ſaid juſtice on the day appointed for the return of the ſaid warrant, not exceeding ſeven days from the taking ſuch ſecurity: and if upon ſuch return, no ſufficient diſtreſs can be had, the ſaid juſtice ſhall commit the offender to the common gaol or houſe of correction for three calendar months, unleſs the forfeiture ſhall be ſooner paid; or until ſuch offender, thinking himſelf aggrieved by ſuch conviction, ſhall give notice to the informer that he intends to appeal to the next ſeſſions, and ſhall enter into a recognizance before a juſtice with two ſufficient ſureties conditioned to try ſuch appeal, and to abide the order of, and pay ſuch coſts as ſhall be awarded by the juſtices at ſuch ſeſſions; which notice ſhall not be leſs than fourteen days before the trial of the appeal. And the juſtices at ſuch ſeſſions, on proof of ſuch notice and recognizance, ſhall determine the appeal in a ſummary way, and award coſts to either party, as they ſhall judge proper.

And if the offender dwells in another county, the juſtice before whom the information or indictment was made, may direct his warrant of apprehenſion and diſtreſs to any conſtable where the offence was committed, to be by him carried to a juſtice near reſiding where the offender dwells, to be ſigned by him on the back of the ſaid warrant, on proof on oath of the hand-writing of the juſtice who firſt granted the warrant; which indorſement ſhall be ſufficient authority for the conſtable of the place where he dwells, or where his goods and chattels are, or for the conſtable who brings the warrant to be indorſed, to apprehend and convey the offender before the juſtice who firſt granted the warrant, or any other juſtice of that county where the offence was committed, or for ſuch conſtable to levy the penalty by diſtreſs; and alſo, in caſe where no ſufficient diſtreſs can be had, to convey the offender before the juſtice who firſt granted the warrant of diſtreſs, or any other juſtice of that county where the offence was committed, to be dealt with according to law. And the juſtice who indorſed the warrant ſhall direct the conſtable or other perſon making the diſtreſs, to deliver over the money levied to the juſtice who firſt granted the warrant; and if ſuch conſtable or other perſon ſhall neglect or refuſe to pay ſuch ſum, or deliver over all proceedings upon ſuch diſtreſs or warrant of apprehenſion, the juſtice who firſt granted the warrant, or the juſtice who indorſed it, may commit him to the common gaol or houſe of correction for ſix months, or till the money ſhall be paid, and the proceedings delivered over. And no order made, or any other proceedings upon this act, ſhall be quaſhed for want of form, or removed by certiorari or other writ into any of the courts of record at Weſtminſter.

[In reſpect to the third offence, here ſeems to be an inconſiſtency. The former part of the act ſays, if the offender ſhall not, upon conviction by indictment at the ſeſſions, pay into court the penalty of 5ol. he ſhall be committed to the gaol or houſe of correction for not leſs than ſix months nor more than twelve.—The latter part of the act ſays, the ſaid penalty ſhall be levied by diſtreſs; and if no diſtreſs can be had, the offender ſhall be committed to the gaol or houſe of correction for *three* months; with power of appealing to the ſeſſions then next following; with other circumſtances ſeemingly abſurd.]

And moreover by the 39 & 40 Geo. II. c. 50, after reciting that idle and diſorderly perſons frequently aſſemble and aſſiſt each other in the deſtruction of game in the night, and if interrupted are guilty of violence, to the terror of the people: It is enacted, that if any perſons to the number of two or more, ſhall enter into, or be found in, any foreſt, chaſe, park, wood, plantation, paddock, field, meadow, or other open or incloſed ground, in the night, namely, between eight at night and ſix in the morning from the 1ſt of October to the 1ſt of February, or between ten at night and four in the morning from the 1ſt of February to the 1ſt of October, having any gun, net, engine, or other inſtrument, for the purpoſe and with the intent to deſtroy, or ſhall wilfully deſtroy, take, or kill any hare, pheaſant, partridge, heath-fowl, commonly called *black game*, or grouſe, commonly called *red game*, or any other game: or if any perſon ſhall be found with any gun, fire-arms, bludgeon, or other offenſive weapon, protecting, aiding, abetting, or aſſiſting, any ſuch perſons as aforeſaid, the ranger, owner, or occupier thereof, or their keepers or ſervants, or any other perſon, may apprehend any ſuch offender, and deliver him into the cuſtody of a peace officer, who ſhall convey him before a juſtice: or in caſe any ſuch offender ſhall not be ſo apprehended, any juſtice, on information on oath of one witneſs, may iſſue his warrant to apprehend ſuch offender; and if it ſhall appear to ſuch juſtice on the oath of one witneſs that ſuch perſon is guilty of any of the offences aforeſaid, he ſhall be deemed to be a rogue and a vagabond within the meaning of the 17 Geo. II. c. 5, and ſhall ſuffer as therein directed; and in caſe any perſon ſo convicted, ſhall offend again, he ſhall be deemed an incorrigible rogue, and ſhall ſuffer accordingly.

Every perſon who ſhall ſell, or buy to ſell again, any hare, ſhall, on conviction at the aſſizes or ſeſſions, or before two juſtices out of ſeſſions, forfeit for every hare 10s. half to the poor, and half to him that will ſue. 1 *Jac.* c. 27. ſ. 4.

By the Black Act before mentioned, if any perſon, armed and diſguiſed, ſhall appear in any warren or place where hares are uſually kept, or unlawfully rob any ſuch warren; or (whether armed and diſguiſed or not) ſhall reſcue any perſon in cuſtody for either of the ſaid offences, or procure any to join with him in any ſuch unlawful act; he ſhall be guilty of felony without benefit of clergy.

It may here be proper to remark, that the law above recited for the preſervation and encouragement of the breed of *hare*, applies as well to perſons *qualified*, as to thoſe who are not qualified. It has been inſiſted upon that qualified perſons, inaſmuch as they have a right to *buy*, may likewiſe *ſell*, game; but it is not ſo. This traffic, of buying game to ſell again *in the large way* for the London market, has been carried on in ſeveral parts of England with impunity, by perſons who have thought it worth their while to purchaſe land for a qualification, with this ſole view, and for the privilege of *freeing* or guaranteeing it ſafe into London; but let it be remembered that they are amenable to every penal ſtatute now in force which prohibits the *ſale* of game.—It is alſo to be noticed here, that though there are ſtated periods or ſeaſons in which alone the *winged* game is allowed to be purſued and killed; yet it is not ſo with the *hare:* this timid unoffending creature is allowed no reſpite by law, not even for a breeding time; but may be hunted, courſed, and killed, except on Sundays and Chriſtmas-day, by qualified perſons, *all the year round.* Shame, however, in ſome, and the hope of greater plenty for ſport, in others, have, by a ſort of remorſeleſs conſent, influenced the bulk both of ſportſmen and of poachers to deſiſt from killing hares after Eaſter Monday; but they are eager to begin again as early as July or Auguſt, the inſtant the clover is carried, and the corn begins to fall, whereby the leverets are diſturbed, and become an eaſy prey to the voracity of man!—Why ſhould the legiſlature refuſe to hare the temporary repoſe it has granted to partridge, pheaſant, grouſe, &c.?

If

Of CONIES.

If any warrener ſhall find any treſpaſſers wandering within his liberty, intending to do damage therein, and that will not yield themſelves after hue and cry made to ſtand unto the peace, but do flee, or defend themſelves; although the warrener or his aſſiſtant do *kill* ſuch offenders, they ſhall not be troubled upon the ſame. 21 *Edw.* I. ſt. 2.

When information ſhall be made of unlawful hunting in a warren by night, or with painted faces, to any of the king's counſel, or to a juſtice of the peace, of any perſon ſuſpected, he may make a warrant to bring ſuch perſon before himſelf, or any other of the ſaid counſel or juſtices; and if ſuch perſon ſhall conceal the ſaid hunting, or any of his accomplices, it ſhall be felony; but if he confeſſeth, it ſhall be but treſpaſs finable at the ſeſſions. 1 *Hen.* c. 7.

If any perſon ſhall in the night time enter into any grounds incloſed, and uſed for keeping of conies, and hunt, drive out, take, or kill, any conies; he ſhall, on conviction at the ſuit of the king or of the party, at the aſſizes or ſeſſions, on indictment, bill, or information, or otherwiſe, be impriſoned three months, and pay to the party grieved treble damages and coſts, and find ſureties for his good abearing for ſeven years, or continue in priſon till he does: but this ſhall not extend to any grounds to be incloſed and uſed for conies *after* the making of this act, *without the king's licence.* 3 *Jac.* c. 13.

If any perſon ſhall at any time enter wrongfully into any warren or ground lawfully uſed or kept for the breeding or keeping of conies, whether it be incloſed or not; and there ſhall chaſe, take, or kill, any conies; and ſhall be thereof convicted in one month after the offence, before one juſtice, by confeſſion, or oath of one witneſs; he ſhall yield to the party grieved treble damages and coſts, and be impriſoned three months, and after till he find ſureties for his good abearing. 22 & 23 *Car.* II. *c.* 25. *ſ.* 4.

If any perſon ſhall wilfully and wrongfully, *in the night time,* enter into any warren or grounds lawfully uſed or kept for the breeding or keeping of conies, although the ſame be not incloſed, and ſhall then and there wilfully and wrongfully take or kill, in the night time, any coney againſt the will of the owner or occupier thereof; or ſhall be aiding and aſſiſting therein, and ſhall be convicted thereof at the aſſizes; he ſhall be tranſported for ſeven years, or ſuffer ſuch other leſſer puniſhment, by whipping, fine, or impriſonment, as the court ſhall award. Provided that conies may be taken, *in the day time,* on the ſea or river banks in the county of Lincoln, ſo far as the tide ſhall extend, or within one furlong of the ſaid banks; and the perſon taking them ſhall not be obliged to make ſatisfaction for damage, unleſs the ſame ſhall exceed the ſum of 1s. 5 *Geo.* III. *c.* 14.

By the Black Act above-mentioned, If any perſon, being armed and diſguiſed, ſhall appear in any warren or place where conies are uſually kept, or unlawfully rob any ſuch warren; or (whether armed and diſguiſed or not) ſhall reſcue any perſon in cuſtody for ſuch offence, or procure any perſon to join him therein; he ſhall be guilty of felony without benefit of clergy.

No perſon ſhall kill or take in the night any conies upon the *borders* of warrens, or other grounds lawfully uſed for the breeding or keeping of conies (except the owner or poſſeſſor of the ground, or perſons employed by them); on pain that the offender, on conviction in *one month* after the offence, before one juſtice, by confeſſion, or oath of one witneſs, ſhall give to the party injured ſuch damages and in ſuch time as ſhall be appointed by the juſtice, and over and above pay down preſently to the overſeers for the uſe of the poor ſuch ſum, not exceeding 10s. as the juſtice ſhall appoint; which if he ſhall not do, the juſtice ſhall commit him to the houſe of correction for ſuch time as he ſhall think fit, not exceeding one month. 22 & 23 *Car.* II. *c.* 25, *ſ.* 5.

The ſtatute ſaith, *upon the borders of warrens:* but if they are *out of* the warren, no perſon hath any property in them, and a man may juſtify killing them if they eat up his corn; but no action lies againſt the owner of the warren. 5 *Co.* 104.—So a perſon that hath a right of common may kill them, when they are out of the warren, and deſtroy the common; but he cannot have an action on the caſe *againſt the lord,* for that would be to create a multiplicity of actions. *Cro. El.* 548. *Cro. Ja.* 195. *Cro. Car.* 388.—For a man cannot have an action for another man's conies breaking into his ground, becauſe they are no longer the other's than while they are in the warren or place where he hath a right to keep them; ſo that no violation hereby ariſes to the property of one man by the beaſts of another; but the conies, being in their natural liberty, may be lawfully killed by the owner of the ſoil. 3 *Bac. Abr.* 326.

But if the lord hath a right to put conies upon the common, and by an exceſs in the number ſurcharges the common, and by the number of burrows made by the conies prevents the commoners' cattle from depaſturing the common; an action in ſuch caſe is the proper remedy, and the tenant may not of his own accord fill up the burrows and remove the nuiſance. As in the caſe of Cooper *v.* Marſhall, *E.* 30 Geo. II. By *L. Mansfield,* Ch. J. The queſtion in this caſe is not, whether the act of the lord be or be not hurtful, or how far it may be ſo: but the queſtion turns upon the remedy, whether it is abateable, whether the commoner can do himſelf juſtice? It may be prejudicial to the commoner, yet not injurious; it may be both prejudicial and injurious, yet not abateable. The lord by his grant of common, gives every thing incident to the enjoyment of it, as ingreſs, egreſs, and the like: and thereby authoriſes the commoner to remove every obſtruction to his cattle's grazing the graſs which grows upon ſuch a ſpot of ground: becauſe every ſuch obſtruction is directly contrary to the terms of the grant. A hedge, a gate, or a wall, to keep the commoner's cattle out, is inconſiſtent with a grant which gives them a right to come in. But the lord ſtill remains owner of the ſoil; and is not debarred from exerciſing any act of ownerſhip. The commoner has no right to meddle with the ſoil. In the preſent caſe, the lord has done nothing contrary to the grant. He hath not obſtructed the commoner from entering and putting in his cattle. The lord has a right to put conies upon the common. The conies themſelves naturally make the burrows. So that they are incident to the right of putting on the conies. If the lord ſurcharges, the commoner is injured in his right of common, it is true: But what is the commoner's remedy? Not to abate; not to be his own judge, in a complicated queſtion, which may admit of nicety to determine. There is a certain line to be drawn. The lord has a right ſo far, but no farther. Yet the commoner cannot deſtroy or drive off the conies; nor, conſequently, can he deſtroy the burrows, which is in effect deſtroying the conies.—By Mr. J. Denniſon: Upon the record of this caſe, it muſt be taken that the plaintiff was owner of the ſoil, and had a free warren; and that there is not ſufficient common left by the increaſe of the conies for the uſe of the commoner. The queſtion then is, Whether the commoner ſhall be intruſted to deſtroy the eſtate of the lord, in order to preſerve his own right of common. This would be to conſtitute himſelf judge in his own cauſe: No, let him take his proper remedy. A coney burrow is not of its own nature a nuiſance: on the contrary, it is eſſential to a free warren, therefore the nuiſance depends upon the number of them: and you can at the utmoſt, only abate ſo much of the thing as is a nuiſance. You cannot deſtroy the whole (which is the right here claimed); but only ſo much of the thing as

makes it a nuiſance.—By Mr. J. Foſter: This juſtification is clearly bad. It is founded on a claim of right, which cannot be maintained. It is admitted, that a commoner cannot in this caſe deſtroy the conies. Conſequently he cannot deſtroy the burrows; for the effect is, deſtroying the conies. If the lord has exceeded the bounds of his right, the law is to determine the *quantum* of ſuch exceſs; and to the law the commoner muſt reſort for his remedy, if he is aggrieved. 1 *Bur.* 252.

If any perſon ſhall be found or apprehended ſetting or uſing any ſnares or other like engines, for taking of conies, and ſhall be thereof in like manner convicted, he ſhall give to the party grieved ſuch damages and in ſuch time as the juſtice ſhall appoint, and pay down preſently to the overſeer for the uſe of the poor ſuch ſum not exceeding 10s. as the juſtice ſhall appoint; which, if he ſhall not do, the juſtice ſhall commit him to the houſe of correction not exceeding one month. 22 & 23 *Car.* II. *c.* 25.—Perſons aggrieved by any judgment given by virtue of this act, may appeal to the next ſeſſions, whoſe order therein ſhall be final, *if no title to any land or royalty be therein concerned.*

If any perſons not having lands or hereditaments of 40l. a-year, or not worth in goods 200l. ſhall uſe any gun or bow to kill conies, or ſhall keep any ferrets or coney dogs (except he have grounds incloſed for keeping of conies, the increaſing of which ſhall amount to 40s. a-year to be let, and except warreners in their warrens); in ſuch caſe, any perſon having 100l. a-year, may ſeize the ſame to his own uſe. 3 *Jac. c.* 13.

Of SWANS.

No perſon (other than the king's ſon), unleſs he have lands of freehold to the value of five marks a-year, ſhall have any mark or game of ſwans; on pain of forfeiting the ſwans, half to the king, and half to any perſon (ſo qualified) who ſhall ſeize the ſame. 22 *Edw.* IV. *c.* 6.—It is felony to take any ſwans that be lawfully marked, though they be at large. *Dalt. c.* 156.—And as to ſwans unmarked; if they be domeſtical or tame, that is, kept in a moat, or in a pond near to a dwelling houſe, to ſteal ſuch is alſo felony. So it ſeemeth of ſwans unmarked, ſo long as they keep within a man's manor, or within his private rivers; or if they happen to eſcape from thence, and be purſued and taken, and brought in again. But if ſwans that are *unmarked* ſhall be abroad, and ſhall attain to their natural liberty, then the property of them is loſt; and ſo long felony cannot be committed by taking them. And yet ſuch unmarked and wild ſwans the king's officers may ſeize (being abroad) for the king's uſe by his prerogative. Alſo the king may grant them, and by conſequence another may preſcribe to have them, within a certain precinct or place.

Every perſon who ſhall take the eggs of any ſwan out of the neſt, or willingly ſpoil them in the neſt; and ſhall be convicted thereof before two juſtices, by confeſſion, or oath of two witneſſes; ſhall be committed to gaol three months, unleſs he pay to the churchwardens, for the uſe of the poor, 20s. for every egg; or after one month of his commitment, become bound by his recognizance with two ſureties in 20l. a-piece, before two juſtices, never to offend again in like manner; which recognizance ſhall be returned to the next ſeſſions. 1 *Jac. c.* 27.

But by a more ancient ſtatute, no perſon ſhall take or cauſe to be taken, on his own ground or any other man's, the eggs of any ſwan; on pain (on conviction before the juſtices of the peace) of impriſonment for a year and a day, and fine at the king's will, half to the king, and half to the owner of the ſwans. 11 *Hen.* VII. *c.* 17.—See the article Anas, vol. i. p. 515.

Of PARTRIDGE and PHEASANT.

By the 11 Hen. VII. c. 17.—It is enacted, that no perſon, of what condition he be, ſhall take or cauſe to be taken, any pheaſants or partridges by nets, ſnares, or other engines, out of his own warren, upon the *freehold* of any other perſon, without the ſpecial licence of the owner or poſſeſſioner of the ſame; on pain of 10l. half to him that ſhall ſue, and half to the owner or poſſeſſioner of the ground where they ſhall be taken.

Every perſon who ſhall ſhoot at, kill, or deſtroy, any pheaſant, or partridge, with any gun or bow; or ſhall take, kill, or deſtroy them with ſetting dogs or nets, or with any manner of nets, ſnares, engines, or inſtruments whatſoever; or ſhall take their eggs out of the neſt or ſpoil them in the neſt; ſhall on conviction before two juſtices, by confeſſion or oath of two witneſſes, be committed to gaol three months, unleſs he pay upon conviction to the church-wardens for the uſe of the poor 20s. for every pheaſant, partridge, or egg; or after one month after his commitment, become bound by recognizance with two ſureties, before two juſtices in 20l. each, not to offend again in like manner. The recognizances to be returned to the next ſeſſions. 1 *Jac. c.* 27.

And by the 7 Jac. c. 11.—Every perſon who ſhall take, kill, or deſtroy, any pheaſant or partridge, with ſetting dogs and nets, or otherwiſe with any manner of nets, ſnares, or engines, ſhall on conviction before two juſtices, by confeſſion, or oath of one witneſs, be committed to gaol for three months, unleſs he forthwith pay to the churchwardens or overſeers 20s. for every pheaſant or partridge; and further to become bound by recognizance of 20l. before one juſtice, that he ſhall not thereafter kill or deſtroy any pheaſant or partridge. The recognizance to be filed at the next ſeſſions.—And every perſon who ſhall ſell, or buy to ſell again, any partridge or pheaſant (except they be reared and brought up in houſes, or brought from beyond ſea); ſhall on conviction at the aſſizes or ſeſſions, or before two juſtices out of ſeſſions, forfeit for every partridge 10s. and for every pheaſant 20s. half to him that will ſue, and half to the poor. 1 *Jac. c.* 27.

By the 33 Eliz. c. 10.—If any perſon of what eſtate, degree, or condition ſoever, ſhall take, kill, or deſtroy, any pheaſants or partridges *in the night time*; and be thereof convicted at the aſſizes, ſeſſions, or leet; he ſhall forfeit for every pheaſant 20s. and for every partridge 10s. half to him that ſhall ſue, and half to the lord of the manor, unleſs ſuch lord ſhall licence or procure the ſaid taking or killing, in which caſe the ſaid half ſhall go to the poor, to be recovered by any one of the churchwardens; and if not paid in ten days after conviction, he ſhall be impriſoned for one month: and moreover, beſides ſuch forfeiture and impriſonment, he ſhall give bond to ſome juſtice of the peace, with good ſureties, not to offend again in like manner for the ſpace of two years.

By the 9 Anne, c. 25.—If any perſon whatſoever ſhall take, or kill any pheaſant or partridge *in the night time*; he ſhall on conviction before one juſtice, on oath of one witneſs, forfeit 5l. half to the informer, and half to the poor, by diſtreſs; for want of diſtreſs to be ſent to the houſe of correction for three months for the firſt offence, and for every other offence four months.

And by the 13 Geo. III. c. 80.—If any perſon ſhall knowingly and wilfully kill, take, or deſtroy, or uſe any gun, dog, ſnare, net, or other engine, with intent to kill, take, or deſtroy, any pheaſant or partridge *in the night*, that is between the hours of ſeven at night and ſix in the morning from the 12th day of October to the 12th day of February, and between the hours of nine at night and four in the morning from the twelfth day of February to the twelfth day of October; or, *in the day time*, on a Sunday, or Chriſtmas-day; he ſhall forfeit for the firſt offence not exceeding 20l. nor leſs than 10l. for the ſecond offence not exceeding 30l. nor leſs than 20l. for the third and every other ſubſequent offence, 50l. To be levied and recovered as the like penalties for killing

ing any hare in the night or on a Sunday and Chriſtmas-day, as is above ſet forth.

And moreover, by 39 & 40 Geo. III. c. 50.—Idle and diſorderly perſons, to the number of two or more, who ſhall deſtroy any pheaſant or partridge in the night ſhall be deemed rogues and vagabonds, and dealt with accordingly.

Every perſon whatſoever, who ſhall hawk at, deſtroy, or kill, any pheaſant or partridge, with any kind of hawk, or dog, by colour of hawking, between the firſt of July and the laſt of Auguſt, ſhall on conviction before two juſtices, by confeſſion, or oath of two witneſſes, in *ſix months* after the offence, be committed to gaol for one month, unleſs he pay upon conviction to the churchwardens or overſeers for the uſe of the poor 40s. for every ſuch hawking at any pheaſant or partridge, and 20s. for every ſuch pheaſant or partridge which he, his hawk, or dog, ſhall take or kill. 7 *Jac. c.* 11.

By the 2 Geo. III. c. 19.—No perſon ſhall, upon any pretence whatſoever, take, kill, carry, ſell, buy, or have in his poſſeſſion or uſe, any *partridge*, (ſee the article TETRAO,) between [1ſt of February and 1ſt of September, 39 Geo. III. c. 34.] or any *pheaſant* (ſee the article PHASIANUS,) between February 1, and October 1, yearly, on pain of forfeiting, on conviction by one witneſs, in any of the courts of record at Weſtminſter, 5l. for every ſuch fowl, with full coſts. But this not to extend to any pheaſant taken in the ſeaſon allowed by this act, and kept in any mew or breeding place. All theſe fines and penalties extend alike to qualified and unqualified perſons.

Of PIGEONS.

A lord of a manor may build a dove-cote upon his own land, parcel of the manor; but a tenant of a manor cannot do it without the lord's licence. 3 *Salk.* 248. But any *freeholder* may build a dove-cote on his own ground. *Cro. El.* 548. *Cro. Ja.* 382.—And it hath been adjudged that erecting of a dove-houſe is not a common nuiſance, nor preſentable in the leet. *Cro. Jac.* 490, 1.

By the 1 James, c. 17.—Every perſon who ſhall ſhoot at, kill, or deſtroy, any houſe-dove or pigeon with any gun or bow; or ſhall take, kill, or deſtroy the ſame with ſetting dogs and nets, or with any manner of nets, ſnares, engines, or inſtruments whatſoever; ſhall, on conviction before two juſtices where the offence ſhall be committed, or the offender apprehended, by confeſſion or oath of two witneſſes, be committed to gaol three months, unleſs he pay to the churchwardens, for the uſe of the poor of the pariſh where the offence was committed or the offender apprehended reſpectively, 20s. for every pigeon, or after one month after his commitment become bound by recognizance with two ſureties, before two juſtices in 20l. apiece, not to offend again in like manner. The recognizance to be returned to the next ſeſſions.

And by the 2 Geo. III. c. 29.—If any perſon ſhall ſhoot at with an intent to kill, or by any means kill, or take, with a wilful intent to deſtroy, any houſe-dove or pigeon, and ſhall be thereof convicted, by confeſſion or oath of one witneſs, before one juſtice where the offence was committed, or the party apprehended, he ſhall forfeit 20s. to the proſecutor; and if not forthwith paid, ſuch juſtice may commit him to the gaol or houſe of correction, not exceeding three calendar months nor leſs than one, unleſs the forfeiture ſhall be ſooner paid.

But this not to extend to the ſhooting at or killing *wild* pigeons, unleſs they are ſhut up in a dove-houſe for the purpoſe of being tamed or taken. 1 *Hawk. P. C. c.* 33. —Perſons convicted on this act, ſhall not be convicted on any former act: and proſecutions on this act ſhall be commenced and carried on with effect within *two months* after the offence committed; and perſons impriſoned for default of payment of the penalty, ſhall not be liable afterwards to pay ſuch penalty.

But if the pigeons come upon my land, and I kill them; the owner hath no remedy againſt me; though I may be liable to the ſtatutes which make it penal to deſtroy them. *Cro. Ja.* 492.—Doves in a dove-houſe, young and old, ſhall go to the heir, and not the executor. 1 *Inſt.* 8.—See the article COLUMBA, vol. iv. p. 815–832.

Of WILD DUCKS, WILD GEESE, AND OTHER WATER FOWL.

Every perſon who ſhall ſhoot at, kill, or deſtroy, with any gun or bow, any mallard, duck, teal, or widgeon; and the ſame be proved by confeſſion, or oath of two witneſſes, before two juſtices; ſhall be committed to gaol for three months, unleſs he pay to the churchwardens for the uſe of the poor, 20s. for each fowl, or after one month after the commitment become bound by recognizance with two ſureties, before two juſtices, in 20l. each, not to offend again in like manner: which recognizance ſhall be returned to the next ſeſſions. 1 *J. c.* 27.

No perſon, between the laſt day of May and the laſt day of Auguſt yearly, ſhall take, or cauſe to be taken, any wild ducks, mallards, widgeons, teals, or wild geeſe, with nets or other engines; on pain of a year's impriſonment, and to forfeit for every fowl ſo taken 4d. half to the king, and half to him that will ſue by action of debt: alſo the juſtices of the peace may inquire of, hear and determine the ſame, as in caſes of treſpaſs. 25 *H.* VIII. *c.* 11.—Nevertheleſs, any gentleman, or any other that may diſpend 40s. a-year of freehold, may hunt and take ſuch wild fowl with their ſpaniels only, without uſing a net or other engine except the long bow.

But by a ſubſequent ſtatute, *if any perſon whatſoever* (between June 1, and Oct. 1, yearly, 10 Geo. II. c. 32.) ſhall by hays, tunnels, or other nets, drive and take any wild duck, teal, widgeon, or any other water fowl, in any place or reſort for wild fowl in the moulting ſeaſon; and ſhall be convicted thereof before one juſtice by the oath of one witneſs; he ſhall for every ſuch fowl forfeit 5s. half to the informer, and half to the poor, by diſtreſs, rendering the overplus above the penalty and charges of diſtreſs; for want of diſtreſs, to be committed to the houſe of correction not exceeding one month, nor leſs than fourteen days, to be whipt and kept to hard labour. And the nets to be ſeized and deſtroyed in the preſence of the juſtice. 9 *An. c.* 25.

No perſon, from March 31 to June 30, yearly, ſhall take or deſtroy the eggs of any mallard, teal, or other water fowl; on pain of a year's impriſonment, and of forfeiting for every egg one penny, half to the king, and half to him that will ſue by action of debt; or the juſtices of the peace may determine the ſame as in caſes of treſpaſs. 25 *H.* VIII. *c.* 11.—See the article DECOY, vol. v. p. 648.

Of HEATH-FOWL, GROUSE, AND BUSTARDS.

Every perſon who ſhall ſhoot at, kill, or deſtroy, with any gun or bow, any grouſe, heath-cock, or moor-game, (during the ſeaſon prohibited,) ſhall on conviction before two juſtices, by confeſſion, or oath of two witneſſes, be committed to gaol for three months, unleſs upon conviction he pay to the churchwardens for the uſe of the poor, 20s. for each fowl, or after one month after his commitment become bound by recognizance, with two ſureties in 20l. each, before two juſtices, not to offend again in like manner: the recognizance to be returned to the next ſeſſions. 1 *J. c.* 27.

No perſon ſhall, upon any pretence whatſoever, wilfully take, kill, deſtroy, carry, ſell, buy, or have in his poſſeſſion or uſe, any heath-fowl commonly called *black game*, between Dec. 10, and Aug. 20; nor any grouſe commonly called *red game*, between Dec. 10, and Aug. 12; nor any *buſtard*, between Mar. 1, and Sept. 1, in any year; on pain of forfeiting for the firſt offence any ſum not exceeding 20l. nor leſs than 10l. and for the ſecond and every ſubſequent offence, not exceeding 30l. nor

leſs

leſs than 20l. half to the informer, and half to the poor. 13 *Geo.* III. *c.* 55.—And perſons taking or killing in the New Foreſt, Hants, any *black game*, between Dec. 10 and Sept. 1, ſhall be liable to the forfeiture of the 13 *Geo.* III. *c.* 55. 43 *Geo.* III. *c.* 112.

To be recovered in any of his majeſty's courts of record at Weſtminſter, on proſecution within *ſix calendar months* after the offence committed.—Or the ſame may be recovered before one juſtice, information on oath being made before him within *three calendar months* after the offence committed; which ſaid juſtice may convict the offender by confeſſion, or oath of one witneſs: and on neglect or refuſal to pay, ſhall levy the ſame by diſtreſs, together with all coſts and charges attending the ſame. And ſuch juſtice may order the offender to be detained in ſafe cuſtody, until return may conveniently be had to the warrant of diſtreſs, unleſs the ſaid offender ſhall give ſecurity, by recognizance or otherwiſe, to the ſatisfaction of ſuch juſtice, for his appearance before him on the day appointed for the return of the warrant of diſtreſs, ſuch day not exceeding five days from the time of taking ſuch ſecurity. And if no ſufficient diſtreſs can be had, ſuch juſtice ſhall commit the offender to the common gaol or houſe of correction, there to be kept to hard labour for any time not exceeding ſix nor leſs than three calendar months, unleſs the forfeiture, and all coſts and charges attending the proſecution, be ſooner paid.

And if any perſon ſhall think himſelf aggrieved, he may appeal to any general quarter ſeſſions to be holden within four calendar months after the cauſe of complaint ſhall ariſe, giving fourteen days' notice in writing to the juſtice and to every other perſon againſt whom complaint ſhall be made; and in four days after ſuch notice, entering into recognizance before a juſtice with one ſufficient ſurety, conditioned to try the appeal at, and abide the order of, and pay ſuch coſts as ſhall be awarded by the juſtices at ſuch ſeſſions. And the juſtice having received notice of appeal, ſhall return all proceedings had before him, touching the matter of the ſaid appeal, to the juſtices at ſuch ſeſſions. And the ſaid juſtices upon proof of the notice given, and of the entering into ſuch recognizance, ſhall determine the appeal in a ſummary way, and award coſts to either party. And none of the proceedings ſhall be quaſhed for want of form, nor removed by *certiorari* or other proceſs into any of the courts at Weſtminſter.

By the 9 Anne, c. 25.—If any perſon whatſoever ſhall take or kill, any moor, heath-game, or grouſe, *in the night-time*; he ſhall, on conviction before one juſtice, on the oath of one witneſs, forfeit 5l. half to the informer, and half to the poor, by diſtreſs; for want of diſtreſs, to be ſent to the houſe of correction for three months for the firſt offence, and for every other offence four months.

And by the 13 Geo. III. c. 80.—If any perſon ſhall knowingly and wilfully kill, take, or deſtroy, or uſe any gun, dog, ſnare, net, or other engine, with intent to kill, take, or deſtroy, any moor-game or heath-game, *in the night*, viz. between the hours of ſeven at night and ſix in the morning, from the 12th day of October to the 12th day of February; and between the hours of nine at night and four in the morning, from the 12th day of February to the 12th day of October, or, in the day time, on a Sunday or Chriſtmas-day: he ſhall forfeit for the firſt offence not exceeding 20l. nor leſs than 10l. for the ſecond offence not exceeding 30l. nor leſs than 20l. for the third and every other ſubſequent offence, 50l. To be levied and recovered as the like penalties for killing any hare in the night, or on a Sunday or Chriſtmas-day, as is above ſet forth. And by 39 & 40 Geo. III. *c.* 50. idle and diſorderly perſons amounting to two or more, who ſhall deſtroy or attempt to deſtroy any *black game*, or *red game*, (grouſe,) or any other game, in the night, ſhall be deemed rogues and vagabonds.

For the better preſerving the red and black game of grouſe commonly called heath-cocks, or heath-polts, no perſon whatſoever on any mountains, hills, heaths, moors, foreſts, chaſes, or other waſtes, ſhall preſume to burn, between February 2 and June 24, any grig, ling, heath, furze, goſs, or fern; on pain of being committed to the houſe of correction, for any time not exceeding one month, nor leſs than ten days, there to be whipt and kept to hard labour. 4 & 5 *W.* *c.* 23.—However, as there is no method of conviction directed for this offence, the juſtices of the peace ſeem to have no cognizance of it; but the trial and conviction muſt be at the aſſizes, or in the courts at Weſtminſter.—See the article TETRAO.

OF HERONS.

Every perſon who ſhall ſhoot at, kill, or deſtroy, any heron, with gun or bow, ſhall, on conviction before two juſtices, by confeſſion or oath of two witneſſes, be committed to gaol for three months, unleſs on conviction he pay to the churchwardens for the uſe of the poor, 20s. for each heron, or after one month from his commitment, become bound by recognizance with two ſureties in 20l. each, before two juſtices, not to offend again in like manner: the recognizance to be returned to the next ſeſſions. 1 *J.* *c.* 27.

No perſon, without his own ground, ſhall flea, take, or cauſe to be taken, by means of craft or engine, any herons, unleſs it be with hawking, or with long bows; on pain of ſix ſhillings and eight-pence to him who ſhall ſue by action of debt: or the ſeſſions may call before them perſons ſuſpected, and examine them; and if found in default, may commit them till they have found ſurety for payment of the forfeiture to the king; and the juſtices ſhall have the tenth part of the forfeiture for their labour. 19 *H.* VII. *c.* 11.—And no perſon, without his own ground, ſhall take any young herons out of the neſt; on pain of 10s. in like manner, for every young heron. 19 *H.* VII. *c.* 11.

And if any perſon, from March 31 to June 30, ſhall take or deſtroy the eggs of any heron; he ſhall be impriſoned for a year, and forfeit for every egg eight-pence, half to the king, and half to him that will ſue by action of debt, or before the juſtices of the peace. 25 *H.* VIII. *c.* 11.

OF HAWKS.

No man ſhall bear any hawk of the breed of England, called a nyeſſe, goſhawk, taſſel, laner, laneret, or faulcon, on pain of forfeiting his hawk to the king. And if he bring any of them over ſea, he ſhall bring a certificate thereof from the officer of the port: on the like pain of forfeiting the ſame to the king. And the perſon that bringeth any ſuch hawk to the king, ſhall have a reaſonable reward of the king, or elſe the hawk for his labour. 11 *H.* VII. *c.* 17.

Every perſon who findeth a faulcon, tercelet, laner or laneret, or other hawk that is loſt, ſhall preſently bring the ſame to the ſheriff; and the ſheriff ſhall make proclamation in all the good towns in the county that he hath ſuch an hawk in his cuſtody; and if he is challenged in four months, the owner ſhall have him again, paying the coſts; if he is not challenged in four months, the ſheriff ſhall have him, making gree to him that took him, if he be a ſimple man; but if he be a gentleman, and of eſtate to have the hawk, then the ſheriff ſhall re-deliver to him the hawk, taking of him reaſonable coſts for the time that he had him in his cuſtody. 34 *Ed.* III. *c.* 22.

And if any man ſteal any hawk, and the ſame carry away, not doing the ordinance aforeſaid, it ſhall be done of him as of a thief that ſtealeth a horſe or other thing, 37 *Ed.* III. *c.* 19. that is, he ſhall be guilty of felony, but ſhall have his clergy. 3 *Inſt.* 98.—Or if any perſon ſhall take away any hawks or their eggs, by any means unlawfully out of the woods or ground of any perſon, and be thereof convicted at the aſſizes or ſeſſions, on indict-

ment, bill, or information, at the ſuit of the king, or of the party; he ſhall be impriſoned three months, and ſhall pay treble damages; and after the three months expired, ſhall find ſureties for his good abearing for ſeven years, or remain in priſon till he doth. 5 *El. c.* 21.

But by a more ancient ſtatute, no man ſhall take any ayre, faulcon, goſhawk, taſſel, laner, or laneret, in their warren, wood, or other place; nor purpoſely drive them out of their coverts accuſtomed to breed in, to cauſe them to go to other coverts to breed; nor ſlay them for any hurt done by them: on pain of 10l. half to him that will ſue before the juſtices of the peace, and half to the king. And no manner of perſon of what condition or degree he be, ſhall take or cauſe to be taken, on his own ground or any other man's, the eggs of any faulcon, goſhawk or laner, out of the neſt; on pain (being convicted thereof before the juſtices of the peace) of impriſonment for a year and a day, and fine at the king's will; half to the king, and half to the owner of the ground where the eggs were taken. 11 *H.* VII. *c.* 17.

If any manner of perſon ſhall hawk in another man's corn, after it is eared, and before it is ſhocked; and be convicted at the aſſizes, ſeſſions, or leet; he ſhall forfeit 40s. to the owner: and if not paid in ten days, he ſhall be impriſoned for a month. 23 *El. c.* 10.

In general; no manner of perſon, from the laſt day of March to the laſt day of June yearly, ſhall by day or night, take or deſtroy any eggs of any kind of wild fowl, from or in any neſt or place, where they ſhall chance to be laid by any kind of the ſame wild fowl; on pain of impriſonment for a year, and to forfeit for every egg of a buſtard 20d. of a bittour or ſhovelard 8d. and of other wild fowl (except crows, ravens, boſcards, and other fowl not uſed to be eaten) 1d. half to the king, and half to him that will ſue by action of debt. Alſo the juſtices of the peace may determine the ſame, as in caſes of treſpaſs. 25 *Hen.* VIII. *c.* 11.

With regard to fowl not uſed to be eaten, together with certain other noxious animals, there were proviſions made by an ancient ſtatute, viz. 8 Eliz. c. 15. intitled, *an Act for the preſervation of graine*, which it were to be wiſhed might be revived with a proper conſideration of the difference of the value of money betwixt that time and the preſent; by which it was required, that the churchwardens ſhould levy by an aſſeſſment, and pay for the heads of every three old crowes, choughes, or rookes, 1d. of ſixe young crowes, choughes, or rookes, 1d. and for every ſixe egges of any of them, 1d. for every twelve ſtares heads, 1d. for every heade of merten, hawks, fureſekytte, moldkytte, buſarde, chagge, carmeraunt, or ryngtayle, 2d. and for two egges of them 1d. for every iron or oſpray's heade, 4d. for the heade of every wood wall, pye, jay, raven, kyte, or king's fiſher, 1d. bulfynce, or other bird that devoureth the blowth of fruit, 1d. for the heade of every foxe or graye 12d. and for the heade of every fytchewe, polcate, weſel, ſtote, fayre, bade, or wylde cat, 1d. for the head of every otter or hedgehogge, 2d. for the heades of three rattes or twelve miſe, 1d. for the heade of every want or moldwarp, one halfpenny.—And by another ancient ſtatute 24 H. VIII. c. 10. Every townſhip was required to keep a crow net, to deſtroy crows, rooks, and choughs.

There is a faint ſhadow of theſe regulations ſtill remaining in ſome pariſhes, where they give a reward for deſtroying ſeveral of the abovementioned noxious fowl and vermin. Theſe ſtatutes were ſuffered to grow into diſuſe, probably becauſe in a ſhort time there would be no need of their continuance; but it might be convenient nevertheleſs, to revive the like proviſions from time to time; and among the reſt of the ravenous tribe, to ſet a price upon the head of the FALCON, that diſtinguiſhed fowl, for the ſake of which moſt of the ancient laws concerning the winged game were enacted, and which it was felony to deſtroy. The current having received a contrary direction, the hawk himſelf now perhaps deſtroys more game than gunpowder and hailſhot which have uſurped his empire.—See the article FALCONRY, vol. vii. p. 197—199.

Of the QUALIFICATION for killing GAME.

On this much-conteſted ſubject ſir William Blackſtone writes as follows: "The offence of deſtroying ſuch beaſts and fowls, as are ranked under the denomination of *game*, we may remember, upon the old principles of the foreſt law, is a treſpaſs and offence in all perſons alike, who have not authority from the crown to kill game, (which is royal property,) by the grant of either a free warren, *or at leaſt a manor of their own.* But the laws, called the *Game Laws*, have inflicted additional puniſhments on perſons guilty of this general offence, unleſs they be people of ſuch rank or fortune as is therein particularly ſpecified. All perſons therefore, of what property or diſtinction ſoever, that kill game out of their own territories, or even upon their own eſtates, *without the king's licence*, expreſſed by the grant of a franchiſe, are guilty of the firſt original offence, of encroaching on the royal prerogative. And thoſe indigent perſons who do ſo, without having ſuch rank or fortune as by the game laws is called a *qualification*, are guilty not only of the *original* offence, but of the aggravations alſo, created by the ſtatutes for preſerving the game: which aggravations are ſo ſeverely puniſhed, and thoſe puniſhments ſo implacably inflicted, that the offence againſt the king is ſeldom thought of, provided the delinquent can make his peace with the lord of the manor. But the only rational footing upon which we can conſider it as a crime, is, that in low and indigent perſons it promotes idleneſs, and takes them away from their proper employments and callings: which is an offence againſt the public police and economy of the commonwealth.

"The ſtatutes for preſerving the game are many and various, and not a little obſcure and intricate; it being remarked, that in one ſtatute only, 5 Ann. c. 14. there is falſe grammar in no fewer than ſix places, beſides other miſtakes: the occaſion of which, or what denomination of perſons were probably the penners of theſe ſtatutes, I ſhall not at preſent inquire. It is in general ſufficient to obſerve, that the *qualifications* for killing game, as they are uſually called, or more properly the *exemptions* from the penalties inflicted by the ſtatute law, are, 1. The having a freehold eſtate of 100l. per annum; there being fifty times the property required to enable a man to kill a partridge, as to vote for a knight of the ſhire: 2. A leaſehold for ninety years of 150l. per annum: 3. Being the ſon and heir apparent of an eſquire, (a very looſe and vague deſcription,) or perſon of ſuperior degree: 4. Being the owner, or keeper, of a foreſt, park, chaſe, or warren. For unqualified perſons tranſgreſſing theſe laws, by killing game, keeping engines for that purpoſe, or even having game in their cuſtody, or for perſons (however qualified) that kill game, or have it in poſſeſſion, at unſeaſonable times of the year, or unſeaſonable hours of the day or night, as killing it on Sundays, or on Chriſtmas-day, there are various penalties aſſigned, corporal and pecuniary, by different ſtatutes; on any of which, but only on one at a time, the juſtices may convict in a ſummary way, or proſecutions may be carried on at the aſſiſes. And, laſtly, by ſtatute 28 Geo. III. c. 12. no perſon, however qualified to *kill*, may make merchandize of this valuable privilege, by *ſelling* or expoſing to ſale any game, on pain of like forfeiture as if he had no qualification; but a perſon qualified to kill, is not ſubject to any penalty for *buying* game."

It is not neceſſary that the eſtate ſhould be a freehold, for copyhold, or an equitable eſtate of *inheritance* of the clear value of 100l. per annum, is a qualification. But it is not ſufficient, if the value of the eſtate is reduced

below that ſum by the intereſt of a mortgage. A *life*-eſtate, as a church benefice, muſt be of the clear annual value of 150l. The eldeſt ſon of an eſquire, or of any perſon of higher degree, is qualified without any eſtate, whilſt his father is living; but the father himſelf, though an eſquire, doctor, knight, or perſon of ſtill higher rank, is not qualified without having the eſtate required by the ſtatute.

But ſince many ancient laws relating to the game are ſtill in force, and are generally enacted ſo to be by the ſubſequent ſtatutes, it will be neceſſary, in order to have a thorough knowledge of the ſubject, to infert them in their order, becauſe the penalties on each being different, the proſecutor, or the magiſtrate, may chuſe which of them they will convict an offender upon. Thus by the ſtatute of the 5 Anne, if a perſon not having 100l. a-year ſhall keep dogs or engines to deſtroy the game, he ſhall forfeit 5l. but if ſuch perſon have not 40s. a-year he may upon the ſtatute of Rd. II. be puniſhed by a year's impriſonment; and ſo of the reſt: provided, as obſerved above, that no perſon be proſecuted upon more than one act for one offence.

The firſt qualification relating to the game was in the 13th year of the reign of Richard II. by which it is enacted, that no layman which hath not lands or tenements of 40s. a-year, nor clergyman if he be not advanced to 10l. a-year, ſhall have or keep any grey-hound, hound, nor other dog to hunt; nor ſhall uſe ferrets, hays, nets, hare-pipes, nor cords, nor other engines, for to take or deſtroy hares nor conies, nor other gentlemen's game: on pain of a year's impriſonment. And the juſtices of the peace (that is, in their ſeſſions) ſhall inquire of the offenders in this behalf, and puniſh them by the pain aforeſaid. 13 *Rd.* II. *ſt.* 1. *c.* 13. 16 *Geo.* III. *c.* 30.

The next qualification by eſtate or degree to kill game, was by a ſtatute in the 1 James, whereby it is enacted that every perſon who ſhall keep any greyhound for courſing of deer or hare, or ſetting-dog or net to take pheaſants or partridges, (except he be ſeiſed, in his own right or the right of his wife, of 10l. a-year eſtate of inheritance, or 30l. a-year of a lives eſtate, or goods to the value of 200l. or be the ſon of a knight or lord, or the ſon and heir apparent of an eſquire,) and be thereof convicted by confeſſion, or oath of two witneſſes, before two juſtices, he ſhall be committed to gaol three months, unleſs upon conviction he pay 20s. to the churchwardens for the uſe of the poor, or after one month after his commitment he become bound by recognizance with two ſureties before two juſtices, in 20l. a-piece, not to offend again in like manner. 1 *J.* *c.* 27.

The next qualification relates to deer and conies only, in ſtat. 3 James, by which it is enacted, that if any perſon not having hereditaments of 40l. a-year, or not worth in goods 200l. ſhall uſe any gun or bow to kill any deer or conies; or ſhall keep any buckſtall, nets, or coney dogs, (except he have grounds incloſed, and uſed for the keeping of deer or conies, the increaſing of which ſaid conies ſhall amount to the value of 40s. a-year; or keepers or warreners in their parks, warrens, or grounds;) in ſuch caſe any perſon having lands or hereditaments of 100l. a year in fee, or for life, in his own right or the right of his wife, may take from ſuch perſon to his own uſe for ever ſuch guns, bows, buckſtalls, nets, and coney dogs. 3 *J.* *c.* 13.

The next qualification relates to pheaſants and partridges only, and is as follows: every free warrener, lord of a manor, or freeholder ſeiſed in his own or his wife's right of 40l. a-year of inheritance, or lives eſtate of 80l. or worth in goods 400l. may take pheaſants and partridges (in the day time only) in his own free warren, manor, or freehold, betwixt Michaelmas and Chriſtmas yearly. 7 *J.* *c.* 11.—Theſe, ſir William Blackſtone aſſerts, are the only *two* inſtances wherein an expreſs *permiſſion* to kill game, was ever given by ſtatute law. But Mr. Chriſtian remarks, that "what the learned judge has here ſtated reſpecting the *firſt* permiſſion, has ariſen from a miſconception of the ſubject. The firſt qualification act is the 13 Richard II. c. 13, the title of which is "None ſhall hunt but they who have a ſufficient living." The preamble ſtates, that divers artificers, labourers, ſervants, and grooms, keep grey-hounds and dogs, and on the holydays, when good chriſtian people be at church hearing divine ſervice, they go a hunting in parks, and warrens, and connigrees of lords and others, to the very great deſtruction of the ſame, and ſometime under ſuch colour they make their aſſemblies, conferences, and conſpiracies for to riſe and diſobey their allegiance; it is therefore ordained, that no artificer, labourer, or other layman, which hath not lands or tenements to the value of 40s. by the year, nor any prieſt to the value of 10l. ſhall keep any dogs, nets, nor engines, to deſtroy deer, hares, nor conies, nor other gentlemen's game, upon pain of one year's impriſonment.—This ſtatute clearly admits and reſtrains their *former* right: the 1 Jac. I. c. 27, which ſeems intended for the encouragement of hawking, the moſt honourable mode of killing game at that time, begins with a general prohibition to all perſons whatever to kill game with guns, bows, ſetting dogs, and nets; but there is afterwards a proviſo in the act, that it ſhall and may be lawful for perſons of a certain deſcription and eſtate to take pheaſants and partridges, upon their own lands, in the day-time, with nets. This proviſo and permiſſion clearly refers to the preceding prohibition introduced by the ſtatute, and by no means gives a *new* permiſſion to the perſons thus qualified, which they did not poſſeſs antecedently to that ſtatute. Thoſe, therefore, who will take the trouble to examine the ſtatute, will be convinced of the truth of this remark; and that the correction of this error alone will contribute in ſome degree to the refutation of the doctrine which the learned judge has advanced in this and other parts of the commentaries, viz. that all the game in the kingdom is the property of the king or his grantees, being uſually the lords of manors."

The laſt general qualification by eſtate or degree to kill game, and which is now moſt to be regarded, is in 22 & 23 Charles II. c. 25. by which it is enacted, that every perſon, not having lands and tenements or ſome other eſtate of inheritance, in his own or his wife's right, of the clear yearly value of 100l. or for term of life, or having leaſe or leaſes of ninety-nine years, or for any longer term, of the clear yearly value of 150l. (other than the ſon and heir apparent of an eſquire, or other perſon of higher degree, and the owners and keepers of foreſts, parks, chaſes, or warrens, being ſtocked with deer or conies for their neceſſary uſe, in reſpect of the ſaid foreſts, parks, chaſes, or warrens,) is hereby declared to be a perſon, by the laws of this realm, not allowed to have or keep for himſelf or any other perſon, any guns, bows, greyhounds, ſetting dogs, ferrets, coney dogs, lurchers, hays, nets, lowbels, harepipes, gins, ſnares, or other engines aforeſaid, but ſhall be and are hereby prohibited to have, keep, or uſe, the ſame.

QUALIFICATION BY ESTATE OF 100l. BUT MORTGAGED.—CASE of Wethrell and Hall, *Mich. Term*, 23 Geo. III. On an action againſt the defendant, for the penalty of 5l. for uſing a gun to kill and deſtroy the game, not being a perſon qualified ſo to do, the cauſe was tried at Durham aſſizes in 1782, when the jury found a verdict for the plaintiff, ſubject to the opinion of the court of king's bench, on the following caſe:—The defendant Hall, having an eſtate of 103l. a-year, mortgaged a part of it, of the value of 14l. a-year, to Robert Kelſey, for 400l. which part being copyhold, he ſurrendered the ſame, according to the cuſtom of the manor, to the ſaid Robert Kelſey, who thereupon was admitted tenant. But Kelſey never entered upon the premiſes; Hall continuing in poſſeſſion, and paying intereſt of the mortgage regularly. The queſtion for the opinion of the court was, whether the defendant was duly qualified to uſe

engines

engines to kill and deſtroy game?—Lambe for the plaintiff contended, firſt, that a *legal* eſtate of 100l. a-year, was neceſſary to conſtitute a qualification: that here the defendant had no more than an *equitable* eſtate in the part mortgaged; and that ſuch eſtate cannot be taken notice of by a court of law in the conſtruction of an act of parliament. Lord Mansfield intimating that it would be difficult to ſupport this ground of argument, Mr. Lambe inſiſted, ſecondly, that if an *equitable* eſtate were conſidered as giving a qualification, ſtill in point of annual value the defendant had not, upon the true conſtruction of the act, an eſtate ſufficient to qualify him: that the words of the act were, the clear yearly value of 100l. that this could not mean the groſs value of the eſtate, but muſt mean the net income; that ſuch it could not be, if, by incumbrances of any ſort, the iſſues and profits were brought within that ſum; that the object of the legiſlature was, to entitle thoſe only, whoſe independence, ariſing from the produce of their lands, would enable them to uſe theſe rights for the purpoſe of amuſement; that upon comparing the value of land at the time this law paſſed with its preſent value, it would be found that the meaſure of this independence had already been reduced much below the intention of the legiſlature; that if the conſtruction contended for were admitted, no degree of intereſt whatſoever in the produce of lands would be neceſſary, and the intention of the legiſlature muſt be totally fruſtrated, inaſmuch as the holder of an eſtate, whether he charged it himſelf to its utmoſt value, or had it transferred to him under ſuch charge, without having, or without ever having had, an income ariſing out of land to the amount of one farthing, muſt in ſuch caſe be entitled.—Lord Mansfield calling on the other ſide, Chambre for the defendant, ſtated the only queſtion to be, whether the intereſt of the mortgage was to be conſidered as ſuch a reduction of the annual value of the eſtate as would deſtroy the defendant's qualification? and contended, that this being a penal law, could not be extended by conſtruction; that it was beſides a general law, and in its terms does not require the party to have a *legal* eſtate. That the mortgage is in ſubſtance a ſpecialty debt, the equity of redemption is conſidered as a real eſtate, and deſcends to the heir of the mortgagor; who is conſidered as a debtor, and his perſonal aſſets liable in the firſt inſtance to diſcharge the mortgage; and though at law the heir of the mortgagee takes a legal eſtate, yet the perſonal repreſentatives are conſidered as entitled to receive the mortgage debt. And further inſiſted, that a mortgagee can never get poſſeſſion, if the mortgagor is ready to pay the money: and that by 7 Geo. II. c. 20. it may be paid *impendente lite*: and that if the legal eſtate only were to be regarded, an eſtate of 1000l. a-year, mortgaged in fee for 100l. would not furniſh a qualification. That the only remaining queſtion was, whether the intereſt of the mortgage money was to be conſidered as an outgoing that would reduce the value of the eſtate below 100l. and he contended, that the intereſt was not a thing iſſuing out of any part of the eſtate in the nature of a rent or ſervice; that both principal and intereſt were a debt; that the intereſt muſt be conſidered as a debt on the perſonalty, juſt as the principal is conſidered as a debt; and that the eſtate was neither made of greater or leſs value by the mortgage, but was merely a pledge for the payment of the debt; that the legiſlature, therefore, when they uſed the words *clear yearly value*, meant to advert only to the value of the eſtate itſelf, and not to the quantity of intereſt that any perſon might have in it, the thing itſelf, without any regard to the charge upon it, provided only that the party was in poſſeſſion. That in the ſame manner, in the caſe of a mortgagee in poſſeſſion, there can be no doubt but that he is entitled to kill game; and the court in ſuch caſe will not enquire into the amount of the intereſt money of the ſum advanced to the mortgagor upon his land, provided the ſecurity, the land itſelf, be of the annual value the law requires; that the court would well weigh the conſequences of ſuch a doctrine as is contended for; that the juſtices, who muſt enquire into this in a ſummary way, muſt make all perſons, of whatever oſtenſible eſtate, diſcloſe their private circumſtances; which would be too great an extenſion of a law already conſidered in many inſtances as tyrannical; that a rent charge indeed, or ſervices iſſuing out of an eſtate, as matters of notoriety, might perhaps be conſidered by the juſtices; but of ſuch things only as were oſtenſible could they take cognizance; that if every private tranſaction in money concerns were to be laid open, if it could be ſeriouſly argued that ſuch diſcuſſions were proper ſubjects for a ſummary juriſdiction, it would be inveſting juſtices and informers with powers of haraſſing the country as far beyond any known precedent, as it was beyond the intention of the legiſlature; that their object had not been at any time an enquiry into debts, but the actual poſſeſſion of, and intereſt in, landed property, and the viſible amount of that property; that with reſpect to chooſing knights of the ſhire, the legiſlature have declared by ſeveral ſtatutes, that the mortgagor or *ceſtuy que truſt* in poſſeſſion may vote for ſuch eſtates, notwithſtanding ſuch mortgage or truſt.—Buller J. But he muſt ſwear that he has 40s. a-year above every charge payable in reſpect of them.—Chambre. But this is by the expreſs proviſion of ſubſequent ſtatutes. 13 Geo. II. c. 8. and 19 Geo. II. c. 28.—Lord Mansfield. The privilege here is given to property, and the *ceſtuy que truſt*, the mortgagor, is really the owner; the truſtee, the mortgagee, is merely nominal. We conſider the defendant's intereſt in this court juſt as it would be conſidered in a court of equity: it is an intereſt ſubject to the payment of the mortgage; it is a qualification of property; and though it is not neceſſary that he ſhould have a legal eſtate, he muſt have ſuch property in the land as ſhall produce a clear income of 100l. per annum; or it might be carried ſo far, as that he might have nothing and yet enjoy the privilege. What then are a mortgagor and mortgagee in chancery? one the owner, and the other as having a charge upon the land; and the charge goes along with it.—Buller J. In the caſe of rent-charges the cognizance of the juſtice is admitted; and in many others they muſt interfere, as in contracts between landlord and tenant. Neither is there any pretence on the part of the defendant to complain of hardſhip. Poſſeſſion is *prima facie* evidence of property: the defendant, therefore muſt be preſumed to be the entire owner: the hard taſk lies upon the other party; who muſt make proof of the contrary. If the juſtice may receive proof of rent-charges and ſervices, what ſhould prevent his doing the like as to mortgages? The only point then is, whether the words *clear yearly value*, mean, *clear yearly value to the perſon in poſſeſſion?* The words of this act would of themſelves leave little room for doubt; but when explained and ſupported by the ſtatutes of James in *pari materia*, the words of which are, *over and above all charges and reprifes*, it can no longer admit of a queſtion, but that it muſt mean *clear value* to the perſon in poſſeſſion; for by the common rule of conſtruction, all ſtatutes upon the ſame ſubject are conſidered as making one ſyſtem of law, and conſequently the words in the two laſt ſtatutes muſt be referred to the ſtatute in queſtion. Willes and Aſhhurſt Js. concurred. Judgment for the plaintiff. *Cald. Caſ.* 230.

QUALIFICATION DISPROVED BY A RETURN ON THE PROPERTY TAX.—Caſe of the K. *v.* Clarke, *Eaſter Term*, 39 Geo. III.—This was a conviction on 5 Anne, for keeping and uſing a greyhound for the deſtruction of game without being duly qualified. The conviction was in the uſual form, negativing ſpecifically each of the qualifications enumerated in 22 & 23 Car. II. The conviction then proceeded as follows: "And it duly appears to us the ſaid juſtices in the preſence of the ſaid defendant, that on the 22d of March, 1798, at, &c. before

fore A. B. and C. D. commiſſioners appointed by an act for granting to his majeſty an aid and contribution for the proſecution of the war, then and there acting as ſuch commiſſioners, did make a declaration in writing, ſigned by him, that his *annual income* did not exceed 50l. and being examined upon oath, depoſed that the value of the whole lands, tenements, and eſtate of the ſaid defendant was then 70l. a-year and no more; and that 17l. a-year intereſt money was then payable out of the ſaid lands; and claimed to be allowed the ſame as intereſt paid for money charged upon the ſaid lands; and the ſame was allowed. And the defendant admits that he made the ſaid declaration and claim of allowance; and that the value of his ſaid lands, &c. has not increaſed ſince the time of making ſuch declaration, and that he has not ſince the ſaid 22d of March acquired other lands, and that the 17l. a-year intereſt money is ſtill payable out of the ſaid lands, &c." The conviction next proceeded to ſtate, that the defendant, being called upon to make his defence, ſaid that he was poſſeſſed of an eſtate in the pariſh of Whitgift of the yearly value of 100l. and upwards, and produced a witneſs, who ſaid that he knew the defendant's ſaid eſtate, and he thought it worth 100l. a-year, and that he would give 100l. a-year and upwards for it, but admitted that he would not ſwear that the defendant's ſaid eſtate was worth 100l. a-year *clear of repriſes*.—*Per curiam*. It muſt be taken *pro confeſſio* that the defendant at the time mentioned in the conviction, when he was before the commiſſioners on the amount of his income, had not then an eſtate of 100l. a year in value; it is evidence out of his own mouth; and the witneſs adduced by him did not contradict this, even if he were credited to the full extent of what he depoſed; for he would not undertake to ſay that the eſtate was of that value *clear of repriſes*; and as to the deductions being on account of ſimple contract debts, the contrary appears by the defendant's own ſhewing; for he claimed the allowance before the commiſſioners for the intereſt of money *charged upon his eſtate*. Conviction affirmed. *D. & E.* 8 V. 220.

By Estate for term of life.—It hath been doubted upon theſe words, in what order of qualification an eccleſiaſtical living ſhall be ranked, which a man holds not in his own or his wife's right, but in the right of his church. It is allowed to be a life eſtate, although it may happen to be determined ſooner, as by reſignation, deprivation, or accepting another living incompatible. But the queſtion is, whether theſe words ſhall belong to the former or the latter part of the ſentence? The difficulty ſeems to be partly occaſioned by the diſjointed manner of punctuation. But the points are no part of the ſtatute; the ſtatutes themſelves are without points; the punctuation is only made by the printer. Abſtracted from the punctuation, it ſhould ſeem that the former part of the ſentence, reſpecting the qualification of 100l. a-year by an eſtate of inheritance, ought to terminate with the words per annum. And that a life eſtate, being of inferior quality, ought to be coupled with leaſehold, whereof 150l. a-year is neceſſary to conſtitute a qualification. And ſo it was determined in the caſe of Lowndes, eſq. *v.* Lewis, clerk, that a life eſtate of leſs than 150l. per annum is not a qualification to kill game. *Cald. Caſ.* 183.

By Lease of ninety-nine years of 150l. yearly value.—An eſtate of the value of 150l. per annum, holden by the party in his own right, under a leaſe for ninety-nine years to truſtees, if he and others ſhould ſo long live, is a ſufficient qualification; and leaſes of this kind have always been ſo deemed. Earl Ferrers *v.* Henton. *D. & E.* 8 V. 506.

By being the son and heir apparent of an esquire.—Eſquire is a name of dignity next above the common title of gentleman, and below a knight. Heretofore he was attendant, and had employment as a ſervant, waiting on ſuch as had the order of knighthood, bearing their *ſhields*, and helping them to horſe, or ſuch like. See the article Esquire, vol. vii. p. 20. And this title is of that nature with us now, that to whomſoever either by blood, or place in the ſtate, or other eminency, we conceive ſome higher attribute ſhould be given than that ſole title of gentleman, knowing yet that he hath no other honorary title legally fixed on him, we uſually ſtile him *an eſquire*, in ſuch paſſages as require legally that his degree or ſtate be mentioned. *Seld. Tit. of Hon.* 374, &c.

Or Person of higher degree.—In the order of precedence, the heralds, next below knights and their ſons, and above eſquires, rank colonels, ſerjeants at law, and doctors in the three learned profeſſions. 1 *Blackſt. Comm.* 405.—In the caſe of K. *v.* Utley, upon an information on the game laws, and a conviction of the defendant on the ſtat. of Car. II. as "not being the eldeſt ſon of an eſquire, or *of* other perſon of higher degree," Chambre moved to quaſh this information on the inſertion of the word *of*; and contended, that though this was copied from precedent, yet it was not warranted in law, for that by this conſtruction, neither an eſquire or a knight would be qualified as ſuch.—Buller J. ſaid, that the legiſlature ſeemed to him to have taken it for granted, that an eſquire or other perſon of higher degree would have a ſufficient eſtate to qualify him, and therefore they had neglected to do it expreſsly; though there was a caſe in Lord Hardwicke's time, where the word *of* was rejected, and no notice taken. However he was of opinion that the conviction ſhould be affirmed: and it was ſo. *D. & E.* 1 V. 413.

Case of Jones *v.* Smart, *Mich. T.* 26 Geo. III.—This was an action to recover a penalty for killing game, by 5 & 9 An. *not being duly qualified*. The queſtion was, whether a diploma from St. Andrew's in Scotland appointing the defendant *doctor of phyſic*, gave him a qualification under 22 & 23 Car. 2. c. 25. to kill game? Conſte for the plaintiff argued, that ſuppoſing him to have the ſame rank as a doctor of the Engliſh univerſities, yet he is not ſuch a character as was meant to be qualified by the ſtatute of Car. II. The qualification claimed muſt be derived from conſtruing the words *or other perſon of higher degree* in the nominative caſe, and ſuppoſing that every perſon of higher degree than an eſquire is thereby qualified. That this is not a true conſtruction of the ſtatute is clear by the caſe of K. *v.* Utley, 24 Geo. III. And ſuppoſing the doctors of the two Engliſh univerſities have the right contended for by the preſent defendant, which is a very doubtful matter, yet this diploma does not confer ſuch a right. There is no inſtance in which foreign diplomas and degrees have been acknowledged here, and there is a great difference between degrees acquired by long labour and reſidence, and one beſtowed in a ſummary manner. 8 *Rep.* 114. Dr. Bonham's caſe. And by the union, it does not follow that perſons having taken Scotch degrees are to be endowed with all the privileges of Engliſh degrees. Dr. Gilbert, having taken his degree of D. D. in Scotland, wiſhed to preach at Oxford in his proper habit as doctor, but was not allowed: and Dr. Pitcairn accepted a degree at our univerſities, although he had before taken the ſame degree in Scotland.—Erſkine in reply made three queſtions; 1ſt. Whether on the conſtruction of 22 & 23 Car. II. every perſon as a member of the civil ſtate, who is an eſquire or ſuperior in rank, may not kill game? 2dly. Whether a doctor of phyſic who has taken his degree in England be not ſuch perſon? 3dly. Whether a Scotch diploma does not confer the ſame privileges? As to the firſt, the language of the ſtatute is very ſtrong; the word *other* muſt be conſidered as the *nominative* and not as the *genitive* caſe, both in reaſon and grammatical conſtruction. It is clear the ſtatute did not mean to confine the qualification altogether to *landed* property, by extending it to the ſon and heir apparent of an eſquire, who is ſuppoſed to have no landed property of his own.

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The eſquires alſo who are enumerated by Camden are perſons who have no land: from 8 Rep. 118. we may collect, that where a ſtatute will bear two interpretations, one contrary to ſenſe, the other agreeable to it, the latter ſhall prevail: here it was evidently the intention of the legiſlature, that perſons of higher degree than an eſquire ſhould be qualified, for if the oppoſite conſtruction was to prevail, a perſon would have a derivative title, when the perſon from whom ſuch title derived would have none, and this very defendant's ſon will derive a right from his father's diploma, which it is contended the father himſelf has not. 2dly. As to the queſtion, whether an Engliſh doctor be of ſuperior degree to an eſquire? Blackſtone ranks doctors above eſquires, and ſo do the heralds, but this relates only to Engliſh degrees: then 3dly. Does a Scotch diploma confer the ſame right? A Scotch doctor is of equal rank as an Engliſh one as a member of the civil ſtate: and the 4th article of the act of union ſays *there ſhall be a communication of all rights, &c.* except where expreſsly agreed to the contrary: as to the college of phyſicians and the univerſities refuſing to allow Scotch doctors their own privileges within their own juriſdictions, they, as private corporations, may make what regulations they pleaſe concerning their own bodies; but as to all general immunities derived from the common law, or under the act of union, they cannot deprive any body of theſe. —The court took time to conſider: but Lord Mansfield then ſaid, that as to the latter ground he had no doubt, that all privileges granted by the ſtatutes to the univerſities, were confined to our own, and did not extend to Scotland or other foreign univerſities, which were governed by their own particular laws and cuſtoms. But that the general queſtion upon the conſtruction of the ſtatute of Car. II. ſhould not paſs undecided.—Afterwards the court delivered their opinions *ſeriatim*.—Lord Mansfield. This is an action brought by the plaintiff againſt the defendant for uſing a gun for the purpoſe of killing game, not being duly qualified. The caſe ſtates that the defendant reſted his juſtification upon a diploma from St. Andrew's in Scotland, conferring on him the degree of doctor of phyſic. Two objections have been raiſed: firſt, That under this diploma, the defendant had the ſame rights and privileges conferred upon him as are acquired by a degree beſtowed by the Engliſh univerſities. 2dly. That doctors in the learned profeſſions are of higher degree than an eſquire, and therefore by 22 and 23 Car. II. are exempted from the penalties of the game laws. The ſtatute of 22 & 23 Car. II. has theſe words, *other than the ſon and heir apparent of an eſquire, or other perſon of higher degree.* For the defendant it has been contended, that *other perſon of higher degree* relates to the eſquire himſelf, and means that a perſon of higher degree than an eſquire is qualified; whereas on the other ſide it is contended, that it means *other than the ſon and heir apparent of an eſquire, or the ſon of any other perſon of higher degree.* To be ſure, abſurd conſequences may ſeem to follow from giving a privilege to the ſon which the father has not; but the queſtion is, has the ſtatute done it or not? I wiſh to have the general point determined becauſe of the conſequences: this court conſidered the point before in K. *v.* Utley, and there they held that the ſtatute meant *the ſons of other perſons of higher degree:* on full conſideration I am not ripe to vary from the opinion given in that judgment, all the precedents are ſo; but what ſtruck me moſt was this, the drawer of the ſtatute of Car. II. certainly had the former ſtatute of Jac. I. in his view; for though it does not follow the other ſtatute throughout, yet it does in that clauſe, and that does not admit of a doubt, for there the word *of* is expreſsly inſerted: I cannot therefore unneceſſarily vary from the deciſion that has been given; I ſay *unneceſſarily*, becauſe I am ſatisfied on the other ground of the opinion I delivered the other day; on that ground there is not a colour for ſaying that the defendant is qualified by the act of union; it is true, that by the 4th article of that act, the Scotch have the ſame general privileges as the Engliſh, but then they muſt have the ſame qualifications otherwiſe they come not within the ſame deſcription, for the general article which declares, there ſhall be a communication of all privileges, can only mean ſuch as are of a general nature: a burgeſs of London is endued with certain privileges, to which a burgeſs of Edinburgh has no claim; ſo in every caſe where a privilege is of a qualified nature, it muſt be underſtood with that qualification; a doctor of the Engliſh univerſities may become a member of the college of phyſicians, may plead in doctors commons, and has various other privileges from which a Scotch doctor, as ſuch, is excluded; the qualification therefore, muſt be from Oxford or Cambridge. In like manner, the ſtatute allowing men of certain degrees to have certain diſpenſations for holding two livings, neceſſarily refers to ſuch degrees only as are obtained in an Engliſh univerſity, for the church of Scotland is diſtinct from ours, and admits not of the ſame rules; therefore whatever rank the defendant may hold by courteſy; he is not in point of law to be conſidered as a doctor to this purpoſe.—Willes J. It is my misfortune to differ from the reſt of the court on the conſtruction of the ſtatute of Car. II. The caſe of K. and Utley came before us on a motion to quaſh a conviction on account of the word *of* being inſerted before the words, *other perſons of higher degree.* I find by looking at my own paper book that the caſe was but ſlightly argued, and the court principally relied upon the ground of all the precedents having been in that form; I adopted that opinion at that time, but I now retract my aſſent to that determination for three reaſons: 1ſt. the game laws are already ſufficiently oppreſſive, and therefore ought not to be extended by implication; 2dly. becauſe I think that in grammatical conſtruction and propriety the words *other perſons* muſt be taken to be in the *nominative* and not in the *genitive* caſe; 3dly. becauſe a different conſtruction is unnatural and unreaſonable, and muſt be productive of endleſs inconvenience and abſurdity. Firſt, nothing can be more oppreſſive than the preſent ſyſtem of the game laws; we are told they aroſe from the old foreſt laws, which reſtrained the right of killing game to much narrower limits; and hence that theſe new regulations encroach on no privileges to which we were before entitled; but on the contrary are mild when compared with the ſources from whence they flow. Blackſtone however, in 2d book of his Commentaries, c. 27. holds a different language: and wherever a law is productive of tyranny, I ſhall ever give my conſent to narrow the conſtruction. 2dly. According to grammatical conſtruction, I think the words *other perſons of higher degree* muſt be taken in the *nominative* caſe, for want of the word *of*, and I am the more confirmed in that opinion, for where the legiſlature meant the *genitive* caſe they have expreſsly inſerted the word *of*, as in 1 Jac. I. c. 27. and 9 An. c. 5. which relates to qualifications to ſit in parliament. But 3dly, what I moſt rely on, are the many abſurdities which muſt flow from a different interpretation; the eldeſt ſon of a barriſter at law or of a captain in the army or navy will be qualified as ſuch, and yet the father himſelf will not; even a peer who is not qualified by property, will not be privileged to kill game, though his ſon who claims through him will: the act could never mean to annex the qualification to *land* only, for no landed eſtate however large will confer the title, but it muſt be acquired either by office, the king's patent, or ſome of the means laid down by Selden and Camden. A lord of the manor is certainly not an eſquire by virtue of his manor, or royalty, though in common acceptation he is conſidered as ſuch; this is evident from the 2d ſec. of 22 & 23 Car. II. c. 25. which empowers lords of manors or other royalties, *not under the degree of an eſquire*, to appoint game-keepers; but no lord of a manor under that rank can make ſuch an appointment, whatever

whatever his eſtate may be. On the other hand, was ever an eſquire, ſince the paſſing of this act, convicted on it? If no ſuch inſtance can be produced, that ſhows the general ſenſe of the nation as to this act, and is a much more powerful argument, and has greater weight with me, than any faulty precedent. From the preambles of the ſtatutes on this ſubject, it is plain they are chiefly pointed againſt perſons of low degree, to prevent mechanics from leaving their employments to deſtroy the game, to the prejudice of noblemen, gentlemen, lords of manors, and others: for thoſe reaſons I think gentlemen of this deſcription ought not to be deprived of their amuſements, and this is my opinion on the general import of the act; how far it may affect the preſent queſtion is another matter. As to the 2d point, if an *eſquire as ſuch* is qualified, I am likewiſe of opinion that *doctors* are ſo; to this it is objected, that at all events, a perſon who has not taken his degree in England, is not to be conſidered in the light of a perſon qualified by the ſame means as thoſe are; but this objection is in my mind done away by the 4th article of the union, which enacts, that there ſhall be a communication of all privileges, except where it is expreſsly provided to the contrary: as to their being excluded by the college of phyſicians, that is merely the reſult of a local inſtitution; however, as the reſt of the court are againſt me on the firſt point, I ſhall give no further opinion upon this.—Aſhhurſt J. I ſee no reaſon to depart from the conſtruction which has been put upon the ſtatute 22 & 23 Car. II. by this court in the caſe of K. & Utley. The game laws are to be conſidered as poſitive rules, rather than as founded on reaſon; therefore it is ſafer to adopt what they have actually ſaid, than to ſuppoſe what they meant to ſay: though by the ſtatute of Jac. I. rank as well as property gave a qualification: yet under this ſtatute of Car. II. a man can only be qualified by means of property; but ſaid the legiſlature, the heir apparent, who is in the line of ſucceſſion, ſhall likewiſe be qualified, from a ſuppoſition that the eſquire was ſo already; according to which conſtruction I cannot think that it was in their intention purpoſely to exclude the father, but in fact they have done it; and the matter is put out of all doubt by the ſtatute of James which expreſsly excludes them, and ſo does the ſtatute of Car. II. as effectually in my opinion; the blunder has been adopted perhaps without meaning it; this appears to me from the wording of the clauſe, for it ſhould ſeem ſtrange that in fixing the qualifications, they ſhould begin with property, then go to a derivative qualification, and then return to a very large deſcription of original ones, namely, quality and degree. In a grammatical ſenſe alſo, it muſt be taken to be in the *genitive* caſe in the ſame manner as if the word *of* had been actually inſerted. I ſee no reaſon to depart from the conſtruction put upon the ſtatute Car. II. in K. and Utley; nor can any inconvenience reſult from it, for the legiſlature may hereafter extend the qualification if they think proper. It is not neceſſary to ſay any thing upon the other head, if it were, I ſhould agree with my lord. —Buller J. The caſe of the K. & Utley did not paſs with ſo little argument as my brother Willes ſuppoſes, for I remember it was argued very fully, and the grounds of our deciſion were, 1ſt, the conſtant form of convictions on the game laws, which ought to have great weight with the court: 2dly, from a compariſon of the ſeveral acts relating to game. But notwithſtanding that deciſion, if I ſaw any reaſon to alter the opinion which I then gave, I would be ready to do it and correct my miſtake; but upon full conſideration, in my opinion that judgment was right: 1ſt, taking this clauſe of Car. II. in a grammatical ſenſe, had the exception extended no farther than to *other perſons of higher degree*, ſtill I ſhould have thought that the word *of* was intended, and that the word *other* was to be underſtood in the *genitive* caſe; but I am confirmed in my opinion by the manner in which the clauſe proceeds, for the words immediately following are, *and the owners and keepers of foreſts, parks, chaſes, and warrens*; now had the preceding part of the ſentence, *or other perſons of higher degree*, been intended to have been taken in the *nominative* caſe, why did the legiſlature alter the mode of expreſſion? for when they ſpeak of other perſons to be exempted in their own right, they change the words. Again it is aſked, what reaſon is there for excepting the eldeſt ſon alone, and not the younger? The only reaſon that can be given is, becauſe he is the preſumptive heir to the real eſtate, which is a further argument for ſuppoſing that landed qualification was the immediate object of the ſtatute, and in fact this act of Car. II. had that principally in view, for it repeals the perſonal qualification of the ſtatute of James, and leaves no other but that of land, with the exception in favour of the heir apparent, on account of his right of ſucceſſion. And we may obſerve, that there is the ſame exception introduced into the act of qualifications of members of parliament. I have no doubt that the legiſlature took it for granted that eſquires themſelves would be qualified in reſpect of their land, and for the reaſons aſſigned, extended the qualification to their eldeſt ſons. So that had the legiſlature been aſked at the time of making this act, whether they intended to exclude the younger ſons of *dukes?* they would have anſwered *no*; but I am as firmly perſuaded, that had the ſame queſtion been put to them reſpecting *doctors*, they would have anſwered in the *affirmative*: be this as it may, we are bound to take the act as they have made it; a *caſus omiſſus* can in no caſe be ſupplied by a court of law, for that would be to make laws; nor can I conceive that it is our province to conſider, whether ſuch a law that has been paſſed is tyrannical or not: it has been ſaid that this act is only pointed againſt perſons of low degree, as appears from the preamble; to conſider the preamble of an act is to be ſure in general a good mode to come at the meaning of the legiſlature, but it does not aſſiſt us in this caſe, for we gather from the enacting part of the ſtatute, that a perſon who has a freehold of 99l. per annum, or a leaſehold for ninety-nine years of 149l. per annum, is not qualified, but can it be ſaid that either of theſe is a mean or vulgar perſon? Thus far we have been conſidering the ſtatute of Cha. II. alone, but now conſider it as coupled with the former ſtatutes which are *in pari materia*. In the ſtatute of James, the ſame words *other perſons of higher degree* are uſed, and there it is clear they are uſed as part of the deſcription of the ſons, for the particle *of* is expreſsly prefixed; now if the ſtatute of Car. II. is any ways doubtful we muſt expound it by the ſtatute of James, and that is confined to ſons alone. But the ſtrong ground of all is, that all the acts relative to game have been from time to time reſtrictive of the right to kill game: they aboliſh ſome qualifications and raiſe others, and conſequently leſſen the number of qualified perſons, and no one ſtatute can be conſtrued into an enabling one; this is deciſive. There is not a pretence to ſay that a doctor of phyſic is within the exception of the ſtatute of James; then if he is not within that ſtatute, how can he be ſaid to be qualified under the ſtatute of Car. II. which is a reſtraining one, and gives no new qualification whatever? As to the other queſtion, whether a doctor of phyſic of the defendant's deſcription is qualified? I think he is not on another ground, but on this head I refer generally to what my lord has ſaid.—Judgment for the plaintiff. *D. & E.* 1 V. 44.

And all lords of manors or other royalties may authorize their gamekeepers WITHIN THEIR RESPECTIVE MANORS OR ROYALTIES, to take and ſeize all ſuch guns, bows, greyhounds, fetting-dogs, lurchers, or other dogs to kill hares or conies; ferrets, tramels, lowbels, hays, or other nets, hare-pipes, ſnares, or other engines for the taking and killing of conies, hares, pheaſants, partridges, or other game, as within the precincts of ſuch reſpective manors ſhall be uſed by any perſon who by this act is prohibited to keep or uſe the ſame: and moreover,

moreover, any ſuch gamekeeper (or other perſon being thereunto authoriſed by warrant of one juſtice) may in the day time ſearch the houſes, out-houſes, or other places, of any ſuch perſon by this act prohibited to keep or uſe the ſame, as upon good ground ſhall be ſuſpected to have or keep in his cuſtody any guns, bows, greyhounds, ſetting-dogs, ferrets, coney-dogs, or other dogs to deſtroy hares or conies, hays, tramels, or other nets, lowbels, hare-pipes, ſnares, or other engines aforeſaid, and the ſame may ſeize, detain, and keep, for the uſe of the lord of the manor or royalty where found or taken, or otherwiſe to cut in pieces or deſtroy, as things by this act prohibited to be kept by perſons of their degree. 22 & 23 *Car.* II. c. 25.

And if any unqualified perſon ſhall have, keep, or uſe, any bows, greyhounds, ſetting dogs, ferrets, coney-dogs, hays, lurchers, nets, tunnels, lowbels, hare-pipes, ſnares, or any other inſtruments, for the deſtruction of fiſh, fowl, or other game, and ſhall not give a good account before a juſtice, to the ſatisfaction of ſuch juſtice, how he came by the ſame, or elſe ſhall not in ſome convenient time (to be ſet by ſuch juſtice) produce the party of whom he bought the ſame, or ſome other credible perſon, to depoſe upon oath ſuch ſale thereof; he ſhall forfeit for every offence not under 5s. nor above 20s. half to the informer, and half to the poor, by diſtreſs; for want of diſtreſs, to be committed to the houſe of correction, not more than one month, nor leſs than ten days, there to be whipped and kept to hard labour. And if any perſon ſo produced or charged with the ſaid offence, ſhall not before the juſtice give ſuch evidence of his innocence as aforeſaid, he ſhall be convicted thereof in the ſame manner as the perſon firſt charged therewith, and ſo from perſon to perſon till the firſt offender be diſcovered. 4 & 5 *Will.* c. 23. And all lords of manors or their game-keepers may within their manors oppoſe and reſiſt ſuch offender, in the night time, in the ſame manner as if the fact had been committed in any ancient chaſe, park, or warren, incloſed. And no certiorari ſhall be allowed to remove any conviction, unleſs the party firſt become bound to the proſecutor in 50l. with ſuch ſufficient ſureties as the juſtice ſhall think fit, to pay within a month after the conviction confirmed, or procedendo granted, full coſts and charges; and in default thereof, the juſtice ſhall proceed to the execution of the conviction.

But by a ſubſequent ſtatute, 5 Anne, c. 14, if any perſon, not qualified by the laws of this realm ſo to do, ſhall keep or uſe any greyhounds, ſetting-dogs, hays, lurchers, tunnels, or any other engine to kill and deſtroy the game, and ſhall be thereof convicted on the oath of one credible witneſs, before one juſtice, he ſhall forfeit 5l. half to the informer, and half to the poor of the pariſh where the offence was committed, to be levied by diſtreſs and ſale of the offender's goods; for want of diſtreſs, to be ſent to the houſe of correction for three months for the firſt offence, for every other offence four months.—And any juſtice, or lord *within his manor*, may take away ſuch dogs, nets, or other engines, which ſhall be in the power or cuſtody of any perſon not qualified, and may keep the ſame to his own uſe without being accountable to any perſon for the ſame.

Case of K. *v.* Newman. *Hilary Term*, 13 Geo. III.—An information was moved for againſt a juſtice, for convicting two perſons for uſing greyhounds to deſtroy game; which perſons were themſelves unqualified, but were out with a qualified perſon; which they pleaded in their defence, and that the dogs were not their own. The juſtice ſaid he knew it, and thereupon convicted them. —On behalf of the juſtice, Mr. ſerjeant Burland ſaid, that the convicted perſons being by their own evidence not qualified, and it not appearing by any evidence expreſsly that the perſon they were with was a qualified perſon, or that the dogs were (as they aſſerted) not theirs, but his, he hoped the information would not be granted. It was further ſaid, that it hath never been adjudged, that unqualified perſons, out with qualified, were free from the penalty; nor that it ſignified, whether the dogs belonged to the qualified man, or to the others: for the being out to *uſe* them, was ſufficient within the ſtatute; or at leaſt it had been much doubted. ——L. Mansfield: Let the juſtice pay the whole coſts, and go before the maſter.——Upon which, the ſerjeant ſaid, Does your lordſhip then think them ſufficiently qualified?——L. Mansfield: Yes; and it is matter of tenderneſs to take it this way. I know you to be very judicious, and thought you led to it. The defence you ſet up for the juſtice was none; if it had ever been thought of by him. Shall not a gentleman take any body out with him, to beat the buſhes and ſee a hare killed? It appeared alſo on the evidence, that the ſummons was taken out on the Sunday, and that the parties aſked an hour's time to go for Mr. Linch, the gentleman they went out with, who, they ſay, is worth ſeveral hundreds a-year. It is not pretended on the other ſide, but they might have brought this witneſs in three or four hours at longeſt. This (as his lordſhip added) with ſome of the above-mentioned, were very aggravating circumſtances: however, you know the ſtrength of your own caſe: Take it by way of information.—The ſerjeant, however, thought it adviſeable to deſire leave to refer it to the maſter. Which was granted accordingly. *Lofft.* 178.

In the caſe of Peſhall *v.* Layton. *Mich. T.* 29 Geo. III. *L. Kenyon*, Ch. J. ſaid, that where ſeveral unqualified perſons offended by going out together and killing a hare, that only one penalty can be recovered, though the proſecutor has his election which he will ſue. *D. & E.* 2 *V.* 712.

Alſo in the caſe of K. *v.* Bleaſdale and another, *Trinity Term*, 32 Geo. III. which was a conviction on 5 Anne, c. 14. for uſing a greyhound to deſtroy game without being qualified; for which the defendants were convicted in 5l. *each*; which the *court*, without hearing any argument, ſaid, could not be ſupported, for that it was only one offence, and that the magiſtrate ſhould only have convicted them in *one* penalty. And they ſaid that this point had been ſeveral times decided; in Hardman *v.* Whitacre, *Bull. N. P.* 189, and in others.—Conviction quaſhed. *D. & E.* 4 *V.* 809.

Case of K. *v.* Marriot, *Mich. T.* 4 Geo. This was a conviction for keeping a greyhound; reciting that one William Toune came and informed, that the defendant being a perſon not qualified to keep a greyhound, did nevertheleſs keep one, and therewith killed ſeveral hares; and that he being ſummoned did appear, and being aſked what he had to ſay, offered nothing in excuſe, and therefore the juſtice convicted him. It was objected, that the juſtice ſhould ſet out, why the defendant is not a qualified perſon, as that he is not the ſon of an eſquire, nor has 100l. a-year in his own or his wife's right: for he ought not to make himſelf the ſole judge, but give the reaſons at large. Parker Ch. J. ſeemed to think the conviction would be good, having followed the words of the ſtatute, and that if the defendant was qualified, he ought to have ſhewn it before the juſtice, being ſummoned for that purpoſe. Eyre J. ſtarted an objection, that it was not the juſtice that had taken upon him to ſay the defendant was not qualified; but only the witneſs; for the conviction runs, that the witneſs being ſworn ſaith, that the defendant, *being a perſon no way qualified*, did ſuch a day keep a greyhound; ſo that it appears, the witneſs has given the law to the juſtice, and takes upon himſelf to judge of the defendant's qualification, and the juſtice is only made uſe of as an inſtrument, to reduce the opinion of the witneſs into a conviction. By Parker Ch. J. The *being not qualified* ſhould be the concluſion of the juſtice, and not the words of the witneſs; for he ought not to ſwear generally a man is not qualified, and ſuch a general proof will not be good: this

this is only an invention to ſupport a conviction in general terms, which would be bad if the particular facts were alleged. Pratt J. Where the juſtices have a ſummary juriſdiction, and no appeal lies, as in this caſe, we muſt keep them up ſtrictly to the law: and I ſhould be glad if we could make them ſet out the whole particularly. The caſe was adjourned. And afterwards Pengelly ſerjeant mentioned two caſes, Q. and Hayward, E. 12 An. There it was, *not being qualified, licenſed, or authoriſed to keep any engine*, and it was quaſhed. The other was in the ſame term, and quaſhed, becauſe no qualifications were mentioned. And towards the end of the term this conviction was quaſhed; and the principal reaſon declared to be, becauſe the witneſſes had taken upon themſelves to judge of the qualifications. 1 *Str.* 66.

Case of K. and Hill, *Hilary T.* 12 Geo.—Defendant was convicted, for unlawfully keeping a lurcher and a gun to kill and deſtroy the game, *not being qualified by the laws of this realm ſo to do.* And the conviction, being removed into the king's-bench by *certiorari*, was quaſhed; becauſe it was only averred generally, that he was not qualified, and did not aver that the defendant had not the particular qualifications mentioned in the ſtatute, as to degree, eſtate, and the reſt. 2 *Ld. Raym.* 1415.

A perſon was likewiſe convicted before a juſtice upon the ſtatute, for keeping a gun, not having 100l. per annum; and the conviction, being removed into the court of king's-bench, was quaſhed, for not ſaying *when* the defendant had not 100l. a-year; for it might be he had ſuch qualification at the time when he kept the gun, though not at the conviction; and the offence and time ought to be certainly alleged. 3 *Mod.* 280.

Case of K. *v.* Jarvis, *Hil. T.* 30 Geo. II.—This conviction ſet forth, that defendant did unlawfully keep and uſe, and had in his cuſtody and poſſeſſion, one ſetting dog and ſetting net, for the deſtruction of the game; and that he the ſaid Jarvis was not then anywiſe qualified, impowered, licenſed, or authoriſed, by or according to the laws of this realm, to kill game. It was moved to quaſh this conviction. And by L. Mansfield, Ch. J. It is now ſettled by the uniform courſe of authorities, that the qualifications muſt be all negatively ſet out: otherwiſe the juſtices have no juriſdiction over the perſons killing game, or keeping dogs or engines for the deſtruction of it. The *obiter* ſaying in 10 *Mod.* (if it was a book of better authority than it is) would ſignify nothing, when the determinations are the other way. There is a great difference between the purview of an act of parliament and a proviſo in an act of parliament. In the caſe of K. *v.* Marriot, where the witneſs ſwears only generally, it was holden inſufficient: and the juſtices who convict upon the evidence of the witneſs can have no other or further ground to go upon, than what the witneſs ſwears. In the caſe of K. *v.* Hill, it is the very point eſtabliſhed and ſettled, that the general averment is not ſufficient, and that it muſt be averred that the defendant had not the particular qualifications mentioned in the ſtatute. In the caſe of Bluet, *qui tam*, and Needs; (*Com. R.* 522.) the general averment of the defendant's not being qualified, was holden to be ſufficient upon an action, though inſufficient upon a conviction; for in the examination of the queſtion at the trial of an action, the qualification may be gone into: the diſtinction is obvious between an action and a conviction. In the preſent caſe, the witneſs ſwears generally, that the defendant was not qualified. The juſtices adjudge it generally, only. The ſtream can go no higher than the ſpring head. So the concluſion, which the juſtices draw from the teſtimony of the witneſs, muſt be as general as that teſtimony. In the caſe of K. *v.* Pickels, *M.* 19 Geo. II. it was laid down as a rule, that the want of the particular qualifications required by the 22 and 23 Car. II. c. 25, ought to be negatively ſet out in convictions. And the only queſtion there was, Whether it was neceſſary to add the inferred or argumentative qualification, collected from the 5 An. c. 14, but not mentioned in the 22 and 23 Car. II. c. 25, of his not being lord of a manor? *Exceptio probat regulam:* Nor was the general rule at all doubted or diſputed in that caſe. In indictments upon the 8 and 9 Will. c. 26, for having a coining preſs, every thing which ſhews that the defendant had no authority, muſt be negatively ſet out: and ſo it was done in the indictment of Bell, which was lately argued before all the judges. I take the point to be ſettled, by the conſtant tenor of all the authorities: and I think upon very good reaſon, if there was need to enter into the reaſon at large, after it has been fully ſettled already.—Mr. J. Deniſon concurred, and ſaid, it was a clear caſe, and that it was fully ſettled and eſtabliſhed, that in theſe convictions, the want of the particular qualifications mentioned in the 22 and 23 Car. II. ought to be negatively ſet out. If not, the juſtices have no juriſdiction to convict the defendant as an offender. And the evidence and adjudication ought both of them to be, that he had not the qualifications which are ſpecified in that act, *nor any of them.* Indeed you are not obliged to go further than the words of this act of parliament of the 22 and 23 Car. II. and that was the caſe of K. *v.* Pickels. But however in that caſe, the preſent point was eſtabliſhed, and taken to be indiſputable. There is a known diſtinction between exceptions in a ſtatute by way of proviſo (which need not be ſet forth) and thoſe in the purview of the act: and to this point there is a very ſtrong caſe (K. *v.* Bell, *Foſt.* 430.) upon an indictment for having coining inſtruments in his cuſtody. It was ſaid that in a conviction it is ſufficient to purſue the words of the act of parliament; but I think that is not ſo, and there are many caſes where that has been ruled otherwiſe. Among other inſtances, it was determined in K. *v.* Chapman, *E. T.* 28 Geo. II. upon a conviction of a perſon for robbing an orchard; which the court held not ſufficient; but it ought to have appeared of what and how the orchard was robbed, that they might judge whether it were a robbery within the meaning of the 43 Eliz. c. 7.—Mr. J. Foſter alſo concurred, and ſaid, that on negative acts of parliament, the point is fully ſettled and eſtabliſhed, that the particular qualifications mentioned in the purview of them, muſt be negatively ſpecified in convictions made upon them.—And by the court unanimouſly, the conviction was quaſhed. 1 *Burr.* 148.

Case of K. *v.* Filer, *Hil. T.* 8 Geo.—Conviction for *keeping* a lurcher to deſtroy game, not being qualified. Exception was taken, that it was not ſhewn he *uſed* the dog to deſtroy game; and it may be he only kept it for a gentleman who was qualified, it being common to put out dogs in that manner. But by the court, the ſtatute is in the diſjunctive, *keep* or *uſe*; ſo that the bare *keeping* a lurcher is an offence; and ſo it was determined in the caſe of K. *v.* King, *E.* 3 Geo. which was a conviction for keeping a gun; and it was not doubted by the court, whether the *keeping* was not enough to be ſhewn, but the only queſtion they made was, Whether a gun was ſuch an engine as is within that ſtatute? and in that caſe a difference was taken, as to the keeping a *dog*, which could only be to deſtroy the game; and the keeping a *gun*, which a man might do for the defence of his houſe. And the conviction was confirmed. 1 *Str.* 426.

Case of K. *v.* Hartley, *Eaſter Term*, 22 Geo. III.—This was a conviction on 5 Anne, for *keeping* and *uſing* a *greyhound* to kill and deſtroy the game.—On a rule to ſhew cauſe why this conviction ſhould not be quaſhed, Chambre took two objections: That it was not fully and ſufficiently ſtated, that there had been an *uſing* of the greyhound (that is) how, and in what manner, and for what purpoſe. 2d, That it was not expreſsly and poſitively averred, that he had kept and uſed a *greyhound* at all; being only ſet forth, that he kept and uſed a dog *called* a greyhound, but that it might be called ſo, and yet be another

ther kind of dog; that it might be an *Italian* greyhound, or might be kept for the protection of a houſe, or other purpoſes than to kill or deſtroy the game.—By L. Mansfield. Convictions muſt certainly be preciſe, that the court may ſee whether the offence committed falls within the juriſdiction of the magiſtrate; and muſt be quaſhed if not ſo. In this act there are two offences deſcribed, a *keeping* and *uſing*; and the legiſlature mean, that there may be a keeping to deſtroy, &c. which is not of neceſſity to be proved by an uſing to that purpoſe; if it were ſo it would be tautologous, for ſuch evidence would be a proving of the other offence: the *keeping* therefore of a thing prohibited being an offence under the act, it is neceſſary *prima facie* evidence of a keeping for the purpoſe prohibited, and it is incumbent upon the defendant to ſhew that it is kept for another purpoſe, as that in the preſent caſe it is a houſe dog, a favourite dog, or a particular ſpecies of greyhound: the deſcription cannot be more preciſe, unleſs ſome particular inſtance of uſing is ſhewn, which, if *keeping* of itſelf conſtitutes an offence, cannot be neceſſary. As to the other objection, that the averment is defective in ſtating only that this was a dog *called* a greyhound, I think it poſitive enough: it muſt mean the dog of that ſpecies generally known in this country.—The other judges concurred.—Rule diſcharged and conviction affirmed. *Cal. Caſ.* 175.

In the caſe of K. *v.* King aforeſaid, Parker Ch. J. ſaid, that walking about with *intent* to kill game, is evidence of *uſing* the inſtrument for that purpoſe. 1 *Seſſ. C.* 88.

And in the caſe of K. *v.* T. Davis, *Hilary T.* 35 G. 33. which was a conviction on the above ſtatute 5 Anne, c. 14, ſ. 4, for keeping and uſing a gun for the deſtruction of game. It appeared on the conviction, that on, &c. "one credible witneſs, (viz.) R. Pyndar of Hadſon, (where the offence was committed,) upon his oath, in the preſence of the defendant, depoſed, that the aforeſaid T. Davis, not having the qualifications, &c. (repeating them,) did keep and uſe a certain engine called a *gun*, with intent to kill and deſtroy the game; and that he (the witneſs) was ſatisfied that the ſaid T. Davis did keep and uſe the ſaid gun for the purpoſe aforeſaid, from the circumſtance of his hearing a gun go off, and obſerving that it was fired by the ſaid T. Davis, who was then walking about a piece of ground in the pariſh of Hadſon aforeſaid, with that apparent intent," &c.—Erſkine and Lane took two objections to this conviction; 1ſt, That the witneſs was incompetent, becauſe he was an inhabitant of the pariſh where the offence was committed; 2dly, If competent, that his evidence was not ſufficient to ſupport the conviction. The evidence is, that the defendant "did keep and uſe a certain engine called *a gun*, with intent to kill and deſtroy the game." If this had been a dog or a ſnare, this evidence perhaps would have been ſufficient, but the defendant may have kept and uſed a gun for a variety of purpoſes beſides that of killing game. Keeping or uſing a gun is not of itſelf an offence within the act, K. *v.* Gardiner; it muſt be kept or uſed with an intent to kill game; and though the witneſs has undertaken to ſwear to the defendant's *intention*, that is not ſufficient, if the reaſon on which his oath is founded do not warrant ſuch a concluſion: now the only reaſon aſſigned by the witneſs is, that the defendant fired a gun, and "walked about a piece of ground with that apparent intent;" to kill game cannot be collected from the mere circumſtance of a perſon carrying a gun.—L. Kenyon Ch. J. (ſtopping Bower, contra.) The firſt objection is anſwered by the ſtatute 27 Geo. III. c. 29, which was paſſed to prevent difficulties of this kind, and to enable inhabitants and pariſhioners to give evidence in proſecutions where the penalty is given to the pariſh, provided it do not exceed 20l. With regard to the other objection, here was evidence tending to prove the offence. That being the caſe, we have no authority to examine further, and ſee whether the concluſion drawn by the magiſtrate, be or be not the inevitable concluſion from the evidence: It is ſufficient in convictions, if there were ſuch evidence before the magiſtrate as in an action would be ſufficient to be left to a jury: here we cannot ſay that there was no evidence of the fact for the conſideration of the magiſtrate. In K. *v.* Gardiner, the defendant was only charged "with having and keeping a gun, being an engine for deſtroying game."—Groſe J. was of the ſame opinion. Conviction affirmed. *D.* and *E.* 6 *V.* 177.

Case of Hooker *v.* Wills, *Hil. T.* 13 Geo. II.—An action was brought on the 8 Geo. c. 19, for uſing a *hound* to deſtroy game. And after a verdict for the plaintiff, the judgment was arreſted; for the ſtatute of the 5 Anne, c. 14, has not the word *hound*, and the words *other engines* come after *nets*, and are applicable only to inanimate things. And this being a penal law, cannot be extended. The ſtatute of the 22 and 23 Car. II. c. 25, has indeed general words *or any other dogs to deſtroy game*; but this is not a conviction on that ſtatute. 2 *Str.* 1126.

Nor indeed could it have been a conviction *on that ſtatute* for any penalty *in certain* for killing and deſtroying the game; for the ſtatute of the 22 and 23 Car. II. doth not inflict a general penalty upon perſons unqualified who ſhall kill and deſtroy the game; but only declares who ſhall or ſhall not be deemed *unqualified*; and gives power to lords of manors and their gamekeepers to ſeize the dogs, nets, and other engines, of ſuch unqualified perſons. But if the defendant did kill the game, and had the ſame in his cuſtody, he might have been proſecuted for the penalty of 20s. for ſuch offence, by the ſtatute of the 4 and 5 Will. hereafter following. But then the conſequence of all this will be, that it is not penal barely to keep a *hound* on this ſtatute of the 5 Anne, but if any unqualified perſon ſhall do ſo, the gamekeepers or others, authoriſed by a juſtice's warrant, may ſeize and keep or deſtroy the ſame, by the aforeſaid ſtatute of the 22 and 23 Car. II.

So in the caſe of Raſon and Liſle, *Trin. T.* 11 Geo. II.—In an action upon the ſtatute, the plantiff declared, that the defendant did keep and uſe a *dog* to deſtroy the game. It was objected, that he ought to have expreſſed what ſort of dog; for it might be a maſtiff or a lap-dog, which might chance to kill game; and the ſtatute only mentions greyhounds, ſetting dogs, and lurchers; and this being a penal law, ſhall not be extended by equity. And of this opinion was the court. And judgment was arreſted. *Com. R.* 576.

Case of K. *v.* Gardiner, *Trin. T.* 11 Geo. II.—It was moved to quaſh a conviction, for unlawfully having and keeping a *gun*, being an engine or inſtrument for deſtroying the game. And it was urged, that this is no ſufficient charge within this act, or any other of the laws relating to the game: for it is not ſaid that the defendant *uſed* the gun for the deſtruction of game; and a gun is not an inſtrument ſo far appropriated to killing game, as that it is criminal for a perſon to have one in his cuſtody only: and it would have been altogether as well, if it had been ſaid that the defendant had in his cuſtody a *cane* for the deſtruction of the game, which may poſſibly be uſed for that purpoſe. The only offences intended to be prevented by the act are, the keeping of engines appropriated to, and which can only be uſed in, the deſtroying of game. A gun is an engine, not for killing the game, but for the defence of a man's houſe. And the whole court were clearly of opinion, that this conviction was not good. For (as they argued) if the ſtatute is to be conſtrued ſo largely, as to extend to the bare having of any inſtrument that *may* poſſibly be uſed in deſtroying game, it will be attended with very great inconvenience; there being ſcarce any, though ever ſo uſeful, but what may be applied to that purpoſe. And though a gun may be uſed in deſtroy-

ing game, and when it is ſo, doth then fall within the words of the act; yet as it is an inſtrument proper, and frequently neceſſary to be kept and uſed for other purpoſes, as the killing of noxious vermin, and the like, it is not the having a gun, without applying it in the deſtruction of game, that is prohibited by the act: but it is otherwiſe of lurchers, harepipes, and ſuch like, which are *peculiarly* fitted or diſpoſed for killing game. The bare *keeping* of theſe for the purpoſe of killing game, is ſufficient to convict an offender, and it will be incumbent upon the defendant himſelf to prove, that he kept them for other purpoſes. And the conviction was therefore quaſhed. After which, Strange ſolicitor-general ſaid, that in the caſe of K. *v.* King, *E.* 3 Geo.—Lord Macclesfield ſaid, that he was in the houſe of commons when this act was made, and he himſelf objected to the inſerting of the word *gun* therein, becauſe it might be attended with great inconvenience. *And.* 255. 2 *Seſſ. C.* 204. 2 *Str.* 1098.

Case of K. *v.* Johnſon, *Hil. T.* 6 Geo.—Conviction for keeping a gun, not being qualified. Exception was taken, that there was not a reaſonable *ſummons*; it was anſwered, that the defendant appeared at the time and made defence, ſo that cures all defects in the ſummons. And by the court, The anſwer is right. 1 *Str.* 261.

Case of K. *v.* Heber, *Hil. T.* 5 Geo. II.—On a rule to ſhew cauſe, why an information ſhould not be granted againſt the defendant, Mr. Heber, a juſtice of the peace, for convicting two perſons, Hargrave and Lancaſter, for killing game, not being qualified; the complaint in relation to Hargrave was, that the defendant ſent his warrant for him, by which he was arreſted, without any previous information upon oath; in relation to Lancaſter, the complaint was, that he happening to be preſent at the time Hargrave was convicted, the defendant took that opportunity of convicting him alſo, without giving him any previous ſummons, by which he might prepare himſelf for his defence. The court (the chief juſtice being abſent) were very clear, that an information ought to go againſt the juſtice for his behaviour in relation to Lancaſter; for they ſaid, it was a moſt known rule of common law, that no man ought to be convicted of an offence, till he has previous notice given him of the charge, that he may be prepared to put in his anſwer to it. Accordingly the rule, as to him, was made abſolute. As to Hargrave, judge Probyn thought, that the rule with reſpect to him alſo ought to be made abſolute. He ſaid, a warrant deprives a man of his liberty; and therefore a ſummons ought only to iſſue, and not a warrant, without an information upon oath. The other two judges did not think this a ſufficient cauſe for granting an information. And therefore the rule, with reſpect to Hargrave, was diſcharged.—In this caſe, the court would not proceed to make a rule to ſhew cauſe, until the convictions were removed thither by *certiorari*: for, they ſaid, if there was no conviction, there ought to be no information; and if there was a conviction, this ought to appear by the record. 2 *Barnardiſt.* 34, 101.

If, however, a conviction before a juſtice on the game laws ſtate that the defendant was *preſent* at the time when the information was read and the witneſſes examined; and that when called on for his defence, he produced no evidence, and did not require any further time; that is ſufficient, without ſtating, that he was previouſly ſummoned to anſwer, &c. K. *v.* Stone, 1 *Eaſt's R.* 639.

Case of K. *v.* Thomas Spencer Crowther, *Hil. T.* 26 Geo. III.—This was a conviction before a juſtice on 5 Anne, c. 14, for uſing a gun. After ſtating the information, which negatived ſpecifically every one of the qualifications in 22 and 23 Car. II. c. 25, it proceeded to ſtate, that, "On the ſame 14th day of the ſame month of September 1785, at the pariſh of Sevenoak, in the county of Kent, one credible witneſs, to wit, Edward Tye, came before me the ſaid juſtice, and by his depoſition taken in writing before me the ſame juſtice, upon his oath, &c. ſwore, affirmed, and ſaid, that the aforeſaid T. S. Crowther, on the 8th day of September aforeſaid, in the year aforeſaid, at the pariſh, &c. did keep and uſe a gun, and certain dogs called ſetting dogs or pointers, to kill and deſtroy the game; and hunted them over certain grounds, part of Black Hall farm, in the pariſh, &c. and did then and there ſhoot at and kill one partridge with his ſaid gun, againſt the form of the ſtatute in ſuch caſe made and provided. And afterwards, that is to ſay, on the 15th day of September in the year aforeſaid, he the ſaid T. S. Crowther, having been duly ſummoned in this behalf, appeareth before me the juſtice aforeſaid, and is preſent to make his defence againſt the ſaid charge; and having heard the ſame, and the aforeſaid depoſition of the ſaid Edward Tye having been read over again to the ſaid E. Tye in the preſence and hearing of the ſaid T. S. Crowther, and the ſaid *E. Tye having again affirmed his ſaid depoſition to be true, in the preſence and hearing of the ſaid T. S. Crowther*, he the ſaid T. S. Crowther, is aſked by me, the ſaid juſtice, If he can ſay any thing for himſelf, why he, the ſaid T. S. Crowther, ſhould not be convicted of the premiſes above charged upon him in the form aforeſaid: whereupon the ſaid T. S. Crowther ſaith, that he is not guilty of the ſaid offence, but he doth not produce to me any evidence whatſoever, that he is in any manner qualified, allowed, or authorized, by the laws of this realm, to have, uſe, or keep, for himſelf or any other perſon, any gun, ſetting dog, pointer, or any other engine, to kill and deſtroy the game of this kingdom. And thereupon it manifeſtly appearing to me, that the aforeſaid T. S. Crowther is guilty of the ſaid offence charged upon him in the ſaid information, I do therefore hereby convict him of the offence aforeſaid, and do declare and adjudge that he the ſaid T. S. Crowther hath forfeited the ſum of 5l. for the offence aforeſaid, &c."—It was moved to quaſh this conviction on the two following grounds: 1ſt, That the evidence on which it was founded was not given in the *preſence* of the defendant, for on his appearing before the juſtice, the witneſs only *affirmed* his former depoſition to be true, and K. *v.* Vipont was cited. 2dly, The qualifications required by 22 and 23 Car. II. c. 25, were not negatived by the evidence. The evidence was only general, that what he did was *againſt the form of the ſtatute*, &c. and K. *v.* Jarvis, and K. *v.* Wheatman, were cited.—In anſwer thereto it was ſaid, That the depoſition of the witneſs having been read over in the defendant's preſence, and affirmed by him to be true, was the ſame as if he had been re-ſworn.—That as to the other objection, the information had negatived every ſeparate qualification, and was ſo ſtated in the conviction, and there was no occaſion to prove it by evidence. It was impoſſible to bring evidence to prove the want of each qualification negatively. If the information is ſpecific, a general depoſition that he is not qualified, is ſufficient to put the defendant upon proving that he was.—By the court. The firſt objection is good: the witneſs ought to have been re-ſworn in the defendant's preſence. As to the other point, there is no caſe in which it has been directly decided, that the evidence ſhould negative every particular qualification. It cannot be ſo from the nature of the caſe.—Conviction quaſhed. *D.* and *E.* 1 *V.* 125.

Case of K. *v.* Thomſon, *Trin. T.* 27 Geo. III.—This was a conviction on 5 Anne, c. 14, ſtating an information on 8th December 1786; the appearance of the defendant on the 9th, after being ſummoned, and the plea of *not guilty*, and then proceeding as follows: "nevertheleſs, on the ſaid 9th day of December in the year aforeſaid, at, &c. one credible witneſs, to wit, Richard Taylor, of, &c. cometh before me the ſaid juſtice, and before me the ſame juſtice upon his oath, ſaith, that the defendant,

ſendant, on the 7th day of December aforeſaid, in the year aforeſaid, at, &c. (negativing the qualifications of 22 and 23 Car. II. c. 25.) *did keep and uſe a gun to kill and deſtroy the game*; and thereupon the ſaid defendant, before me the ſame juſtice, by the oath of one credible witneſs aforeſaid, according to the form of the ſtatute aforeſaid, is convicted, and for his offence aforeſaid, hath forfeited 5l. to be diſtributed, &c."—Cockell objected, that it did not appear upon the conviction of what the defendant had been convicted: it only ſaid, "thereupon the defendant on, &c. before me the ſame juſtice, by the oath of one credible witneſs, according to the form of the ſtatute, is convicted, and for his offence hath forfeited, &c." This is only a concluſion of law, and not an adjudication of the juſtice. There is nothing to connect it with that which precedes it; ſuch as that "he is convicted of the premiſes," or "in manner and form aforeſaid."—But the *court* were clearly of opinion that there was no ground for that objection; but deſired it might be argued again on another objection, which they ſuggeſted to the counſel; whether the evidence was ſufficiently ſet forth, ſo that the court could ſee by what act the defendant had incurred the penalty; for they obſerved, that the act of *keeping a gun* was in itſelf ambiguous, and it muſt be ſhewn to be *kept for the purpoſe of killing game*, in order to bring the party keeping it within the act; it was not like keeping a greyhound or a ſnare; which could not be kept for any other purpoſe, and which was expreſsly prohibited by the act.—Wood, in conſequence, argued againſt the conviction. It is a fatal objection that the evidence on which the conviction is grounded, is not particularly ſet forth; the evidence which is ſtated is merely a repetition of the information. Only the reſult ariſing from the facts ſet forth; but every part of the evidence ought to have been ſpecially ſhewn, that the court might have had an opportunity of judging whether the juſtice drew a legal and proper inference from the facts ſworn to, ſo as to bring the defendant within the penalty of the act. The evidence which was given before the juſtice, could not be given in the manner in which it is ſtated in the conviction, for this evidence is the language of the act of parliament, and even if it was given in this general way, the juſtice ought to have refuſed it.—Chambre *contrà* did not diſpute the general rule that it was neceſſary to ſtate the evidence particularly in a conviction, but inſiſted that in the preſent caſe, the evidence was ſufficiently ſtated, being expreſsly ſtated that the defendant *kept and uſed the gun to kill and deſtroy the game*; that this form of conviction has been almoſt univerſally uſed on ſimilar occaſions.—Aſhhurſt J. If this were a new caſe, I ſhould moſt undoubtedly be of opinion that this conviction could not be ſupported, becauſe I think the evidence ſhould be ſet forth particularly, that we may judge whether the juſtice has convicted upon proper evidence. The fact of keeping or uſing the gun for the purpoſe of deſtroying game ſhould appear; but it is only ſtated here that the defendant kept and uſed, &c. which is the reſult of his evidence. Then whether he kept it for the purpoſe of killing *game* is likewiſe a queſtion of law; for an ignorant witneſs in the country might fancy that a woodcock was game. So that it ſeems to me that permitting this general evidence to be ſtated, is allowing the witneſs to give his ſentiments on the law as well as on the facts. But as the precedents are uſually in this form, and as the conviction in K. *v.* Hartley was ſimilar to the preſent, it is better to ſupport this conviction, than by quaſhing it to overturn all former precedents.—Buller J. If this precedent had never been adopted, I ſhould have been of opinion that the evidence ſhould have been fully ſet forth; but after ſo many convictions have been made in the ſame form, it would be dangerous to quaſh the preſent. The diſtinction taken in K. *v.* Filer is good law; it is not an offence to *keep* or *uſe* a gun, unleſs it be *kept* or *uſed for the purpoſe of killing game*. But it is here ſtated by the evidence, that the defendant did keep and uſe a gun to kill and deſtroy the game." As to the other queſtion reſpecting *game*, I cannot agree that the witneſs in ſwearing that the defendant uſed a gun to deſtroy game, would be ſwearing to a queſtion of law, becauſe it is ſettled by act of parliament, and *every man is bound to know what is game:* if he ſwears that to be game which is not ſo in law, he would be guilty of perjury. Game muſt be underſtood in its legal ſenſe. —Groſe J. I cannot give my conſent to ſupport this conviction. The juſtice ſhould return particularly all the facts and the concluſion in the conviction; firſt the information, the ſummons, the appearance, or the defendant's default in not appearing, that the information was read to the defendant, that he was aſked what he had to plead, the whole of the evidence particularly, and the adjudication. The witneſs ſhould ſwear to the *facts*, and not to the *law:* and in this caſe it is almoſt incredible that the witneſs ſhould have ſworn in the manner in which this evidence is ſet out: the juſtice ſhould not have received it, if it were offered in this general way, but ſhould have queſtioned the witneſs as to the manner in which this gun was kept, for what purpoſe it was uſed, and what particular kind of game he killed or attempted to kill. All theſe particulars ſhould have been ſpecially ſet forth, in order that we might judge whether they conſtituted an offence within the act. Here the witneſs ſwore to the law, namely, that the defendant *kept and uſed a gun to kill and deſtroy the game*. I had rather chooſe to decide this caſe according to the K. *v.* Baker and K. *v.* Hartley. And although this conviction cannot be quaſhed, becauſe my brothers have given their opinions in ſupport of it, yet I did not chooſe that this queſtion ſhould paſs *ſub ſilentio*, eſpecially as this declaration of my opinion may have the effect of inducing juſtices in future to ſtate the whole matter upon the record.

There was another doubt entertained by the court, namely, whether it ſufficiently appeared that the evidence was given in the defendant's preſence? but it was over-ruled. Conviction affirmed. *D.* and *E.* 2 *V.* 18.

Case of K. *v.* Swallow, *Trin. T.* 39 Geo. III.—This was conviction in the ſum of 15l. for three penalties under the game laws. Lord Kenyon C. J. ſaid, There is no objection to the conviction on the ground that the defendant has been convicted of ſeveral penalties. It is the conſtant practice in actions on the game laws, and not unfrequent in convictions. Even in indictments for capital offences, ſeveral offences are ſometimes charged, as burglary, and ſtealing in the dwelling houſe to the value of 40s. I by no means wiſh that magiſtrates in drawing up convictions ſhould ſet all forms at nought; but they ought not to be entangled in greater forms and ceremonies than the ſuperior courts. The word "convicted" in this caſe applies to the ſeveral offences with which the defendant was charged, and to the evidence given in ſupport of them; and the following words are, "and for his ſeveral offences *aforeſaid*, &c." Taking the whole of the adjudication together, it is evident that the magiſtrate convicted the defendant in the three ſeveral offences charged. Conviction affirmed. *D.* and *E.* 8 *V.* 284.

Case of K. *v.* Gage, *Hil. T.* 9 Geo.—The defendant was convicted for uſing a greyhound in killing hares. Exception was taken to the conviction that the ſtatute had only given the juſtices juriſdiction to convict upon the oath of one or more credible witneſſes, whereas this was upon his own confeſſion, which it was inſiſted the juſtices had no power to take. But by the court: The conviction muſt be confirmed. The intent of mentioning the oath of one witneſs, was only to direct the juſtices, that they ſhould not convict on leſs evidence; ſuppoſe the confeſſion had not been before the juſtices, but before two witneſſes who had ſworn it; that would be convicting him on the oaths of witneſſes; and yet the evidence

evidence would not be ſo ſtrong as this. Here the juſtices had a better evidence than the oath of any ſingle witneſs; and it is a monſtrous thing to ſay, that a better ſort of evidence ſhall not do. 1 *Str.* 546.

Case of K. *v.* Stone, *M.* 2 Geo. II.—A conviction was quaſhed, becauſe the informer was the witneſs, divers convictions having been quaſhed for the ſame reaſon before. 2 *Ld. Raym.* 1545. The ſame adjudged in the caſe of K. *v.* Blaney, *Trin. T.* 11 Geo. II. *Andr.* 240. And in the ſtatute of the 2 Geo. III. c. 19, it is recited, that in proſecutions on the act of 8 Geo. c. 19, in the courts at Weſtminſter, where a part of the penalty is given to the poor of the pariſh, the inhabitants of ſuch pariſh had been diſallowed to give evidence; and therefore in that caſe, to remedy the ſame, the act gives the whole penalty to the proſecutor, in order to enable the inhabitants to give evidence.

Case of Indictment. K. *v.* Buck, *Hil. T.* 12 Geo.—It was moved to quaſh the *indictment* for killing a hare, this not being a matter indictable, the ſtatute appointing a ſummary proceeding before juſtices of the peace; and a caſe was cited, K. *v.* James, *T.* 1 Geo. where an indictment for keeping an alehouſe was quaſhed, becauſe the ſtatute of the 3 Car. c. 3, had directed a particular remedy. And by the court: The indictment muſt be quaſhed. 2 *Str.* 679.

Case of Q. *v.* Matthews, *Tri. T.* 10 Anne.—On a conviction exception was taken, that the perſon was charged with ſo many five pounds as he had killed hares in the ſame day. And the court was of opinion that the offence for which the ſtatute gave the forfeiture, was the keeping dogs and engines, and not killing the hares. If a man not qualified goes a hunting, and kills never ſo many hares on the ſame day, he would forfeit but one 5l. for it is but one offence; but if a man keeps dogs, and goes a hunting ſeveral days and kills hares, if it was thus laid, that he ſuch a day kept dogs, and killed, and then again ſuch a day, by laying it thus ſeverally, the offence is ſevered, and he ſhall forfeit 5l. for each offence. 10 *Mod.* 26.

So in the caſe of Marriot *v.* Shaw, *Eaſter T.* 4 Geo. where the defendant was convicted, that upon ſuch a day he kept and uſed a greyhound to kill and deſtroy the game at ſuch a place, that on the ſame day he kept and uſed a greyhound to kill and deſtroy the game at another place, and ſo at a third place, and killed ſeveral hares at the ſaid ſeveral places; it was adjudged by the court, that this being all done on the ſame day, was only one offence; for this ſtatute does not give 5l. for every hare; but only ſays, if any unqualified perſon ſhall keep or uſe any greyhound, or the like, to kill and deſtroy the game, he ſhall forfeit 5l. *Com. R.* 274.

Where the offence was committed.—In ſome ſituations a man may ſtand in one pariſh (or county), and ſhoot into two or three: in ſuch caſe the place where the offence was committed is, where the party *ſtood* when he ſhot, and not where the object was which he ſhot at. *Show.* 339. K. *v.* Alſop, *Mich. T.* 3 Will.

Case of K. *v.* Burchet, *Trin. T.* 9 Geo.—The court ordered an attachment (unleſs cauſe ſhewn) againſt the town-clerk of Guildford, and a defendant convicted on the game act, for granting and ſuing out a replevin of goods diſtrained for the penalty. But on ſhewing cauſe the next term, when Eyre J. only was preſent, he diſcharged the rule, becauſe it was only a contempt to the inferior juriſdiction of the juſtices, and in that caſe the king's-bench never interpoſes. 1 *Str.* 567.

But in the caſe of the king againſt the ſheriff of Leiceſterſhire and others, *Mich. T.* 2 Geo. II. an attachment was moved for againſt the defendants, for replevying three horſes, which were ſeized as forfeited upon a juſtice's warrant, they being driven in a waggon contrary to act of parliament. The court, though they would not grant an attachment, yet made a rule to ſhew cauſe why an information ſhould not go. And on ſhewing cauſe, the court thought there was enough to excuſe the ſheriff; but granted it againſt Parſons, whoſe horſes were ſeized, becauſe he knew that the juſtices had granted this warrant; but it did not appear that the ſheriff did. 1 *Barnardiſt.* 110.

And in the caſe of K. *v.* Monkhouſe, *Eaſt. T.* 16 Geo. II. The court granted an attachment againſt the under ſheriff of Cumberland, for granting a replevin of goods diſtrained on a conviction for deer ſtealing. 2 *Str.* 1184.

Case of Feltham *v.* Tarry, *Eaſt. T.* 13 Geo. III.—The defendant levied money by ſeizing and ſelling the plaintiff's goods, on a juſtice's warrant founded on a conviction. Which conviction was afterwards quaſhed. And it was holden, that an action for money had and received then lay for the clear money produced by the ſale of the goods. *Bull. Ni. Pri.* 131.

Case of Hill *v.* Bateman, *Trin. T.* 12 Geo. Before Raymond Ch. J. at Weſtminſter.—The defendant Bateman, being a juſtice of the peace, had convicted the plaintiff for deſtroying game, and though (as it was proved) the plaintiff had effects of his own which might have been diſtrained, which were ſufficient to anſwer the penalty he had incurred, yet the defendant ſent him immediately to Bridewell, without endeavouring to levy the penalty upon his goods: and an action of treſpaſs and falſe impriſonment being brought againſt Bateman for this commitment, the chief juſtice was of opinion that the action well lay. 2 *Str.* 710.

A conviction on the 4th ſect. of the ſtat. 5 Anne, c. 14, for keeping a dog and gun to kill game, without being duly qualified, muſt be made within *three months* after the offence committed; and if the hearing of the matter be adjourned over that time, though with the conſent of the defendant, a conviction afterwards is bad. K. *v.* Tolley, 3 *Eaſt's R.* 467.

And [no] *certiorari* ſhall be allowed to remove the conviction or other proceedings on this act, unleſs the party convicted ſhall before the allowance thereof become bound to the proſecutor in 50l. with ſuch ſureties as the juſtice ſhall think fit, to pay full coſts and charges in fourteen days after the conviction [confirmed], or *procedendo* granted. And in default thereof, the juſtice ſhall proceed in execution of the conviction in ſuch manner as if no *certiorari* had been awarded. 5 *Anne*, c. 14.

The word [*no*] is inſerted inſtead of the words [*if any*] which are in the act, ſince that word ſeemeth neceſſary to make up the ſenſe; and the word [*confirmed*] is added for the like reaſon. And indeed there have been too many inadvertencies in the drawing up of this act; for there is falſe grammar in no fewer than ſix places, beſides other miſtakes.

By the yearly mutiny act, if any officer or ſoldier ſhall, without leave of the lord of the manor under his hand and ſeal, deſtroy any hare, coney, pheaſant, partridge, pigeon, or other fowl, poultry, or fiſh, or his majeſty's game, and be convicted thereof, on oath of one witneſs, before one juſtice; every officer ſo offending ſhall forfeit 5l. to the poor; and the commanding officer upon the place, for every offence committed by any ſoldier under his command, ſhall forfeit 20s. in like manner. And if, upon conviction by the juſtices, and demand thereof made by the conſtable or overſeers of the poor, he ſhall not in *two days* pay the ſaid penalties, *he ſhall forfeit his commiſſion.*

This clauſe, though enacted by the legiſlature for the beſt of purpoſes, that of preventing officers in the army from being eſtranged from their duty by the ſports of the field; yet, in its operation, it is liable to bear extremely hard upon a moſt meritorious claſs of men, embarked under every peril of their lives for the defence and glory of their country. Had this prohibition been tempered with ſome ſuch words as *while on duty*, or, *on a march*, or, *under orders for embarkation*, or, *during the alarm*

alarm of invaſion, &c. no hardſhip or particular ſeverity could be complained of. But as the law now ſtands, officers in the army, while in cantonments, in barracks, in winter quarters, or even on leave of abſence at their own homes, and on their own eſtates, be their qualifications in rank or fortune whatever they may, appear, by the mutiny act, to be reſtrained from ſhooting, hunting, courſing, or killing game, in any kind of way whatſoever, without being amenable to informers and forfeitures.—This will alſo appear the more unreaſonable, when it is recollected that officers in the navy are not reſtricted from theſe recreations, either by the Articles of War, or any other code by which the nautical diſcipline is regulated.

Of GAME found on CARRIERS, HIGLERS, and unqualified PERSONS.

By ſtat. 4 and 5 Will. c. 23, the conſtable, authoriſed by a juſtice's warrant, ſhall enter into and ſearch (in ſuch manner and with ſuch power as in caſes where goods are ſtolen, or ſuſpected to be ſtolen) the houſes, out-houſes, or other places belonging to ſuch houſes, of ſuſpected perſons not qualified; and if any hare, partridge, pheaſant, pigeon, fiſh, fowl, or other game, ſhall (upon ſuch ſearch or otherwiſe) be found, the offender ſhall be carried before a juſtice; and if ſuch perſon do not give a good account how he came by the ſame, ſuch as ſhall ſatisfy the ſaid juſtice, or elſe ſhall not, in ſome convenient time to be ſet by the juſtice, produce the party of whom he bought the ſame, or ſome other credible perſon to depoſe upon oath ſuch ſale thereof, he ſhall be convicted by the ſaid juſtice of ſuch offence, and upon ſuch conviction ſhall forfeit for every hare, partridge, pheaſant, fiſh, fowl, or other game, any ſum not under 5s. and not exceeding 20s. half to the informer, and half to the poor by diſtreſs; for want of diſtreſs, to be committed to the houſe of correction not more than one month, nor leſs than ten days, there to be whipt and kept to hard labour.

And if any perſon ſo produced, or charged with the ſaid offence, ſhall not before the juſtice give ſuch evidence of his innocence as aforeſaid, he ſhall be convicted thereof in the ſame manner as the perſon firſt charged therewith, and ſo from perſon to perſon till the firſt offender is diſcovered. And no *certiorari* ſhall be allowed to remove any conviction, unleſs the party firſt become bound to the proſecutor in 50l. with ſuch ſufficient ſureties as the juſtice ſhall think fit, to pay within a month after the conviction confirmed, or *procedendo* granted, full coſts and charges; and in default thereof, the juſtice to proceed to the execution of the conviction.

If any higler, chapman, carrier, innkeeper, victualler, or alehouſekeeper, ſhall have in his cuſtody or poſſeſſion, or ſhall buy, ſell, or offer to ſell, any hare, pheaſant, partridge, moor, heath-game, or grouſe, unleſs ſuch game in the hands of ſuch carrier be ſent up by ſome perſon qualified; (or, if any perſon whatſoever, WHETHER QUALIFIED OR NOT, ſhall ſell, expoſe, or offer to ſale any hare, pheaſant, partridge, moor, heath-game, or grouſe, 28 Geo. II. c. 12,) he ſhall be carried before a juſtice where the offence is committed; and being convicted thereof (in three months after the offence) on view, or oath of one witneſs, he ſhall forfeit for every hare, pheaſant, partridge, moor, heath-game, or grouſe, the ſum of 5l. half to the informer, and half to the poor, by diſtreſs; for want of diſtreſs, to be committed to the houſe of correction for the firſt offence three months, and for every other offence four months.

And no *certiorari* ſhall be allowed to remove the conviction or other proceedings, unleſs the party convicted ſhall, before the allowance thereof, become bound to the proſecutor in 50l. with ſuch ſureties as the juſtice ſhall think fit, to pay full coſts in fourteen days after the conviction confirmed, or *procedendo* granted. And in default thereof the juſtice ſhall proceed in execution of the conviction, in ſuch manner as if no *certiorari* had been awarded. 5 *Anne*, c. 14.

And if any hare, pheaſant, partridge, moor, heath-game, or grouſe, ſhall be found in the ſhop, houſe, or poſſeſſion of any poulterer, ſaleſman, fiſhmonger, cook, or paſtry-cook, or of any perſon not qualified in his own right to kill game, or entitled thereunto under ſome perſon ſo qualified, it ſhall be deemed an expoſing thereof to ſale. 9 *Anne*, c. 25. 28 *Geo.* II. c. 12.

And any juſtice of the peace, and lord *within his manor*, may take away any ſuch hare, pheaſant, partridge, moor, heath-game, or grouſe, or any other game, from any ſuch higler, chapman, innkeeper, victualler, or carrier, or any other perſon not qualified, which ſhall be found in his cuſtody or poſſeſſion. 5 *Anne*, c. 14.

And any perſon that ſhall deſtroy, ſell, or buy, any hare, pheaſant, moor, heath-game, or grouſe, and ſhall in three months make diſcovery of any higler, chapman, carrier, innkeeper, alehouſekeeper, or victualler, that hath bought or ſold, or offered to buy or ſell, or had in their poſſeſſion, any hare, pheaſant, partridge, moor, heath-game, or grouſe, ſo as any one ſhall be convicted; ſuch diſcoverer ſhall be diſcharged of the pains and penalties hereby enacted for killing and ſelling ſuch game, and ſhall receive the ſame benefit as any other informer.

And whereas great miſchiefs do enſue by inferior tradeſmen, apprentices, and other diſſolute perſons, neglecting their trades and employments, who follow hunting, fiſhing, and other game, to the ruin of themſelves and damage of their neighbours; therefore if any ſuch perſon ſhall preſume to hunt, hawk, fiſh, or fowl, (unleſs in company with the maſter of ſuch apprentice duly qualified,) he ſhall not only be ſubject to the other penalties, but if he be proſecuted for treſpaſs, in coming on any perſon's land, and be found guilty, the plaintiff ſhall not only recover damages againſt him, but full coſts. 4 and 5 *Will.* c. 23, ſ. 10.

The words "inferior tradeſmen," ſeem to extend to every tradeſman not qualified to kill game. 2 *Tidd's Pract.* 887. But in Buxton *v.* Mingay, *Trin. T.* 30 and 31 Geo. II. In the common pleas. The plaintiff declared, that the defendant being an inferior tradeſman, viz. an apothecary, ſuch a day committed a treſpaſs in hunting in the plaintiff's cloſe. On a trial at the aſſizes, a verdict was found for the plaintiff, with 1s. damages, and 40s. coſts; ſubject to the opinion of the court, upon a caſe made, which ſtates, that it was proved at the trial, that the defendant at the time of the treſpaſs was a ſurgeon and an apothecary, and not qualified to kill game; that on ſuch a day he was hunting with divers others not qualified, in company with a perſon who was properly qualified to kill game, and committed a treſpaſs in the plaintiff's cloſe. The queſtion for the conſideration of the court was, Whether upon the facts above ſtated the defendant ſhall be deemed an *inferior* tradeſman within the meaning of the ſtatute? This caſe was argued ſeveral times at the bar; and the judges were equally divided. For the plaintiff it was argued, that among tradeſmen no line can be drawn with reſpect to who are ſuperior and who are inferior, but they are all upon an equal footing as tradeſmen; but that the line which the legiſlature intended to draw was between thoſe that were qualified, and thoſe that were not: ſo that in this reſpect every tradeſman is *inferior* who is not qualified. For the defendant it was urged, that every caſe of this kind ought to be determined on its own particular circumſtances, and left to the jury, whether the defendant is an inferior tradeſman or diſſolute perſon within the ſtatute. The court being equally divided, no rule in this caſe was made, nor has ſince been made. 2 *Wilſon*, 70. [Indeed the word *inferior* ſeems to be applicable rather to the *man* than to the *trade*; ſo as that two perſons of the ſame trade may be one a *ſuperior* and the other an *inferior* tradeſman.]

Of the SHOOTING CERTIFICATE.

By 25 Geo. III. c. 50, every perſon who ſhall uſe any dog, gun, net, or other engine for the taking or deſtruction of game, *(not acting as a gamekeeper,)* ſhall previouſly deliver in a paper or account in writing, containing his name and place of abode, to the clerk of the peace of the county where he ſhall reſide, and annually take out a certificate thereof, upon which he ſhall be charged a ſtamp duty of 2l. 2s. And by 31 Geo. III. c. 21, 1l. 1s. more. Total 3l. 3s.

And every ſuch clerk of the peace, on the delivery of ſuch paper or account as aforeſaid, ſhall thereupon iſſue ſuch certificate, ſtamped as before directed, with a *two* guinea and a *one* guinea ſtamp; and the ſame ſhall bear date on the day on which it is iſſued, and ſhall continue in force until the 1ſt day of July next following the date thereof, *and no longer*; for which ſuch clerk of the peace, previous to the delivery thereof, ſhall be entitled to one ſhilling for his trouble. And if he ſhall iſſue any certificate otherwiſe than as above ſet forth, or ſhall neglect or refuſe to deliver a certificate properly ſtamped in manner as aforeſaid, he ſhall forfeit 20l. and moreover ſhall be liable to pay the duty on ſuch certificate.

And if any perſon ſhall uſe any greyhound, hound, pointer, ſetting dog, ſpaniel, or other dog, or any gun, net, or other engine, for the taking or deſtruction of any hare, pheaſant, partridge, heath-fowl, commonly called *black game*, or grouſe, commonly called *red game*, or any other game whatſoever, without having obtained ſuch certificate, he ſhall forfeit 20l.

And to prevent the evading the payment of the ſaid duties, and to facilitate the detection of offenders, it is enacted, that if any perſon ſhall be found uſing any dog, gun, net, or other engine, for the taking or deſtruction of game, by any other perſon, who hath obtained ſuch certificate as aforeſaid, it ſhall be lawful for ſuch perſon, *producing ſuch certificate*, to demand and require from the perſon ſo uſing ſuch dog, gun, net, or other engine, to produce and ſhew a certificate iſſued to him for that purpoſe; and every ſuch perſon ſhall, upon ſuch demand, produce his certificate to the perſon ſo demanding the ſame, and permit the ſame to be inſpected accordingly: and if any ſuch perſon ſhall wilfully refuſe to produce and ſhew a certificate iſſued to him for that purpoſe, or not having produced and ſhewn ſuch certificate, ſhall refuſe on demand thereof, to give in his chriſtian and ſurname, and the place of his reſidence, or ſhall give in a falſe or fictitious name or place of reſidence, he ſhall forfeit 5ol.

Provided nevertheleſs, that ſuch certificate *ſhall not authorize any perſon* to uſe any greyhound, hound, pointer, ſetting dog, ſpaniel, or other dog, nor any gun, net, or other engine, for the taking or deſtruction of game, at any time, or in any manner, prohibited by law, nor ſhall give to any perſon any *right* to uſe any greyhound, hound, pointer, ſetting dog, ſpaniel, or other dog, nor any gun, net, or other engine for the taking or deſtruction of game, *unleſs ſuch perſon ſhall be duly qualified*, under and by virtue of the laws now in being, made for the preſervation of the game; but he ſhall remain liable to the penalties in all or any of the ſaid laws contained, in the ſame manner as if this act had not been made.

And the clerks of the peace ſhall on or before the firſt day of Auguſt in each year, whenever they ſhall be thereunto required by the commiſſioners of the ſtamp-duties, make out and tranſmit to the head office of ſtamps, correct liſts in alphabetical order, of the certificates ſo iſſued by them, diſtinguiſhing the duties paid on each reſpective certificate; for which they ſhall have one halfpenny for each name; and in caſe any clerk of the peace ſhall neglect or refuſe to make out ſuch liſt, or ſhall not inſert therein, a full, true, and perfect account, of all the perſons the ſame ought to contain, then and in every ſuch caſe he ſhall forfeit 20l.

And the ſaid liſts ſhall be kept at the ſaid office, and may within the office hours be inſpected by any perſon on payment of one ſhilling. And the ſaid commiſſioners ſhall once or oftener in every year, as ſoon as conveniently may be after ſuch liſts have been ſo tranſmitted, cauſe the ſame to be inſerted in the newſpapers circulating in each reſpective county, or in ſuch public newſpapers as to them ſhall ſeem moſt proper.

All penalties and forfeitures by this act impoſed, may be ſued for and recovered in the courts at Weſtminſter, to the uſe of the plaintiff, if he ſhall recover the ſame, with coſts of ſuit. But where the penalty doth not exceed 20l. the ſame may be recovered before one juſtice, who is required upon complaint to ſummon the party accuſed, and alſo the witneſſes on either ſide; and upon appearance of the party accuſed, or in default thereof, (ſuch ſummons being duly proved,) to proceed to hear and determine the matter in a ſummary way; and upon due proof made thereof, either by the voluntary confeſſion of the party, or by the oath of one witneſs, to give judgment therein, and to iſſue his warrant for levying the penalty by diſtreſs, one moiety thereof to go to the perſon who ſhall inform and proſecute for the ſame *within ſix* calendar months after the offence is committed, and the other moiety to go to the king, after firſt deducting the neceſſary charges of recovering the ſame; but if not ſued for *within* ſix calendar months, the whole ſhall go to the king. And where ſufficient diſtreſs cannot be found, to commit ſuch offender to the common goal, or houſe of correction, (for three calendar months,) unleſs ſuch penalty ſhall be ſooner paid.

And any perſon who ſhall find himſelf aggrieved, may upon giving ſecurity to the amount of ſuch penalty, together with ſuch coſts as ſhall be awarded, in caſe ſuch judgment ſhall be affirmed, appeal to the next ſeſſions, who are to hear and finally determine the ſame; and in caſe the judgment of ſuch juſtice ſhall be affirmed, they may award ſuch coſts as to them ſhall ſeem meet.

FORM OF THE CERTIFICATE

I, WILLIAM BALCOMBE LANGRIDGE, Clerk of the Peace for the County of Suſſex, do hereby declare, that John Wilkes, Eſquire, of Milland Houſe in the ſaid County, hath delivered into my Office a Paper Writing or Account containing his Name and Place of Abode, bearing Date July 5th, 1806, which I do hereby certify, in purſuance of an Act of Parliament paſſed in the Twenty fifth Year of King George the Third, intituled, "An Act for repealing an Act made in the Twenty-fourth Year of the Reign of his preſent Majeſty, intituled 'An Act for granting to his Majeſty certain Duties on Certificates iſſued with reſpect to the killing of Game,' and for granting other Duties in lieu thereof."—As witneſs my Hand this Twenty-third Day of Auguſt, 1806. W. BALCOMBE LANGRIDGE.

Of the APPOINTMENT and POWER of a GAMEKEEPER.

All lords of manors, or other royalties, not under the degree of an eſquire, may by writing under their hands and ſeals authorize one or more gamekeeper or gamekeepers, within their reſpective manors or royalties. 22 and 23 *Car.* II. c. 25. In the caſe of Jones *v.* Smart, as ſtated above, p. 220, Willes J. ſaid, That the lord of a manor is certainly not an eſquire by virtue of his manor or royalty, though in common acceptation he is conſidered as ſuch; and that no lord of a manor under that rank, can appoint a gamekeeper, whatever his eſtate may be. *D.* and *E.* 1 *V.* 44. And in Calcroft *v.* Gibbs, *M.* 33 Geo. III. L. Kenyon Ch. J. ſaid, That the lord of a manor cannot convey to another the power of appointing a gamekeeper, without a deed of conveyance of the manor itſelf. Such a power is a mere emanation of the manor, and it is inſeparable from it. It is a mere ſhadow, accompanying the ſubſtance. *D.* and *E.* 5 *V.* 19.

And the lords of manors may impower him thereby, upon their own manors, to kill hare, pheaſant, partridge, or any other game: but if the gamekeeper ſhall, under colour thereof, kill or take the ſame for the uſe of the lord,

lord, and afterwards ſell and diſpoſe thereof without the lord's conſent; and be convicted, on complaint of ſuch lord, and on oath of one witneſs, before one juſtice; he ſhall be committed to the houſe of correction for three months, to be kept to hard labour. 5 *Anne*, c. 14. But no lord of the manor ſhall make above *one* perſon to be gamekeeper within *any one manor*, with power to kill game. And the name of ſuch perſon ſhall be entered with the clerk of the peace where the manor lies; the entry to be made and viewed without fee; and a certificate thereof ſhall be granted by the clerk of the peace, on payment of one ſhilling.

And if any other gamekeeper, whoſe name is not ſo entered, *who ſhall not be otherwiſe qualified* by the laws of this kingdom to kill game, ſhall kill, ſell, or expoſe to ſale, any hare, pheaſant, partridge, moor, heath-game, or grouſe; he ſhall on conviction before one juſtice, on oath of one witneſs, forfeit for every offence 5l. half to the informer, and half to the poor, by diſtreſs: for want of diſtreſs, to be ſent to the houſe of correction for three months for the firſt offence, and for every other offence four months. 9 *Anne*, c. 25.

WHO SHALL NOT BE OTHERWISE QUALIFIED.—From theſe words it ſeemeth clear, that a gamekeeper who is qualified in his own right to kill game, need not be entered with the clerk of the peace. But by 25 Geo. III. c. 50,—Every deputation of a gamekeeper ſhall be regiſtered with the clerk of the peace of the county where the manor ſhall lie, and ſuch gamekeeper ſhall take out a certificate thereof *annually*, upon which there ſhall be charged a ſtamp duty of 10s. 6d. and by 31 Geo. III. c. 21, 10s. 6d. more. Total 1l. 1s. And if any gamekeeper, to whom ſuch deputation ſhall be granted, ſhall for *twenty days* next after the granting thereof, neglect or refuſe to regiſter the ſame, and take out a certificate thereof as aforeſaid, he ſhall forfeit 20l.

And in caſe of a new deputation of a gamekeeper, the ſame ſhall be regiſtered with the clerk of the peace, and a certificate thereof taken out in manner as aforeſaid; whereupon the former certificate ſhall be void, and the perſon acting under the ſame after notice to him given of ſuch new certificate, ſhall be liable to the penalties preſcribed by this act, in the ſame manner as if no certificate had been granted to him. And no ſuch deputation and certificate ſhall authorize any ſuch gamekeeper to take or deſtroy game out of the limits of the manor for which ſuch deputation was given.

And moreover, by 3 Geo. c. 11, it is further enacted, that no lord of a manor ſhall make any perſon to be a gamekeeper with power to kill game, unleſs ſuch perſon be qualified by the laws of this realm ſo to do; or unleſs ſuch perſon be truly and properly a *ſervant* to the ſaid lord; or be immediately employed and appointed to take and kill the game for the *ſole uſe* of the ſaid lord, and not otherwiſe.

And if any perſon, not being qualified by the laws ſo to do, or not being truly and properly a ſervant of any lord of a manor, or not immediately employed and appointed to take and kill the game for the ſole uſe or immediate benefit of the ſaid lord, ſhall under colour or pretence of any power or authority, deputation or qualification to him granted by any lord of a manor, take and kill any hare, pheaſant, partridge, or other game whatſoever; or ſhall keep or uſe any greyhounds, ſetting dogs, hays, lurchers, guns, tunnels, or any other engine to kill and deſtroy the game; he ſhall forfeit 5l. in like manner.

The gamekeeper (ſo authorized) may ſearch for dogs and engines, and ſeize the ſame for the uſe of the lord, or deſtroy them. 22 and 23 *Car.* II. c. 25. But it hath been adjudged, that an authority from the lord of the manor is not ſufficient of itſelf for this purpoſe, but that he ought to have a warrant from a juſtice of the peace. *Comb.* 183. Carpenter *v.* Adams. At leaſt it may be ſafe to have ſuch warrant, eſpecially if any houſes are to be entered and ſearched. For it would give too great a power to the gamekeepers, to leave it in their own diſcretion to ſearch what places they ſhall think proper, as alſo to conſtitute them the judges whether ſuch or ſuch a perſon is or is not qualified to kill game. Therefore it is beſt to have a warrant from a juſtice of the peace, after information and oath of the offence firſt made.

On a conviction, *Trin. T.* 10 Anne, Q. *v.* Matthews, exception was taken, that the conviction reciting the defendant not to be a perſon ſo and ſo qualified, and enumerating diſtinctly the ſeveral qualifications in 22 and 23 Car. II. omitted the qualification of *gamekeeper*, namely, that he was not a perſon authoriſed by a lord (or lady) of a manor to kill game for his uſe. And by the court: Had it been generally laid thus, that he not being a *perſon qualified according to law*, and ſo on, it had been enough; and ſo it would have been in an action *qui tam*, but not in a conviction, *Com. R.* 522, and *K.* v. *Jarvis*, as ſtated above, p. 224; but the qualifications being diſtinctly and ſeverally mentioned, the omiſſion of one is fatal. [But where the informer need not negative any of the exceptions, if he negative, it will be ſurpluſage. *D.* and *E.* 1 *V.* 320.] 10 *Mod.* 26.

CASE of Rogers *v.* Carter, *Mich. T.* 9 Geo. III.—The plaintiff Rogers brought an action againſt the defendant, being a juſtice of the peace, for taking and carrying away the plaintiff's gun. On a verdict for the plaintiff, a new trial was moved for. The caſe was, the plaintiff, being gamekeeper within the manor of Ringwood, in beating for game within the ſaid manor, ſprung a covey of partridges, which he ſhot at *within* the ſaid manor. They took a ſecond flight, and he purſued them *out of* the manor, but could not find them. As he was returning to the manor of Ringwood, he was met by the defendant about three quarters of a mile diſtant from that manor, who aſked him if he had a qualification. The plaintiff anſwered, I have a deputation from the lord of the manor of Ringwood. The defendant replied, You are now out of that manor; and demanded his gun, and took it from him. The defendant did not ſhoot out of the manor, but was three quarters of a mile out of the manor, with his gun and dog, with an *intention* to ſhoot at game. By the court: The queſtion is, Whether the juſtice had a right to take the plaintiff's gun from him, whilſt he was ſporting for the purpoſe of killing game in another manor, out of the manor of Ringwood? And we are all of opinion, *he had not ſuch right.* If he had killed game where he was not a gamekeeper, he might have been convicted in the penalty of 5l. but he was entitled to keep and have dogs, guns, and nets, any where; and a gamekeeper's gun cannot be ſeized either in going to or returning from the manor, or in any other place; and if gamekeepers were permitted to ſeize one another's guns, it would create a kind of border war amongſt them. And the rule to ſhew cauſe why there ſhould not be a new trial was diſcharged. 2 *Wilſon*, 387.

FORM OF THE DEPUTATION.

To all to whom theſe preſents ſhall come, John Wilkes of Milland Houſe in the county of Suſſex, Eſquire, ſendeth greeting. Know ye that I the ſaid John Wilkes have appointed, authorized, and empowered, and by theſe preſents do appoint, authorize, and empower, George Goldring, of Rake, in the pariſh of Rogate and county of Suſſex, to be my Gamekeeper of and within the ſeveral manors of Rogate Bohunt, Rogate College, Clarke's Dean, and Milland, and the royalties, rights, members, and appurtenances thereto belonging, in the ſaid county of Suſſex, during my pleaſure. And I do hereby give and grant unto him the ſaid George Goldring, during ſuch my will and pleaſure as aforeſaid, full power and authority to ſeize and take all and all manner of guns, bows, greyhounds, ſetters, ferrets, tramels, lowbels, kayes,

or other nets, harepipes, ſnares, or other engines for taking or deſtroying conies, hares, pheaſants, partridges, or other game. And alſo all manner of fiſhing-nets, leaſhes, angles, pitchers, and other inſtruments or engines for the taking of fiſh, uſed and employed within the ſaid manors of Rogate Bohunt, Rogate College, Clarke's Dean, and Milland, and the royalties, members, and precincts thereof, by any perſon or perſons whomſoever prohibited by the laws of this realm in any wiſe to uſe, employ, or keep, the ſame, as any other gamekeeper may lawfully do. And further I do hereby give and grant unto him the ſaid George Goldring, during my pleaſure, full power and authority to do all and every act or acts, thing or things, which by the laws of this realm are requiſite and neceſſary for the preſervation of the ſaid game within the ſaid manors; and the rights, members, and appurtenances thereof, and for the diſcovery of offenders therein, againſt the laws and ſtatutes in that caſe made and provided. In witneſs whereof I have hereunto ſubſcribed and ſet my hand and ſeal this 5th day of July, in the year of our Lord 1806.
Sealed and delivered in the preſence of } *JOHN WILKES.*
WILLOUGHBY RHOADES. }

Lewes, 23d of Auguſt, 1806.—*I do hereby certify that the above Deputation was this day regiſtered in my office, purſuant to the ſtatute in that caſe made.*

W. BALCOMBE LANGRIDGE,
Clerk of the Peace for the County of Suſſex.

FORM OF THE CERTIFICATE UPON IT.

I, WILLIAM BALCOMBE LANGRIDGE, Clerk of the Peace for the county of Suſſex, do hereby declare, that George Goldring, of Rake in the pariſh of Rogate in the ſaid county, hath regiſtered a Deputation bearing date the 5th day of July 1806, *whereby he is appointed a Gamekeeper by John Wilkes, Eſquire, of Milland Houſe, for the manors and lands of Rogate Bohunt, Rogate College, Clarke's Dean, and Milland, in the county aforeſaid, which I do hereby certify, in purſuance of an Act of Parliament paſſed in the twenty-fifth year of King George the Third, intituled, "An Act for repealing an Act made in the twenty-fourth year of the reign of his preſent Majeſty, intituled, 'An Act for granting to his Majeſty certain duties on certificates iſſued with reſpect to the killing of game,' and for granting other duties in lieu thereof." As witneſs my hand this 23d day of Auguſt,* 1806. *WILLIAM BALCOMBE LANGRIDGE.*

The Deputation thus given to a Gamekeeper on a thirty-ſhilling ſtamp, does not require to be renewed, until a different perſon is appointed; and then it muſt be done on a freſh ſtamp; but the Deputation requires to be regiſtered *annually* with the clerk of the peace, on the 5th day of July, and a new Certificate for the current year taken out, otherwiſe the Gamekeeper is liable to the penalty.

ANOTHER FORM OF THE DEPUTATION.

I, JOHN WILKES, of Milland Houſe in the county of Suſſex, Eſquire, Lord of the Manor of Upper and Lower Kingſham and Trippets, in the ſeveral pariſhes of Iping, Chithurſt, and Trotton, in the ſaid county, do hereby nominate, authorize, and appoint Richard Budd, of Milland aforeſaid, to be my Gamekeeper of and within my manor of Upper and Lower Kingſham and Trippets, with full power, licence, and authority, to kill any hare, pheaſant, partridge, or other game whatſoever, in and upon my ſaid manor, for my ſole uſe and benefit. And alſo to take and ſeize all ſuch guns, bows, greyhounds, ſetting-dogs, lurchers, or other dogs to kill hares or conies, ferrets, tramels, lowbels, hayes, or other nets, harepipes, ſnares, or other engines, for the taking and killing of conies, hares, pheaſants, partridges, or other game. And alſo all manner of fiſhing-nets, leaſhes, angles, pitchers, and other inſtruments or engines for the taking of fiſh, uſed and employed within the ſaid manor of Upper and Lower Kingſham and Trippets, by any perſon or perſons who by law are prohibited to keep or uſe the ſame. Given under my hand and ſeal this 5th day of July, in the year of our Lord 1804.
Witneſs, THOMAS ELMES. *JOHN WILKES.*

Horſham, 30th of Auguſt, 1804. *I hereby certify that the above Deputation was this day regiſtered in my office, purſuant to the ſtatute in that caſe made.* *WILLIAM ELLIS,*
Clerk of the Peace for the County of Suſſex.

CERTIFICATE UPON IT FOR THE CURRENT YEAR.

I, WILLIAM BALCOMBE LANGRIDGE, Clerk of the Peace for the county of Suſſex, do hereby declare, that Richard Budd, of Milland in the pariſh of Trotton in the ſaid county, hath regiſtered a Deputation bearing date the 5th day of July, 1804, *whereby he is appointed a Gamekeeper by John Wilkes, Eſquire, of Milland Houſe, for the manor and lands of Upper and Lower Kingſham and Trippets, in the ſeveral pariſhes of Iping, Chithurſt, and Trotton, in the county aforeſaid, which I do hereby certify, in purſuance of an Act of Parliament, &c. &c.* (*as recited above.*) *Signed, W. BALCOMBE LANGRIDGE.*
Lewes, 23d Auguſt, 1806.

It may here be proper to notice, that as by act of parliament every ſhooting certificate expires annually on the fifth of July, the freſh one ought to be taken out on that or the day following, otherwiſe gentlemen, and their gamekeepers, who are in the habit of hunting, courſing, or killing hare, which is almoſt every where renewed in July and Auguſt, are liable to the penalties of the act, until ſuch freſh certificate is actually obtained.

OF TRESPASS IN PURSUING GAME.

In order to obtain a ſatisfactory idea of the nature and extent of that ſpecies of treſpaſs which a man is liable to commit in the purſuit of game, it may be proper to inveſtigate the rights and privileges of thoſe ancient demeſnes or royalties, which were time out of mind appropriated for the preſervation and breed of game; ſuch as foreſts, purlieus, chaſes, parks, warrens, honours, and manors.

A FOREST is a "royal demeſne, or territory, compriſing woody grounds and fruitful paſtures, privileged for wild deer and fowls of foreſt, chaſe, and warren, to reſt and abide there under the ſafe protection of the king; which territory of ground ſo privileged is meered and bounded with unremoveable marks, meers, and boundaries, either known by matter of record, or by preſcription; and alſo repleniſhed with beaſts of venary or chaſe, and with great coverts of vert for the ſuccour of the deer there to abide: for the preſervation and continuance of which, there are particular officers, laws, and privileges, belonging to the ſame, anciently inſtituted for that purpoſe, and proper only to a foreſt, and to no other place." *Manw.* 40. The *vert* comprehends every thing which bears green leaves in the foreſt. *Manw.* 51. And the lord having the wood in the tenant's land, *which is ſtill cuſtomary in many manors,* was originally for preſervation of the vert, for the ſuſtentation of the lord's game there. Beaſts of foreſt are properly hart, hind, buck, hare, and boar; but legally all wild beaſts of venary. 1 *Inſt.* 233.—They are called *beaſts of venary*, becauſe they are gotten by the chaſe; and *venatio*, or veniſon, becauſe being *hunted*, are reckoned moſt wholeſome. They are appurtenant to a foreſt, as the peculiar privilege of crowned heads; whence aroſe the foreſt laws, the courts of eyre, ſwainmote, &c. and the chief juſtice in eyre, warden, ranger, regarder, verderor, and other officers, whoſe buſineſs it is to protect the vert and veniſon, and puniſh thoſe who preſume to treſpaſs within the foreſt liberty, in purſuit of his majeſty's game.—See the article FOREST, vol. vii. p. 565—568, where this ſubject is amply diſcuſſed.

PURLIEU, comes from the French *pur*, clear, entire, and exempt; and *lieu*, a place: that is, a place, entire, clear, or exempt, from the foreſt, and ſignifies thoſe grounds which Henry the Second, Richard the Firſt, or king John, added to their ancient foreſts, over other men's grounds, and were diſafforeſted by the ſtatute of *charta de foreſta*. 4 *Inſt.* 303. *Manw.* 318. But nevertheleſs the *purlieu* as to ſome purpoſes is foreſt ſtill, and is diſaf-

diſafforeſted as to the particular owners of the land and for their benefit, and not generally to give liberty to any man to hunt the deer and ſpoil the vert. And if thoſe beaſts do eſcape out of the foreſt into the *purlieu*, the king hath a property in them ſtill againſt any man but againſt the owners of the woods and lands in which they are; and ſuch owners have a ſpecial property in them *ratione loci*, but yet ſo that they hunt them fairly and not foreſtall them in their return towards the foreſt. *Manw.* 366. But if the purlieu-man find the beaſts of the foreſt in his woods or lands *in the purlieu*, in ſuch caſe he hath a property in them againſt any other man *ratione ſoli*. And if he begins the hunting in his own lands, then by reaſon of that property he may purſue his hunting through any man's woods or lands, ſo as he doth not enter into any foreſt, chaſe, park, or warren. And if he kill the deer in another man's land, and out of ſuch privileged place, he may take and carry away the ſame by reaſon of the firſt property. But if the deer recover the foreſt, he muſt call back his dogs, for they are then the king's wild beaſts again. And if he do not call back and rebuke his dogs, and they kill the deer in the foreſt, he is a *treſpaſſer*, though himſelf never came within the bounds thereof. *Manw.* 373.—See the article PURLIEU.

A CHASE, (from *chaſſer*, to chaſe,) is a privileged place for the receipt of deer, very ſimilar to a purlieu; and is of a middle nature betwixt a foreſt and park. It is leſs than a foreſt, and not endowed with ſo many liberties; as officers, laws, courts, &c. and yet is of a larger compaſs than a park, but differeth in that it is not incloſed; though it muſt have certain metes and bounds, and may be in other men's grounds as well as in one's own: being indeed the liberty of keeping beaſts of chaſe or royal game therein, protected even from the owner of the land, *with a power of hunting them thereon without treſpaſs*. 2 *Comm.* 38.—See the article CHASE, vol. iv. p. 120, 121.

A PARK is an encloſed chaſe, extending only over a man's own grounds. The word park indeed properly ſignifies an encloſure; but yet it is not every field or common, which a gentleman pleaſes to ſurround with a wall or paling, and to ſtock with a herd of deer, that is thereby conſtituted a *legal* park: for the king's grant, or at leaſt *immemorial preſcription*, is neceſſary to make it ſo. 2 *Inſt.* 220. Though *now* the difference between a real park, and ſuch encloſed grounds, is in many reſpects not very material: only that it was anciently ſtated to be unlawful for any perſon to kill any beaſts of park or chaſe, viz. any hart, hind, hare, boar, or other beaſts of venary or hunting, except ſuch as poſſeſſed theſe franchiſes of foreſt, chaſe, or park. *Co. Litt.* 233.—A park muſt be incloſed, otherwiſe the owner cannot maintain an action of treſpaſs againſt ſuch as hunt in his park. *Manw. Cromp. Juriſd.* 148. —See the article PARK.

FREE-WARREN is a franchiſe erected for preſervation or cuſtody of beaſts and fowls of warren; which are hares, conies, and roes: the fowls are either *campeſtres*, as partridges, rails, and quails; or *ſylveſtres*, as woodcocks and pheaſants, or *aquatiles*, as mallards and herons. *Co. Litt.* 233. —Upon the introduction of the foreſt laws, ſoon after the Norman conqueſt, theſe animals being looked upon as royal game, this franchiſe of free-warren was invented to protect them; by giving the grantee a ſole and excluſive power of killing ſuch game ſo far as his warren extended, on condition of his preventing other perſons. This royal franchiſe is almoſt fallen into diſregard, ſince the new ſtatutes for preſerving the game; the name being now chiefly preſerved in grounds that are ſet apart for breeding hares and rabbits. There are many inſtances of keen ſportſmen in ancient times, who have ſold their eſtates, and reſerved the free-warren, or right of killing game, to themſelves; by which means it comes to paſs that a man and his heirs have ſometimes free-warren over another's ground. *Bro. Abr. tit. Warren.* 3.—2 *Comm.* 39. A free warren may lie open, there being no neceſſity of incloſing it. It is not lawful, however, for any perſon to make any chaſe, park, or warren, in his own freehold, or elſewhere, to keep in it any wild beaſts or birds of foreſt, chaſe, park, or warren, without the king's grant or warrant ſo to do; and if any man do, he is to be puniſhed in a *quo warranto*, and the franchiſe to be ſeized into the king's hands. *Manw.* 56.

CASE of K. *v.* ſir William Lowther, *Mich. T.* 12 *G.*—It was moved for leave to file an information in nature of a *quo warranto* againſt ſir William Lowther, to ſhew by what authority he had made and ſet up a warren. But it was denied by the court: becauſe it was of a private nature, and therefore proper to be proſecuted only in the name of the attorney general by information, if his majeſty thought fit. And the like motion had been denied before in the caſe of the lord Liſburne. 2 *L. Raym.* 1409. 1 *Stra.* 637.

CASE of lord Dacre *v.* Tebb, *Eaſter T.* 17 *Geo.* III.—This was a declaration in treſpaſs, for breaking and entering his free warren in Aveley in the county of Eſſex, and chaſing, hunting, and killing, divers foxes, hares, conies, partridges, and pheaſants of the plaintiff, and taking away other his goods and chattels. On not guilty pleaded, and tried by a ſpecial jury, the defendant was found guilty of breaking and entering the free warren of the plaintiff, and chaſing and hunting one hare, damages ſixpence, and not guilty as to the reſidue. It was moved for the plaintiff that he ſhould have full coſts; alleging that the ſtat. 22 & 23 Car. II. (which reſtricts coſts in treſpaſs, where the damages are under forty ſhillings, unleſs the freehold or title to the land came in queſtion) did not extend to this action, in which there could not poſſibly be any queſtion relating to the land, but merely to the franchiſe of free warren: for that act related only to ſuch action of treſpaſs, where ſome injury was done to the land. For the defendant it was anſwered, that it was poſſible the freehold or title to the land might be ſo interwoven with the title to the free warren, that both might come in queſtion. And where the title of the land may come in queſtion, but did not, and the damages are under forty ſhillings, there ſhall be no more coſts than damages.—By the court: The act is confined to ſuch actions of treſpaſs where the ſoil or land is mentioned in the declaration as the ſubject of the treſpaſs complained of. The right of free warren was not in the contemplation of the legiſlature. In an action merely for breaking free warren, it is impoſſible the title of the ſoil can ever come in queſtion. For though both may concur in one perſon, yet the title to the free warren is always collateral to that of the land, for a man may have free warren in another man's land. Beſides, the hare ſo hunted was the perſonal property of the owner of the free warren; and if any injury be done to perſonal property, that will take it out of the ſtatute, and intitle the plaintiff to full coſts. And the rule was made abſolute for taxing full coſts. 2 *Black. Rep.* 1151.

The next franchiſe which confers a right of killing game, is termed an HONOUR; and conſiſts of lands, liberties, and royalties. 1 *Bulſt.* 197. 2 *Rol.* 72. *l.* 48. And it is the moſt noble ſeigniority. *Co. Lit.* 108 *a.* One or more manors may be parcel of an honour. 2 *Rol.* 72. *l.* 45. So a foreſt may be appendant to it. 2 *Rol.* 73. *l.* 3. —An honour originally ſhall be created by the king. *Co. Lit.* 108 *a.* Every honour muſt be holden of the king. *R.* 1 *Bul.* 195. And if it be aſſigned, or granted over to another, it ſhall not be holden of a ſubject For it may be granted by the king alone to a ſubject. A man may claim and hold an honour by grant, or by preſcription: but the king at this day cannot make an honour by grant, without an act of parliament. *R.* 1 *Bul.* 195, 196. *Co. Lit.* 108 *a.*

The following is a liſt of *honours* within the realm, viz. Ampthill (by ſtat. 33 Hen. VIII. c. 37). Aquilay

(formerly Pevenſey), Arundel, Abergavenny, Boloine, Berkhamſtead, Beaulieu, Barnard's Caſtle, Bullingbroke, Barnſtable, Bononia, Brecknock, Bramber, Bedford, Clare, Crevecure, Clun, Chriſtchurch, Cockermouth, Cormayls, Candicut, Cariſbrook, Clifford caſtle, Cheſter, Carmarthen, and Cardigan, Donnington caſtle, (by ſtat. 37 Hen. VIII. c. 18.)—Dudley, and Dover caſtle, Eye, and Egremond.—The honour of Eaſt and Weſt Greenwich, Glamorgan, Gloceſter, Grentmeſnil, Gower, Grafton, (by ſtat. 33 Hen. VIII. c. 38.)—Haganet, Hampton court, (by ſtat. 31 Hen. VIII. c. 5,) —Huntingdon in Herefordſhire, Heveningham, Hawenden-caſtle, Hertford, and Halton, Lancaſter, Lincoln, Leiceſter, Lovetot, Hinckley, Kingſton upon Hull, (by ſtat. 37 Hen. VIII. c. 18.)—Kington, and Folkingham. —The honour of Montgomery, Mowbray, Middleham, and Maidſtone, Nottingham, Newelhn or Newelme, Oakhampton, St. Oſith, (by ſtat. 37 Hen. VIII. c. 18.)—Oxford.—The honour of Plimpton, Peverel; Pickering, Raleigh, Richard's caſtle, Skipton, Stafford, Strigul, Tickhil, Tremanton, Totneſs, Theony, Tamworth.—The honour of Wigmore, Wallingford, Weſtminſter, (by ſtat. 37 Hen. VIII. c. 18.)—Windſor, Wormgay, Whirwelton in Yorkſhire, Werk, Whitchurch, and Warwick, Webley, and Tutbury.—At this day the earl of Arundel only hath his honour and earldom by preſcription, the beginning of which is not within the memory of any one, ſo that his earldom is the moſt ancient in the realm. 1 *Bulſt.* 196.—Each of theſe honours are maintained and kept up by a court, ſimilar to thoſe of a manor, over many of which however they claim ſeigniority.—See *Spelman* in v. *Honor*.

The next and laſt franchiſe by which a right of killing game is inſiſted upon, is called a MANOR, or LORDSHIP. Theſe, ſays Blackſtone, are as ancient as the Saxon conſtitution, though perhaps differing in ſome immaterial circumſtances from thoſe that exiſt at this day. *Co. Cop.* 2. 10. It is ſaid to have been named *manor*, from the French *manoir*, *habitatio*; or rather *manendo*, an abiding place; it being a noble ſort of fee granted for the reſidence or domain of a lord, *with juriſdiction over his tenants for their farms*. This fee was of old termed a *barony*; from whence the court, which is appendant to the manor, is called the *Court-baron*.—See *Skeene de verb Signif.* —and the article COURT BARON, vol. v. p. 298. Concerning the original ſetting out of manors, it ſeems to be generally admitted that in the beginning, there was a circuit of ground, granted by the king to ſome baron or man of worth, for him and his heirs to dwell upon, and to exerciſe juriſdiction more or leſs within that compaſs, as he thought good to grant; performing ſuch ſervices, and paying ſuch yearly rent for the ſame, as the king by his grant required; and that afterwards this great man parcelled his land to other meaner men, enjoining them ſuch ſervices and rents as he thought good, and ſo, as he became tenant to the king, the inferiors became tenants to him. *Perkin's Reſervations*, 670: *Horne's Mirror of Juſtices*, *lib.* 1. *cap. de Roy Alfred*; *Fulbeck*, 18. But in theſe days, a manor as often ſignifies the juriſdiction and royalty incorporeal, as the land or ſite. For a man may have a manor in groſs, that is, the right and intereſt of a court-baron, with the perquiſites thereunto belonging, and another, or others, have every foot of the land. *Kitchen*, *fol.* 4. At this day a manor cannot be made, becauſe a court-baron cannot now be made, and a manor cannot be without a court-baron, and ſuitors or freeholders, two at the leaſt; for if all the freeholds except one eſcheat to the lord, his manor is gone *cauſâ quâ ſupra*, although in common ſpeech it may be ſo called. *Cowell. Co. Lit.* 58, 108; *Lit.* 73: 2 *Rol. Abr.* 121.

A manor may contain one or more villages or hamlets; or only great part of a village, &c. And there are capital manors which have other manors under them, the lords whereof perform cuſtoms and ſervices to the ſuperior lords. 2 *Inſt.* 67: 2 *Rol. Abr.* 72. There may be alſo cuſtomary manors, granted by copy of court-roll, and held of other manors. 4 *Rep.* 26: 11 *Rep.* 17. But ſtill it cannot be a manor in law, if it wanteth freehold tenants; nor be a cuſtomary manor, without copyhold tenants. 1 *Inſt.* 58: *Lit.* 73: 2 *Rol. Abr.* 121. The tenemental lands of ancient manors were, from the different modes of tenure, diſtinguiſhed by two different names. Firſt, *book-land*, or charter-land, which was held by deed under certain rents and free-ſervices, and in effect differed nothing from free ſocage lands. *Co. Cop.* 3. And from hence have ariſen moſt of the freehold tenants who hold of particular manors, and owe ſuit and ſervice to the lord. The other ſpecies was called *folk-land*, which was held at firſt by no aſſurance in writing, but diſtributed among the common folk, or people, at the pleaſure of the lord, and reſumed at his diſcretion: hence came the copyholders. The reſidue of the manor being uncultivated, was termed the *lord's waſte*. And it is curious to obſerve, that the ancient nobility, from pride, or the affectation of diſplaying a princely domain, were every where fond of having around them a vaſt extent of ſuch *waſte* territory. "Una ex parte a Suevis circiter millia paſſuum DC agri *vacare* dicuntur." *Cæſar, de Bell. Gall. lib.* 4. c. 2. "Civitatibus maxima laus eſt quam latiſſimas circum ſe vaſtatis finibus *ſolitudines* habere." *Id. lib.* 6. c. 22. "Bella cum finitimis gerunt, ut quæ circa ipſos jacent *vaſta* ſint." *Mela*, *lib.* 3. It is remarkable alſo, that after land came to be connected with individuals, every great baron and chief lord diſtributed portions of their poſſeſſions to their followers; and they again even affected *waſtes* of this kind, which often created a manor *within* a manor; over which the original poſſeſſor ſtill claimed his authority as *lord paramount*, which was ſecured to him by the cuſtomary homage at his court, and by fine or fee. Beſides this mode of parcelling out a domain, the lord of a manor, after having aſſigned a tract of ground for the maintenance of his houſe and hoſpitality, gave other diviſions to his vaſſals and tenants, for the ſupport of his political greatneſs; and theſe purpoſes being anſwered, a large proportion of territory often remained wholly unemployed by him. This *waſte* domain gave an idea of the extent of his power, and ſerved to excite, in ſtrangers, a ſentiment of admiration of his extenſive riches and princely authority. On this tract of land, the inhabitants of the diſtrict, connected with his caſtle, were indulged in feeding their cattle, till, in the courſe of time, he almoſt loſt all connection with it himſelf, while his tenants and vaſſals, from the conſtant and undiſturbed uſe of it, at length aſſerted a preſcriptive right over it. Hence aroſe *common* of *paſture*, and *commons* in general. On theſe *waſtes*, therefore, *qualified perſons* are apt to imagine they have an authority to ſhoot and hunt; but it is not ſo: they are equally as liable to actions of *treſpaſs* for ſporting on waſte lands and commons, after forbiddance by notice in writing, as upon incloſed lands, or in private grounds.

In imitation of the grants above-mentioned, the inferior lords began to carve out and grant to others ſtill more minute eſtates, to be holden of themſelves; whence came *manor farms*: and they were ſo proceeding downwards *in infinitum*, till the ſuperior lords obſerved, that by this method of ſubinfeudation they loſt all their feudal profits of wardſhips and eſcheats, which fell into the hands of theſe meſne or middle lords, who were the immediate ſuperiors of the *terre-tenant*, or him who occupied the land; and alſo that the meſne lords themſelves were ſo impoveriſhed thereby, that they were diſabled from performing their ſervices to their own ſuperiors. This occaſioned, firſt, that proviſion in the 32d cap. of Magna Charta, 9 Hen. III. (which is not to be found in the firſt charter granted by that prince, nor in the great charter of king John;) that no man ſhould either give or ſell his land, without reſerving ſufficient to anſwer the demands of his lord; and afterwards the ſtat. of

Weſtm.

Weſtm. 3, or *quia emptores*, 18 Edw. I. c. 1. which directs that upon all ſales or feoffments of lands, the feoffee ſhall hold the ſame, not of his immediate feoffor, but of the chief lord of the fee of whom ſuch feoffor himſelf held it. But theſe proviſions not extending to the king's own tenants *in capite*, the like law concerning them is declared by the ſtatute of *prerogativa regis*, 17 Edward II. c. 6. 34 Edw. III. c. 15. by which all ſubinfeudations, previous to the reign of Edw. I. were confirmed: but all ſubſequent to that period were left open to the king's prerogative. From hence it is clear, that all manors exiſting at this day, muſt have exiſted as early as king Edward I. for it is eſſential to a manor, that there be tenants who hold of the lord; and by the operation of theſe ſtatutes no tenant *in capite* ſince the acceſſion of that prince, and no tenant of a common lord ſince the ſtatute of *quia emptores*, could create any new tenants to hold of himſelf. 2 *Comm. c. 6. p.* 90–92. Hence it is material to notice, that as there can be no manor *in law*, without two copyhold or two freehold tenants *at the leaſt*, who are to form the jury and court by which alone the rights of a manor can be maintained; ſo, where no ſuch court is or can be holden, the franchiſe is loſt, and the lordſhip is termed a *manor extinct*, or only a *reputed manor*.

From the laws or claims founded on the franchiſes above deſcribed, but particularly from the foreſt laws, (ſays ſir William Blackſtone, 4 *Comm.* p. 415,) "has ſprung a baſtard ſlip, known by the name of the *Game-law*, now arrived to and wantoning in its higheſt vigour: both founded upon the ſame unreaſonable notions of permanent property in wild creatures; and both productive of the ſame tyranny to the commons: but with this difference; that the foreſt laws eſtabliſhed only *one* mighty hunter throughout the land, and the game laws have raiſed a little Nimrod in every manor. And in one reſpect the ancient law was much leſs unreaſonable than the modern: for the king's grantee of a chaſe or freewarren might kill game in every part of his franchiſe; but now, though a freeholder of leſs than 100l. a year is forbidden to kill a partridge upon his own eſtate, yet nobody elſe can do it, without committing a treſpaſs, and ſubjecting himſelf to an action at law."

The learned Commentator alſo remarks, that if a man ſtarts any game within his own grounds, and follows it into another's, and kills it there, the property remains in himſelf. 11 *Mod.* 75. And this is grounded on reaſon and natural juſtice: for the property conſiſts in the poſſeſſion; which poſſeſſion commences by the finding it in his own liberty, and is continued by the immediate purſuit. And ſo if a ſtranger ſtarts game in one man's *chaſe, or free warren*, and hunts it into another liberty, the property continues in the owner of the chaſe or warren, this property ariſing from privilege, and not being changed by the act of a mere ſtranger. Or if a man ſtarts game on another's private grounds and kills it there, the property belongs to him in whoſe ground it was killed, becauſe it was alſo ſtarted there, the property ariſing *ratione ſoli*. *Lord Raym.* 251. Whereas if, after being ſtarted there, it is killed in the *grounds* of a third perſon, the property belongs not to the owner of the firſt ground, becauſe the property is local; nor yet to the owner of the ſecond, becauſe it was not ſtarted in his ſoil; but it veſts in the perſon who ſtarted and killed it; *though guilty of a treſpaſs againſt both the owners*. *Ld. Raym. ib.* 7 *Mod.* 18. 2 *Comm.* 419. On a reference to this law, as laid down by ſir William Blackſtone, Mr. Chriſtian very acutely obſerves, that theſe diſtinctions never could have exiſted, if the doctrine were true, "that all the game was the property of the king,"—for in that caſe the maxim *in æquali jure potior eſt conditio poſſidentis*, muſt have prevailed. 2 *Comm.* c. 27.

On the principle of the common law above laid down, Dr. Burn has ſtated the following general maxim from *Manwood*:—"If I find a pheaſant in my lands, and I let my hawk fly, I may follow the flight into another man's land by reaſon of the firſt property which I had in the pheaſant *ratione ſoli*; and if my hawk kill the pheaſant in another man's land, I may enter and take it, by reaſon of that property and purſuit; and in that caſe, I ſhall not be puniſhed as a treſpaſſer for taking and carrying away the *pheaſant*, but only for *entering the ground*. But if the pheaſant fly into a warren (which is a privileged place for birds of warren) and the hawk kill it there, the falconer ſhall not have the pheaſant, but the owner of the warren. And the law is the ſame in the caſes of all wild beaſts of the foreſt and chaſe. *Manw.* 389.—But if he be qualified to kill game, and the damage found ſhall be under 40s. he ſhall in ſuch caſe pay no more coſts than damages.

But in the caſe of Reynold *v.* Edwards, *M. T.* 35 Geo. III. which was upon an action of *treſpaſs* tried before Buller, J. at Staffordſhire aſſizes, where it appeared in evidence, that a treſpaſs was committed by the defendant in courſing over a cloſe belonging to the plaintiff, who four years before had given a general notice to all perſons not to treſpaſs on his lands. It appeared alſo, that the defendant was anxious to avoid treſpaſſing on the plaintiff's grounds, and had made enquiries reſpecting his boundaries. The plaintiff's counſel preſſed the judge to certify that the treſpaſs was wilful and malicious, in order to entitle the plaintiff to full coſts under 8 & 9 Will. c. 11, which ſets forth, that in all actions of treſpaſs, where at the trial it ſhall appear and be certified by the judge under his hand, upon the back of the record, that the treſpaſs was *wilful* and *malicious*, the plaintiff ſhall recover not only his damages, but his full coſts of ſuit. And the judge, conceiving that he had no diſcretion on the ſubject, accordingly certified, reſerving liberty to the defendant to move to ſet aſide that certificate, if this court ſhould be of opinion that the ſtatute was not compulſory on the judge.—Afterwards a motion was made to that effect. But the court refuſed to grant the rule, ſaying, that in the caſe of Swinnerton *v.* Jarvis, *E. T.* 22 Geo. III. in the common pleas, it was determined that if it appeared that the treſpaſs, however trifling, was committed *after notice*, the judge was bound to certify under the ſtatute; and that it was proper to adhere to that as an univerſal rule. *D. & E.* 6 *V.* 11.

It was otherwiſe in the caſe of Pallant *v.* Roll, *E. T.* 13 Geo. III.—This was an action of *treſpaſs*; for that the defendant, being a diſſolute perſon, neglecting his employment, and following hunting and other game, and by no means qualified by law ſo to do, broke and entered the plaintiff's cloſes, and with dogs, guns, and other engines for deſtruction of the game, hunted upon the ſaid cloſes, trod down the graſs and corn, and broke the fences, againſt the form of the ſtatute. On Not Guilty pleaded, and iſſue thereon, a verdict was found for the plaintiff, at Bury aſſizes, for *one ſhilling* damages, ſubject to the opinion of the court upon the following caſe: The defendant was not qualified in his own right to kill game, but was, and for three years had been, a menial ſervant, and by certificate a huntſman, to Robert Leman, eſquire, a gentleman of 1500l. a-year eſtate, who had kept hounds for twenty years; and the defendant went out by his maſter's order with the hounds, his maſter not being preſent, and was beating over the plaintiff's grounds. The plaintiff deſired the defendant to go off his land, which he refuſed, and at length found a hare, and hunted it over ſeveral pieces of land mentioned in the declaration, two of which were ſown with wheat. The queſtion was, Whether, if the court ſhould be of opinion that the defendant is not a diſſolute perſon, or the like, under the ſtatute of the 4 & 5 Will. the plaintiff can recover againſt him in this action upon the ſtatute? or whether he ought to have brought a common action of treſpaſs for breaking his cloſe? By the court: We have no doubt, but that the defendant is not a diſſolute perſon within the meaning of the act. The only real queſtion is, Whether, as this action is framed, the

the plaintiff can recover any thing? He certainly cannot have his full coſts. If he cannot recover any thing, but is nonſuit, he muſt pay coſts. If he can recover, as upon a common action of *treſpaſs*, he ſaves his coſts. Now certainly any man might have always brought an action of treſpaſs for hunting upon his ground. For this injury, among others, the ſtatute of Glouceſter gave coſts as well as damages. The 22 & 23 Car. II. c. 9, to prevent vexation, lowered the coſts, and if leſs than 40s. recovered, gave no more coſts than damages. This ſtatute of 4 & 5 Will. reſtored full coſts again, even in caſe of ſmall damages recovered againſt diſſolute and other perſons deſcribed in the ſaid ſtatute. But as we are of opinion, that the defendant is not within theſe deſcriptions, the offence falls back upon the ſtatute of Car. II. whereby the plaintiff ſhall recover no more coſts than damages. And the verdict was entered by conſent, that the jury find the defendant not a diſſolute perſon, but guilty of the treſpaſs; damages 1s. coſts 1s. 2 *Black. Rep.* 900.

A treſpaſs is conſidered as *wilful*, where the perſon has been forewarned not to come upon the land; and *malicious*, where the treſpaſs is committed plainly with intent to vex and diſtreſs the plaintiff. 3 *Blac. Com.* 214. And where this appears to have been the caſe, it ſeems that the judge is bound to certify, provided that he be required ſo to do *in court* immediately upon the trial. *Eſp. Ni. Pri.* 424. 5 *Wms. Juſt.* 80.

FORM OF THE NOTICE.

MR. JOHN DILLAWAY.—*Take notice, that if you hunt, ſhoot, fowl, courſe, or fiſh, in or upon any of the manors, lands, fields, woods, or premiſes, ponds, rivers, or waters, belonging to John Wilkes, Eſq. lying and being within the ſeveral pariſhes of Trotton, Iping, and Chithurſt, in the county of Suſſex, you will be conſidered as a wilful treſpaſſer, and be dealt with according to law. Dated this 20th day of Auguſt*, 1806.

T. RHOADES, *Steward of the ſaid Manors.*

The common law allows of the hunting of foxes and badgers, being beaſts of prey, *in another man's ground*, becauſe the deſtroying of them is looked upon as a public benefit; yet the digging and breaking of ground to unearth them is held to be unlawful, and the owner of the ground may maintain an action of treſpaſs. *Cro. Jac.* 321.

CASE of Gundry *v.* Feltham, *Trin. T.* 26 Geo. III.—This was an action of treſpaſs for breaking the hedges and trampling the graſs of the plaintiff, with horſes, dogs, &c. belonging to Humphrey Sturt, eſquire, a qualified perſon, and to whom the defendant was huntſman, in purſuing a fox.——Lawrence for the plaintiff obſerved the queſtion was, whether a perſon hunting has a right to follow foxes upon the ground of another? The qualification of the perſon is entirely out of the queſtion. By the general law, no perſon can go over the ground of another without his permiſſion; and in Sutton *v.* Moody, 1 *Ld. Raym.* 250, Holt ſaid, "If A. ſtarts a hare in the ground of B. and hunts it into the ground of C. and kills it there, the property is in A. the hunter; but A. is liable to an action of treſpaſs for hunting in the grounds as well of B. as of C." In Gedge *v.* Minne, 2 *Bulſt.* 60, it was determined that the defendant could not juſtify digging for a *badger*.——Gibbs for the defendant was ſtopped by the court. Lord Mansfield ſaid, that, by all the caſes as far back as Hen. VIII. it is ſettled that a man *may follow a fox into the grounds of another*.—— Willes, J. ſaid, that the caſe in Popham, 162, was much ſtronger than the preſent.——Buller, J. ſaid, the queſtion in this caſe was, whether the defendant is juſtified in following the fox over another man's ground? it is averred in the plea, that this was the only means of killing the fox. This caſe does not determine that a perſon may *unneceſſarily* trample down another man's hedges, or *maliciouſly* ride over his grounds; if he does more than is abſolutely neceſſary, he cannot juſtify it.—Judgment for the defendant. *D. & E.* 1 *V.* 334.

But as there is a modern faſhion among foxhunters, which ſeems to call loudly for reſtraint, namely, that of importing foxes from the continent on purpoſe to *turn out*, for the multiplication of the ſpecies as well as of the ſport, but to the great injury and annoyance of their neighbours: it ſhould be remembered, that this practice cannot be juſtified on any ground; and in an action of treſpaſs for foxhunting, if it can be ſhewn that the defendant was in the habit of procuring foxes or young cubs on purpoſe to turn out for his diverſion, *and did actually turn them out*, it is more than probable that the verdict would go againſt him; beſides that he might be proſecuted for a public nuiſance.—It is a caſe which appears never to have been tried, or even noticed in the books, though in common and conſtant practice.

It is a fundamental principle of the common law, laid down by all the great authorities, that no perſon can break cloſe, or enter upon another man's land in purſuit of game, without being liable to an action of treſpaſs. 2 *Bac. Abr.* 613. 2 *Comm.* 417. 2 *Blac. Rep.* 900. And to this ſir William Blackſtone has added, in very ſtrong language, "that not even the lord of a manor can by common law juſtify ſporting even *on his own ſoil*, unleſs he hath a grant of *free-warren*; nor can he come upon another man's ground to hunt or ſhoot, *though it be in his own manor*, without committing treſpaſs, and ſubjecting himſelf to an action for the ſame." 2 *Comm.* 39. and 4 *Comm.* 415.

In this opinion all the modern writers on the game laws ſeem to have unanimouſly concurred; though we might obſerve that the ſentiments of all theſe writers appear to have been derived from one and the ſame ſource, namely, the Commentaries of Sir William Blackſtone. And yet that learned commentator, in his fourth volume, p. 174, ſays expreſsly, "that thoſe who have a grant of *free-warren*, or a *manor of their own*, ARE EXEMPT FROM THIS SPECIES OF TRESPASS." And with reſpect to the poſition "that the lord of a manor cannot juſtify ſporting even on his own ſoil, by reaſon that the property of the game is *excluſively* veſted in the king,"—this is pretty evidently refuted by the facts ſtated from Mr. Chriſtian's notes, recited above. It would ſeem therefore that the general doctrine of treſpaſs with reſpect to the owners of manerial property, (if it holds good at all,) muſt apply to the lords of *reputed* manors, and not to thoſe who poſſeſs a *legal* manor, over which the lord exerciſes a complete ſupremacy by his baronial court, compels ſuit and ſervice from all his tenants, receives the fines and quit-rents and homage due for the *farms and lands held of him*, and records the preſentments of his jury which are to puniſh all innovations, encroachments, and injuries, which might appear ſubverſive of the privileges and franchiſes of his manor, or of the rights of the tenants *who hold under him*.

It would ſeem indeed highly incompatible with the well-known principle of an original grant of *manor* and *royalty*, though the lord might have leaſed or granted off to tenants under him the principal part of it in farms and incloſed grounds, and for which theſe tenants are obliged to render him ſuit and ſervice, that this very lord ſhould not poſſeſs the right of purſuing his game over ſuch ſoil, (although the franchiſe itſelf was originally granted by the king,) without being liable to an action of treſpaſs *from his own tenants*—the very men who acknowledge to hold theſe lands of him by their fealty at his court, and who pay him fines, and quit-rents, and ſervices, as a token of their ſubmiſſion to his ſupremacy over the ſoil. Nor is it reaſonable to imagine that thoſe great and arbitrary barons, who were ſo jealous and ſcrupulous of the game, would ever have granted the uſe of the ſoil in any ſhape to their vaſſals, if by ſuch grant they were to be afterwards excluded from purſuing the game on thoſe particular parts of the royalty or manor ſo granted off.

There is a further glaring abſurdity in the contrary pro-

propoſition, which has been remarked by ſeveral diſtinguiſhed writers, namely, that if the lord of a manor cannot juſtify killing the game on the farms of a tenant *within his royalty*, and the tenant not being qualified by law to kill it himſelf, that then the game on all thoſe numerous farms muſt remain wholly untouched, and be continually propagated in vain, as being for no man's uſe, nor for the benefit of ſociety. This the legiſlature could never intend; nor is it any where ſet forth when, or how, the ancient lords of *legal* manors forfeited or loſt this franchiſe, which muſt have been granted originally with the manor. For if the right of purſuing the game over all men's property, by the feodal ſyſtem, or ſyſtem of tenures, was univerſally admitted to reſide excluſively in the king, then of courſe it follows, that when the king granted theſe immunities to a ſubject, that ſubject muſt have poſſeſſed in full right every ſuch privilege as was inherent in the king himſelf.

That the legiſlature, in framing the modern game laws, conceived the right of purſuing the game over every part of the manor, as well the *incloſed part* as the waſte, to veſt in the lord of ſuch manor, appears extremely evident from the words of the ſtatute in the powers delegated to a gamekeeper, viz. "that all lords of manors may authorize their gamekeepers WITHIN THEIR RESPECTIVE MANORS OR ROYALTIES,—(not exempting the incloſed parts or farms, but in ALL parts WITHIN the manerial liberty,)—to take and ſeize all ſetting-dogs, tunnels, tramels, hays, or other nets, lowbels, hare-pipes, ſnares, or other engines, for the taking and killing of hares, pheaſants, partridges, or other game, as WITHIN the PRECINCTS of ſuch reſpective manors ſhall be uſed, by any perſon who by this act is prohibited to keep or uſe the ſame." 22 & 23 *Car.* II. c. 25.

Now, if it be held, as ſir William Blackſtone has affirmed, "that neither the lord of a manor, nor his gamekeeper, can enter upon his tenant's land without being liable to an action of treſpaſs,"—how can he poſſibly "take and ſeize ſetting-dogs, nets, hays, tunnels, tramels, lowbels, harepipes, ſnares, or other engines,"—ſet or placed for the deſtruction of game?

Theſe engines are almoſt always made uſe of in the *incloſed grounds*, particularly for partridge and pheaſant; and for hare likewiſe, the ſnares are much oftener placed in coppices, on the ſides of rows and hedges, on the borders of corn-fields and turnips, of clover and ſaintfoin, than upon waſtes and commons, where the chance of ſucceſs in poaching is much leſs, and the danger of detection much greater, than in woods and incloſed grounds, where the game is ſure to be moving at its accuſtomed hours of feeding; and which hours and places are therefore always choſen for its deſtruction. This fact is incontrovertible: and therefore if a gamekeeper is not warranted to enter an incloſure for the ſeizure of theſe implements of poaching, and for the detection of the perſons employed in ſetting them, then ſuch an appointment becomes of no avail, and the act of parliament itſelf is a perfect nullity. On the contrary, if it be granted that the gamekeeper has a right to enter the incloſed grounds and farms *within the manor* for theſe purpoſes, then the lord of the manor who appointed him muſt inherently poſſeſs the ſame right, otherwiſe he could not delegate it to his ſervant. And, from a parity of reaſoning, if he poſſeſſes the right of entering his tenant's farm and grounds in ſearch of nets, dogs, ſnares, &c. it cannot be pretended that he poſſeſſes not the right of purſuing and killing the game in and upon all ſuch grounds and incloſures, *without being liable to an action of treſpaſs from any of his manerial tenants.*

How far this right can be maintained on a *reputed* manor, or manor *extinct*, is another queſtion; but as all the other manerial rights and privileges are loſt and gone by the extinction of the court-baron, ſo it is reaſonable to conclude that this right, (if it be one,) is loſt likewiſe; and the more ſo, as there are no tenants who hold *of* or *under* ſuch a manor; and it is not pretended that the lord of a *legal* manor can juſtify entering, either of himſelf or by his gamekeeper, into any man's land ſituated *out of his manor*, or even *within* his manor, if ſuch occupant does not perform ſuit and ſervice at his court for the land he occupies: which is ſometimes the caſe with allodial and other freehold farms, ſituated *within* the boundary of a legal manor. In all caſes, however, where the baronial courts are maintained, and at which the tenants perform their ſuit and ſervice, it is conceived that the lord can claim, without treſpaſs, the *right* of ſporting over the incloſed ground; and the opinion of many men, of diſtinguiſhed abilities in the Engliſh juriſprudence, is in favour of this manerial franchiſe; ſomewhat arbitrary, indeed, and perhaps the only exiſting fragment of the ancient feodal authority. In all the precedents we have ſtated, or have heard of, the actions for treſpaſs have been brought againſt *unqualified* perſons, or the lord of a manor *extinct*, or for treſpaſs of a *legal* lord *out of his manor*. But the queſtion, in the ſhape we have propoſed it, with the many and nice diſtinctions which emanate from it, has never been before the court; though it would be extremely deſirable, for the information of the owners of ſuch franchiſes, as well as of the public at large, that the matter ſhould be coolly and ſeriouſly argued, and decided upon with that candour and deliberate juſtice, for which the Engliſh courts of law are ſo eminently diſtinguiſhed.

That the game-laws, in their preſent confuſed form, are in many reſpects contradictory and vexatious, appears to be univerſally admitted. The juſtices Aſhhurſt and Willes (*D. & E.* 1. v. 44.) openly declared in court, that "nothing could be more oppreſſive than the preſent ſyſtem of the game-laws; and that in expounding them, they ought to be conſidered only as poſitive rules, rather than as laws founded on reaſon."—Perhaps it might hereafter be found expedient to repeal the ſtatutes now in force relating to this ſubject, in order to form a new ſyſtem under one act of parliament, that ſhall appear more conſonant to human reaſon, and explain more obviouſly and ſatisfactorily the rights of individuals, and the pains and penalties to be incurred by thoſe who offend. Of what utility can the clauſe be now, in the *ſtat.* 33 *Hen.* VIII. *c.* 6. which ſets forth, that ſhooting with a croſs-bow, hand-gun, or demihake, by any perſon not poſſeſſing 100l. a year, incurs a penalty of 10l. Or that hand-guns are to be of a yard length in the ſtock and gun, otherwiſe qualified perſons are to take, ſeize, and deſtroy them? Many other of our preſent exiſting laws, enacted for the preſervation of the game, ſtand in a ſimilar predicament; and previous to any ſubſtantial reformation to be made in the code, it might perhaps be worth while *well* to conſider, whether it would not prove more beneficial to the community at large, and much more advantageous to the ſportſman, to make the game *private property*. This would effectually ſtrike at the root of poaching; game would abound in every part of the kingdom; our markets would be ſupplied with it throughout the ſeaſon at a reaſonable price; and every man poſſeſſed of landed property would enjoy the right he ought to inherit from nature, that of ſporting on his own ſoil, and of poſſeſſing in full right the game it nurtures up, and which he feeds, and propagates, and protects. Selfiſh minds alone will revolt at ſo juſt and equitable an arrangement of the game-laws. The circumſtance of the game being *ferœ naturæ*, is not a ſufficient ground whereon to found an objection, provided every perſon is confined within the boundaries of his own land; and as to its paſſing occaſionally from one man's ſoil to that of another, the chance being equal, will ſtill afford the ſame participation of equal advantage and of equal right. The royalty of all river fiſheries in England is maintained upon this principle; and ſo might that of the game, with the ſame juſtice and facility.

GA'MECOCK, *ſ.* Cocks bred to fight.—They manage the diſpute as fiercely as two *game-cocks* in the pit. *Locke.*

GA'ME-EGG, *ſ.* Eggs from which fighting cocks are bred:

Thus boys hatch *game-eggs* under birds of prey,
To make the fowl more furious for the fray. *Garth.*

GA'MEHEN, *ſ.* A hen of the game kind.

GA'MEKEEPER, *ſ.* A perſon who looks after game and ſees it is not deſtroyed. See the article GAME, p. 231.

GAME'LIA, a ſirname of Juno, as Gamelius was of Jupiter, on account of their preſiding over marriages. Alſo a feſtival privately obſerved among the Greeks at three different times. The firſt was the celebration of a marriage, the ſecond was in commemoration of a birthday, and the third was an anniverſary of the death of a perſon.

GAME'LION, in the ancient chronology, was the eighth month of the Athenian year, containing twenty-nine days, and anſwering to the latter part of our January and beginning of February. It was ſo called, as being, by the laws of the Athenians, the moſt proper ſeaſon for marriage.

GAMELO'RA, a ſmall iſland in the Mediterranean, near the north-eaſt coaſt of Tunis: three miles eaſt of Cape Zibeeb.

GA'MESOME, *adj.* Frolicſome; gay; ſportive; playful; ſportful.—This *gameſome* humour of children ſhould rather be encouraged, to keep up their ſpirits and improve their ſtrength and health, than curbed or reſtrained. *Locke.*

The *gameſome* wind among her treſſes play,
And curleth up thoſe growing riches ſhort. *Fairfax.*

GA'MESOMENESS, *ſ.* Sportiveneſs; merriment.

GA'MESOMELY, *adv.* Merrily.

GA'MESTER, *ſ.* One who is viciouſly addicted to play.—Could we look into the mind of a common *gameſter*, we ſhould ſee it full of nothing but trumps and mattadores: her ſlumbers are haunted with kings, queens, and knaves. *Addiſon.*

All the ſuperfluous whims relate,
That fill a female *gameſter's* pate;
What agony of ſoul ſhe feels
To ſee a knave's inverted heels. *Swift.*

One who is engaged at play;

When lenity and cruelty play for kingdoms,
The gentler *gameſter* is the ſooneſt winner. *Shakeſpeare.*

A merry frolicſome perſon.—You're a merry *gameſter*, my lord Sands. *Shakeſpeare.*—A proſtitute; *not in uſe:*

She's impudent, my lord,
And was a common *gameſter* to the camp. *Shakeſpeare.*

GAM'ET, or OLD MANDOE, a ſmall iſland in the north ſea, belonging to Denmark: three miles from the continent, and eight weſt-ſouth-weſt of Ripen.

GA'MING, *ſ.* The art or practice of playing and following up any game, particularly thoſe of hazard; as cards, dice, eo-tables, &c. This practice has at all times been conſidered as a thing of pernicious conſequence to the commonwealth, and is therefore ſeverely prohibited by law; the ſtatutes enacted for which, and the caſes wherein they are applied, have been already ſtated under the preceding article GAME, p. 204. It is lamentable to obſerve, however, that not even the force of laws has been able to reſtrain or prevent that ſort of diſſipation, which indeed ought to be avoided as the deſtroyer of every good principle, that which leads a man to venture his fortune upon the deciſion of a game of chance. This is the worſt ſort of *thoughtleſſneſs*, if that be not too ſoft a name for a vice which lays aſleep every tender, every benevolent, ſentiment. Covetouſneſs, in the extreme, is the ruling paſſion of theſe ſharping gameſters, who call themſelves *men of the world.* They lie in wait for the young, the weak in judgment, and for him whoſe head is diſordered with wine. They make plunder of the confidence of a relation, a friend, or a guardian. The hoſpitality of your houſe is made an excuſe for robbing your children. Can this be ſupported on any principle of religion or morals? Covetouſneſs ſtifles every affection, and deſtroys every tie of blood, or obligation of gratitude. It is a maxim that allows of few exceptions, That a fortune which is made ſuddenly, is not made fairly: That honeſt gain is only to be acquired by laudable induſtry and perſeverance.

Is there the perſon living who will venture to maintain a contrary doctrine, or become an advocate for the baneful deluſions of a gaming table? If there be, let him contemplate the following extract from Dr. Biſſet's Diſcourſes: "Though you ſhould be the ſucceſsful adventurer, you muſt have been much hardened, if you feel no ſtings of conſcience for the diſtreſs you have brought upon innocent families. Children are turned out of their father's houſe, becauſe they had the misfortune to encounter with you. He who lived in plenty has no bread: Poverty has come from your hand: Your breath brings miſery, as the mildew of the clouds bring famine into a fruitful land. If we ſuppoſe, on the other hand, that a man is the loſer, how can he behold the face of the relations he has ruined? It had been happy for his children that they had been fatherleſs; for his wife that ſhe had been a widow. He who ought to have ſaved them, has deſtroyed them. Hold thy hand, barbarous man. An amiable wife, and engaging children, do warmly beſeech thee not to throw away their inheritance, and to leave them for a patrimony, cold, and hunger, and nakedneſs. Thy ſon, or thy daughter, may, without friends or comforters, be expoſed to a thouſand misfortunes, by this folly of their father. Thy adverſary, who, at this time, may appear with ſoftened brow, will be the firſt to execute this ſentence: He is a hardened creature. How could he be otherwiſe, when he flouriſhes by the misfortunes of men? Hold thy hands, barbarous man, that thou mayeſt not force thy children upon the paw of the bear, or the tooth of the lion, who thirſts for their blood.

"Some vices portend great evil to the country where they are practiſed: This vice in particular. The hazard is, That he who lays a ſnare for his friend, will not be ſcrupulous about the intereſt of his country. Though the number, the rank, or ſhining parts, of thoſe who take this road, may give a currency to the moſt ſelfiſh of vices, yet no rank or ability can authoriſe any man to be the plunderer of his friends, to make prey of the harmleſs, the unſuſpicious, the ignorant, and the uninformed."

The *chance* or *hazard* in gaming, is a matter of mathematical inveſtigation, becauſe it admits of more and leſs. Gameſters either ſet out upon an equality of chance, or are ſuppoſed to do ſo. This equality may be altered in the courſe of the game, by the greater good-fortune or addreſs of one of the gameſters, whereby he comes to have a better chance, ſo that his ſhare in the ſtakes is proportionably better than at firſt. This more and leſs runs through all the ratios between equality and infinite difference, or from an infinitely little difference till it come to an infinitely great one, whereby the game is determined. The whole game, therefore, with regard to the iſſue of it, is a chance of the proportion the two ſhares bear to each other.

The probability of an event is greater or leſs, according to the number of chances by which it may happen, compared with the number of all the chances by which it may either happen or fail. On this principle M. de Moivre, in a treatiſe *de Menſura Sortis*, has computed the variety of chances in ſeveral caſes that occur in gaming, the laws of which may be underſtood by what follows:

If A and B play with a ſingle die, on this condition, that, if

if A throw two or more aces at eight throws, he ſhall win; otherwiſe B ſhall win; What is the ratio of their chances? Since there is but one caſe wherein an ace may turn up, and five wherein it may not, let $a=1$, and $b=5$. And again, ſince there are eight throws of the die, let $n=8$; and you will have $\overline{a+b}|^n - b^n - nab^n - 1$, to $b^n + nab^n - 1$: that is, the chance of A will be to that of B as 663991 to 10156525, or nearly 2 to 3.

A and B are engaged at ſingle quoits; and, after playing ſome time, A wants 4 of being up, and B 6; but B is ſo much the better gameſter, that his chance againſt A upon a ſingle throw would be as 3 to 2; What is the ratio of their chances? Since A wants 4, and B 6, the game will be ended at nine throws; therefore, raiſe $a+b$ to the ninth power, and it will be $a^9+9\,a^8b+36\,a^7bb+84\,a^6b^3\times 126\,a^5b^4+126\,a^4b^5$, to $84a^3b^6+36\,aab^7+6ab^8+b^9$; call a 3, and b 2, and you will have the ratio of chances in numbers, viz. 1759077 to 194048.

A and B play at ſingle quoits, and A is the beſt gameſter, ſo that he can give B 2 in 3: What is the ratio of their chances at a ſingle throw? Suppoſe the chances as z to 1, and raiſe $z+1$ to its cube, which will be z^3+3z^2+3z+1. Now ſince A could give B 2 out of 3, A might undertake to win three throws running; and conſequently the chances in this caſe will be as z^3 to $3z^3+3z+1$. Hence $z^3=3z^2+3z+1$; or $2z^3=z^3+3z^2-3z+1$. And therefore $z^3\sqrt{2}=z+1$; and, conſequently, $z=\frac{1}{\sqrt[3]{2}-1}$. The chances, therefore, are $\sqrt[3]{2}-1$, and 1 reſpectively.

Again, ſuppoſe I have two wagers depending, in the firſt of which I have 3 to 2 the beſt of the lay, and in the ſecond 7 to 4; What is the probability I win both wagers? 1. The probability of winning the firſt is $\frac{3}{5}$, that is the number of chances I have to win, divided by the number of all the chances: the probability of winning the ſecond is $\frac{7}{11}$: therefore, multiplying theſe two fractions together, the product will be $\frac{21}{55}$, which is the probability of winning both wagers. Now, this fraction being ſubtracted from 1, the remainder is $\frac{34}{55}$, which is the probability I do not win both wagers: therefore the odds againſt me are 34 to 21. 2. If I would know what the probability is of winning the firſt, and loſing the ſecond, I argue thus: the probability of winning the firſt is $\frac{3}{5}$, the probability of loſing the ſecond is $\frac{4}{11}$: therefore multiplying $\frac{3}{5}$ by $\frac{4}{11}$, the product $\frac{12}{55}$ will be the probability of my winning the firſt, and loſing the ſecond; which being ſubtracted from 1, there will remain $\frac{43}{55}$, which is the probability I do not win the firſt, and at the ſame time loſe the ſecond. 3. If I would know what the probability is of winning the ſecond, and at the ſame time loſing the firſt, I ſay thus: The probability of winning the ſecond is $\frac{7}{11}$; the probability of loſing the firſt is $\frac{2}{5}$: therefore, multiplying theſe two fractions together, the product $\frac{14}{55}$ is the probability I win the ſecond, and alſo loſe the firſt. 4. If I would know what the probability is of loſing both wagers, I ſay, the probability of loſing the firſt is $\frac{2}{5}$, and the probability of loſing the ſecond $\frac{4}{11}$: therefore the probability of loſing them both is $\frac{8}{55}$: which, being ſubtracted from 1, there remains $\frac{47}{55}$: therefore, the odds of loſing both wagers is 47 to 8.

This way of reaſoning is applicable to the happening or failing of any events that may fall under conſideration. Thus if I would know what the probability is of miſſing an ace four times together with a die, this I conſider as the failing of four different events. Now the probability of miſſing the firſt is $\frac{5}{6}$, the ſecond is alſo $\frac{5}{6}$, the third $\frac{5}{6}$, and the fourth $\frac{5}{6}$; therefore the probability of miſſing it four times together is $\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}=\frac{625}{1296}$; which being ſubtracted from 1, there will remain $\frac{671}{1296}$ for the probability of throwing it once or oftener in four times: therefore the odds of throwing an ace in four times, is 671 to 625.

But if the flinging of an ace were undertaken in three times, the probability of miſſing it three times would be $\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}=\frac{125}{216}$; which being ſubtracted from 1, there will remain $\frac{91}{216}$ for the probability of throwing it once or oftener in three times: therefore the odds againſt throwing it in three times are 125 to 91. Again, ſuppoſe we would know the probability of throwing an ace once in four times, and no more: ſince the probability of throwing it the firſt time is $\frac{1}{6}$, and of miſſing it the other three times, is $\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}$, it follows, that the probability of throwing it the firſt time, and miſſing it the other three ſucceſſive times, is $\frac{1}{6}\times\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}=\frac{125}{1296}$; but becauſe it is poſſible to hit every throw as well as the firſt, it follows, that the probability of throwing it once in four throws, and miſſing it the other three, is $\frac{4\times 125}{1296}=\frac{500}{1296}$; which being ſubtracted from 1, there will remain $\frac{796}{1296}$ for the probability of throwing it once, and no more, in four times. Therefore, if one undertake to throw an ace once, and no more, in four times, he has 500 to 796 the worſt of the lay, or 5 to 8 very nearly.

Suppoſe two events are ſuch, that one of them has twice as many chances to come up as the other; what is the probability, that the event, which has the greater number of chances to come up, does not happen twice before the other happens once, which is the caſe of flinging 7 with two dice before 4 once? Since the number of chances is as 2 to 1, the probability of the firſt happening before the ſecond is $\frac{2}{3}$, but the probability of its happening twice before it is but $\frac{2}{3}\times\frac{2}{3}$ or $\frac{4}{9}$: therefore it is 5 to 4 ſeven does not come up twice before four once. But, if it were demanded, what muſt be the proportion of the facilities of the coming up of two events, to make that which has the moſt chances come up twice, before the other comes up once? The anſwer is, 12 to 5 very nearly: whence it follows, that the probability of throwing the firſt before the ſecond is $\frac{12}{17}$, and the probability of throwing it twice is $\frac{12}{17}\times\frac{12}{17}$, or $\frac{144}{289}$; therefore the probability of not doing it is $\frac{145}{289}$: therefore the odds againſt it are as 145 to 144, which comes very near an equality.

Suppoſe there is a heap of thirteen cards of one colour, and another heap of thirteen cards of another colour; What is the probability, that, taking one card at a venture out of each heap, I ſhall take out the two aces? The probability of taking rhe ace out of the firſt heap is $\frac{1}{13}$, the probability of taking the ace out of the ſecond heap is $\frac{1}{13}$; therefore the probability of taking out both aces is $\frac{1}{13}\times\frac{1}{13}=\frac{1}{169}$, which being ſubtracted from 1, there will remain $\frac{168}{169}$: therefore the odds againſt me are 168 to 1.

In caſes where the events depend on one another, the manner of arguing is ſomewhat varied. Thus, ſuppoſe that out of one ſingle heap of thirteen cards of one colour, I ſhould engage to take out firſt the ace; and, ſecondly, the two: though the probability of taking out the two be likewiſe $\frac{1}{13}$: yet, the ace being ſuppoſed as taken out already, there will remain only twelve cards in the heap, which will make the probability of taking out the two to be $\frac{1}{12}$; therefore the probability of taking out the ace, and then the two, will be $\frac{1}{13}\times\frac{1}{12}$. In this laſt queſtion the two events have a dependence on each other; which conſiſts in this, that one of the events being ſuppoſed as having happened, the probability of the other's happening is thereby altered. But the caſe is not ſo in the two heaps of cards.

If the events in queſtion be n in number, and be ſuch as have the ſame number a of chances by which they may happen, and likewiſe the ſame number b of chances by which they may fail, raiſe $a+b$ to the power n. And if A and B play together, on condition that if either one or more of the events in queſtion happen, A ſhall win, and B loſe, the probability of A's winning will be $\frac{\overline{a+b}|^n - b^n}{\overline{a+b}|^n}$; and that of B's winning will be $\frac{b^n}{\overline{a+b}|^n}$; for when $a+b$ is

actually raised to the power n, the only term in which a does not occur is the last b^n: therefore all the terms but the last are favourable to A.

Thus if $n=3$, raising $a+b$ to the cube $a^3+3a^2b+3ab^2+b^3$, all the terms but b^3 will be favourable to A; and therefore the probability of A's winning will be $\frac{a^3+3a^2b+3ab^2}{\overline{a+b}^3}$, or $\frac{\overline{a+b}^3-b^3}{\overline{a+b}^3}$; and the probability of B's winning will be $\frac{b^3}{\overline{a+b}^3}$. But if A and B play on condition, that if either two or more of the events in question happen, A shall win; but in case one only happen, or none, B shall win; the probability of A's winning will be $\frac{\overline{+b}^n-nab^{n-1}-b^n}{\overline{n+b}^n}$; for the only two terms in which aa does not occur, are the two last, viz. nab^{n-1} and b^n. See the article ALGEBRA, vol. i. p. 315; and the game of FARO, vol. vii. p. 221.

GA'MING, in sculpture and painting, is represented by a woman sitting at a gaming table, and sweeping money into a bag full of holes, through which it immediately falls out again. By her side an anchor, and with her right foot endeavouring to stop the wheel of fortune.

GA'MING-HOUSE, *s.* A house where gaming is carried on.—All disorderly inns or alehouses, bawdy-houses, *gaming-houses*, stage-plays unlicensed, booths and stages for ropedancers, and the like, are public nuisances. *Blackstone.*

GA'MING-TABLE, *s.* A table appropriated to gaming.—They frequent plays, operas, and taverns; and at home have their routs and their *gaming-tables. World.*

GAM'LITZ, a town of Germany, in the duchy of Stiria: eleven miles north-north-west of Marburg.

GAM'MA, *s.* [from the Greek letter Γ, which it is like.] A surgical instrument for cauterising a hernia.

GAMMACA'NOR, or GAMMADOUR, a town of the island of Bachian, one of the Moluccas.

GAM'MADIM, GAM'MADIMS, *s. plu.* [etymology doubtful.] The garrison placed in the towers of Tyrus. *Ezek.*

GAMMALAM'MA, a town of the island of Ternate, where the king usually resides.

GAM'MER, *s.* [Of uncertain etymology; perhaps from *grand mere*, and therefore used commonly to old women.] The compellation of a woman corresponding to gaffer; as, *Gammer* Gurton's Needle; an old play.

GAM'MING, a town of Germany, in the archduchy of Austria: ten miles east-south-east of Bavarian Waidhofen.

GAM'MING (Markt), a town of Germany, in the archduchy of Austria: ten miles east of Bavarian Waidhofen.

GAM'MO, a town of Africa, on the Ivory Coast.

GAM'MON, *s.* [*gambone*, Ital.] The buttock of an hog salted and dried; the lower end of the flitch:

Ask for what price thy venal tongue was sold;
A rusty *gammon* of some sev'n years old. *Dryden.*

A kind of play with dice; the back-gammon-board:

The quick dice,
In thunder leaping from the box, awake
The sounding *gammon.* *Thomson.*

GAM'MON POINT, anciently called *Point Gilbert*, in North America, forms the eastern side of the harbour of Hyennes, in Barnstable county, and in the state of Massachusetts.

GA'MUT, *s.* [*gama*, Ital.] The scale of musical notes. See MUSIC.

When by the *gamut* some musicians make
A perfect song, others will undertake,
By the same *gamut* chang'd, to equal it:
Things simply good can never be unfit. *Donne.*

GAMPS, a town of Switzerland, which belongs partly to the canton of Schweitz, and partly to Glaris, with a bailiwick, in which is a sulphurous medicinal spring: five miles south of Appenzel.

GAM'RY-HEAD, a cape of Scotland, on the north coast of Bamffshire: six miles east of Bamff.

GAN, for *began*, from *'gin* for *begin*:

The noble knight *'gan* to feel
His vital force to faint. *Spenser.*

GAN, a city of China, of the first rank, and metropolis of the province of Se-tchuen. Lat. 31. 16. N. lon. 13. S. W. Pekin.

GAN, a town of China, of the second rank, in the province of Pe-tcheli: fifteen miles east of Paoting, and seventy south-south-west of Peking. Lat. 38. 54 N. lon. 133. 15. E. Ferro.

GAN, a town of France, in the department of the Lower Pyrenées: one league and a half south of Pau, and three and a half east of Oleron.

GAN-GIN', a town of China, of the third rank, in the province of Hou-quang: thirty-six miles east-south-east of Heng-tche.

GAN-NAN', a town of China, of the third rank, in the province of Koei-tcheou: thirty-five miles east of Poungan.

GAN-PIN', a town of China, of the third rank, in the province of Koei-tcheou: twenty miles north-east of Ngan-chun.

GAN-PING', a town of China, of the third rank, in the province of Pe-tcheli: twelves miles north of Ching.

GAN-YE', a town of China, of the third rank, in the province of Se-tchuen: fifty-two miles west of Ho.

GA'NA, a town of Arabia Felix: 150 miles north of Mocha.

GANA'NO-COU'I, a river of Upper Canada, which runs into the river St. Lawrence: four leagues below Kingston.

GANA'RA, a country of Africa, with a town of the same name, situated on the banks of the Niger. The country is populous and fertile: the articles of commerce are gold, sena, and slaves. Lat. 12. 20. N. lon. 16. E. Greenwich.

GAN'AT-SUR-LOIRE, a town of France, in the department of the Allier, and chief place of a canton, in the district of Moulins, situated on the Loire: five leagues north-east of Moulins.

To GANCH, *v. a.* [*ganciare*, from *gancio*, a hook, Ital. *ganche*, Fr.] To drop from a high place upon hooks by way of punishment: a practice in Turkey, to which Smith alludes in his *Pocockius*:

Cohors catenis qua pia stridulis
Gemunt onesti, vel sude trans sinum
Luctantur actâ, pendulive
Sanguineis trepidant in uncis. *Musæ Ang.*

GAN'DE, a river of Germany, which runs into the Leine: four miles west-south-west of Gandersheim.

GANDELU', a town of France in the department of the Aisne, and chief place of a canton, in the district of Chateau Thierry: two leagues and three quarters west-north-west of Chateau Thierry, and three north of la Ferté-sous-Jouarre.

GAN'DER, *s.* [ȝandꝑa, Sax.] The male of the goose. See ANAS, vol. i. p. 516.—As deep drinketh the goose as the *gander*. *Camden.*—One *gander* will serve five geese. *Mortimer.*

GAN'DERSHEIM, a town of Germany, in the circle of Lower Saxony, and principality of Wolfenbuttel, situated on the river Gande, with a celebrated abbey of Protestants, composed of an abbess, who is a princess, and four ladies of noble families: twenty miles west of Goslar.

GAND'JA,

GAND'JA, or GANGEA, a town of Aſia, in the country of Georgia: 100 miles ſouth-eaſt of Teflis. Lat. 41. 32. N. lon. 65. 10. E. Ferro.

GAN'DIA, a ſeaport town of Spain, in the kingdom of Valencia, with a ſmall univerſity. The town declared for the archduke in 1706, but was taken by the French, after the battle of Almanza: twenty-eight miles ſouth of Valencia, and forty north-north-eaſt of Alicant. Lat. 38. 58. N. lon. 16. 29. E. Peak of Teneriffe.

GANDICOT'TA, a celebrated hill fortreſs of Hindooſtan, ſituated on the ſouth ſide of the Pennar, on the ſummit of a lofty mountain, with a ſteep precipice on one ſide, and acceſſible on the other only by an aſcent of from ſeven to eight feet wide, with the river Pennar at the bottom. It was for ages thought to be impregnable, and its garriſon ſet at defiance every attempt to reduce it. Yet in 1652 it was taken by the famous Emir Jumla, a general in the ſervice of the king of Golconda; but Thevenot informs us that it was effected by corrupting the governor. Eighty-ſeven miles weſt-north-weſt of Nellore, and thirty-three north-weſt of Cuddapa. Lat. 14. 45. N. lon. 78. 29. E. Greenwich.

GAN'DINA, a town of Italy, in the Bergamaſco, belonging to the ſtate of Venice: ten miles north-eaſt of Bergamo.

GANDO'LA, *ſ.* in botany. See BASELLA.

GANEGAM', a town of the iſland of Ceylon: ſixty miles ſouth-ſouth-eaſt of Columbo.

GA'NET, or SOLAND GOOSE, in ornithology. See PELICANUS.

GA'NET ISLANDS, a cluſter of ſmall iſlands, near the eaſt coaſt of Labrador. Lat. 54. N. lon. 56. 10. W. Greenwich.

To GANG, *v. n.* [*gangen*, Dut. ȝanȝan, Sax. *gang*, Scot.] To go; to walk; an old word not now uſed, except ludicrouſly.—Your flaunting beaus *gang* with their breaſts open. *Arbuthnot.*

But let them *gang* alone,
As they have brew'd, ſo let them bear blame. *Spenſer.*

GANG, *ſ.* A number herding together; a troop; a company; a tribe; a herd. It is ſeldom uſed but in contempt or abhorrence.—As a *gang* of thieves were robbing a houſe, a maſtiff fell a barking. *L'Eſtrange.*

Admitted in among the *gang*,
He acts and talks as they befriend him. *Prior.*

GA'NG-BOARD, *ſ.* a ſea term; a plank with ſeveral cleats nailed to it for the convenience of going into or out of a boat where the water is not deep enough to float the boat cloſe to the landing place.

GA'NG-WEEK, *ſ.* [*q. d.* going or walking week.] The time when the bounds of the pariſhes are luſtrated, or gone over by the pariſh-officers; *rogation-week.*

GANGANEL'LI. See CLEMENT XIV. vol. iv. p. 654.

GANGA'RIDÆ, in ancient hiſtory, a people near the mouths of the Ganges. They were ſo powerful that Alexander did not dare to attack them. Some attributed this to the wearineſs and indolence of his troops. They are placed by Valerius Flaccus among the deſerts of Scythia. *Juſtin.*

GAN'GELT, a town of Germany, in the circle of Weſtphalia, and duchy of Juliers: twelve miles ſouth-ſouth-eaſt of Ruremond. Lat. 51. 8. N. lon. 23. 34. E. Ferro.

GAN'GES, a town of France, in the department of the Herault, and chief place of a canton, in the diſtrict of Montpellier: ſeven leagues north of Montpellier, and ſix and a half north-eaſt of Ledeve.

GAN'GES, a noble river of Aſia, the Nile of Hindooſtan, which riſes by two branches from the mountains of Kentaiſſe, in the country of Thibet; theſe two branches take a weſterly direction, inclining to the north, for a courſe of about 300 miles in direct diſtance, when meeting the great chain or ridge of mount Himmaleh, which extends from Cabul along the north of Hindooſtan, and through Thibet, the rivers are compelled to turn to the ſouth, in which courſe they unite their waters, and then form what is properly termed the river Ganges. This body of water now forces a paſſage through the ridge of mount Himmaleh, at the diſtance, poſſibly, of one hundred miles below the place of its firſt approach to it, and ſapping its foundation, ruſhes through a cavernous aperture, and precipitates itſelf into a vaſt baſon, which it has worn in the rock, at the hither foot of the mountains. From this ſecond ſource (as it may be termed) of the Ganges, its courſe becomes more eaſtwardly than before, through the rugged country of Sirinagur, until, at Hurdwar, it finally eſcapes from the mountainous tract, in which it has wandered for about eight hundred Britiſh miles. At Hurdwar it opens itſelf a paſſage through mount Sewallick; which is the chain of mountains that borders on the level country, on the north of the province of Delhi. After entering Hindooſtan, it paſſes by Anopſheer, Furruckabad, Canoga, Cawnpour, Allahabad, where it is joined by the Jumna, Merzapour, Chunar, Benares, Patna, thirty-ſix miles above which it is joined by the Dewah, and ſixteen miles above the ſame town by the Soane, and oppoſite to it by the Gunduck. After leaving Patna, it paſſes by Bar, Monghir, forty miles eaſt of which it is joined by the Coſa, it then paſſes by Rajemal, forty miles below which it is joined by a branch of the Sanpoo, or Teeſta, and eighty miles below that by another branch of the ſame river. Soon after which it divides into various branches, called *the Mouths of the Ganges*, which empty themſelves into the Bay of Bengal, in lat. 21. 40. to 22. N. A circumſtance attending the courſe of the Ganges and the Burrampooter rivers in reſpect to each other is remarkably ſingular. Iſſuing from oppoſite ſides of the ſame ridge of mountains, they direct their courſe towards oppoſite quarters, till they are more than 1200 miles aſunder, and afterwards meet in one point near the ſea, after each has performed a winding courſe of more than 2000 miles.

The multitude of rivers which fall into the Ganges from each ſide of its banks, give it a matchleſs inland navigation. Some of theſe rivers are equal in ſize to the Rhine, and none leſs than the Thames: it maintains, in the parts already known, thirty thouſand boatmen, by their carriage of ſalt and food for ten millions of people in Bengal and its dependencies, which occaſions a vaſt expenditure; beſides the exports and imports, the common interchange of divers articles within its limits, its fiſheries, and its travellers; which, all together, occaſion annually a further circulation of at leaſt two millions of money.

Juſt before the periodical rains ſet in, which is about the middle of July, the waters of the Ganges begin to increaſe, ſimilar to thoſe of the Nile, occaſioned by the ſnow on the tops of the hills from whence the river iſſues (above thirteen hundred miles from the ſea) being melted by the vertical ſun; as ſoon as the rains commence it hourly ſwells, pouring with the moſt impetuous velocity, and the river has the appearance of a ſea, and in ſome parts, where there happen to be rocks or very high hills on each ſide pretty near the river, the water being there pent up, it riſes to a prodigious height, and the current is ſo ſtrong and rapid, that it is hardly poſſible for any boat to ſtem it. After about two months, when the violence of the rain begins to ſubſide, the water decreaſes almoſt as ſuddenly as it aroſe, and that which was of late one entire ſheet of water, except perhaps ſome tops of trees, now appears a moſt fertile country, covered with woods, corn-fields, and other plantations, and the different arms which the river branches into, preſent many little iſlands, which in the rainy ſeaſon appeared to have no exiſtence. Some of theſe iſlands produce three and four crops yearly; rice, which grows only when it is co-

vered with water; after that corn; then water-melons, &c. In the dry ſeaſon the current runs very ſlow, not above three miles an hour; in the wet ſeaſon from five to eight; the deſcent is only four inches in a mile. In the time of the inundations, the veſſels ſail in all directions as over a vaſt inland ſea: the dangers in navigating it are very great, either from the fierce eddies occaſioned by other rivers diſcharging themſelves into the Ganges, or, in the dry ſeaſon, by the falling in of great fragments of the banks, or by the ſtriking on trees ſunk beneath the ſurface of the water, which often occaſion very fatal accidents.

Of the mutability of the courſe and bed of this pre-eminent river, in its paſſage through the extenſive regions of Bengal, major Colebrooke, in the Aſiatic Tranſactions, vol. vi. and vii. has given a very intereſting account. "By rapidly impelling its vaſt body of waters through a plain compoſed of a light ſandy ſoil to a conſiderable depth, it is there continually changing its bed, and producing alterations which excite the aſtoniſhment of all men. Iſlands and ſand-banks are in a ſhort time formed in places which were once the deepeſt parts of the river, ſome towns and villages which were once near its banks are deſerted by it, others are undermined, and the vaſt body of earth on which they ſtood is entirely ſwept away. In thoſe parts where the velocity of the ſtream is greateſt, and the ſoil extremely looſe, the banks of them become as perpendicular as a wall, and crumble in ſo frequently and ſuddenly, that it is dangerous to approach them. The ſhifting of the current, and the effects of inundations, produce alluvions, and iſlands of an unuſual extent. The reader may form ſome idea of theſe operations from the following inſtance: The alteration of the river at Colgong, may be reckoned among the moſt extraordinary which have ever been obſerved in modern times, and of this I can ſpeak with great confidence, having been an eye witneſs of the ſtate of the river at this place at four ſeveral periods, in three of which I obſerved a conſiderable difference, viz. in the dry ſeaſons of 1779, 1788, and 1796-7. At the former of theſe periods, the river was a broad open ſtream, and free from ſhallows; at the ſame time, the three rocks near Colgong were ſurrounded by dry land, and appeared to be at ſome little diſtance from the ſhore. But in January 1788, I found theſe three rocks completely inſulated, and the current ruſhing between them with great rapidity; the river having undermined and borne away the whole of the ſoil which had for many years adhered to them, and having formed a bed for itſelf, with a conſiderable depth of water, which continued for ſeveral years to be the principal, and indeed the only navigable channel of the river in the dry ſeaſon. Here boats are frequently in imminent danger of ſtriking againſt the rocks, as during the period of the river's encroachment, and particularly in the rains, it was difficult to avoid them when coming down with the ſtream. While the river continued thus to expand itſelf, an iſland was growing up in the middle of its bed, which, when I laſt ſaw it in January 1797, extended from near Pattergotta, five miles below Colgong, to a conſiderable diſtance above the latter place, being altogether eight miles in length, and two in breadth; and filling nearly the whole ſpace which had been occupied by the principal ſtream in the year 1779. The quantity of ſand, and ſoil, which the river muſt have depoſited to effect this, will appear prodigious, if it be conſidered, that the depth of water in the navigable part of the Ganges is frequently upwards of ſeventy feet; and the new iſlands had riſen to more than twenty feet above the level of the ſtream. Again, the quantity of earth which it had excavated in forming a new channel for itſelf, will appear no leſs aſtoniſhing: ſome idea of this may, however, be conceived, from the ſoundings which I cauſed to be taken near the rocks, which varied from ſeventy to ninety feet. If we add twenty-four feet for the height of the ſoil that had formerly adhered to theſe rocks, as indicated by the marks it had left, it will appear that a column of one hundred and fourteen feet of earth had here been removed by the ſtream."

From the ſurvey here taken, the author conſiders the Ganges as having under its dominion a conſiderable portion of the flat country, and thinks that its bed cannot be ſtated as permanent in any part of its courſe through Bengal. Of the nature and extent of the iſlands thus thrown up, the reader may judge from the following delineation: "The appearance of ſome of theſe iſlands is ſingularly rural and pleaſing, if not altogether romantic; for, although an extenſive flat can hardly come under the latter denomination, yet it may partake of a degree of wildneſs, that will pleaſe the lovers of nature; at the ſame time, that the peaceful appearance of the flocks, fields, and habitations, will give delight to the philanthropiſt. If we preſent to our imaginations a wide extended plain, with pens for cattle, and a few humble huts, whoſe tops are crowned with gourds, and the intervening ſpace highly cultivated; with wheat, barley, and pulſe of all ſorts, growing in abundance, the flowers of the latter preſenting to the eye a variety of rich tints; numerous herds of cattle grazing, and a few ſcattered villages at a diſtance; the horizon bounding the view, with no other remote objects than a long line of graſs jungle, and a few trees, which, from their great diſtance on the main land, are barely diſcernible; we ſhall have a tolerable picture of theſe iſlands in the Ganges. If we fancy, at the ſame time, that the lark is ſoaring, the air cool, and the ſky perfectly unclouded, we ſhall have a ſtill more lively idea of the ſtate of theſe iſlands during at leaſt ſix months of the year."

GAN'GES ISLANDS, or NORTH NATUNAS, two ſmall iſlands between the iſland of Borneo and the Gulf of Siam. Lat. 4. 55. N. lon. 106. 45. E. Greenwich.

GAN'GIATORS, *ſ.* in the Scots law; officers, whoſe buſineſs it is to examine meaſures and weights.

GAN'GITIS, *ſ.* in botany. See NARDUS.

GAN'GLION, *ſ.* [γαγγλιον, Gr.] In anatomy, it imports a knot frequently found in the courſe of the nervous ſyſtem, and which is not morbid; from wherever any nerve ſends out a branch, or receives one from another, or where two nerves join together, there is generally a *ganglion* or *plexus*, as may be ſeen at the beginning of all the nerves of the medulla ſpinalis, and in many other places of the body. See PLEXUS.

In ſurgery, it denotes a moveable tumor formed any where about the tendons of muſcles, and the ligaments; the moſt frequent ſituation is about the carpus; but in whatever part of the body it happens, it is near the ſkin, and is not attended with any conſiderable uneaſineſs to the patient. *Ganglions* are formed of lymph, which is ſecreted within the vaginæ of tendons; they are different in their form, conſiſtence, and other appearances, but they never ſuppurate. See the article ANATOMY, vol. i. p. 633–636.

GANGO'TRI, a town of Aſia, in the country of Thibet, on the Ganges: 138 miles north of Delhi. Lat. 33. 8. N. lon. 76. 35. E. Greenwich.

GANGOU'TRA, a ſtupendous rock of mount Himmaleh, in Hindooſtan, through which the Ganges precipitates its waters with awful impetuoſity, into a vaſt and deep chaſm below. The word imports a caſcade of the *Ganga*, or Ganges.

GANGPOU'R, a town of Hindooſtan, in the country of Oriſſa: 244 miles weſt of Calcutta, and 226 ſouth of Patna.

To GAN'GRENATE, *v. a.* To produce a gangrene; to mortify.—Parts cauterized, *gangrenated*, ſiderated, and mortified, become black, the radical moiſture or vital ſulphur ſuffering an extinction. *Brown.*

GAN'GRENE, *ſ.* [*gangrene*, Fr. *gangræna*, Lat.]

A mortification; a ſtoppage of circulation followed by putrefaction.—If the ſubſtance of the ſoul is feſtered with theſe paſſions, the *gangrene* is gone too far to be ever cured; theſe inflammations will rage to all eternity. *Addiſon.*—See the article SURGERY.

She ſaves the lover, as we *gangrenes* ſtay,
By cutting hope, like a lopt limb, away. *Waller.*

To GAN'GRENE, *v. a.* [*gangrener*, Fr.] To corrupt to mortification.—In cold countries, when men's noſes and ears are mortified, and, as it were, *gangrene* with cold, if they come to a fire they rot off preſently; for that the few ſpirits that remain in thoſe parts, are ſuddenly drawn forth, and ſo putrefaction is made complete. *Bacon.*

Gangren'd members muſt be lop'd away,
Before the nobler parts are tainted to decay. *Dryden.*

To GAN'GRENE, *v. n.* To become mortified.—As phlegmons are ſubject to mortification, ſo alſo in fat bodies they are apt to *gangrene* after opening, if that fat be not ſpeedily digeſted out. *Wiſeman.*

Wounds immedicable
Rankle and feſter, and *gangrene*
To black mortification. *Milton.*

GAN'GRENOUS, *adj.* Mortified; produced or betokening mortification.—The blood, turning acrimonious, corrodes the veſſels, producing hæmorrhages, puſtules red, lead-colour, black and *gangrenous*. *Arbuthnot.*

GANGUE, *ſ.* In mineralogy, the ſtones which fill the cavities that form the veins of metals are called the *gangue*, or matrix of the ore; the rocks that lie over the veins are called the roof; thoſe that lie under them the floor, and by ſome the hading: the matrix is almoſt always a finer ſpecies of ſtone than the ſurrounding rocks, though of the ſame genus; even the rocks themſelves are finer grained as they approach the vein. There is no matrix peculiarly appropriated to any metal; it has only been remarked, that tin is generally found among ſtones of the ſiliceous genus, and lead very frequently among thoſe of the calcareous.

GANG'WAY, *ſ.* In a ſhip, the ſeveral ways or paſſages from one part of it to the other.

GA'NIA, *ſ.* in botany. See CORCHORUS.

GAN'JAM, a town of Hindooſtan, in the circle of Cicacole, on the ſea coaſt of the bay of Bengal: eight miles ſouth-ſouth-weſt of Cattack, and ninety-five north-eaſt of Cicacole. Lat. 19. 23. N. lon. 85. 20. E. Greenwich.

GANI'TRUS, *ſ.* in botany. See ELÆOCARPUS.

GAN'KA, a town of Arabia, in the province of Oman: 124 miles ſouth of Maſcate.

GAN'KU, a town of China, of the third rank, in the province of Se-tchuen: twelve miles weſt of Ho.

GAN'NAT, a town of France, and principal place of a diſtrict, in the department of the Allier, containing about 3000 inhabitants: nine leagues ſouth of Moulins. Lat. 46. 5. N. lon. 20. 52. E. Ferro.

GAN'NELOR, a ſmall iſland of North America, in the gulph of St. Lawrence, in north lat. 48, near Bird Iſland.

GAN'NEMIE, a town of Arabia: twenty-eight miles north-weſt of Dsjebi.

GAN'NET ISLAND, a ſmall iſland near the north coaſt of New Zealand, in the South Pacific Ocean.

GAN'NING, a town of China, of the ſecond rank, in the province of Yun-nan: 1162 miles ſouth-ſouth-weſt of Pekin. Lat. 25. N. lon. 120. 2. E. Ferro.

GA'NOS, a town of European Turkey, in the province of Romania: thirty-two miles north-eaſt of Gallipoli.

GA'NOWIZ, a town of Germany, in the duchy of Stiria: ſix miles ſouth-weſt of Windiſch-Weiſtritz.

GANS'BACH, a town of Germany, in the archduchy of Auſtria: ſix miles ſouth-ſouth-weſt of Maultern.

GANT, a town of France, in the department of the Lower Pyrenées: four miles ſouth of Pau.

GANT, a town of Germany, in the Tyroleſe: ſeven miles weſt-north-weſt of Landeck.

GAN'TELOPE, or GANT'LET, *ſ.* [*gantlet* is only corrupted from *gantelope*; *gant*, all, and *loopen*, to run, Dut.] A military puniſhment, in which the criminal running between the ranks receives a laſh from each man.—Young gentlemen are driven with a whip, to run the *gantlet* through the ſeveral claſſes. *Locke.*

But would'ſt thou, friend, who haſt two legs alone,
Would'ſt thou to run the *gantlet* theſe expoſe,
To a whole company of hob-nail'd ſhoes? *Dryden.*

GAN'YMEDE, a goddeſs, better known by the name of HEBE, which ſee.

GANYME'DES, in mythology, a beautiful youth of Phrygia, ſon of Tros, and brother to Ilus and Aſſaracus. According to Lucian, he was ſon of Dardanus. He was taken up to heaven by Jupiter as he was hunting, or rather tending his father's flocks on mount Ida, and he became the cup-bearer of the gods in the place of Hebe. Some ſay that he was carried away by an eagle, to ſatisfy the unnatural deſires of Jupiter. He is generally repreſented ſitting on the back of a flying eagle in the air.

GAN'ZA, *ſ.* [*ganſa*, Span. a gooſe.] A kind of wild gooſe, by a flock of which a virtuoſo was fabled to be carried to the lunar world:

They are but idle dreams and fancies,
And favour ſtrongly of the *ganza's*. *Hudibras.*

GAO'GA, a country of Africa, to the weſt of Nubia, with a town of the ſame name, ſituated on a large lake. The inhabitants are ſaid to be barbarous and uncivilized. Lat. 16. N. lon. 26. E. Greenwich.

GAOL, *ſ.* [*gaola*, Lat. *geole*, Fr. i. e. *caveola*, a cage for birds; uſed metaphorically for a priſon.] A ſtrong place or houſe for keeping of debtors, &c. and wherein a man is reſtrained of his liberty to anſwer an offence done againſt the laws. Every county hath two gaols, one for debtors, which may be any houſe where the ſheriff pleaſes; the other for the peace and matters of the crown, which is the *county gaol*. There are alſo others of an inferior kind, called the *county bridewell*.

Gaols are of ſuch univerſal concern to the public, that none can be erected by any leſs authority than an act of parliament. 2 *Inſt.* 705. All priſons and gaols belong to the king, although the ſubject may have the cuſtody or keeping of them. 2 *Inſt.* 589. It is ſaid, that none can claim a priſon as franchiſe, unleſs they have alſo a gaol-delivery; and that therefore the dean and chapter of Weſtminſter, though they have the cuſtody of the Gate-houſe priſon, yet as they have no gaol-delivery, they muſt ſend a kalendar of the priſoners to Newgate. 1 *Salk.* 343. 7 *Mod.* 31. By ſtat. 14 Edw. III. c. 10, it is enacted, that the ſheriffs ſhall have the cuſtody of the gaols as before, and ſhall put in under-keepers for whom they will anſwer. This ſtatute is confirmed by ſtat. 19 Hen. VII. c. 10. And although divers lords of liberties have the cuſtody of priſons, and ſome in fee, yet the priſon itſelf is the king's, *pro bono publico*; and therefore it is to be repaired at the common charge. 2 *Inſt.* 589.

The juſtices, or the greater number of them within the limits of their commiſſion, upon preſentment of the grand jury at the aſſizes (or ſeſſions; ſtat. 12 Geo. II. c. 29,) of the inſufficiency or inconveniency of the county-gaol, may contract with any perſon for the building, finiſhing, or repairing, the ſame. *Stats.* 11 & 12 *Will.* III. c. 19. The expence thereof to be paid by the treaſurer out of the general county rates. *Stat.* 12 *Geo.* II. But this (by ſaid ſtat. 11 & 12 Will. III.) not to extend to gaols held by inheritance, nor to charge any perſons in any town or liberty, which have common gaols for felons, and commiſſioners of aſſiſe or gaol-delivery, with any

any aſſeſſment to the making the common gaol of the ſhire.

By ſtat. 24 Geo. III. ſt. 2. c. 54, the juſtices, at their general quarter ſeſſions, or the major part of them, not being leſs than ſeven, on preſentment made by the grand jury, of the inſufficiency, inconveniency, or want of repair, of the gaol, may contract for the building, repairing, or enlarging, the ſame; or for erecting any new gaol upon any ſcite within two miles from that of the old gaol; and in that caſe for the ſelling the old goal, and the ſcite thereof, and the materials and land belonging thereto. In certain caſes alſo juſtices may build a new gaol in any part of the county; which is always to be divided into ſeparate apartments, with divers conveniences, for the benefit of the health and morals of the priſoners, which are enforced by ſtat. 31 Geo. III. c. 46.

Juſtices of peace may not commit felons, and other criminals, to the counters in London, or other priſons, but the common gaols, for legally they cannot impriſon any where but in the common gaol. *Co. Lit.* 9, 119. But the houſe of correction, and the counters of the ſheriffs of London, are the common priſons for offenders for the breach of the peace, &c. And by ſtat. 5 Hen. IV. c. 10, it is enacted, "That none ſhall be impriſoned by any juſtice of the peace, but only in the common gaol, ſaving to lords and others, who have gaols, their franchiſe in this caſe." This ſtatute is only declaratory of the common law. 2 *Inſt.* 43. But the court of king's bench may commit to any priſon in the kingdom which they ſhall think moſt proper, and the offender ſo committed or condemned to impriſonment cannot be removed or bailed by any other court. *Moor* 666. *pl.* 919. 1 *Sid.* 145. 31 *C.* II. *c.* 2.

And as priſoners ought to be committed at firſt to the proper priſon, ſo ought they not to be removed from thence, except in ſome ſpecial caſes. To which purpoſe, by the ſaid ſtat. 31 Car. II. c. 2, it is enacted, "That if any ſubject of this realm ſhall be committed to any priſon, or in cuſtody of any officer, for any criminal or ſuppoſed criminal matter, he ſhall not be removed into the cuſtody of any other; unleſs it be by a *habeas corpus*, or other legal writ; or where the priſoner is delivered to the conſtable, &c. to be carried to ſome common gaol; or where any perſon is ſent by order of any judge of aſſiſe, or juſtice of the peace, to any common work-houſe, or houſe of correction; or where the priſoner is removed from one priſon to another within the ſame county, in order to a trial or diſcharge by due courſe of law; or in caſe of ſudden fire or infection, or other neceſſity; upon pain that he who makes out, ſigns, or counterſigns, or obeys, or executes, ſuch warrant, ſhall forfeit to the party grieved 100l. for the firſt offence, 200l. for the ſecond, &c." See ſtat. 19 Car. II. c. 4, for impowering juſtices of the peace to remove priſoners in caſe of infection.

By ſtat. 11 & 12 Will. III. c. 10, all murderers and felons ſhall be impriſoned in the common gaol, and the ſheriffs ſhall have the keeping of the gaol. And offenders committed to priſon, are to bear the charges of their conveying to gaol; or, on refuſal, their goods ſhall be ſold for that purpoſe, by virtue of a juſtice of peace's warrant; and if they have no goods, a tax is to be made by conſtables, &c. on the inhabitants of the pariſh where the offenders were apprehended. 3 *Jac.* I. *c.* 10. And by ſtat. 27 Geo. II. c. 3. the expence of conveying poor offenders to gaol, or the houſe of correction, ſhall be paid by the treaſurer of the county, except in Middleſex.

For the relief of priſoners in gaols, juſtices of peace in ſeſſions have power to tax every pariſh in the county, not exceeding 6s. 8d. per week, leviable by conſtables, and diſtributed by collectors, &c. 14 *Eliz. c.* 5. 12 *C.* II. *c.* 29. And by ſtat. 31 Geo. III. c. 46, the juſtices in ſeſſions may order ſuch ſums as they ſhall think neceſſary to be paid out of the county-rate towards aſſiſting ſuch priſoners as are not able to work, or being able, cannot procure employment ſufficient to maintain themſelves in food and raiment, and not otherwiſe provided for by law.

Various proviſions have been, from time to time, made for the relief of poor priſoners, and ſetting them to work. By ſtat. 22 & 23 Car. II. c. 20, it is enacted, "That all ſheriffs, gaolers, &c. ſhall permit their priſoners to ſend for neceſſary food where they pleaſe; nor demand any greater fee for their commitment or diſcharge, than what is allowable." Alſo it is thereby directed, that an inquiry be made into all charities given for the benefit of poor priſoners. And by ſtat. 29 Geo. III. c. 67, every gaoler is, on forfeiture (of 50l. if a county gaoler, and 20l. if a bridewell keeper), to deliver in at the Michaelmas ſeſſions yearly, a certificate ſtating how far the proviſions made by various ſtatutes for the benefit of priſoners, are obſerved in his gaol. The following are the ſtatutes to be particularized in ſuch certificate.

"The ſtat 22 & 23 Car. II. c. 20, enacts, that felons and debtors ſhall be kept ſeparate. Stat. 24 Geo. II. c. 40, enacts, that no gaoler ſhall ſell, lend, uſe, give away, or ſuffer, any ſpirituous liquors within any gaol: and that a copy of the clauſes prohibiting thereof ſhall be hung up in the gaol. Stat. 32 Geo. II. c. 28, enacts, The clerk of the peace ſhall cauſe a liſt of the fees payable by debtors, and the rules and orders for the government of gaols and priſons, to be hung up in the court where the aſſiſes or ſeſſions are held, and ſend another copy to the gaoler, who ſhall cauſe the ſame to be hung up in a conſpicuous part of the gaol. Stat. 13 Geo. III. c. 58, enacts, That clergymen may be provided to officiate in gaols. Stat. 14 Geo. III. c. 20, enacts, That perſons acquitted, or diſcharged on proclamation for want of proſecution, ſhall be diſcharged immediately in open court and without fee. Stat. 14 Geo. III. c. 59, enacts, That the walls and ceilings of cells in gaols ſhall be ſcraped and white-waſhed, *at leaſt once a year*; that the cells ſhall be kept clean, and ſupplied with freſh air by ventilators, &c. that there ſhall be two rooms ſet apart for the ſick; that a warm and cold bath or bathing tubs ſhall be provided; that a ſurgeon or apothecary ſhall be appointed with a ſalary; that this act ſhall be hung up in the gaol." And by ſtat. 32 Geo. III. c. 45, Priſoners diſcharged may, on application, be conveyed to their ſettlement by a vagrant paſs. See the article VAGRANT. Thus humane have the legiſlature continually ſhewn themſelves, in repeatedly interfering for the health and comfort of thoſe who are conſidered generally as the mere out-caſts of ſociety. To employ them alſo in uſeful induſtry, and thus turn their minds to good from evil, has been another attempt no leſs praiſe-worthy than the former.

The juſtices in general ſeſſions may provide a convenient ſtock of materials for ſetting poor priſoners to work, to be paid for by the treaſurer out of the general county-rate: and may pay and provide fit perſons to overſee and ſet ſuch priſoners on work; and make the orders needful as to regulating the accounts, for puniſhing neglects and abuſes, and for beſtowing the profits of their labour for the relief of the priſoners. *Stats.* 19 *C.* II. *c.* 4. 12 *Geo.* II. *c.* 29. 31 *Geo.* III. *c.* 46.

The offence of breaking gaol, by the common law, was no leſs than felony; and this whether the party were committed in a criminal or civil caſe, or whether he were actually within the walls of the priſon, or only in the ſtocks, or in the cuſtody of any perſon who had lawfully arreſted him, or whether he were in the king's priſon, or one belonging to a lord, or franchiſe. 2 *Inſt.* 589. But now, by the ſtatute 1 Edw. II. ſtat. 2. *de frangentibus priſonam*, "None from henceforth that breaketh priſon ſhall have judgment of life, or member, for breaking

ing of priſon only, except the cauſe for which he was taken and impriſoned did require ſuch judgment, if he had been convicted thereupon according to the law and cuſtom of the realm; albeit in times paſt it hath been uſed otherwiſe." So that to break priſon and eſcape, when one is lawfully committed for any treaſon or felony, remains ſtill felony, as at the common law: and to break priſon, (whether it be the county gaol, the ſtocks, or other uſual place of ſecurity,) when lawfully confined upon any other inferior charge, is ſtill puniſhable as a high miſdemeanor by fine and impriſonment. 4 *Comm. c.* 10. 2 *Hawk. P. C. c.* 18. The offence of breaking priſon is but felony, whatſoever the crime were for which the party was committed, unleſs his intent were to favour the eſcape of others who were committed for treaſon, for that will make him a principal in the treaſon. 2 *Hawk. P. C. c.* 18. The felony of breach of priſon is within clergy, though the offence for which the party was committed be excluded clergy. 1 *Hal. H. P. C.* 612.

To GAOL, *v. n.* To impriſon; to commit to gaol.—*Gaoling* vagabonds was chargeable, peſterous, and of no open example. *Bacon.*

GAOL-DELIV'ERY, the judicial proceſs by which the juſtices of aſſiſe diſpoſe of the priſoners in a gaol. The adminiſtration of juſtice being originally in the crown, in former times our kings in perſon rode through the realm once in ſeven years, to judge of and determine crimes and offences; afterwards juſtices in eyre were appointed; and ſince juſtices of aſſiſe and gaol-delivery, &c. A commiſſion of gaol-delivery is a patent in nature of a letter from the king to certain perſons, appointing them his juſtices, or two, or three, of them, and authoriſing them to deliver his gaol, at ſuch a place, of the priſoners in it; for which purpoſe, it commands them to meet at ſuch a place, at the time they themſelves ſhall appoint; and informs them that for the ſame purpoſe the king hath commanded his ſheriff of the ſame county to bring all the priſoners of the gaol, and their attachments, before them, at the day appointed. *Cromp. Juriſd.* 125. And by ſtat. 3 Hen. VII. c. 3, Thoſe that have the cuſtody of gaols muſt certify the names or calendar of all the priſoners to the juſtices of gaol-delivery in order to their trial or diſcharge, on pain of 5l.

Juſtices of gaol-delivery are impowered by the common law to proceed upon indictments of felony, treſpaſs, &c. and to order execution or reprieve: And they have power to diſcharge ſuch priſoners, as upon their trials ſhall be acquitted; alſo all ſuch againſt whom, upon proclamation made, no evidence appears to indict them; which juſtices of oyer and terminer, &c. may not do. 2 *Hawk. P. C.* But theſe juſtices have nothing to do with any perſon not in cuſtody of the priſon, except in ſome ſpecial caſes; as if ſome of the accomplices to a felony be in ſuch priſon, and ſome of them out of it, the juſtices may receive an appeal againſt thoſe who are out of the priſon, as well as thoſe who are in it; which appeal, after the trial of ſuch priſoners, ſhall be removed into the king's-bench, and proceſs iſſue from thence againſt the reſt. *Fitz. Coron.* 77. Such juſtices have no more to do with one let to mainpriſe, than if he were at large; for ſuch perſon cannot be ſaid to be a priſoner, ſince it is not in the power of his ſureties to detain him in their cuſtody. And where any perſon is bailed, there he is in the cuſtody of his ſureties, and they may detain him where they pleaſe. 2 *H. P. C.* 25. Though per Holt, Ch. J. If a perſon be let to bail, yet he is in law in priſon, and his bail are his keepers; and therefore the juſtices of gaol-delivery may take an indictment againſt him, as well as if he was actually in gaol. And they may take indictments not only of felony, but alſo of high treaſon, if the offenders are in priſon, and try and give judgment upon them, like unto commiſſioners of oyer and terminer; though it has been formerly held otherwiſe. 2 *Hale's Hiſt. P. C.* 35. Juſtices of gaol-delivery may puniſh thoſe who unduly bail priſoners; as being guilty of a negligent eſcape. 25 *Edw.* III. *c.* 39. They are alſo to puniſh ſheriffs and gaolers, refuſing to take felons into their cuſtody from conſtables, &c. *ſtat.* 4 *Edw.* III. *c.* 10; and have authority to puniſh many particular offences by ſtatute.

GAOL'ER, *ſ.* The maſter or keeper of a priſon; one that hath the cuſtody of the place where priſoners are kept. Sheriffs muſt make ſuch gaolers for which they will anſwer. But if there is a default in the gaoler, action lies againſt him for an eſcape, &c. 2 *Inſt.* 592. In common caſes, the ſheriff, or gaoler, is chargeable at the diſcretion of the party; though the ſheriff is moſt uſually charged. He who hath the cuſtody of the gaol wrongfully, or of right, ſhall be charged with the eſcape of priſoners; and if he that hath the actual poſſeſſion be not ſufficient, his ſuperior ſhall anſwer. 2 *Hawk. P. C.*

It is ſaid that for his own ſecurity a gaoler may hamper a felon with irons to prevent his eſcape; 1 *Hal. H. P. C.* 601. *Dalt. c.* 170; and that a gaoler is no way puniſhable for keeping even a debtor in irons; 2 *Hawk. P. C.* But it has been obſerved that this proceeding, even in the caſe of a felon, (much more in that of a debtor,) can only be intended where the officer has juſt reaſon to ſuſpect an eſcape: as where the priſoner is unruly, or makes any attempt to that purpoſe; but otherwiſe, notwithſtanding the too common practice of gaolers, it ſeems altogether unwarrantable, and contrary to the mildneſs and humanity of the laws of England, by which gaolers are forbidden to put their priſoners to any pain or torment: and lord Coke, 2 Inſt. 381, is expreſs, that by the common law it might not be done. And if the gaoler keep the priſoner more ſtrictly than he ought of right, whereof the priſoner dieth, this is felony in the gaoler by the common law. And this is the cauſe that if a priſoner die in gaol the coroner ought to ſit upon him: and if the death was owing to cruel and oppreſſive uſage on the part of the gaoler, or any officer of his, it will be deemed wilful murder in the perſon guilty of ſuch dureſs. 3 *Inſt.* 91. *Foſt.* 321, 2. But if a criminal endeavouring to break the gaol, aſſault his gaoler, he may be lawfully killed by him in the affray. 1 *Hawk. P. C.* 1 *H. H.* 496.

A perſon in execution in the king's bench priſon was put in irons by the marſhal: and the court ordered the marſhal to keep his priſoner according to law: and in this caſe they ſaid the gaoler might juſtify putting him in irons if he feared an eſcape; or if the priſoner was unruly. 7 *Mod.* 52. In the ſecond year of Geo. II. ſir William Rich, being laid in irons in the fleet priſon, had his irons taken off by order of the houſe of commons; who thereupon began an inquiry into the conduct of gaolers, which produced ſome of the wholeſome laws for the regulation of gaols.

By ſtat. 14 Edw. III. c. 10. "If any keeper of a priſon, or under-keeper, by too great dureſs of impriſonment, and by pain, make any priſoner that he hath in his ward to become an appellor againſt his will, he is guilty of felony." By ſtat. 4 Edw. III. c. 10, It is enacted, that the ſheriffs and gaolers ſhall receive, and ſafely keep in priſon from henceforth, ſuch thieves and felons, by the delivery of the conſtables and townſhips, without taking any thing for the receipt; and the juſtices to deliver the gaol, ſhall have power to hear their complaints, that will complain againſt the ſheriffs and gaolers in ſuch caſe, and moreover to puniſh the ſheriffs and gaolers, if they be found guilty. By ſtat. 3 Hen. VII. c. 3, The ſheriff and every other perſon, having authority or power of keeping of gaol, or of priſoners for felony, ſhall certify the names of all priſoners in his cuſtody to the juſtices of gaol-delivery. And if any perſon aſſault a gaoler, for keeping a priſoner in ſafe cuſtody, he may be fined and impriſoned. 1 *Hawk. P. C.* Where a gaol is broken by thieves, the gaoler is anſwerable; not if it be broken by enemies. 3 *Inſt.* 52.

It ſeems clearly agreed, that a gaoler, by ſuffering vo-

luntary eſcapes, by abuſing his priſoners, by extorting unreaſonable fees from them, or by detaining them in gaol, after they have been legally diſcharged, and paid their juſt fees, forfeits his office; for that in the grant of every office it is implied, that the grantee execute it faithfully and diligently. *Co. Lit.* 233. *Mod.* 143.

By ſtat. 8 & 9 Will. III. c. 27, The marſhal of the king's bench and warden of the fleet taking any reward to connive at priſoner's eſcape, ſhall forfeit 500l. and their office, and be rendered for ever after incapable of executing any ſuch office. It hath been reſolved, that a forfeiture by a gaoler who hath but a particular intereſt, as of him who hath cuſtody of a gaol for life, or years, does not affect him in remainder, or reverſion, who hath the inheritance, but that upon ſuch forfeiture his title ſhall acrue, and not go to the king. *Poph.* 119. 2 *Lev.* 71. *Raym.* 216. 3 *Lev.* 288.

By ſtat. 8 & 9 Will. III. c. 27, it is enacted, That the office of marſhal of the king's bench, and warden of the fleet, ſhall be executed by thoſe who have the inheritance of the ſaid priſons, or their deputies, &c. and the profits of their office may be ſequeſtered on motion to the court of king's-bench, to ſatisfy a judgment had againſt them for eſcape. By ſtat. 3 Geo. I. c. 15, None ſhall purchaſe the office of gaoler, or any other office pertaining to the high ſheriff, under pain of 500l.

By ſtat. 24 Geo. III. ſt. 2. c. 54, a gaoler ſhall not directly or indirectly ſell liquors to the priſoners, or keep, or be concerned in, or benefited by, any tap-houſe, tap-room, tap, or licence for that purpoſe, on pain of 10l. for each offence. The juſtices in ſeſſions may make allowance to gaolers in lieu of profits formerly derived to them from the ſale of liquors. By ſtat. 31 Geo. III. c. 46, gaolers are, on the firſt day of every aſſiſe to make a return of the ſize and condition of gaols, the number of priſoners, &c. therein.

GA'ONS, an order of Jewiſh doctors, who appeared in the eaſt, after the cloſing of the Talmud. The word *gaons* ſignifies "excellent." The Gaons ſucceeded the Seburæans or Opiners, about the beginning of the ſixth century. Chanan Meiſchtia was the head, and firſt of the excellents. He reſtored the academy of Pandebita, which had been ſhut up for thirty years

GAP, *ſ.* [from *gape*.] An opening in a broken fence.—Buſhes are moſt laſting of any for dead hedges, or to mend *gaps*. *Mortimer*.

With terrors and with furies to the bounds
And cryſtal wall of heav'n; which, opening wide,
Roll'd inward, and a ſpacious *gap* diſclos'd
Into the waſteful deep. *Milton*.

A breach.—The loſs of that city concerned the chriſtian commonweal; manifold miſeries afterwards enſued by the opening of that *gap* to all that ſide of chriſtendom. *Knolles*.—Any paſſage:

So ſtands the Thracian herdſman with his ſpear
Full in the *gap*, and hopes the hunted bear,
And hears him ruſtling in the wood. *Dryden*.

An avenue; an open way.—The former kings of England paſſed into them a great part of their prerogatives; which though then it was well intended, and perhaps well deſerved, yet now ſuch a *gap* of miſchief lies open thereby, that I could wiſh it were well ſtopt. *Spenſer*.—A hole; a deficiency.—If you violently proceed againſt him, miſtaking his purpoſe, it would make a great *gap* in your honour. *Shakeſpeare*.—Any interſtice; a vacuity.—One can revive a languiſhing converſation by a ſudden ſurpriſing ſentence; another is more dexterous in ſeconding; a third can fill the *gap* with laughing. *Swift*.

To make 'twixt words and lines huge *gaps*,
Wide as meridians in maps. *Hudibras*.

An opening of the mouth in ſpeech during the pronunciation of two ſucceſſive vowels.—The hiatus, or *gap* between two words, is cauſed by two vowels opening on each other. *Pope*.

To ſtop a GAP, is to eſcape by ſome mean ſhift; alluding to hedges mended with dead buſhes, till the quick-ſets will grow:

His policy conſiſts in ſetting traps,
In finding ways and means, and *ſtopping gaps*. *Swift*.

To ſtand in the GAP. To make defence; to expoſe himſelf for the protection of ſomething in danger.—What would become of the church, if there were none more concerned for her rights than this? Who would *ſtand in the gap? Leſley*.

GAP, a town of France, and capital of the department of the Higher Alps. Before the revolution, the ſee of a biſhop, ſuffragan of Aix, and capital of a county called *Gapençois*, about nine leagues long and ſix wide. In 1602, the town was taken and burned by the duke of Savoy; near it is a mineral ſpring: eight leagues north of Siſteron, and fifteen ſouth of Grenoble. Lat. 44. 34. N. lon. 23. 45. E. Ferro.

To GAPE, *v. n.* [ȝeapan, Sax.] To open the mouth wide; to yawn.—*Gaping* or yawning, and ſtretching, do paſs from man to man; for that that cauſeth *gaping* and ſtretching is when the ſpirits are a little heavy by any vapour. *Arbuthnot*.

She ſtretches, *gapes*, unglues her eyes,
And aſks if it be time to riſe. *Swift*.

To open the mouth for food, as a young bird:

As callow birds,
Whoſe mother's kill'd in ſeeking of the prey,
Cry in their neſt, and think her long away;
And at each leaf that ſtirs, each blaſt of wind,
Gape for the food which they muſt never find. *Dryden*.

To deſire earneſtly; to crave; with *for*:

To thy fortune be not thou a ſlave;
For what haſt thou to fear beyond the grave?
And thou, who *gap'ſt for* my eſtate; draw near;
For I would whiſper ſomewhat in thy ear. *Dryden*.

With *after*.—What ſhall we ſay of thoſe who ſpend their days in *gaping after* court-favour and preferments. *L'Eſtrange*.—With *at*.—Many have *gaped at* the church revenues; but, before they could ſwallow them, have had their mouths ſtopped in the church-yard. *South*.—To open in fiſſures or holes.—The earth *gapes* and greedily opens itſelf to drink in the dew of heaven, or the refreſhments of a ſhower. *South*.

If it aſſume my noble father's perſon,
I'll ſpeak to it, though hell itſelf ſhould *gape*
And bid me hold my peace. *Shakeſpeare*.

To open with a breach:

The planks, their pitchy coverings waſh'd away,
Now yield, and now a yawning breach diſplay:
The roaring waters, with a hoſtile tide,
Ruſh through the ruins of her *gaping* ſide. *Dryden*.

To open; to have an hiatus.—There is not to the beſt of my remembrance, one vowel *gaping* on another for want of cæſura in this poem. *Dryden*.—To make a noiſe with open throat:

And, if my muſe can through paſt ages ſee,
That noiſy, nauſeous, *gaping*, fool is he. *Roſcommon*.

To ſtare with hope or expectation:

Others will *gape* t' anticipate
The cabinet deſigns of fate;
Apply to wizards, to foreſee
What ſhall, and what ſhall never, be. *Hudibras*.

To ſtare with wonder.—Parts of different ſpecies jumbled together, according to the mad imagination of the dawber; and the end of all this to cauſe laughter; a very

ry monſter in a Bartholomew fair, for the mob to *gape at*. *Dryden*.

Where elevated o'er the *gaping* crowd,
Claſp'd in the board the perjur'd head is bow'd. *Gay*.

To ſtare irreverently.—They have *gaped* upon me with their mouth. *Job*. xvi. 10.

"He that GAPETH until he be fed,
"Well may he GAPE until he is dead."

This proverb teacheth that we are not ſo entirely to depend upon the gifts of Providence, as not to uſe the ordinary means, and our utmoſt endeavours, to gain a livelihood, and obtain the comforts of human life in lawful and commendable manner.

"GAPING is catching."—The French ſay, *Un bon bailleur en fait bailler deux*; One good gaper will make two follow him. It might indeed as well have been ſaid *twenty*, for it is generally obſerved to affect the whole company

GAPEN'NES, a town of France, in the department of the Somme: ſeven miles north-eaſt of Abbeville.

GA'PER, *ſ.* One who opens his mouth. One who ſtares fooliſhly. One who longs or craves.—The golden ſhower of the diſſolved abbey-lands rained well near into every *gaper's* mouth. *Carew*.

GAP'SAL, a town of Ruſſia, in the government of Revel: thirty-ſix miles weſt-ſouth-weſt of Revel. Lat. 59. 5. N. lon. 60. 10. E. Greenwich.

GAR, in Saxon, ſignifies a weapon. So *Eadgar* is a happy weapon; *Ethelgar*, a noble weapon. *Gibſon*.

To GAR, *v. a.* [*giera*, Iſlandic.] To cauſe; to make. *Obſolete*. But it is ſtill uſed in Scotland:

Tell me, good Hobbinol, what *gars* thee greet?
What! hath ſome wolf thy tender lambs ytorn?
Or is thy bagpipe broke, that ſounds ſo ſweet?
Or art thou of thy loved laſs forlorne? *Spenſer*.

GAR-EL-MAI'LAH, a ſeaport of Africa, on the eaſt coaſt of Tunis: four miles weſt of Cape Zibeeb.

GAR'-FISH, HORN-FISH, or SEA-NEEDLE, *ſ.* See ESOX.

GA'RA LOUGH, a lake of Ireland, in the county of Sligo: twenty miles ſouth of Sligo.

GARABU'SA, a ſmall iſland in the Mediterranean, near the weſt coaſt of the iſland of Candi, taken by the Turks in 1692, and confirmed to them by the peace of Carlowitz. Lat. 35. 39. N. lon. 41. 8. E. Ferro.

GA'RAC, a town of France, in the department of the Charente, and chief place of a canton, in the diſtrict of Angoulême: four miles eaſt-ſouth-eaſt of Angoulême.

GARA'CHIO, or GARACHICO, a town on the weſt coaſt of the iſland of Teneriffe.

GA'RACK, an iſland in the Gulf of Perſia, near the mouth of the Euphrates, otherwiſe called *Bahhrein*. See BAHHREIN.

GAR'AMA, in ancient geography, the capital of the Garamantes in Libya Interior; near the ſprings of the Cinyphus, now in ruins. Garamantes the people. It lay to the ſouth of the Gætulia, extending from the ſprings of the Cinyphus, and the adjacency of the river Gir, to the mountains which form at the *Vallis Garamantica* (Pliny); or from the ſprings of the Bagrades to the lake Nuba (Ptolemy).

GARAMAN'TES (ſing. *Garamas*), a people in the interior parts of Africa, now called the *Deſerts of Sahara*. They lived in common, and ſcarce clothed themſelves, on account of the warmth of their climate. *Virgil*.

GARAMAN'TIS, in mythology, a nymph who became mother of Iarbas, Phileus, and Pilumpus, by Jupiter. *Virgil*.

GAR'AMAS, a king of Libya, whoſe daughter was mother of Ammon by Jupiter.

GAR'AMOND (Claude), an ingenious letter-founder at Paris, who began, in 1510, to found printing types free from all the remains of the gothic or black-letter ſtyle; and brought them to ſuch perfection, that he had the honour of ſurpaſſing all who went before him in that valuable profeſſion. His types were preferred in all parts of Europe; inſomuch that in Italy, Germany, England, and Holland, authors, by way of recommending their books, diſtinguiſhed the type by his name; inſomuch that even the printers boaſted of having the type called *Garamond's Long Primer*. By command of Francis I. king of France, he founded three ſizes of Greek types for the uſe of Robert Stephens, who with them printed all his beautiful editions of the New Teſtament, and other Greek authors. He died at Paris in 1561.

GA'RAN, a ſmall iſland in the North Sea, near the north coaſt of Scotland: three miles eaſt-ſouth-eaſt of Cape Wrath.

GARAS'SE (Francis), a French Jeſuit, noted for his controverſial writings, born at Angoulême, in 1585. While he was in his noviciate, he publiſhed a defence of the Jeſuits againſt three different attacks upon the order, in a piece entitled *Andreæ Schioppii Caſparis Fratris Horoſcopus, &c.* 1614, 4to. which is drawn up in an ironical ſtrain, and not deſtitute of wit. Of the ſame caſt is his *Andreæ Schioppii Caſparis Fratris Elixir Calviniſticum, &c.* 8vo. publiſhed in the following year, againſt ſome ſtrictures on his order by miniſters of the proteſtant communion. When he had completed his noviciate, he became a very popular preacher, and maintained that character for many years in the principal cities of France and Lorrain. In 1623 he ventured on the production of a large work, intended to controvert the principles of atheiſts and libertines, entitled The curious Doctrine of the Wits, or Pretenders to Wit, of this Age, containing ſeveral Maxims pernicious to the State, Religion, and good Manners, refuted and overthrown by Father Garaſſe, of the Society of Jeſus, 4to. In 1625 he publiſhed The Theological Summary of the capital Truths of the Chriſtian Religion, folio. The moſt able criticiſm on this performance was publiſhed in 1626, by the abbot of St. Cyran, entitled The Summary of the capital Faults and Falſhoods contained in the Theological Summary of Father F. Garaſſe, 4to. This work brought a conſiderable imputation on the religious character of Garaſſe, and he was baniſhed from Paris to a houſe belonging to the Jeſuits at Poitiers. But they entertained an invincible hatred to the abbot of St. Cyran, who was a Janſeniſt; and by ſome writers this is ſaid to have been the cauſe of the war which afterwards raged ſo furiouſly between the Jeſuits and the Janſeniſts. While father Garaſſe was at Poitiers, the plague having ſpread its ravages into that part of the kingdom in 1631, he begged leave of his ſuperiors to attend thoſe who were infected with it; and, having obtained their permiſſion, he caught the contagion, while charitably adminiſtering relief and conſolation to the afflicted ſufferers, and died in the hoſpital, at the age of forty-ſix. Beſides his profeſs works, he was the author of ſome Latin verſes, conſiſting of elegies on the death of Henry IV. a poem in heroic verſe, addreſſed to Louis XIII. upon his inauguration.

GARAZU', a town in Brazil, and province of Pernambuco: twenty-five miles north from Olinda.

GARB, *ſ.* [*garbe*, Fr.] Dreſs; clothes; habit.—He puts himſelf into the *garb* and habit of a profeſſor of phyſic, and ſets up. *L'Eſtrange*.

Thus Belial, with words cloth'd in reaſon's *garb*,
Counſel'd ignoble eaſe and peaceful ſloth. *Milton*.

Faſhion of dreſs:

Horace's wit, and Virgil's ſtate,
He did not ſteal, but emulate;
And when he would like them appear,
Their *garb*, but not their clothes, did wear. *Denham*.

Exterior appearance:

This is ſome fellow,
Who having been prais'd for bluntneſs, doth affect
A ſaucy roughneſs, and conſtrains the *garb*
Quite from his nature. *Shakeſpeare*.

GARB, *ſ.* in botany. See SALIX BABYLONICA.

GAR'BAGE,

GAR'BAGE, *ſ* [*garbear*, Span.] The bowels: the offal; that part of the inwards which is ſeparated and thrown away.—When you receive condign puniſhment, you run to your confeſſor, that parcel of guts and *garbage*. *Dryden.*

The cloyed will,
That ſatiate yet unſatisfy'd deſire, that tub
Both fill'd and running, ravening firſt the lamb,
Longs after for the *garbage*. *Shakeſpeare.*

Luſt, though to a radiant angel link'd,
Will ſate itſelf in a celeſtial bed,
And prey on *garbage*. *Shakeſpeare.*

GARBAN'ZO, *ſ.* in botany. See CICER ARIETINUM, vol. iv. p. 589. To that article we may add, that this pulſe is highly eſteemed in Spain as fodder for cattle, and at the table in ſoups and other diſhes, but principally with that ſtandard diſh in all families, the *olio*. The garbanzo plant has a very inconſiderable root, not penetrating far into the ground, and therefore not impoveriſhing the ſoil; its branches are numerous, and the large ſort throws out ſhoots three feet long; it varies in colour, white, reddiſh, or rather grey; and the ſeed of each is of the ſame colour reſpectively. Each pod contains but one ſeed, or at moſt two; not round, but rather pointed; whence it is compared to a ſheep's head, and has the trivial name *arietinum*. In Caſtile they ſay that the beſt ſort has the ſurface wrinkled like the face of an old woman, the broad back of a porter, and the bill of a parrot; the colour alſo ſhould be not white, but of a pale hue; and it ſhould be light, ſoft, and fat. This pulſe does not ſucceed ſo well in the hotter parts of Spain as in the cold northern diſtricts of Fuente Sauco, Mentrida, and others. It is ſowed in the ſame manner as other pulſe, and generally in open fields. A ſoft rich ſoil is beſt for the garbanzo, but a ſtiff clay is not unſuitable to it. The Spaniards have a proverb, that rain never hurts garbanzos. There are two principal ſorts, or rather varieties, the large or winter, and the ſmall or ſummer garbanzo. The former ſhould be ſown the firſt week in October, that it may acquire a good root, and ſpread out luxuriantly for fodder. The latter muſt be ſown about the end of February. The conſumption of the garbanzo is great in Spain to fodder cattle, and it is reckoned tolerably nutritive. It is uſed either by feeding it on the ground, by cutting it green and giving it to them in the ſtall or ſtable, which is the beſt, or dried after the manner of hay. The large ſort furniſhes an early fodder for cattle, ſheep and lambs, at a time when no other is to be had. It is a good preparation for other crops, becauſe it is deſtructive of weeds, and ſhades the ſurface of the ground.

GAR'BEL, *ſ.* A plank next the keel of a ſhip.

GAR'BIDGE, *ſ.* Corrupted from *garbage*.—All ſhavings of horns, hoofs of cattle, blood, and *garbidge*, is good manure for land. *Mortimer.*

GAR'BISH, *ſ.* Corrupted from *garbage*.—In Newfoundland they improve their ground with the *garbiſh* of fiſh. *Mortimer.*

To GAR'BLE, *v. a.* [*garbellare*, Ital.] To ſift; to part; to ſeparate the good from the bad:—The underſtanding works to collate, combine, and *garble*, the images and ideas, the imagination and memory preſent to it. *Cheyne.*

But you who fathers and traditions take,
And *garble* ſome, and ſome you quite forſake. *Dryden.*

GAR'BLER, *ſ.* He who ſeparates one part from another.—A farther ſecret in this clauſe may beſt be diſcovered by the projectors, or at leaſt the *garblers* of it. *Swift.*

GAR'BLER OF SPICES, an officer of antiquity in the city of London, who may enter into any ſhop, warehouſe, &c. to view and ſearch drugs and ſpices, and *garble* and make clean the ſame, or ſee that it be done. And anciently all drugs, &c. were to be cleanſed and garbled before ſold, on pain of forfeiture, or the value. By 6 Ann. c. 16, this officer is to be appointed by the court of lord mayor, aldermen, and common council, to garble ſpices at the requeſt of the owner, but not otherwiſe.

GAR'BLES, *ſ.* The duſt, ſoil, or filth, ſeparated by garbling.

GAR'BO (Il), a town of Italy, in the duchy of Tuſcany: ſix miles eaſt-ſouth-eaſt of Leghorn.

GAR'BOIL, *ſ.* [*garbouille*, Fr. *garbuglio*, Ital.] Diſorder; tumult; uproar. *Hanmer.*

Look here, and at thy ſovereign leiſure read
What *garboils* ſhe awak'd. *Shakeſpeare.*

GAR'CES or GRACES (Henry), a native of Porto, in the kingdom of Portugal; who went to Peru in the Spaniſh ſervice, and after the death of his wife became canon of the cathedral of Mexico. He tranſlated the Luſiad of Camoens from the Portugueſe into Spaniſh, and this has procured him a place in profeſſor Dieze's tranſlation of Velaſquez's Hiſtory of Spaniſh poetry. He cauſed a law to be enacted that no ſilver bullion ſhould be ſuffered to circulate in Peru; but his greateſt ſervice was the diſcovery of the quickſilver mines. As he was one day examining the red earth, which the Indians uſe for paint, and call *limpi*, he obſerved that it was native cinnabar; and as he knew that quickſilver was extracted from it in Europe, he went to the place where it was dug up, made ſome experiments, and thus, in 1566, laid a foundation for the moſt important works. No one, however, thought of employing it, in the ſilver mines, till the year 1571, when, Francis de Toledo being viceroy, Pero Fernandes de Velaſco came to Peru, and offered to refine the ſilver by mercury, as he had learned at the ſmelting-houſes in Mexico. His propoſal being accepted, and his attempts proving ſucceſsful, the old methods were abandoned, and that of amalgamating purſued as it is practiced at preſent. From this account it appears that Garces was not the inventor of amalgamation; but that it was introduced firſt into Peru in 1571, and that it had been long before practiced there: but at what period is uncertain. It was, however, ſubſequent to the death of Garces, which took place in Mexico.

GARCHAN'SKOI, a town of Ruſſian Siberia: in the government of Tobolſk, on the river Tobol: eighty miles ſouth of Tobolſk.

GAR'CIA, a town of Spain, the province of Catalonia: eighteen miles north of Tortoſa.

GAR'CIAS-LAS'SO or GARCILASSO (de la Vega), one of the moſt eminent of the Spaniſh poets, born at Toledo, in 1503. His works are contained in a ſmall volume, and conſiſt in a great meaſure of paſtorals. His principal excellence is tenderneſs, which he beautifully diſplays in ſome of his ſonnets, the moſt intereſting of his compoſitions. He was indebted to a familiarity with the ancients for a greater freedom from bombaſt than his countrymen in general; but he does not riſe to the ſublime, and his learning and taſte were ſuperior to his genius. Many editions of his poems have been given, and they have been commented upon by Sanchez de Las Brozas, the moſt learned of the Spaniſh grammarians. Garcilaſſo followed the profeſſion of arms, and attended Charles V. in many of his expeditions. He loſt his life at an early age in 1536, at the attack of a fortreſs in Provence, while ſignaliſing his courage in the preſence of his ſovereign.

Another GARCILASSO DE LA VEGA, a native of Cuſco in Peru, compoſed in Spaniſh a Hiſtory of Florida, and another of Peru, and its Incas.

GARCIN'IA, *ſ.* [named in honour of Laurent Garcin, M. D. F. R. S. who travelled into the Eaſt-Indies.] In botany, the MANGOSTAN; a genus of the claſs dodecandria, order monogynia, natural order bicornes, *Linn.* (guttiferæ, *Juſſ.*) The generic characters are—Calyx: perianth four-leaved; leaflets roundiſh, concave, obtuſe, ſpreading, permanent. Corolla: petals four, roundiſh, concave, ſpreading; a little larger than the

the calyx. Stamina: filaments ſixteen, (twelve or more, *G.*) upright, placed in a cylinder, ſimple, ſhorter than the calyx; antheræ roundiſh. Piſtillum: germ ſuperior, ſuboval; ſtyle ſcarcely any; ſtigma flat, ſpreading, peltate, eight-cleft, obtuſe, permanent. Pericarpium: berry coriaceous, globular, large, one-celled, crowned with the ſtigma: ſeeds eight, convex on one ſide, angular on the other, villoſe, fleſhy.—*Eſſential Character.* Calyx four-leaved, inferior; petals four; berry eight-ſeeded, (or five, ſix, to eight;) crowned with the peltate ſtigma.

Species. 1. Garcinia mangoſtana, mangoſtan, or mangoſteen: leaves ovate; peduncles one-flowered. The common mangoſtan riſes with an upright ſtem near twenty feet high, ſending out many branches on every ſide, which are placed oppoſite, and ſtand oblique to each other, and not at right angles; the bark of the branches is ſmooth, of a grey colour, but on the tender ſhoots it is green, and that of the trunk is of a darker colour, and full of cracks; the leaves are entire; they are ſeven or eight inches long, and about half as much in breadth in the middle, gradually diminiſhing to both ends, of a lucid green on their upper ſide, and of an olive colour on their under, having a prominent midrib through the middle, with ſeveral ſmall veins running from that to both ſides of the leaf. The flower is like that of a ſingle roſe, compoſed of four roundiſh petals, which are thick at their baſe, but are thinner toward their ends; they are of a dark red colour; the fruit is round, the ſize of a middling orange; the top is covered by a cap, which was the ſtigma on the top of the ſtyle, and is indented in rays to the number of ſix or ſeven, which are obtuſe; the ſhell of the fruit is like that of the pomegranate, but ſofter, thicker, and fuller of juice; it is green at firſt, but changes to a dark brown, with ſome yellowiſh ſpots; the inſide of the fruit is of a roſe-colour, and divided into ſeveral parts by thin partitions, as in oranges, in which the ſeeds are lodged, ſurrounded by a ſoft juicy pulp of a delicious flavour, partaking of the ſtrawberry and the grape, and is eſteemed one of the richeſt fruits in the world; the trees naturally growing in the form of parabolas, and the branches being well garniſhed with large ſhining green leaves, they have an elegant appearance, and afford a kindly ſhade in hot countries, therefore are worthy of cultivation in all thoſe countries where there is warmth enough to ripen the fruit. It is eſteemed the moſt delicious of the Eaſt-Indian fruits, and a great deal of it may be eaten without any inconvenience; it is the only fruit which ſick people are allowed to eat without ſcruple. It is given with ſafety in almoſt every diſorder; and we are told that Dr. Solander, in the laſt ſtage of a putrid fever at Batavia, found himſelf inſenſibly recovering, by ſucking this delicious and refreſhing fruit; the pulp has a moſt happy mixture of the tart and ſweet, and is no leſs ſalutary than pleaſant, for which reaſon, in hot climates, it is allowed, with the ſweet orange, in any quantity, to thoſe who are afflicted with fevers, either of the putrid or inflammatory kind. The dried bark is uſed with ſucceſs in the dyſentery and teneſmus; and an infuſion of it is eſteemed a good gargle for a ſore mouth or ulcers in the throat. The Chineſe dyers uſe this bark for the ground or baſis of a black colour, in order to fix it the firmer. Native of the Moluccа iſlands, whence it has been tranſplanted to Java and Malacca. The head is ſo fine and regular, and the leaves ſo beautiful, that it is looked upon at Batavia as the tree moſt proper for adorning a garden, and affording an agreeable ſhade. Mangoſtan is the Malayan name.

2. Garcinia Celebica, or Celebes mangoſtan: leaves lanceolate; peduncles three-flowered. This is not a lofty tree, but it has an elegant ſpreading head; leaves oppoſite, on ſhort ſtrong petioles, five or ſix pairs, narrower and ſharper than thoſe of the common mangoſtan; in a young tree they are nine inches and a half long, and three and a half or four inches broad, entirely ſmooth and even; the fruit reſembles that of the common mangoſtan, but ſometimes grows to a larger ſize; it is of a yellowiſh red or ſaffron colour, like the pomegranate, and is not crowned with a ſtar, but with a little crown, which is hollowed above, and broader there than at its origin. Native of the iſland of Celebes about Macaſſar, whence it has been tranſplanted into Amboyna and Java, where however it ſeldom bears ripe fruit.

3. Garcinia cornea, or horny mangoſtan: leaves lanceolate, veinleſs; peduncles one-flowered, drooping. The trunk of this tree is lofty, but not very thick; it is covered with a black bark, adhering firmly to the wood; the branches extend wide, and divide into many ſhort branchlets, which have a pair of leaves at each joint; theſe are large; from eleven to fifteen inches long, and four broad, but on old trees ſhorter, ſmooth, firm and ſhining, having a thick midrib beneath, but above ſmooth and grooved; petioles thick and ſhort, frequently ſo curved in, that the lower ſide of the leaf becomes the upper one; the flower comes out from the branch between the upper leaves, hanging on an incurved peduncle, having the form of a ſmall roſe, but of a yellow colour. Fruit ſolitary, growing cloſe to the branch, the ſize of a plum, crowned by a ſort of a wart like the head of a nail; it is of a duſky brown or ſmoaky colour on the outſide, and within it has a mucous pulp, in which lie a few ſeeds in ſhape of a half moon; it has a reſinous ſmell when freſh; the wood is heavy and very hard like horn, whence Rumphius names it *lignum corneum*; it is uſed for the handles of tools, and the young trees in building, the older ones being too hard to work. Native of Amboyna, in high remote mountains.

Propagation and Culture. As there are but few of the ſeeds which come to perfection (for the greateſt part of them are abortive), ſo moſt of thoſe which have been brought to Europe have failed; therefore the ſureſt way to obtain the plants, is to ſow the ſeeds in tubs of earth in the country, and when the plants have obtained ſtrength, they may be brought to Europe; but there ſhould be great care taken in their paſſage, to ſcreen them from ſalt water and the ſpray of the ſea, as alſo not to give them much water, eſpecially when they are in a cool or temperate climate, for theſe plants are very impatient of wet. When the plants arrive in Europe, they ſhould be carefully tranſplanted, each into a ſeparate pot, filled with light kitchen-garden earth, and plunged into the tan-bed, obſerving to ſhade them from the ſun till they have taken new root; then they muſt be treated in the ſame manner as other tender plants from hot countries. It may be increaſed here by cuttings in the ſame manner as is directed for Gardenia.

GAR'ÇON, *ſ.* a French term for a boy or male child any time before his marriage. It is alſo applied to divers inferior ſervants, among us called *grooms*, *garçiones*, &c.

GARD, *ſ.* [*garde*, Fr.] Wardſhip; care; cuſtody.

GARD, a department of France, bounded on the north by the departments of the Lozere, and Ardeche, on the eaſt by the Rhône, on the ſouth by the Mediterranean and the department of the Herault, and on the weſt by the departments of the Herault and the Aveiron. Nimes is the capital.

GAR'DA, a town of Italy, in the Veroneſe, on a lake of the ſame name: twelve miles north-weſt of Verona. It comprehends eight pariſhes. The town of Garda, in the time of the Guelphs and Gibelines, was a celebrated fortreſs with a citadel, where Adelheit, the widow of the emperor of Lotharius, afterwards the conſort of the emperor Otto I. was detained in priſon by Berenger II. At preſent Garda is but an open place; and on the ruins of its citadel has been built an hermitage or convent of the Camalduan monks.

GAR'DA, a celebrated lake of Italy, between the Veroneſe and the Breſſan. It is about fifteen leagues long,

and its mean breadth about three leagues. The head of the lake is ſhut in between Monte Baldo and the mountains of Breſſan, which are cut perpendicularly from Gargano to Riva. The lower part is included between hills, to which learned Italians give the name of *Colli-Benacenſi*. It receives the Sarca on the north; towards the weſt, the torrents of Ponal, Braſa, Lampion, and Toſcolano; and on the eaſt, the waters which run from Monte Baldo. The ſurface of the lake is broken by three iſlands, the Trimelone, Olivi, and Frati, and by the peninſula of Sermione, which projects from the middle of the lower ſide of the baſin. Its waters being extremely limpid, we can perceive at a great depth the ſtones at the bottom, and the plants which cover them; but its depth is ſo very unequal that its mean cannot be eaſily aſſigned. The water is very light, but it has a fiſhy taſte. M. Zeviani ſays that it does not curdle ſoap, and boils vegetables perfectly well. At the commencement of the ſummer, the water riſes, which the fiſhermen attribute to the plants that ſpring up from the bottom of the lake; but which it is more natural to aſſign to the melting of the ſnows, and the heavy rains which fall at that ſeaſon. The navigation is then often dangerous. When the water ſinks, marſhes appear in certain places; the exhalations from which, by the action of the ſun, render the air unhealthy.

South and north winds prevail in the morning and in the evening, but the various directions of the vallies, which border on the lake, occaſion currents of air, to which the inhabitants give names referring either to their effects, or to the part of the ſhore from which they proceed. The Vexentina blows after changes of the weather, or when it becomes ſettled. The Toſcano blows when the weather is about to change, and is often followed by a high wind. The names of theſe two refer to their direction; they are ſtormy, as is alſo that which blows from Garda, and is called *Spizzocher*, being often as tremendous as that from the north, but it is of ſhort duration. The *Andro*, which blows from the ſide of Lonato, is little dangerous. Thoſe of Ponal and Navenne, named from the places whence they proceed, are much to be feared in the ſummer ſeaſon, taking the barks by ſurpriſe which fail in theſe directions: but theſe winds are not of long continuance. The Ora blows all the year, eſpecially in April; but it never diſturbs the lake. The Sovero is the moſt furious, often violently agitating the whole maſs of water; at which time the lake preſents the terrific appearance of a ſtormy ſea. The veſſels, which are overtaken by it, do not endeavour to reſiſt it, and only think of ſhelter. Theſe tempeſts commonly happen either in winter, when the ſnow is on the mountains; or in ſummer, when they become tremendous ſtorms, which continue for two or three days. The appearance of the atmoſphere indicates their approach.

The commerce of the lake is conſiderable, and it would become more ſo if the Mincio were rendered navigable. At Torri, Garda, Limon, Torbole, Peſchiera, and Riva, the fiſhery is a very important object. The principal market is at Dezenzano: but there is another alſo at Torri. The people carry their fiſh to Venice, Milan, and even to Genoa; and every where it is much in requeſt. On the eaſtern bank, the ports moſt frequented are thoſe of Laſiſe, San Virgilio, and Malſonina; they are moreover the largeſt and moſt commodious. That of Torri is choaked up with ſand, or at leaſt ſubject to that inconvenience. Thoſe of Bardolino and Brenzone are uſed only as ferries. That of Riva is the largeſt and the ſafeſt, and it is the *entrepôt* of the commerce of the Tyrol.

GARDAN'NE, a town of France, in the department of the Mouths of the Rhône, and chief place of a canton, in the diſtrict of Aix: three leagues north-north-eaſt of Marſeilles, and one and a half ſouth-ſouth-eaſt of Aix.

GAR'DANT, *adj.* Keeping guard. In heraldry a creature full-faced, and looking right forward.

GAR'DE (La), a town of France, in the department of the Var, and chief place of a canton, in the diſtrict of Toulon: two leagues weſt of Hieres, and one and a half eaſt of Toulon.

GAR'DECAUT, or GUARD DU CORD, *ſ.* in a watch, is that which ſtops the fuſee, when wound up, and for that end is driven up by the ſpring. Some call it guard-cock; others guard du gut.

GARDEI'AH, a town of Africa, the capital of Beni Mezzab: 180 miles eaſt of Fighig. Lat. 32. 15. N. lon. 2. 30. E. Greenwich.

GARDELE'GEN, or GARDELEBEN, a town of Germany, in the circle of Upper Saxony, and Old Mark of Brandenburg, containing four churches, four hoſpitals, and a manufacture of cloth; celebrated for its beer: forty-four miles weſt-north-weſt of Brandenburg, and ſeventy-two weſt of Berlin. Lat. 53. 7. N. lon. 29. 9. E. Ferro.

GAR'DEN, *ſ.* [*gardd*, Welſh; *jardin*, Fr. *giardino*, Ital.] A piece of ground incloſed, and cultivated with extraordinary care, planted with herbs or fruits for food, or laid out for pleaſure.—In the royal ordering of *gardens*, there ought to be *gardens* for all the months in the year. *Bacon.*—In every *garden* ſhould be provided flowers, fruit, ſhade, and water. *Temple.*

My *garden* takes up half my daily care,
And my field aſks the minutes I can ſpare. *Harte.*

A place particularly fruitful or delightful:

I am arrived from fruitful Lombardy,
The pleaſant *garden* of great Italy. *Shakeſpeare.*

GARDEN is often uſed in compoſition for *hortenſis*, or belonging to a garden. *Garden-mould*, is mould fit for a garden.—They delight moſt in rich black *garden mould*, that is deep and light, and mixed rather with ſand than clay. *Mortimer.*—*Garden-tillage*, is tillage uſed in cultivating gardens.—Peas and beans are what belong to *garden-tillage* as well as that of the field. *Mortimer.*—*Garden-ware*, is the produce of gardens.—A clay bottom is a much more pernicious ſoil for tree and *garden-ware* than gravel. *Mortimer.*

To GAR'DEN, *v. n.* To cultivate a garden; to lay out gardens.—When ages grow to civility and elegancy, men come to build ſtately, ſooner than to *garden* finely; as if *gardening* were the greater perfection. *Bacon.*

At firſt, in Rome's poor age,
When both her kings and conſuls held the plough,
Or *garden'd* well. *Ben Jonſon.*

Robbing gardens of fruit growing therein, is puniſhable criminally by whipping, ſmall fines, impriſonment, and ſatisfaction to the party wronged, according to the nature of the offence. 43 *Eliz. c.* 7.

GAR'DEN (Francis), known by the title of *lord Gardenſtone*, born at Edinburgh, in 1721. His father was an opulent landholder in Aberdeenſhire; his mother was Jane, daughter of ſir Francis Grant of Cullen. After paſſing through the uſual courſe of liberal education at the univerſity, he betook himſelf to the ſtudy of law for his profeſſion; and in 1744 he was admitted a member of the faculty of advocates, and called to the Scottiſh bar. In his practice as an advocate, he ſoon began to be diſtinguiſhed by a ſtrong rectitude of underſtanding, and by great vivacity of genius; though his taſte was averſe from auſtere and plodding ſtudy, while it was captivated by the faſcinations of polite learning, and the fine arts. He became his majeſty's ſolicitor, July 3, 1764; and at length the worth of his character, and his abilities as a lawyer, recommended him to the office of a judge in the courts of ſeſſion and juſticiary, the ſupreme judicatures, civil and criminal, for Scotland. His place in the court of ſeſſion he continued to occupy till his death; but had, ſome years before, reſigned the office of

of a commiſſioner of juſticiary, and in recompence got a penſion of 200l. per annum. Clear diſcernment, ſtrong good ſenſe, conſcientious integrity, and amiable benevolence, remarkably diſtinguiſhed his conduct as a judge.

In 1762 he purchaſed the eſtate of Johnſton, in the county of Kincardine. Within a few years after he began a plan of the moſt liberal improvement of the value of this eſtate, by an extenſion of the village of Laurencekirk, adjoining. He offered leaſes of ſmall farms, and of ground for building upon, which were to laſt for the term of one hundred years; and of which the conditions were extremely inviting to the ſurrounding country. Theſe offers were eagerly embraced. More deſirous to make the attempt beneficial to the country, than to derive profit from it to himſelf, he was induced, within a few years, to reduce his ground-rents to one half of the original rate. Numerous artiſans reſorted to ſettle in the riſing village. His lordſhip's earneſtneſs for the ſucceſs of his project, and to promote the proſperity of the people whom he had received under his protection, led him to engage in ſeveral undertakings; by the failure of which he incurred conſiderable loſſes. Projects of a print-field, and of manufactures of linen and of ſtockings, attempted with ſanguine hopes in the new village, and chiefly at his lordſhip's riſk and expence, miſgave in ſuch a manner as might well have finally diſguſted a man of leſs ſteady and ardent philanthropy, with every ſuch engagement. But the village ſtill continued to advance. It grew up under his lordſhip's eye; and in 1779, he procured it to be erected into a burgh or barony; having a magiſtracy, an annual fair, and a weekly market. He provided in it a good inn for the reception of travellers; and with an unconmon attention to the entertainment of the gueſts who might reſort to it, furniſhed this inn with a library of books for their amuſement. Before his lordſhip's death, he ſaw his plan of improving the condition of the labourers, by the formation of a new village at Laurencekirk, crowned with ſucceſs beyond his moſt ſanguine hopes. He has acknowledged, with an amiable frankneſs, in a memoir concerning this village, "That he had tried, in ſome meaſure, a variety of the pleaſures which mankind purſue; but never reliſhed any ſo much as the pleaſure ariſing from the progreſs of his v llage."

In 1785, upon the death of his elder brother, Alexander Garden of Troup, M. P. for Aberdeenſhire, lord Gardenſtone ſucceeded to the poſſeſſion of the family eſtates, which were very conſiderable, and afforded him an opportunity of viſiting the continent. In the month of September 1786, his lordſhip ſet out from London for Dover, and paſſed over into France. After viſiting Paris, he proceeded to Provence, and ſpent the winter months in the genial climate of Hieres. In the ſpring of 1787 he returned northwards, viſiting Geneva, Swiſſerland, the Netherlands, and the Dutch provinces, and paſſing through Germany into Italy. With a fond curioſity, attentive alike to the wonders of nature, to the noble monuments of the arts, and to the awful remains of ancient grandeur, with which Italy abounds, he viſited all its great cities, and ſurveyed almoſt every remarkable and famous ſcene that it exhibits. He eagerly collected ſpecimens of the ſpars, the ſhells, the ſtrata of rocks, and the veins of metals, in the ſeveral countries through which he paſſed. He amaſſed alſo cameos, medals, and paintings. He enquired into ſcience, literature, and local inſtitutions. He wrote down his obſervations, from time to time; not indeed with the minute care of a pedant, or the oſtentatious labour of a man travelling with a deſign to publiſh an account of his travels; but ſimply to aid memory and imagination in the future remembrance of objects uſeful or agreeable. After an abſence of about three years, he returned to his native country. The laſt years were ſpent in the diſcharge of the duties of his office as a judge; in ſocial intercourſe with his friends, and in the performance of a thouſand generous offices of benevolence and humanity. As an amuſement for the laſt two or three years of his life, when his increaſing infirmities precluded him from active exerciſe, he bethought himſelf of reviſing ſome of the light fugitive pieces, in which he had indulged the gaiety of his fancy in his earlier days; and a ſmall volume of poems was publiſhed, in which the beſt pieces are, upon good authority, aſcribed to lord Gardenſtone. He reviſed alſo the memorandums which he had made upon his travels, and permitted them to be ſent to the preſs. The two former volumes were publiſhed while his lordſhip was alive; the third after his death. They convey much agreeable information, and beſpeak an elegant, enlightened, and amiable, mind. The laſt volume is filled chiefly with memorandums of his lordſhip's travels in Italy; and contains many intereſting criticiſms upon ſome of the nobleſt productions of the fine arts of painting and ſculpture. His lordſhip's health had long been declining; and he died a bachelor on the 22d of July 1793.

GARDEN BAY', a bay on the eaſt coaſt of Newfoundland. Lat. 49. 42. N. lon. 54. 50. W. Greenwich.

GAR'DEN-PLOT, *ſ.* Plot in a garden:

In bower and field he ſought, where any tuft
Of grove, or *garden-plot*, more pleaſant lay. *Milton.*

GAR'DEN-STUFF, *ſ.* The produce of the garden, eſpecially that which is dreſſed and eaten with meat.

GAR'DENER, *ſ.* He that attends or cultivates gardens.—Our bodies are our gardens, to the which our wills are *gardeners*; ſo that if we plant nettles, or ſow lettuce, the power lies in our will. *Shakeſpeare.*—The life and felicity of an excellent *gardener* is preferable to all other diverſions. *Evelyn.*

Then let the learned *gard'ner* mark with care
The kinds of ſtocks, and what thoſe kinds will bear.
Dryden.

GARDE'NIA, *ſ.* [So named by Ellis, in honour of Alexander Garden, M. D. of Charleſtown in Carolina.] In botany, a genus of the claſs pentandria, order monogynia, natural order contortæ, (rubiaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, five-cleft, ſuperior; diviſions upright, permanent. Corolla: one-petalled, funnel-form or ſalver-form; tube cylindric, longer than the calyx; border flat, five-parted. Stamina: filaments none; antheræ five, inſerted into the mouth of the tube, linear, ſtreaked, half the length of the border. Piſtillum: germ inferior; ſtyle filiform or club-ſhaped; ſtigma ſtanding out, ovate, obtuſe, two-lobed, often furrowed. Pericarpium: berry (berried drupe, *Gærtner,*) dry, one, two, or four, celled. Seeds: very many, flatted, imbricate in two rows, (two rows in each cell. *Juſſ.*)—*Eſſential Character.* Corolla one-petalled, contorted or twiſted; ſtigma lobed; berry inferior, two or four-celled, many-ſeeded.

Species. 1. Without thorns. 1. Gardenia radicans, or rooting gardenia: corollas obtuſe; calyx angular; leaves elliptic; ſtem rooting. Stem decumbent, ſmooth, thickneſs of a reed, about a foot high, putting out roots at the bottom; branches oppoſite, tubercled with rudiments of leaves, flexuoſe, upright; leaves aſſembled at the ends of the branches, oppoſite, ſubſeſſile, entire, marked with parallel nerves, ſmooth, upright, from an inch to two inches in length. It is commonly cultivated in Japan, where it flowers in June and July.

2. Gardenia florida, or fragrant gardenia, or Cape jaſmine: corollas ſalver-ſhaped; calycine ſegments vertical, lanceolate-ſubulate; leaves elliptic. Stem large and woody, ſending out many branches, which are firſt green, but afterwards the bark becomes grey and ſmooth, the branches come out by pairs oppoſite, and have ſhort joints; the leaves alſo are oppoſite, cloſe to the branches; they are five inches long, and two and a half broad in the middle, leſſening to both ends, terminating in a point; they are of a lucid green, having ſeveral tranſverſe

verſe veins from the midrib to the borders; they are entire, and of a thick conſiſtence; the flowers are produced at the ends of the branches, ſitting cloſe to the leaves; when fully blown, the double flower is as large as a middling roſe. It has a very agreeable odour, on the firſt approach ſomething like that of the orange-flower, but on being more cloſely ſmelt to, like the common double white narciſſus. There are hedges of it in Japan, and the Japaneſe are very fond of it near their houſes, and in the walks of their gardens. Both in Japan and China the fruit is uſed for dying yellow. The mucilage preſſed out with the ſeeds produces a fine yellow; that from the ſeeds only is lighter, but tinges water of a lively yellow, and is ſaid to dye ſilk of a deep orange, or even ſcarlet, but not the deep China ſcarlet. Native of the Cape of Good Hope, Cochinchina, China, Japan, Surat, Amboyna, and the South-Sea iſlands. Introduced about 1754, by captain Hutchinſon, of the Godolphin Indiaman, who found it near the Cape of Good Hope, being attracted by the great fragrancy of the flowers. He preſented it to Richard Warren, Eſq. of Woodford in Eſſex, in whoſe curious garden it continued flowering. Mr. James Gordon, of Mile-end, propagated it from cuttings in 1757. It flowers in July and Auguſt. It varies with ſingle and double flowers: the former has from five to nine diviſions of the corolla, and ſtamens.

3. Gardenia Thunbergia, or ſtarry gardenia: corollas ſalver-ſhaped; calyxes burſting laterally, with the ſegments dilated at the tip; leaves elliptic. This is a tree, about two fathoms in height, ſmooth, and branching very much; branches alternate, round, having rings on them from the rudiments of leaves, aſh-coloured, ſmooth, erect, branchletted; leaves in whorls of three or four, acuminate to both ends, entire, concave, ſomewhat waved, marked with parallel nerves, ſmooth, having hairy glands in the axils of the nerves on the lower ſurface, ſpreading, unequal, longer than the internodes, two inches long and more; berry ovate, ſomewhat wrinkled, ſmooth, greeniſh, turning white, one-celled, five-valved, the ſize of a hen's egg, continuing ſeveral years without opening or falling; having a woody hard bark, and ſcarcely any pulp. Native of the Cape of Good Hope, and introduced in 1773, by ſir James Cockburn, Bart.

4. Gardenia latifolia, or broad-leaved gardenia: corollas ſalver-ſhaped; calycine ſegments ſubulate, obtuſely keeled; leaves obovate-roundiſh. Native of the barren rocky hills both in the Circars and Carnatic. Its large gloſſy green leaves, and the ſize and fragrance of the flowers, render it both ornamental and deſirable. *Roxb.* 134.

5. Gardenia gummifera, or gummy gardenia: corollas obtuſe; calyx rough with hairs; leaves oblong, obtuſe. This reſembles G. florida in the ſize and form of the border of the corolla; the tube of the calyx is longer, more filiform, and covered with more ſlender hairs. A gum-reſin, very much like gum elemi, exudes from the clefts of the bark, and from the leaves. Native of Ceylon; found there by Koenig.

6. Gardenia Muſſænda, or Muſſænda gardenia: corollas acute; calyx rough with hairs; leaves ovate, acute. Native of South America.

7. Gardenia Genipa, or Genipa gardenia: leaves oblong-lanceolate; peduncles axillary, many-flowered, corollas ſalver-ſhaped, with an abbreviated tube. This is a thornleſs ſhrub, according to Swartz, with oblong-lanceolate leaves; axillary many-flowered; peduncles and ſalver-ſhaped corollas with a ſhort tube. It differs from the other gardenias principally in the form of the corolla, which varies much in this genus. Native of South America.

8. Gardenia rothmannia, or ſpotted-flowered gardenia: corollas funnel-ſhaped; calycine ſegments ſubulate; leaves oblong; (corollas acute, ſubcampanulate; calyx ſmooth; leaves oblong, acute. *Thunb. cap.*) Stem arboreous, erect, branching very much, a fathom and half in height; leaves oppoſite, on very ſhort petioles, acute, entire, nerved, ſmooth, bright green above, paler beneath, evergreen, having hairy glands in the axils of the nerves on the lower ſurface; berry ovate, fleſhy, angular, with about twelve obſcure lines, ſmooth, two-valved, one-celled, pulpy, the ſize of a ſmall pear, black when ripe, opening on one ſide, and falling from the tree when dry; pulp ſoft, like that of the tamarind; the wood of this is very hard; flowers white, ſmelling very ſweet, eſpecially during the night; native of the Cape of Good Hope.

II. Thorny. 9. Gardenia ſpinoſa, or thorny gardenia: flowers ſeſſile, hirſute. Native of China near Macao.

10. Gardenia dumetorum, or buſhy gardenia: thorns oppoſite, longer than the leaves; germs ſmooth. This is one of the moſt common thorny ramous ſhrubs on the coaſt of Coromandel; flowering in the beginning of the wet ſeaſon. Uſed for fences and fire-wood; flowers few, but highly fragrant. The fruit, when ripe, reſembles a ſmall yellow apple; when bruiſed, and thrown into fiſh-tanks, the fiſh are ſoon intoxicated, and ſeen floating on the ſurface. If practiſed in the hot ſeaſon, it is ſaid the fiſh generally die, but if in the cold ſeaſon they recover. Fiſhermen ſometimes follow this mode of catching fiſh; and they are not on that account deemed leſs wholeſome. *Roxb.* 136. It is the G. ſpinoſa of Linnæus, but a different plant from the G. ſpinoſa of Thunberg, which is a native of China, and has the calyx externally, with the corolla very hairy; whereas in this they are ſmooth.

11. Gardenia micranthus, or ſmall flowered gardenia: flowers ſeſſile, ſmooth. Native of China and the iſland of Ceylon.

12. Gardenia ſcandens, or climbing gardenia: climbing; flowers peduncled. Native of China, near Macao: according to Retzius, it is a ſhrub very much branched both oppoſitely and alternately; ſpines ſhort; leaves oppoſite and ſcattered, ovate, quite entire, the ſame ſize as in G. dumetorum; flowers at the ends of the twigs, uſually ſolitary, peduncled, altogether like thoſe of jaſminum odoratum; but the ſtamens and piſtil as in gardenia; it has the calyx of jaſmin, but more leathery, as is alſo the corolla.

13. Gardenia uliginoſa, or boggy gardenia: branches thorny at the end; tube of the corolla hirſute within. A ſhrub with brown ſquariſh branches, the twigs ſhort and growing by pairs, having leaves and two thorns at the end. Native of the Eaſt-Indies in marſhes: found there by Koenig. Roxburgh deſcribes it thus: A rigid ramous ſmall tree, armed with numerous ſtrong thorns, delights in moiſt places; flowers at the beginning of the hot ſeaſon, or in ſome meaſure all the year. *Roxb.* 135.

14. Gardenia armata, or armed gardenia: ſpines of the branchlets terminating in fours; calycine ſegments linear wedgeform; flowers crowded. This is a ſmall tree, about ten feet high, and very ſeldom more than three inches in diameter, frequently branching very near the ground; flowers ſeſſile, commonly four together from the end of each twig; extremely odorous. Native of South America and the Weſt-India iſlands.

15. Gardenia aculeata, or round leaved gardenia: thorns oppoſite, both they and the flowers ſhorter than the leaves; branches ſmooth. Browne calls it the indigo-berry, and ſays that it is a ſmall ſhrub riſing by a branched ſtalk, and ſhooting commonly to the height of ſeven or eight feet; the main ſtem tough and hard; the branches ſomewhat prickly at the ends; the leaves of an oval form, and growing in tufts; the pulp of the berries, which are generally numerous on the ſmaller branches, is very thick, and ſtains paper or linen of a fine fixed blue colour. Native of the Weſt-Indies. Introduced before 1733 by William Houſtoun, M.D. who found it near Vera Cruz, and gave it the name of Randia, in honour

GARDENIA.

Gardenia Latifolia.

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nour of Mr. Iſaac Rand, who was a curious botaniſt; it had alſo been diſcovered by ſir Hans Sloane in the iſland of Barbadoes.

16. Gardenia fragrans, or fragrant gardenia. Like G. dumetorum, delights in a poor ſoil; for, when brought into a good ſoil, the thorns almoſt totally diſappear; flowers in June and July, about the beginning of the rains. *Roxb.* 137.

Propagation and Culture. The common gardenia or cape jaſmin is eaſily propagated by cuttings during the ſummer ſeaſon, planted in pots, plunged into a moderate hot-bed, covered cloſe with bell or hand-glaſſes, and ſcreened from the ſun; when they have taken root, they ſhould be carefully parted, and put each into a ſeparate ſmall pot, plunging them again into the hot-bed, and ſhading them until they have taken new root, after which they ſhould be gradually inured to the open air; though the cuttings ſtrike freely, and make ſtrong ſhoots a year or two after, yet in three or four years they are apt to be ſtinted in their growth, the leaves turn pale and ſickly, and the plants frequently die ſoon after. The other gardenias, ſo far as we are yet acquainted with them, may be increaſed and treated in the ſame manner; allowance being made for ſome, which are natives of hotter climates.

15. The randia is propagated by ſeeds, ſown early in ſpring, in pots filled with light freſh earth, and plunged into a hot-bed of tanner's bark, obſerving to water the earth frequently but gently; when the plants come up, admit freſh air to them every day when the weather is warm, and refreſh them often with water; in a month's time they will be fit to tranſplant; ſhake them carefully out of the pots, plant each in a ſmall pot filled with light freſh earth, and plunge them into the hot-bed again, ſcreening them from the ſun until they have taken new root; after which they muſt have air and moiſture according to the warmth of the ſeaſon. The plants may remain in the hot-bed till towards Michaelmas, when the nights begin to be cold; then they ſhould be removed into the ſtove, and if they are plunged into the bark-bed, it will greatly forward their growth; though they will live in the dry ſtove, in a moderate temperature. During the two firſt ſeaſons, whilſt the plants are young, keep them conſtantly in the ſtove, waſhing their leaves whenever they contract filth; after they have obtained ſtrength, expoſe them in ſummer to the open air for two or three months, in a warm ſituation; but in winter place them in the ſtove, in a moderate warmth. The leaves continuing green throughout the year, this is a valuable plant for the ſtove.

GAR'DENING, *ſ.* The act of cultivating or planning gardens.—My compoſitions in *gardening* are after the Pindaric manner, and run in the beautiful wilderneſs of nature, without affecting the nicer elegancies of art. *Addiſon.*—For the art of planning, cultivating, and improving, GARDENS, with the lateſt and beſt methods of grafting, pruning, framing, forcing, and conſtructing hot-beds, pinaries, hot-houſes, lawns, pleaſure-grounds, and flower-gardens, ſee the article HORTICULTURE.

GAR'DENSTOWN HARBOUR, a bay of Scotland, on the north coaſt of Bamfſhire: ſix miles eaſt of Bamff.

GARDEOL'LE (La), a town of France, in the department of the Tarn: eighteen miles ſouth-eaſt of Lavaur.

GAR'DINER (Stephen), an eminent Engliſh prelate and ſtateſman, born at Bury St. Edmunds, in 1483. According to the moſt probable accounts he was the natural ſon of Dr. Lionel Woodvill, or Widvill, biſhop of Saliſbury, and brother to Elizabeth, queen conſort to Edward IV. He took his ſurname from his reputed father, a menial ſervant of the biſhop, whom his mother married to prevent the prelate's reputation from being injured. He was ſent to Trinity hall, in the univerſity of Cambridge, where he purſued his ſtudies with great diligence and ſucceſs, and obtained reputation for correctneſs and elegance in writing and ſpeaking Latin, and extraordinary ſkill in the Greek language. His writings afford ample proof how much he ſtudied the works of Cicero; and the critics of his time reproached him with affectation, for the cloſeneſs with which he imitated his ſtyle. Afterwards he applied himſelf to the ſtudy of the civil and canon law, and was created doctor of the former in 1520, and of the latter in the following year. The reputation which he acquired in the univerſity ſoon proved the means of his introduction to the favour and confidence of ſome of the greateſt men of that age. Some accounts ſtate that he was at firſt patroniſed by Thomas Howard, duke of Norfolk, and it is certain that he was taken into the family of cardinal Wolſey, who made him his ſecretary. While he filled this poſt an incident happened which introduced him to the knowledge of the king, and thus gave riſe to his farther advancement. Cardinal Wolſey having projected an alliance with the French king, Francis I. in 1525, he employed Gardiner to draw up the plan of it. During the time that he was engaged on this work at the cardinal's houſe at More-Park, in Hertfordſhire, king Henry accidentally went thither, and was highly pleaſed with the progreſs which the ſecretary had made. In 1527-8 Gardiner was appointed, jointly with Edward Fox, to proceed on an embaſſy to Rome, for the purpoſe of negociating the buſineſs of the king's divorce from queen Catharine. Gardiner was appointed chief of the embaſſy; and his addreſs and management ſucceeded ſo well, that he obtained a commiſſion from the pope, addreſſed to the cardinals Wolſey and Campeggi, empowering them to determine the buſineſs. Having ſent Fox home with an account of their negociations, Gardiner continued ſome time longer at Rome, where the dangerous illneſs of pope Clement VII. gave riſe to various intrigues for ſecuring a majority of votes in the ſacred college, in caſe of his demiſe. After Gardiner's return to England, the archdeaconry of Norfolk was beſtowed upon him, in return for his ſervices at Rome. This appears to have been his firſt preferment in the church; but in the ſtate he made a more rapid progreſs. By his capacity for buſineſs, and activity in conducting it, he had ſo far recommended himſelf to the king, that he reſorted to him in all matters of moment; and as the libidinous Henry was deſirous of having him entirely in his ſervice, he took him from his ſituation of ſecretary to Wolſey, and appointed him to the office of ſecretary of ſtate; in which capacity he could be more cloſely conſulted on the ſubject of the divorce, which lay neareſt his majeſty's heart. The readineſs and diligence which Gardiner manifeſted in carrying the king's wiſhes into execution, were ſoon rewarded by valuable eccleſiaſtical promotions. In the ſpring of 1531 he was inſtalled archdeacon of Leiceſter, when he reſigned the archdeaconry of Norfolk; and in the September following he reſigned his new preferment in favour of Dr. Fox. In the ſame year he was incorporated doctor of laws in the univerſity of Oxford, and in the month of November conſecrated biſhop of the rich ſee of Wincheſter. Dr. Gardiner was not appriſed, at the time, of the king's deſign of conferring this biſhopric upon him, for Henry would frequently abuſe him as though he had been unworthy of any favour; and at the inſtant when he granted him this preferment, he put him in mind of it. "I have," ſaid the king, "often *ſquared* with you, Gardiner," (a word which he uſed for that ſpecies of rebuke,) "but I love you never the worſe, as the biſhopric which I give you will ſufficiently evince." After this preferment, Gardiner could ſtand a royal battling without much anxiety; or, to uſe his own words to the duke of Somerſet, "he folded it up in the matter, and bore it patiently." In 1533, biſhop Gardiner ſat in the court with archbiſhop Cranmer, when the latter prelate pronounced the ſentence by which queen Catharine's

marriage was declared null and void. In the ſame year he was ſent ambaſſador to France, whither he was ſoon followed by Dr. Bonner. Their inſtructions were to attend an interview between the pope and the French king at Marſeilles, and to diſcover the deſigns of the holy father and the French monarch, which Henry and his council ſuſpected to be of a hoſtile nature againſt England. They there intimated the appeal of Henry VIII. to a general council, if the pope ſhould pretend to proceed to judgment in his cauſe; and alſo the appeal of the archbiſhop of Canterbury to the ſame tribunal, if any deſign ſhould be avowed of excommunicating him, and interdicting his church. Upon Gardiner's return from his French embaſſy, he was called upon, together with the other biſhops, to acknowledge the king as ſupreme head of the church, and to take the oath appointed for that purpoſe. With this ſummons he not only readily complied, but alſo publiſhed a defence of the king's ſupremacy, entitled "*De Vera Obedientia.*" His pen was alſo made uſe of in vindicating the king's divorce, and his emancipation of the kingdom from the tyranny of the papal ſee; upon which ſubject his writings, at the time, acquired him very high reputation. In 1538, he was ſent ambaſſador, with ſir Henry Knevit, to the German diet at Ratiſbon, where he is ſaid to have acquitted himſelf well with reſpect to the objects of his commiſſion; but he there fell under a ſuſpicion of holding a ſecret correſpondence with the pope, on the ſubject of rendering popery again triumphant in England. This ſuſpicion occaſioned a miſunderſtanding between him and his colleague, who tranſmitted to the king the particulars on which it was founded. Whether the king was ſatisfied that theſe particulars were fabricated by the enemies of Gardiner, as the latter maintained, or to whatever cauſe it might be owing, the biſhop was not brought into any trouble on this account during the reign of Henry.

Upon the fall of lord Cromwell, in 1540, Gardiner was elected chancellor of the univerſity of Cambridge, and, for a man of learning, as he unqueſtionably was, gave an extraordinary inſtance of his attachment to old cuſtoms and practices, however abſurd: for when ſir John Cheke, who was diſtinguiſhed for his knowledge of the Greek language, attempted to introduce into the univerſity a reform of the vicious and barbarous pronunciation which then obtained in England, Gardiner, as chancellor of the univerſity, interpoſed his authority, and by a dictatorial edict prohibited the improvement, to which he gave the name of novelty and innovation, under very ſevere penalties. When Cheke, in defence of himſelf, alleged the authority of Eraſmus and other learned foreigners, and obſerved that what he had done was in vindication of truth; Gardiner exclaimed, "*Quid non mortalia pectora cogit veri quærendi fames!*" What does not the itch of ſeeking out truth compel men to do! And he bade Cheke not to be the author of removing "an evil well placed." During the year 1543, Gardiner was one of the commiſſioners appointed to conclude a treaty of peace with Scotland, and to negociate a marriage between the prince of Wales and the young queen of Scotland. But whatever public employments he was engaged in, he never loſt ſight of a favourable opportunity of impeding the progreſs of the reformation; and he was, conjointly with others, very active in bringing to the ſtake ſeveral proteſtants of diſtinguiſhed zeal and character; among whom was Mrs. Anne Aſcough, a lady of unblemiſhed manners; and, by making her the object of their perſecution, they hoped to extort confeſſions from her which would furniſh matter of accuſation againſt the ducheſs of Suffolk, the counteſs of Suſſex, the counteſs of Hertford, and other high characters, among whom were ſome of the king's council. Sir George Blage, one of the king's privy-chamber, was alſo committed to Newgate, and by a ſummary proceſs condemned to be burnt. But the king, hearing of it, was greatly offended with Gardiner, and commanded him immediately to iſſue his pardon. As ſoon as ſir George was releaſed, and come into the royal preſence, the king cried out, as he was accuſtomed to call him, "Ah! my pig." "Yes," ſaid ſir George; "if your majeſty had not been better to me than your biſhops, your pig had been roaſted ere this time."

After the death of Henry VIII. in 1547, biſhop Gardiner, refuſing to conform to certain homilies, was committed a cloſe priſoner to the Fleet, where he continued till the end of the ſeſſion of parliament, when he was releaſed by the general pardon of Edward VI. though he was not charged judicially with any offence. Gardiner, being now at liberty, repaired to his diocefe, where, in general, he ſo conformed himſelf outwardly to the orders of the council, that it was not eaſy to find any advantage againſt him. But ſtill he did what lay in his power to oppoſe the principles of the reformation. Of this conduct complaint was made againſt him in the council, before which he was ſummoned in 1548, and was committed to the Tower, where he was kept ſo cloſe a priſoner for about two years, that his chaplain was only allowed admittance to him once, when he was ill, and afterwards refuſed, becauſe his life was not thought to be in danger. In 1551, he was deprived of his biſhopric, for diſobedience and contempt of the king's authority. Gardiner continued in the Tower during the remainder of king Edward's reign; but the rigor of the order of council concerning him appears to have been abated, ſince in that interval he compoſed a variety of Latin poems, tranſlated into Engliſh verſe ſeveral of the poetical parts of the Old Teſtament, and wrote ſome controverſial tracts. In 1553, king Edward having died in the beginning of July, queen Mary made her ſolemn entry into the Tower; when Gardiner preſented a congratulatory ſpeech to her majeſty, and being immediately ſet at liberty, was received into the higheſt favour. On the 8th day of that month he performed, in the queen's preſence, the Romiſh obſequies for the late king Edward, who was buried at Weſtminſter with the Engliſh ſervice by archbiſhop Cranmer; on the 9th he reſumed poſſeſſion of Winchester-houſe, in Southwark, after a confinement of ſomewhat more than five years; and on the 23d he was declared chancellor of England, when he became the queen's prime-miniſter, and was entruſted with the chief management of public affairs.

Being thus raiſed to the height of power, he determined, in conformity with the queen's zealous wiſhes, and his own inclination, as ſpeedily as poſſible to reeſtabliſh the popiſh religion, and to reconcile the kingdom to the ſee of Rome. The firſt ſtep to this end was the iſſuing of a proclamation, by which all preaching throughout the kingdom was prohibited, excepting by the queen's ſpecial licence under the great ſeal. On the 1ſt of October the biſhop of Winchester crowned queen Mary, when a pardon was proclaimed, from the benefit of which all the priſoners in the Tower and the Fleet, and many others, were excepted, who were chiefly proteſtants. On the 10th of the ſame month Gardiner opened the firſt parliament in Mary's reign. In this parliament an act was paſſed for confirming the marriage of Catharine of Arragon, the queen's mother, with Henry VIII. in the preamble of which the divorce was pronounced impious and illegal, and the whole blame of it, againſt all truth and juſtice, attributed to archbiſhop Cranmer. Biſhop Burnet very truly obſerves, that Gardiner, "in the drawing of it, ſhewed that he was paſt all ſhame: when he could frame ſuch an act, of a buſineſs which he himſelf had ſo ſervilely promoted." Before the end of the year he cauſed a bill to be brought into the houſe of lords, which, after a debate of ſix days in the houſe of commons, was at length carried, by which all the laws made in king Edward's time, relating to religion, were repealed; and it was alſo enacted, that there ſhould be no other form of divine ſervice but what had been uſed

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in the laſt year of king Henry VIII. While the parliament was ſitting the convocation likewiſe met, where by artful management there were but ſix clergymen in the proteſtant intereſt, who were threatened, and interrupted in their arguments. When in the debate, Weſton, the prolocutor, was hard preſſed by their reaſoning, he inſultingly ſaid to them, "You have the word, but we have the ſword;" truly pointing out, ſays Burnet, wherein the ſtrength of their reſpective cauſes lay. Soon after this, ſeveral proteſtant prelates were deprived of their ſees, on different pretences, and their places were filled by thoſe who had been deprived in the reign of Edward VI. By theſe proceedings the proteſtants were with good reaſon convinced, that a ſevere perſecution was determined againſt them; and more than eight hundred of them thought it prudent to conſult their ſafety, by withdrawing into foreign parts. David Lloyd writes, that Gardiner threatened concerning theſe exiles, that "he would watch their ſupplies, ſo that they ſhould eat their nails, and then feed on their fingers' ends." Events ſoon ſhewed how well founded were their apprehenſions, for in the beginning of 1554, the marſhalſea in London, and the priſons in other parts of the kingdom, were filled with proteſtants.

The treaty of marriage between queen Mary and Philip, ſon of Charles V. king of Spain and emperor of Germany, was the next momentous buſineſs to which Gardiner's attention was directed. This projected marriage was extremely odious to the nation in general; and though the articles of it were drawn with much art and plauſibility, and ſeemingly much in favour of England, yet, when they were publiſhed, they gave no ſatisfaction to the people. At the meeting of the ſecond parliament of the queen's reign, however, in April, 1554, the treaty of marriage was made the ſubject of diſcuſſion; and as Gardiner had received large remittances from the emperor, by means of which he had ſecured the votes of many conſiderable members, the terms of it were ratified by both houſes without much oppoſition. In the month of July following the queen met the Spaniſh prince at Wincheſter, where they were married by Gardiner, in that venerable cathedral. This prelate now brought over cardinal Pole, the popiſh legate, and conſigned the people of England once more into the boſom of the catholic church; and a bill quickly followed, by which the old ſtatutes againſt heretics, made in the reigns of Richard II. Henry IV. and Henry V. were revived in their full force. For theſe ſervices biſhop Gardiner was promiſed a cardinal's hat, and, on the firſt vacancy, a promotion to the archbiſhopric of Canterbury. But in the month of October, 1555, he opened the ſeſſions of parliament, and within a few days afterwards was taken ill of the gout, according to ſome writers, but according to others of a ſuppreſſion of urine, which proved fatal to him on the 13th of November following, when he was about ſeventy-two years of age. He is ſaid to have ſuſtained excruciating agonies on his death-bed, and to have felt great remorſe for his paſt life, often repeating the words, *Erravi cum Petro, ſed non flevi cum Petro*; "I have erred with Peter, but I have not wept with Peter." He was the author of a treatiſe *De Vera Obedientia*, already mentioned. 2. *Palinodia dicti Libri*, or a retraction of the preceding works. 3. An Explication and Aſſertion of the true Catholic Faith, touching the moſt bleſſed Sacrament of the Altar, &c. written againſt Cranmer, and printed abroad in 1551. 4. *Confutatio Cavillationum, quibus, ſacroſanctum Euchariſtiæ Sacramentum, ab impiis Capernaitis impetiſolet*, written in the Tower, in reply to an anſwer of Cranmer to the laſt-mentioned piece; and different defences of himſelf againſt the attacks of Dr. Turner, Dr. Poynet, and other proteſtant exiles. Several of his letters to the duke of Somerſet, lord protector, and other perſons, are extant in the firſt edition of Fox's Acts and Monuments, and ſome to Smith and Cheke on the pronunciation of the Greek language in Bene't college library, at Cambridge.

GARDIN'GEN, a town of Denmark, in the duchy of Sleſwic: twenty-eight miles weſt-ſouth-weſt of Sleſwic. Lat. 54. 24. N. lon. 8. 52. E. Greenwich.

GARD'MANGER, *ſ.* [French] A ſtorehouſe, a place to put victuals in. *Scott.*

GARD'NER, a townſhip of the American States, in Worceſter county, Maſſachuſetts, incorporated in 1785. It contains about 14,000 acres, well watered, chiefly by Otter river. The road from Connecticut river through Peterſham, Gerry, and Templeton, and to Boſton, paſſes through it. It contains 531 inhabitants, and is twenty-ſix miles north by weſt of Worceſter, and ſixty north-weſt of Boſton.

GARDNER's ISLAND, or ISLE OF WIGHT, an iſland of the American States, ſituated at the eaſt end of Long-Iſland, in New-York ſtate, ſheltered within Oyſter Pond and Montauk points; ten miles north-weſt of the latter, and as far ſouth-weſt of Plumb iſland. It contains about three thouſand acres of fertile land, and yields excellent graſs, wheat and corn. Fine ſheep and cattle are raiſed on it. It is annexed to Eaſt Hampton, and lies forty miles ſouth-weſterly of Newport, Rhode-Iſland.

GARD'ON, a river of France, which riſes in the department of the Lozere, croſſes the department of the Gard, receiving another river in its courſe, called the *Gardon d'Alais*, and runs into the Rhone, four miles north of Taraſcon.

GARDOU'CH, a town of France, in the department of the Upper Garonne: five leagues ſouth-eaſt of Toulouſe.

GARD'ROBE, *ſ.* [French] A wardrobe, a place to keep clothes in. *Scott.*

GARD'SBY, a town of Sweden, in the province of Smaland: twenty-eight miles north of Wexio.

GARE, *ſ.* Wool growing on the legs of ſheep.

GA'REB, a hill of Paleſtine, (probably GOREB,) ſituated weſt of Jeruſalem near Mount-Calvary, mentioned Jer. xxxi. 29.

GA'RED, a town of Africa, in the kingdom of Suz, on the river Suz, celebrated for its morocco leather.

GARENCIE'RES, a town of France, in the department of the Seine and Oiſe, and chief place of a canton, in the diſtrict of Montfort: one league and a quarter north-weſt of Montfort.

GARENGE'OT (Rene Jacques Croiſſant de), an eminent French ſurgeon, born at Vitry, in 1688. He ſettled at Paris, and firſt raiſed himſelf to notice by publiſhing the diſcoveries and inventions of others as his own, which gave riſe to various litigations. At length he obtained reputation upon better grounds, and became one of the firſt Pariſian ſurgeons of his time. He was a fellow of the royal ſociety of London, and demonſtrator-royal in ſurgery at Paris He was a dextrous operator, as well as an uſeful writer. He died in 1759. The works of Garengeot are: *Traité des Operations de Chirurgie*, Par. 1720, two vols. 8vo. 1731, 1749, three vols. 12mo. This is a valuable performance, containing many practical improvements. *Nouveau Traité des Inſtrumens de Chirurgie*, Par. 1723, two vols. 12mo. *De l'Operation de la Taille par l'Appareil lateral*, Par. 1730, 12mo. *Splanchnologie, ou l'Anatomie des Viſcères*, Par. 1728, 1742, two vols. 12mo. *Myotomie humaine & canine*, Par. 1728, 1750, two vols. 12mo. He alſo wrote ſome papers in the *Mém. de l'Acad. de Chirurgie*, and the *Mém. de l'Acad. des Sciences.*

GAREN'NE (La), a town of France, in the department of Paris: two leagues eaſt-north-eaſt of Paris.

GAREOU'LT, a town of France, in the department of the Var, and chief place of a canton, in the diſtrict of Brignoles: five miles ſouth of Brignoles.

GA'RET (John), a learned French benedictine monk, of the congregation of St. Maur, born at Havre de Grace

Grace in 1627. When he was twenty years of age he embraced the eccleſiaſtical life, which he adorned by his piety and virtues, at the ſame time that he acquired the reſpect of his fraternity by his literary proficiency. He died at the abbey of Jumieges, in 1694, when about ſixty-ſeven years of age. To his labours are we indebted for the moſt valuable edition of the works of "Caſſiodorus," in two volumes folio, publiſhed at Rouen in 1679, with learned and judicious notes. It was printed under the inſpection of Father le Nourri, to whom ſome authors have, improperly, attributed the preface, and the tables which accompany it. This edition of the works of Caſſiodorus is preceded by a curious diſſertation on the monaſtic life of that celebrated Roman ſenator.

GARFE'TE, a town of Portugal, in the province of Alentejo: four leagues weſt of Crato.

GARGA'NO, a town of Italy, in the kingdom of Naples, and province of Capitanata: ſeven miles north of Mount St. Angelo.

GARGANVILLA'RD, a town of France, in the department of the Landes, ſeven miles north-weſt of Riviere Verdun.

GARGA'NUS, in ancient geography, now *St. Angelo*, a lofty mountain of Apulia, which advances in the form of a promontory into the Adriatic Sea. *Lucan.*

GARGA'PHIA, a valley near Platæa, with a fountain of the ſame name, where Actæon was torn to pieces by his dogs. *Ovid.*

GAR'GARA, a town of Aſiatic Turkey, in the province of Natolia: twenty miles weſt of Adramiti.

GARGA'REON, [Greek; from עגר, *gargar*, Arab. or גרגרה, *gargarah*, Heb.] The uvula, or glandulous body which hangs down into the throat.

GAR'GARIS, a king of the Curetes, who firſt found the manner of collecting honey. He had a ſon by his daughter, whom he attempted in vain to deſtroy. He made him his ſucceſſor. *Juſtin.*

GAR'GARISM, *ſ.* [γαργαρισμος, Gr. *gargariſme*, Fr.] A liquid form of medicine to waſh the mouth with.—Apophlegmatiſms and *gargariſms* draw the rheum down by the palate. *Bacon.*

To GAR'GARIZE, *v. a.* [γαργαριζω, Gr. *gargariſer*, Fr.] To waſh the mouth with medicated liquors.—Vinegar, put to the noſtrils, or *gargariſed*, doth eaſe the hiccough; for that is aſtringent, and inhibiteth the motion of the ſpirit. *Bacon.*—This being relaxed, may make a ſhaking of the larynx; as when we *gargarize*. *Holder.*

GAR'GARUS, a town and mountain of Troas, near mount Ida, famous for its fertility. *Strabo.*

GAR'GET, *ſ.* A diſtemper in cattle.—The *garget* appears in the head, maw, or in the hinder parts. *Mortimer.*

GARGET'TUS, a town of Attica, the birth-place of Epicurus. *Cicero.*

GAR'GIL, *ſ.* a diſtemper in geeſe, which by ſtopping the head frequently proves mortal. Three or four cloves of garlic, beaten in a mortar with butter, and made into little balls, and given faſting, are the ordinary cure.

GARGILLES'SE, a town of France, in the department of the Indre, and chief place of a canton, in the diſtrict of Argenton: three leagues north-eaſt of St. Benoiſt du Sault, and one and three quarters ſouth-eaſt of Argenton.

To GAR'GLE, *v. a.* [*gargouiller*, Fr. *gargogliare*, Ital. *gurgel*, Germ. the throat.] To waſh the throat with ſome liquor not ſuffered immediately to deſcend.—The exciſion made, the bleeding will ſoon be ſtopt by *gargling* with oxycrate. *Wiſeman.*

They comb, and then they order ev'ry hair;
Next *gargle* well their throats. *Dryden.*

To warble; to play in the throat. An improper uſe:

Thoſe which only warble long,
And *gargle* in their throats a ſong. *Waller.*

So charm'd you were, you ceas'd a while to doat
On nonſenſe *gargled* in an eunuch's throat. *Fenton.*

GAR'GLE, *ſ.* A liquor with which the throat is waſhed.—His throat was waſhed with one of the *gargles* ſet down in the method of cure. *Wiſeman.*

GAR'GLION, *ſ.* An exſudation of nervous juice from a bruiſe, or the like, which indurates into a hard immoveable tumour. *Quincy.*

GARGNA'NO, a town of Italy, in the Breſſan; twenty-one miles north-eaſt of Breſcia. It contains 3400 inhabitants.

GAR'GOL, *ſ.* A diſtemper in hogs.—The ſigns of the *gargol* in hogs are, hanging down of the head, moiſt eyes, ſtaggering, and loſs of appetite. *Mortimer.*

GAR'HA, a river of Hindooſtan, which runs into the Chumbul, about three miles north-eaſt from Suiſſopour, in the country of Agimere.

GA'RIA, a bay on the ſouth coaſt of Newfoundland: twenty-two miles eaſt of Cape Ray.

GARIDEL'LA, *ſ.* [ſo named by Tournefort in honour of Pierre Garidel, M. D. phyſician at Aix in Provence.] In botany, a genus of the claſs decandria, order trigynia, natural order multiſiliquæ, (ranunculaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-leaved, ſmall; leaflets ovate, acute, deciduous. Corolla: petals none, unleſs the calyx be taken for them; nectaries five, long, equal, two-lipped; outer lip bifid, flat; diviſions long, linear, blunt; inner lip ſhorter, ſimple. Stamina: filaments uſually ten, ſubulate, ſhorter than the corolla; antheræ upright, blunt. Piſtillum: germs three, ovate, upright, acuminate, connected; ſtyles ſcarcely any; ſtigmas ſimple. Pericarpium: capſules three, ſuperior, connected, oblong, acuminate, compreſſed, one-celled, two-valved; the inner future more convex. Seeds: ſeveral, ſhort, about twelve in each cell, ovate-acuminate, wrinkled, black or brown.—*Eſſential Character.* Calyx five-leaved, like petals; nectary five, two-lipped, bifid; capſule three, connected, containing many ſeeds.

Garidella nigellaſtrum, or fennel-leaved garidella, is the only ſpecies known: an annual plant, which riſes with an upright ſtalk a foot high, dividing into ſeveral ſlender branches, having very fine-cut leaves, like thoſe of fennel, at their joints; the ſtalks are terminated by one ſmall flower, of a pale herbaceous colour. Native of the ſouth of France, where it was firſt diſcovered by Monſ. Garidel in 1692. It is found alſo in Italy. It flowers in June and July, and the ſeeds ripen in September. This plant is propagated by ſeeds ſown in autumn on a border of light freſh earth: when the plants come up, weed and thin them to the diſtance of four or five inches; or if the ſeeds be permitted to ſcatter, the plants will come up without farther care. They do not well bear tranſplanting.

GARIEVIT'ZA, or MOUNT CLAUDIUS, a mountain of Sclavonia: ſixteen miles north of Kraliovavelika.

GARIGLIA'NO, a river of Italy, in the kingdom of Naples, which runs into the Mediterranean: eight miles eaſt of Gaeta.

GA'RISH. See GAIRISH.

GARISSO'LES (Anthony), an eminent French proteſtant miniſter, and profeſſor of divinity, born at Montauban in 1587. He poſſeſſed excellent natural abilities, and an early inclination for learning, which being duly foſtered, he made a rapid improvement in the ſtudy of the belles-lettres and philoſophy, and particularly of the Latin language, which he wrote and ſpoke with elegance, and with the ſame facility as he did his native tongue. Afterwards he applied himſelf to theological literature, with great reputation; and when he was twenty-four years of age was admitted into the miniſterial function, and appointed one of the paſtors of the church at Puylaurens. In 1627, the national ſynod held at Caſtres nominated him to the office of profeſſor of divinity

divinity at Montauban, the duties of which he diſcharged with great diligence and fidelity, and with diſtinguiſhed applauſe, until his death, which took place in 1650. He was moderator in the national ſynod held at Charenton in the year 1645. The writings which he publiſhed were partly theological and partly poetical. Of the former kind are a volume of ſermons, entitled, *La Voye de Salut*, or The Way to Salvation; ſeveral *Theſes* in the Latin language; a treatiſe *De Chriſto Mediatore*; *Decreti Synodici Carentonienſis, de Imputatione Peccati Adæ, Explicatio et Defenſio*, 1648, 8vo.; and *Explicatio Catecheſeos Religionis Chriſtianæ*, 8vo. The principal of his Latin poems was entitled, *Adolphidos, ſive de Bello Germanico*, an epic poem, in twelve books, highly commended for its ſkilful conſtruction and variety of images, intereſting epiſodes, noble ſentiments, and elegant latinity. Gariſſoles alſo wrote a Latin poem on the coronation of Chriſtina, and another in praiſe of the four proteſtant Swiſs cantons.

GARITE'NA, a town of European Turkey, in the Morea: thirty-two miles weſt of Argos.

GARIVAN', a town of European Turkey, in the province of Bulgaria, near the Danube: twenty-two miles ſouth-weſt of Driſtra.

GAR'IZIM. 2 *Macc.* v. 23. See GERIZIM.

GAR'LAND, *ſ.* [*garlande, guirlande*, Fr.] A wreath of branches or flowers:

A reeling world will never ſtand upright,
'Till Richard wear the *garland* of the realm.
—How! wear the *garland!* do'ſt thou mean the crown?
—Ay, my good lord. *Shakeſpeare.*

The top; the principal; the thing moſt prized:

With every minute you do change a mind,
And call him noble, that was now your hate,
Him vile, that was your *garland*. *Shakeſpeare.*

[In a ſhip.] A collar of rope wound about the head of a main-maſt to keep the ſhrouds from galling.

GAR'LIC, *ſ.* [ȝaꝛ, Sax. a lance; and *leek*, the leek that ſhoots up in blades. *Skinner.*] In botany; ſee ALLIUM, vol. i. p. 349.—*Garlic* has, of all our plants, the greateſt ſtrength, affords moſt nouriſhment, and ſupplies moſt ſpirits to thoſe who eat little fleſh. *Temple.*

'Tis mortal ſin an onion to devour;
Each clove of *garlic* is a ſacred pow'r:
Religious nations ſure, and bleſt abodes,
Where ev'ry orchard is o'er-run with gods. *Tate.*

GAR'LIC PEAR, *ſ.* in botany. See CRATEVA.

GAR'LIN, a town of France, in the department of the Lower Pyrenées, and chief place of a canton, in the diſtrict of Pau: ſixteen miles north of Pau.

GAR'MENT, *ſ.* [*guarniment*, old Fr.] Any thing by which the body is covered; clothes; dreſs.—Our leaf, once fallen, ſpringeth no more; neither doth the ſun or ſummer adorn us again with the *garments* of new leaves and flowers. *Raleigh.*

Faireſt thing that ſhines below,
Why in this robe doſt thou appear?
Would'ſt thou a while more perfect ſhow,
Thou muſt at all no *garment* wear. *Cowley.*

GARN, a town of Sweden, in the province of Upland: twelve miles north-eaſt of Upſal.

GARNA'CHE (La), a town of France, in the department of the Vendée, and chief place of a canton, in the diſtrict of Challans: one league north-north-eaſt of Challans, and two ſouth of Machecoul.

GAR'NER, *ſ.* [*grenier*, Fr.] A place in which threſhed grain is ſtored up.—Barns and *garners* ſhould be never empty. *Shakeſpeare.*

For ſundry foes the rural realm ſurround;
The fieldmouſe builds her *garner* under ground:
For gather'd grain the blind laborious mole,
In winding mazes, works her hidden hole. *Dryden.*

To GAR'NER, *v. a.* To ſtore as in garners:

There, where I have *garner'd* up my heart,
Where either I muſt live, or bear no life. *Shakeſpeare.*

GAR'NER, a river of England, which joins the Garran, and runs with it into the Wye, four miles ſouth-weſt of Roſs, in Herefordſhire.

GARNERA'NS, a town of France, in the department of the Saône and Loire: two leagues ſouth of Maçon.

GAR'NET, *ſ.* [*garnato*, Ital. *granatus*, low Lat. from its reſemblance in colour to the grain of the pomegranate.] A ſtone, which, when tranſparent and of a fine colour, is reckoned among gems. Its colour is blueiſh or yellowiſh red; its tranſparency often obſcure, unleſs it be held to a ſtrong light. The natural form of its cryſtals is various, and ſeldom regular. Its texture is granular. The garnet is a very common ſtone, frequently embodied in the maſſes of compound rocks. The Syrian garnet, which is of a fine red, inclining to purple, and very clear, though leſs brilliant than the oriental amethyſt, is the moſt eſteemed. See the articles GEM, and MINERALOGY.

GAR'NET, *ſ.* [q. d. *cranet*, i. e. a little crane.] Tackle in a ſhip, wherewith goods are hoiſted in or out.

GARNI'ER (John), a learned French Jeſuit, born at Paris in 1612. He entered on his noviciate when he was ſixteen years old, and diſcovering a quick capacity, and an avidity for learning, he received thoſe advantages of inſtruction by which, through his ſedulous application, he roſe to conſiderable literary eminence among his contemporaries. After having for ſome time taught the claſſics and rhetoric with great ſucceſs and applauſe, he filled the chair of philoſophical profeſſor at Paris for ſeven years, and was then appointed to the profeſſorſhip of theology, the duties of which he ably diſcharged for twenty-ſix years. In 1681 he was deputed to attend at Rome, on ſome buſineſs of moment relating to his ſociety; but falling ſick on his journey, he died at Bologna, in the ſeventieth year of his age. He was the author, or editor, of various works, which afford ample evidence of his learning and abilities: ſuch as, 1. *Organi Philoſophiæ Rudimenta*, 1651, reprinted with enlargements in 1677. 2. *Theſes de Philoſophia Morali*, 1651. 3. *Regulæ Fidei Catholicæ de Gratia Dei per Jeſum Chriſtum*, 1655. 4. *Juliani Eclanenſis Epiſcopi Libellus miſſus ad Sedem Apoſtolicam, Notis illuſtratus*, 1668. 5. *Marii Mercatoris Opera, Gr. & Lat.* in two vols. folio, 1673, illuſtrated with learned notes, commentaries, diſſertations, &c. 6. *Liberati Diaconi Breviarium, cum Notis et Diſſertationibus*, 1675, 8vo. 7. *Liber Diurnus Romanorum Pontificum*, 1680, 4to. accompanied with hiſtorical notes and very curious diſſertations; and a ſupplement to the works of Theodoret, publiſhed after the author's death, in 1684, and entitled, 8. *Auctuarium Theodoreti Cyrenſis Epiſcopi, ſeu Operum Tomus Quintus*, in folio, with notes and critical diſſertations. He alſo publiſhed, in 1678, 9. *Syſtema Bibliothecæ Collegii Pariſienſis Societatis Jeſu*, in quarto, which is much commended for the excellence of its arrangement, by means of which it will be found uſeful to perſons engaged in placing large libraries in proper order.

GARNI'ER (Julian), a learned French benedictine monk, of the congregation of St. Maur, born at Connerai, in 1670. He took the vows when he was about twenty years of age, and acquired much applauſe by his proficiency in the different branches of academic learning. His ſuperiors called him to Paris in 1699, and two years afterwards confided to him the taſk of preparing for publication a new edition of the works of St. Baſil. To this undertaking he applied with becoming diligence, and in 1721 produced the firſt volume, in folio, with a new tranſlation, numerous learned notes, and a very excellent preface, abounding in judicious criticiſm and genuine information. The ſecond volume made its appearance in 1723, when Garnier's ſtate of health re-

ceived a ſevere ſhock from the attack of a dangerous illneſs. His anxiety, however, to complete the work, engaged him to devote his remaining ſtrength to that object; but he had ſcarcely entered upon the third volume, before his powers failed, and he was obliged to abandon his undertaking. He died in 1725, when about fifty-five years of age. The care of finiſhing the third volume was entruſted to father Maran, who was alſo the author of the Preface, the Life of St. Baſil, and the Notes. It was publiſhed in 1730. This edition of the works of St. Baſil is one of the beſt editions of the fathers which have proceeded from the labours of the congregation of St. Maur.

GARNI'ER (Robert), an early French poet, born in 1545, at La Ferté Bernard in Maine. He was brought up to the law, and was firſt a counſellor, and then lieutenant-criminal in the preſidency of Mans. In advanced years, Henry IV. created him a counſellor in his grand council. He died at Mans in 1601. He was attached to poetry in his youth, and while ſtudying at Toulouſe obtained a prize in the Floral games of that city. Afterwards, the peruſal of Seneca the tragedian gave him a taſte for dramatic compoſition, and at his ſecond attempt he became the rival in fame of Jodelle, who was the father of French tragedy. The pieces of Garnier, as well as thoſe of his precurſor, were rude and of little intrinſic merit; yet his nine tragedies for a conſiderable time were the delight of the ſtage, and he deſerves a place among the creators of the French theatre. He alſo wrote *L'Hymne de la Monarchie*, and other poems.

To GAR'NISH, *v. a.* [*garnir*, Fr.] To decorate with ornamental appendages.—Paradiſe was a terreſtrial garden, *garniſhed* with fruits, delighting both the eye and the taſte. *Raleigh.*

All within the flowers was *garniſhed*,
That, when mild Zephyrus amongſt them blew,
Did breathe out bounteous ſmells, and painted colours ſhew. *Spenſer.*

To embelliſh a diſh with ſomething laid round it:

With what expence and art, how richly dreſt!
Garniſh'd with 'ſparagus, himſelf a feaſt! *Dryden.*

No man lards fat pork with orange-peel,
Or *garniſhes* his lamb with ſpitchcock'd eel. *King.*

To fit with fetters; a cant term among gaolers and thief-takers.

GAR'NISH, *ſ.* Ornament; decoration; embelliſhment:

Matter and figure they produce;
For *garniſh* this, and that for uſe;
They ſeek to feed and pleaſe their gueſts. *Prior.*

Things ſtrewed round a diſh. [In gaols.] Fetters; *a cant term.* An acknowledgment in money when firſt a priſoner goes into a gaol.

GARNISHEE', *ſ.* is ſuch third perſon or party in whoſe hands money is attached within the liberties of the city of London, by proceſs out of the ſheriff's court; ſo called, becauſe he hath had *garniſhment* or warning, not to pay the money to the defendant, but to appear and anſwer to the plaintiff creditor's ſuit.

GAR'NISHER, *ſ.* One that garniſhes; one that ſets off any thing. *Scott.*

GAR'NISHMENT, *ſ.* Ornament; embelliſhment.—The church of Sancta Guiſtiniana in Padua is a ſound piece of good art, where the materials being ordinary ſtone, without any *garniſhment* of ſculpture, raviſh the beholders. *Wotton.*

GAR'NISHMENT, *ſ.* in law, means a warning given to one for his appearance; for the information of the court; and explaining a cauſe. For example; a perſon is ſued for the detinue of certain writings delivered; and the defendant alleging that they were delivered to him by the plaintiff, and another perſon, upon condition, prays that the other perſon may be warned to plead with the plaintiff, whether the condition be performed or not; in this petition he is ſaid to pray *garniſhment*, which may be interpreted either a warning of that other, or a furniſhing the court with all parties to the action, whereby it may thoroughly determine the cauſe; and until he appears and joins, the defendant is as it were out of the court. *Cromp. Juriſ.* 211. A writ of ſcire facias is to go forth againſt the other perſon to appear and plead with the plaintiff; and when he comes and thus pleads, it is called *enterpleader*. If the garniſhee be returned ſcire feci, and make default, judgment will be had to recover the writings, and for their delivery, againſt the defendant; and if the garniſhee appears and pleads, if the plaintiff recovers, he ſhall have damages. 1 *Brownl.* 147. Garniſhment is generally uſed for a warning; as *garniſher le court*, is to warn the court; and *reaſonable garniſhment*, is where a perſon hath reaſonable warning. *Kitch.* 6. In the ſtat. 27 Eliz. c. 3, we read, upon a *garniſhment* or two *nihils* returned, &c. And further, ſome contracts are naked, *ſans garnement*; and ſome furniſhed, &c.

GAR'NITURE, *ſ.* Furniture; ornament.—They conclude, if they fall ſhort in *garniture* of their knees, that they are inferior in furniture of their heads. *Government of the Tongue.*

Plain ſenſe, which pleas'd your ſires an age ago,
Is loſt, without the *garniture* of ſhow. *Granville.*

GA'RO DE MALA'CA, *ſ.* See AQUILARIA.

GAROFA'LO (Benvenuto), an eminent painter, born at Ferrara, in 1481. He ſtudied under various maſters, and at length fixed his taſte in the Roman ſchool, where he had the good fortune to obtain the friendſhip and inſtruction of Raphael. Returning to Ferrara, he was patroniſed by the duke, and was employed in ſeveral conſiderable works, in which he diſplayed much excellence both in deſign and colouring, and nearly approached to the manner of Raphael himſelf. Some of his fineſt pieces are the Reſurrection of Lazarus, and the Murder of the Innocents, in the church of St. Francis at Ferrara, and the Adoration of the Magi in the chapel of St. George, near that city. He alſo painted landſcape in a capital ſtyle. He copied ſome of the pictures of Raphael with great exactneſs. Garofalo had the misfortune to loſe his ſight in his ſixty-ninth year; and died at Ferrara in 1559.

GA'RON, or GARUM, *ſ.* A kind of pickle prepared of fiſh; at firſt it was made from a fiſh which the Greeks called *garos*; but the beſt was made from mackerel. Among the moderns, *garum* ſignifies the liquor in which fiſh is pickled. A compoſition of this and vinegar is called *oxygarum.*

GARON'NE, a river of France, which riſes in the Pyrenées, on the borders of Arragon, in Spain, and joining with the Dordogne, about twelve miles below Bourdeaux, changes its name to GIRONDE; which ſee.

GARON'NE (Upper), a department of France, bounded on the north by the department of the Lot, on the north-eaſt by the department of the Tarn, on the ſouth-eaſt by the departments of the Aude and the Arriege, on the ſouth by Spain, and on the weſt by the departments of the Upper Pyrenées and the Gers. It takes its name from the Garonne, which paſſes through it. Toulouſe is the capital.

GAROS'MUS, *ſ.* in botany. See CHENOPODIUM.

GAROUAI', or GAROVAY, a town of Africa, on the Grain Coaſt, on the river St. Clement.

GA'ROUS, *adj.* Reſembling pickle made of fiſh.—In a civet-cat an offenſive odour proceeds, partly from its food, that being eſpecially fiſh; whereof this humour may be a *garous* excretion, and olidous ſeparation. *Brown.*

GARRACHI'CHA, a ſeaport town of the iſland of Teneriffe, deſtroyed by an earthquake and eruption of the volcano on the Peak, in the year 1704; ſo that houſes are now built where the ſhips then lay at anchor.

GAR'RAF, a town of Spain, in the province of Catalonia,

talonia, near the ſea coaſt: ten miles ſouth-weſt of Barcelona.

GAR'RAN, *ſ.* [Erſe. It imports the ſame as gelding. The word is ſtill retained in Scotland.] A ſmall horſe; a hobby. A Highland horſe, which, when brought into the north of England, takes the name of *galloway*.—Every man would be forçed to provide winter-fodder for his team, whereas common *garrans* ſhift upon graſs the year round. *Temple.*

GAR'RAN, a river of England, which runs into the Wye, in the county of Hereford.

GARRES'SIO, a town of Italy, in the principality of Piedmont: nine miles ſouth-weſt of Ceva.

GAR'RET, *ſ.* [*garite*, the tower of a citadel, Fr.] A room on the higheſt floor of the houſe.—John Bull ſkipped from room to room; ran up ſtairs and down ſtairs, from the kitchen to the *garret*. *Arbuthnot.*

On earth the god of wealth was made
Sole patron of the building trade;
Leaving the arts the ſpacious air,
With licence to build caſtles there:
And 'tis conceiv'd their old pretence,
To lodge in *garrets*, comes from thence. *Swift.*

Rotten wood. Not in uſe.—The colour of the ſhining part of rotten wood, by daylight, is in ſome pieces white, and in ſome pieces inclining to red, which they call the white and red *garret*. *Bacon.*

GARRET DEN'NIS, an iſland in the Eaſtern Pacific Ocean, about fourteen leagues in circumference, inhabited by blacks, who are armed with lances, bows and arrows, ſituated to the north of New Ireland. Lat. 2. 30. S. lon. 151. 25. E. Greenwich.

GARRETEE'R, *ſ.* An inhabitant of a garret; a poor author.

GAR'RICK (David), the moſt diſtinguiſhed actor on the Britiſh ſtage, born at Hereford in 1716. His grandfather was a refugee from France, on account of the revocation of the edict of Nantes. His father was a captain in the army, and uſually reſided at Lichfield, where he had married the daughter of one of the vicars of the cathedral. David received the firſt rudiments of education at the grammar-ſchool of Lichfield. He was more diſtinguiſhed by his ſprightlineſs than by his application to literature; and he gave a very early proof of his paſſion for the drama, by engaging his young companions to act the Recruiting Officer, in which play he himſelf took the part of Serjeant Kite. At this time he was little more than eleven years of age, and the applauſe he obtained probably made a durable impreſſion upon his mind. As the circumſtances of his father were narrow, it was thought proper to ſend him to Liſbon upon the invitation of an uncle, who was a conſiderable wine-merchant in that capital. From ſome cauſe, however, his ſtay there was very ſhort; he returned to Lichfield, and again went to ſchool, but the volatility of his temper impeded his proficiency in literature. In order to accelerate his improvement, he was, in his nineteenth year, placed under the celebrated Samuel Johnſon, who had then undertaken to inſtruct a few youths in the belles-lettres at his native city of Lichfield; but love for the ſtage had taken ſuch firm poſſeſſion of the mind of young Garrick, that it left little room for claſſical ſtudies, and he was writing ſcenes in comedies of his own invention, when he ſhould have been compoſing exerciſes. He muſt have been able, however, by his manners and talents, to ingratiate himſelf with his grave tutor; for when Johnſon, tired of his ſituation, determined to try his fortune in London, he joined company with his pupil Garrick. This era in the lives of theſe two diſtinguiſhed perſons was the year 173$\frac{6}{7}$. Garrick, by the recommendation of his father's friend, Mr. Gilbert Walmeſley, was ſent to reſide with the Rev. Mr. Colſon, an eminent mathematician at Rocheſter, with the intention of furniſhing him with general knowledge previous to his entering at the Temple. Though he became no great mathematician, or philoſopher, under the tuition of this perſon, he improved in the uſe of his reaſoning powers, and fitted himſelf for the buſineſs of the world. His father died about this time, leaving a large family unprovided; and his mother ſoon followed. His Liſbon uncle, who died ſome time before, had bequeathed him a thouſand pounds, and with this ſum he entered into partnerſhip in the wine trade with his brother Peter. The very different diſpoſition of the two brothers ſoon cauſed a diſſolution of this connection, and David thenceforth reſolved to follow his favourite plan of becoming an actor by profeſſion. He courted the company of ſtage heroes, obtained introductions to the managers, and tried his powers in recitation. At length he began his campaign in the ſummer of 1741, at Ipſwich, with Giffard's company. Under the aſſumed name of Lyddal he played a variety of parts with uniform ſucceſs; and Ipſwich has the honour of firſt having witneſſed and recogniſed the powers of this greateſt of actors.

At this period the ſtages of the metropolis were but indifferently ſupplied with performers in the higher walks of the drama, and there was a manifeſt interruption in the ſucceſſion from the preceding generation. Though Garrick would have diſtinguiſhed himſelf at any time, the preſent interval was particularly favourable to a ſudden and decided eclat. Beſides the two principal theatres of Drury-lane and Covent-garden, there was then a houſe open in Goodman's-fields, of which Giffard was manager. At this the young Roſcius made his firſt entrance in the metropolis, October 19, 1741. He judiciouſly choſe the part of Richard III. as one which would not require a dignity of perſon that he did not poſſeſs; while it would give ſcope to all thoſe ſtrong markings of character and quick changes of paſſion in which his principal excellence ever conſiſted. Though his natural mode of recitation was a novelty in tragedy to a London audience, accuſtomed to the artificial tones of declamation, yet it was a novelty which, by favouring expreſſions, produced its intended effect, and never was an audience betrayed into more hearty and unfeigned applauſe. The part was repeated for ſeveral ſucceſſive nights, and was followed by others both in tragedy and comedy; and ſuch was the blaze of fame attending the new actor, that the eſtabliſhed theatres were deſerted, and ſtrings of carriages from the polite part of the town thronged the ſtreets of the city. Nor was this the mere rage of faſhion. The beſt judges joined their approbation to the public applauſe; and Pope, who was induced to ſee him, pronounced his eulogy by ſaying "that he was afraid the young man would be ſpoiled, for he would have no competitor." He was ſtill at Goodman's-fields, when he appeared as a dramatic writer in two pieces, The Lying Valet, and Lethe; the firſt broad farce, the ſecond a dramatic ſatire. Both were well received, and ſtill keep poſſeſſion of the ſtage. The proprietors of the old theatres, alarmed at his ſucceſs, threatened the manager of Goodman's-fields with a proſecution, and Fleetwood drew away Garrick to Drury-lane. After finiſhing the winter ſeaſon of 1742 there, he went over to Dublin in the ſummer, where he was received with an admiration bordering upon extravagance. He ſo crowded the theatre, in a hot ſeaſon, that an epidemic diſeaſe, which broke out in that capital, was called the *Garrick-fever*. After his return, he took up ſome parts of a kind entirely new to him, among the reſt, that of Abel Drugger, in which he excited great ſurpriſe by baniſhing from one of the moſt lively and expreſſive of countenances every veſtige of ſenſe, and putting on the ſtare of abſolute ſtupidity. It is aſſerted, that by this theatrical degradation he wrought an unlucky cure in a young lady of fortune, who had fallen in love with him under the perſons of Chamont and Lothario. No actor, indeed, ever more thoroughly adopted for the time the characters he undertook, and his

his attention to propriety was uniformly ſupported by every look and geſture while he continued in the ſight of the audience, whether ſpeaking or ſilent. The part of Hamlet, ſo full of ſoul and animation, was that by which he contraſted his Drugger.

Stage quarrels and revolutions, and a ſecond viſit to Dublin, occupied Garrick during the remainder of the period which he paſſed as a hired actor, but with continually increaſing reputation. He produced in that interval his farce of Miſs in her Teens, the hint of which was taken from Dancourt, but with ſuch accommodation to the Engliſh taſte as to make it a favourite. In the ſpring of 1747 he commenced his reſpectable and lucrative career as a theatrical manager. By acting at Covent-garden, he had reduced Drury-lane to ſuch a ſtate of inferiority, that Lacy, the patentee, was glad to admit him as an equal partner upon moderate terms. In this joint concern the two managers wiſely took diſtinct provinces: that of Lacy was the care of the ſcenes and the domeſtic economy, while Garrick ſuperintended the choice of plays, the diſtribution of parts, and the treaties with authors and actors. Under theſe auſpices, the theatre of Drury-lane opened in September, 1747, furniſhed with a prologue by Garrick's old and conſtant friend, Samuel Johnſon, which ranks among the three or four compoſitions of that kind, the merit of which is not temporary, but ſuch as will ever place them in the firſt ranks of Engliſh poetry. It was the prelude of a better era of dramatic exhibitions; in particular it uſhered in the revival of a number of Shakeſpeare's plays, moſtly freed from the taſteleſs and incongruous additions which had been made to them by the writers of the paſt century. Garrick was himſelf the living commentator of that great dramatiſt. By his admirable force of action, he called forth all the latent beauties of ſentiment and tranſient ſtrokes of feeling of the author, and gave to the hearer ideas which might ever have eſcaped the reader. It is certain that the almoſt idolatrous admiration of Shakeſpeare which diſtinguiſhed the eighteenth century, may be traced from the appearance of Garrick in his principal characters.

In 1749 he married mademoiſelle Violetti, who had been a ſtage dancer; ſhe maintained an irreproachable character, and the union was a ſource of mutual felicity till diſſolved by death. Though Garrick was juſtly a favourite with the public, ſome complaints were made of parſimony under his management, in providing thoſe ornamental decorations and ſplendid ſhows which are found neceſſary to keep the eye ſatisfied, as well as the judgment. To obviate this diſcontent, he prepared, in 1754, an exhibition which was to unite every charm of muſic, dancing, and ſcenery, with that of perfect novelty in deſign. No expence was ſpared on the occaſion; and a large body of foreign performers was hired, at the head of whom was Noverre, the celebrated ballet-maſter, whoſe inventive genius produced a ſpectacle which he entitled a Chineſe Feſtival. But before its exhibition, the national prejudices, enforced by a commencing war with France, took alarm at this importation of foreigners, all of whom were, as uſual, called *Frenchmen*, and a violent oppoſition was organiſed. The piece was brought out in November, 1755, and though firſt ſanctioned by the king's preſence, and warmly ſupported by many of the young nobility, its ſixth repreſentation was terminated by a violent riot, by which a damage was incurred to the theatre of ſome thouſand pounds. Garrick was blamed for his pertinacity in contending againſt the voice of the majority, which was attributed to his reluctance at loſing the fruits of great expence.

In his capacity of manager, he had the ſame difficulties to encounter in his tranſactions with the "irritable race" of authors that all his predeceſſors had, and various ſquabbles aroſe on this account, which we ſhall paſs over. It is admitted that his treatment of dramatic writers was more liberal and gentleman-like than that of ſeveral former managers; but his opinion and theirs could not always coincide, and he might occaſionally ſhow a ſenſe of his own conſequence and their inſignificance. Moreover, he, like many of his brethren of the ſtage, frequently paſſed a judgment upon works, which the event proved to be erroneous; nor was he diſpoſed to revoke a ſentence once given. On the whole, however, he kept on good terms with the moſt reſpectable writers, and received from many of them that praiſe which he dearly loved. This fondneſs for applauſe was naturally accompanied with an equal ſenſibility to ridicule or cenſure. The attacks of one of his critics, by their peculiar petulance, drew from him a retort, in a mock-heroic poem, entitled The Fribbleriad, which poſſeſſes conſiderable vivacity and pleaſantry. The perſon ridiculed took, however, a ſevere vengeance, by exciting a formidable riot on the ſubject of admiſſion at half-price, the conſequences of which were both detrimental and humiliating.

In 1763 Garrick reſolved to relax from his cares and fatigues in a tour to the continent. Accompanied by his wife, from whom he was inſeparable, he viſited ſeveral parts of Italy and France, and met with flattering notice from many perſons of diſtinction. At Paris he ſaw and admired the celebrated mademoiſelle Clairon, and theſe two excellent actors gratified a ſplendid circle with ſpecimens of their theatric powers with equal and mutual applauſe. He returned after an abſence of a year and a half, and was welcomed with rapture. The prologue ſpoken by him on his firſt re-appearance was one of his happieſt efforts of the kind, and he was obliged to repeat it ten ſucceſſive nights. He was thought, if poſſible, to be improved in his ſtyle of acting, as he certainly was in his general knowledge of the drama. In the ſeaſon of 1766 he brought out the excellent comedy of The Clandeſtine Marriage, the joint production of himſelf and Colman, whoſe ſeveral ſhares in it are indiſtinguiſhably and harmoniouſly blended.

One of the moſt remarkable events in Garrick's life, was the celebration of the Shakeſpeare jubilee. A mulberry tree, planted by that poet at his native town of Stratford upon-Avon, being cut down, the wood of it was converted into a number of toys and implements, which were eagerly purchaſed. The corporation of Stratford judiciouſly cauſed a box to be made from it, which, with the freedom of the place encloſed, they preſented to the great actor, who had done their poet ſo much honour. This incident probably ſuggeſted to him the celebration of a feſtival in commemoration of Shakeſpeare, upon the ſpot where he was born, and the idea was put in execution in September, 1769. Temporary buildings were raiſed for the occaſion, and various entertainments were planned, ſome ſufficiently appropriate, others too much partaking of the vulgar taſte of rural feſtivities. A ſplendid company aſſembled from the capital and different parts of the kingdom, ſome warmed by literary enthuſiaſm, more led by mere faſhion and the love of novelty. The jubilee laſted three days, in the midſt of moſt unfavourable weather, and, upon the whole, the pleaſure ſeems not to have been adequate to the effort. Garrick, who was the ſoul of the feſtival, exerted all his talents to gratify both the eye and the underſtanding. Beſides various ſongs for muſic, he compoſed an ode, of conſiderable length, to the honour of the great national bard, in which he ſtrained his poetic powers to the height, and with a ſucceſs deſerving at leaſt of temporary applauſe. As he had expended a large ſum in the Stratford pageant, he was careful, with his uſual attention to economy, to reimburſe himſelf. The Jubilee was made into a theatrical ſpectacle, which became ſo popular, that it was repreſented ninety-two nights to crowded audiences. He alſo recited his ode at the theatre, but the ears of the public were much ſooner ſatiated than their eyes.

After the death of Mr. Lacy, in 1773, the ſole management

nagement of the theatre devolved on Garrick. His health was at this time beginning to give way, and his period of life was ill adapted to additional labours. He continued, however, ſome time longer to fulfil the duties of his office; and he rendered an eſſential ſervice to the profeſſion which he had dignified, by perfecting the plan of an inſtitution for the relief of decayed actors, and bountifully contributing to its fund. At length he determined upon his final retreat, and in January, 1776, he parted with his moiety of the Drury-lane patent for the ſum of 35,000l. to ſuch a value had it riſen in his hands! In order to prove that his admirable powers were ſtill unimpaired, he performed, at ſhort intervals, many of his moſt trying and brilliant parts, juſt before he took leave of the ſtage. The laſt character in which he appeared was Don Felix in the Wonder, for the benefit of the theatrical fund. At the concluſion of the play he made a brief farewel addreſs to the audience, which the genuine feelings of regret on both ſides rendered truly pathetic; and few perſons ever quitted a public ſtation with more deſerved plaudits. He did not long enjoy his opulent and well-earned repoſe. In the Chriſtmas of 1778, being upon a viſit at the ſeat of lord Spencer, he was ſeized with ſome alarming ſymptoms, which haſtened him to London. A ſuppreſſion of urine ſucceeded, under the effects of which he ſunk into a ſtate of ſtupor, and died on January 20, 1779. His remains were interred with great pomp in Weſtminſter abbey, attended by many perſons of the firſt diſtinction in rank and talents. His large fortune, after an ample proviſion for his widow, was ſhared among his relations.

David Garrick was in character a man of the world, whoſe vivacity and apparent volatility did not interfere with the ſteady purſuit of fame and fortune. In this he was guided by great good ſenſe and diſcretion, and a ſpirit of order and economy. The latter quality ſubjected him to the imputation of avarice: but though he was fond of money, and did not laviſh it in the careleſs manner of ſome of his detractors, yet he was fully capable of uſing it with liberality. His mode of living was hoſpitable and generous, and his bounty often flowed in a large ſtream of munificence. Inſtead of quoting particular inſtances upon record, it will be ſufficient to repeat what Dr. Johnſon (who knew him well) ſaid of him, that "he believed David Garrick gave away more money than any man in London." His principal foible was vanity, which made him as inordinately fond of adulation, as he was impatient of cenſure or ridicule. This propenſity alſo rendered him culpably jealous of rivals, and he is charged with endeavouring to keep down thoſe riſing talents from which he feared competition. In his commerce with the great he was attentive and reſpectful, yet with freedom enough to make him a delightful companion; and he obſerved decorum ſo well, that perſons of the graveſt and moſt dignified characters courted his ſociety.

As an actor, it ſeems to be allowed that none ever ſurpaſſed him in the truth and nature with which he identified himſelf with the fictitious object of his repreſentation, ſo that he ſeemed, as it were, to have darted his ſoul ſucceſſively into all the forms which he aſſumed. This faculty he diſplayed equally in the moſt comic and the moſt tragic parts, nor was it ever agreed in which of the two his chief excellence lay. Reynolds happily expreſſed this doubt by his charming picture of Garrick, between the comic and tragic muſe, each of whom is contending to poſſeſs him. His voice and his eye were calculated for every poſſible expreſſion of mental feeling. Expreſſion, indeed, was his great ſtrength, and the parts in which he beſt ſucceeded were thoſe in which paſſion moſt predominated. In the enunciation of calm ſentiment, decorated by poetical language, he has had ſeveral ſuperiors.

His literary talents were reſpectable, but not of the higher kind. He compoſed ſome ſmart epigrams, many pleaſant and well-adapted prologues, entertaining, but rather farcical, dramatic pieces, and lively poems of the humorous and familiar claſs. To ſublimity he was inadequate, and his imagination was capable of no lofty flight. Beſides thoſe of his works which have been mentioned in his life, there are a few dramatic interludes, and many alterations of old plays, in which he generally diſplayed a good judgment, and thorough knowledge of ſtage effect.

GAR'RIEL (Peter), a French eccleſiaſtic in the ſeventeenth century, and author of ſeveral works, intended to illuſtrate the civil and eccleſiaſtical antiquities of his country, was a native of Montpellier; but we have no information reſpecting either the time of his birth, or of his death. He became a canon of the cathedral church in that city, and was admitted to the degrees of doctor in civil and canon law. He was the author of the Origin, Alterations, and preſent State, of the Cathedral Church of St. Peter, at Montpellier, 1631, 12mo. and 1634, 8vo. A Chronological View of the Governors of the Province of Languedoc, from the Time of the Romans to the preſent Day, 1645; and *Series Præſulum Megalonenſium & Montiſpelienſium ab Anno 451 ad Annum 1652*, folio; afterwards reprinted in 1665, with enlargements, and a continuation of the hiſtory to that date. By ſome writers, this work is ſaid to be more the production of father Bonnefoy, a Jeſuit, than of Garriel, and it is claimed for that father in the *Bibliothéque* of the writers of the Society of Jeſus. Garriel was alſo the author of a ſmall volume, in folio, entitled *Idée de la Ville de Montpellier, recherchée & preſentée aux honnêtes Gens*, 1665, which is rendered unpleaſant to the reader by the author's tumid ſtyle, and his frequent digreſſions. It is a work, however, in eſteem with antiquaries and collectors. Among the manuſcripts of Coiſlin, in the library of the abbey of St. Germain des Près, there was preſerved A Diſcourſe on the War againſt the Calviniſts of the Province of Languedoc, from the Year 1619 to the Peace of Montpellier, in 1622, of which father Aiſſet has made uſe in the fifth volume of his Hiſtory of Languedoc. As it is aſcribed to a Peter Gariel, or Garriel, who was alſo a canon of Montpellier, moſt probably it was the production of this author.

GAR'RINISH POINT, a cape on the weſt coaſt of the county of Cork, in Ireland, twenty-ſeven miles weſt of Bantry, and one and a quarter north of Codd's Head.

GAR'RIS, a town of France, in the department of the Lower Pyrenées, half a league ſouth of Palais, and ſix and a half ſouth-eaſt of Bayonne.

GAR'RISON, *ſ.* [*garniſon*, Fr.] Soldiers placed in a fortified town or caſtle to defend it:

How oft he ſaid to me,
Thou art no ſoldier fit for Cupid's *garriſon*. *Sidney.*

Fortified place ſtored with ſoldiers:

Whom the old Roman wall ſo ill confin'd,
With a new chain of *garriſons* you bind. *Waller.*

The ſtate of being placed in a fortification for its defence.—Some of them that are laid in *garriſon* will do no great hurt to the enemies. *Spenſer on Ireland.*

To GAR'RISON, *v. a.* To ſecure by fortreſſes:

Others thoſe forces join,
Which *garriſon* the conqueſts near the Rhine. *Dryden.*

GAR'ROWS, a hill-country of Aſia, ſituated to the eaſt of Bengal, weſt of Aſſam, and ſouth of Burhampooter river, and near the Ganges.—See the article HINDOOSTAN.

GARRU'LITY, *ſ.* [*garrulitas*, Lat.] Loquacity; incontinence of tongue; inability to keep a ſecret:

Let me here
Expatiate, if poſſible, my crime,
Shameful *garrulity*. *Milton's Agoniſtes.*

The quality of talking too much; talkativeneſs.—Some-

vices of ſpeech muſt carefully be avoided: firſt of all, loquacity or *garrulity*. *Ray*.

GAR'RULOUS, *adj.* [*garulus*, Lat.] Prattling; talkative:

Old age looks out,
And *garrulous* recounts the feats of youth. *Thomſon*.

GAR'RULOUSNESS, *ſ.* Talkativeneſs, aptneſs to prate. *Scott*.

GAR'SCH, a town of Germany, in the archduchy of Auſtria: four miles ſouth-ſouth-eaſt of Horn.

GAR'STANG, an ancient market-town in Lancaſhire, diſtant 222 miles from London, twelve from Kirkham, and ſix from Eccleſton. It was incorporated into a borough-town by Charles II. and is governed by a bailiff and ſeven capital burgeſſes, who have power to try miſdemeanors committed within the borough; but it ſends no member to parliament. The market is on Thurſdays. There are three annual fairs: the firſt on Holy Thurſday, for cattle and hardware; the ſecond fair begins the 9th of July, and continues the 10th and 11th, for cattle, wool, woollen-cloth, toys, and hardware; the third begins the 21ſt of November, and holds the 22d and 23d, for cattle, horſes, woollen-cloth, hardware, &c. There are ſeveral very extenſive cotton manufactories eſtabliſhed in the environs of the town. Garſtang ſtands on the great poſt road to Carliſle and Glaſgow, betwixt Preſton and Lancaſter, being eleven miles from each, and is a great thoroughfare. The river Wier bounds the eaſtern ſide of the town, which ſupplies the inhabitants with plenty of fine water; and the river abounds with trout, chub, ſmelts, and other fiſh. By its inland navigation, it has communication with the rivers Merſey, Dee, Ribble, Ouſe, Trent, Darwent, Severn, Humber, Thames, Avon, &c. and extends above five hundred miles in the counties of Nottingham, York, Weſtmoreland, Cheſter, Stafford, Warwick, Leiceſter, Oxford, Worceſter, &c.

GAR'TACH, a town of Germany, in the circle of Swabia, and kingdom of Wirtemberg, on a ſmall river which runs into the Neckar: four miles and a half north-weſt of Heilbronn.

GAR'TAU, a town of Germany, in the circle of Lower Saxony, and principality of Luneburg Zell: twelve miles eaſt of Lucno, and forty-eight eaſt-ſouth-eaſt of Luneburg.

GARTEM'PE, a river of France, which runs into the Creuſe, near Roche-Poſay, in the department of the Indre and Loire.

GAR'TER, *ſ.* [*gardus*, Welch; *jartier*, Fr. from *gar*, Welch, the binding of the knee.] A ſtring or ribband by which the ſtocking is held upon the leg.—When we reſt in our cloaths, we looſen our *garters*, and other ligatures, to give the ſpirits free paſſage. *Ray*.

There lay three *garters*, half a pair of gloves,
And all the trophies of his former loves. *Pope*.

The mark of the order of the garter, the higheſt order of Engliſh knighthood:

Now by my george, my *garter*.
—The george, profan'd, hath loſt his holy honour:
The *garter*, blemiſh'd, pawn'd his knightly virtue.
Shakeſpeare.

Among heralds, the principal king at arms.

ORDER *of the* GARTER, a military order of knighthood, inſtituted by Edward III. for the origin and inſignalia of which, ſee the articles HERALDRY and KNIGHT.

To GAR'TER, *v. a.* To bind with a garter.—He, being in love, could not ſee to *garter* his hoſe. *Shakeſ.*

GAR'TERING, *ſ.* The garters, the ſtuff of which garters are made.

GARTH, *ſ.* [as if *girth*, from *gird*.] The bulk of the body meaſured by the girdle. A ſmall cloſe of land, or garden. A dam or weir to catch fiſh.

GARTH (ſir Samuel), a phyſician and poet, deſcended from a good family in Yorkſhire, and received his academical education at Peterhouſe, in Cambridge, where he reſided till he took his degree of doctor of phyſic, in 1691. He was admitted a fellow of the college of phyſicians, in 1692; and was ſo well able to make his way in the metropolis, as ſoon to ſtand in the firſt profeſſional rank. He was a zealous adherent of the whig party; and his talents for company, and proficience in elegant literature, acquired him patrons among the great, and probably cauſed him to be regarded as a valuable auxiliary. It has not often happened that poetical abilities have raiſed a man to medical eminence, except when accompanied with ſome public proofs of profeſſional knowledge. It was, however, fortunate for Dr. Garth, that the poem which firſt gave him celebrity, was upon a ſubject well calculated to make a phyſician popular. The college had adopted a plan of a diſpenſary for the benefit of the poor in London, which, with the gratuitous advice of the faculty, ſhould unite the diſtribution of medicines at a reduced price. Like many other charitable inſtitutions, this was better intended than it was judiciouſly planned; and its execution met with impediments not only from the company of apothecaries, whoſe intereſt was immediately concerned, but from ſome members of the college of phyſicians itſelf. A ſchiſm, in conſequence, aroſe in that body; and Dr. Garth, being of the number who ſupported the charity, thought the cauſe a proper one to employ his wit and poetry, as well as his profeſſional influence. His mock-heroic poem, entitled The Diſpenſary, was firſt publiſhed in 1699, and, both as a ſatire and a poem, was generally read and admired. It preſently went through three editions, was ſucceſſively improved and corrected by the author, and has ſince become part of the durable ſtock of Engliſh poetry. In 1697 he pronounced and printed the Harveian Oration, which has been much praiſed as a piece of Latin oratory. It ſeems, however, to ſtand little diſtinguiſhed among thoſe pieces of anniverſary rhetoric. Dr. Garth, in 1701, meritoriouſly diſplayed his liberality and reſpect for literary eminence, by taking an active part in the funeral of Dryden, over whoſe remains he ſpoke a Latin panegyrical oration. He was, indeed, though a party man, ready to do good offices to men of merit, of oppoſite principles. Hence he was an early encourager of Pope, who has recorded his kindneſs, with an epithet characteriſtic of him:

"*Well-natured Garth* would tell me I could write."

He had too much honour to deſert his patrons when out of power, and did himſelf credit by a copy of verſes addreſſed to lord Godolphin, on his diſmiſſion, in 1710. Theſe were criticiſed in the true party ſtyle, in a paper of the Examiner, and were defended by Addiſon. He alſo lamented the exile of the duke of Marlborough, in ſome complimentary lines. He diſplayed his attachment to the houſe of Hanover, by an elegant Latin dedication of an intended edition of Lucretius to the elector (afterwards George I.) in 1711. Upon the acceſſion of that prince, his zeal was rewarded by the honour of knighthood, which he had the ſatisfaction of receiving from the ſword of his hero, Marlborough. He was alſo appointed phyſician in ordinary to the king, and phyſician-general to the army. In the height of reputation both medical and literary he died, after a ſhort illneſs, in June, 1718-9, and was interred at Harrow in Middleſex. If his profeſſional celebrity may be eſtimated by ſome lines of lord Landſdown's on his ſickneſs, it muſt have been high indeed, for "his danger is ſaid to be the danger of mankind." Yet his name is unknown in medical hiſtory, as the author of one ſingle improvement or obſervation in his art! One of Garth's laſt literary taſks was an edition of Ovid's Metamorphoſes, tranſlated by ſeveral hands. To this he prefixed a preface, which is no favourable ſpecimen of his critical abilities.

GARTH'MAN, *ſ.* A perſon employed to catch fiſh by

by means of fiſh-garths, or weirs. By ſtatute it is ordained, that no fiſher, nor garthman, ſhall uſe any nets or engines to deſtroy the fry of fiſh, &c. 17 *Rich.* II. c. 9. The word is derived from the Scotch *gart*, which ſignifies *forced* or *compelled*; becauſe fiſh are forced by the weir to paſs in a loop, where they are taken.

GARTZ, a town of Pomerania, in the iſland of Rugen, built on the ſpot on which formerly ſtood a powerful city, called *Carenz*, which was deſtroyed by the dukes of Pomerania, in the 12th century.

GARTZ, a town of Pruſſian Pomerania, in the principality of Stettin, ſituated on the Oder. Lat. 53. 13. N. lon. 34. 45. E. Ferro.

GARVA'O, a town of Portugal, on the ſouth ſide of the Tagus, in the province of Alentejo; twelve miles eaſt of Abrantes.

GARVA'O, a town of Portugal, in the province of Alentejo: two leagues weſt of Ourique.

GAR'VELACH, a ſmall iſland near the weſt coaſt of Scotland, in the county of Argyle: eight miles ſouth-eaſt from Mull Iſland.

GAR'VILANS, a ſmall iſland on the north coaſt of Ireland, in the county of Donegal: about two miles eaſt-ſouth-eaſt from Malin Head.

GAR'VIS, a ſmall iſland of Scotland, in the Frith of Forth: five miles ſouth of Dumfermline.

GA'RUM, *ſ.* The brine or pickle in which fiſh are preſerved. See GARON.

GARUM'NA, in ancient geography, a river of Gaul, now called *Garonne*, riſing in the Pyrenean mountains, and ſeparating Gallia Celtica from Aquitania. It falls into the bay of Biſcay, and has, by the perſevering labours of Louis XIV. of France, a communication with the Mediterranean by the canal of Languedoc, carried upwards of one hundred miles through hills, and over vallies.

GARWO'LIN, a town of Poland, in the palatinate of Maſovia: twelve miles ſouth-eaſt of Czerſk.

GARZ, a town of Germany, in Anterior Pomerania, on the Oder: ſurrounded with walls in 1258: thirty-ſix miles north of Cuſtrin, fifty-three north-eaſt of Berlin, and fourteen ſouth of Old Stettin.

GAR'ZI (Lodovico), an eminent painter, born at Piſtoia (or at Rome) in 1640. He was ſent at the age of fifteen to the ſchool of Andrea Sacchi, and became the favourite pupil of that maſter. He acquired a proficiency in every part of his art, and his reputation extended throughout Italy. After having executed ſeveral public works at Rome, he was ſent for to Naples in order to paint the cupola of the church of St. Catharine, at Formello. His ſucceſs in this work cauſed him to be employed in the palace of the viceroy; and he received great offers to induce him to ſettle in Naples, but preferred returning to Rome. His chief works are in the churches of that city, and they are numerous. In point of invention and colouring, he had few ſuperiors. He drew correctly, and particularly excelled in groups of boys and angels. He has, however, leſs grace in the airs of his heads than Carlo Maratti, who was his fellow-pupil, and whom in general he much reſembled in ſtyle of painting. Garzi's induſtry was unremitted, and old age did not cauſe him to diſcontinue his labours. At the age of fourſcore he engaged to paint the cupola of the church Degli Stigmati, and ſucceeded ſo well in it, that it is reckoned his beſt performance. The effort, however, exhauſted him, and he died in 1721.

GAR'ZIS, a town of Africa, in the kingdom of Fez, ſurrounded with walls, the houſes built with black ſtone, ſituated in a fertile country: fifty-ſix miles ſouth of Melilla.

GAS or GAZ, [from *gaſcht*, Germ. an eruption of wind.] Any matter ſubtiliſed by heat into an elaſtic aëriform ſtate.—For the formation and properties of the different *gaſes*, ſee the article CHEMISTRY, vol. iv. p. 193, 202, 210, &c.

GAS'BORN, a town of Sweden, in the province of Warmeland: forty-three miles north-north-eaſt of Carlſtadt.

GASCOI'GNE (ſir William), chief juſtice of the court of king's bench under Henry IV. A moſt learned and upright judge: who being inſulted on the bench by the then prince of Wales, afterwards Henry V. with equal intrepidity and coolneſs committed the prince to priſon; and by this ſeaſonable fortitude laid the foundation of the future glory of that great monarch, who from this event dated his reformation from the licentiouſneſs of his youth. It is not well authenticated that the prince ſtruck ſir William, as recorded by Shakeſpeare; but all authors agree, that he endeavoured to interrupt the courſe of juſtice, in order to ſcreen a worthleſs dependant. Sir William died in 1413.

GASCOI'GNE (George), an Engliſh poet of ſome fame in the reign of queen Elizabeth, born at Walthamſtow in Eſſex, of an ancient family, and educated at Cambridge. From thence he removed to Gray's Inn, and commenced ſtudent in the law; but poſſeſſing a genius too volatile for that ſtudy, he travelled abroad, and for ſome time ſerved in the army in the Low Countries. He afterwards went to France; where he became enamoured of a Scottiſh lady, and married her. Being at length, ſays Wood, weary of thoſe vanities, he returned to England; and ſettled once more in Gray's Inn, where he wrote moſt of his dramatic and other poems. The latter part of his life he ſpent in his native village of Walthamſtow, where he died, in 1578. He had the character of a polite gentleman, an eloquent and witty companion, *et vir inter poetas ſui ſeculi præſtantiſſimus*. His plays, firſt printed ſeparately, were afterwards, with ſeveral other poems, &c. re-printed in two volumes, 4to. the firſt volume in 1577, the ſecond in 1587.

GAS'COIN, *ſ.* The hinder thigh of a horſe, which begins at the ſtifle, and reaches to the bending of the ham.

GASCONA'DE, *ſ.* [French, from *Gaſcon*, a nation eminent for boaſting.] A boaſt; a bravado.—Was it a *gaſconade* to pleaſe me, that you ſaid your fortune was increaſed to one hundred a-year ſince I left you? *Swift.*

To GASCONA'DE, *v. n.* To boaſt; to brag; to bluſter.

GAS'CONY, before the revolution, a conſiderable province of France, ſituated between the Garonne, the ſea, and the Pyrenées. Sometimes, but improperly, under the name of Gaſcony, Languedoc and the whole of Guienne were included. The Gaſcons have a great deal of ſpirit; but their exaggeration in deſcribing their exploits, has made the term *Gaſconade* proverbial. The Gaſcons who dwell near the Pyrenées, are originally from Spain.

GASCOON', *ſ.* A native of Gaſcony. *Scott.*

GASCUE'NA, a town of Spain, in the province of New Caſtile: thirty miles weſt-north-weſt of Cuença.

GAS'ERA, a city of Paleſtine, where Judas Maccabeus finally overcame Nicanor; a day's journey from Adaſa. 1 *Macc.* vii. 45.

To GASH, *v. a.* [from *hacher*, Fr. to cut. *Skinner.*] To cut deep ſo as to make a gaping wound; to cut with a blunt inſtrument ſo as to make the wound wide.—Wit is a keen inſtrument, and every one can cut and *gaſh* with it: but to carve a beautiful image requires art. *Tillotſon.*

Streaming with blood, all over *gaſh'd* with wounds,
He reel'd, he groan'd, and at the altar fell. *Phillips.*

GASH, *ſ.* A deep and wide wound.—Hamilton drove Newton almoſt to the end of the liſts: but Newton on a ſudden gave him ſuch a *gaſh* on the leg, that therewith he fell to the ground. *Hayward.*

But th' ethereal ſubſtance cloſ'd,
Not long diviſible; and from the *gaſh*
A ſtream of nectarous humour iſſuing flow'd. *Milton.*

The mark of a wound.—I was fond of back-ſword and cudgel play, and I now bear in my body many a black and blue *gaſh* and ſcar. *Arbuthnot.*

GAS'KET, *ſ.* A ſea term; a kind of plated cord faſtened to the ſail-yards of a ſhip, and uſed in furling the ſails.

GAS'KINS, *ſ.* [from *Gaſcoigne.* See GALLIGASKINS.] Wide hoſe; wide breeches. *An old ludicrous word:*

If one point break, the other will hold;
Or, if both break, your *gaſkins* fall. *Shakeſpeare.*

GASOM'ETER, or GAZOMETER, *ſ.* a machine conſtructed of ſeveral tubes and veſſels, for the purpoſes of chemical inveſtigation, in examining and defining the properties of the various kinds of gaſes. Lavoiſier firſt gave the name of *gazometer* to an apparatus which he invented for the purpoſe of meaſuring and transferring gaſes; which, by promiſing to become of great utility to the philoſophical world, ſoon excited the attention and induſtry of others in improving and extending ſo uſeful an invention. The moſt approved machines of this deſcription, with correct engravings, are given in the article CHEMISTRY, vol. iv. p. 374, 378, 380, &c.

To GASP, *v. n.* [from *gape, Skinner*; from *giſpe*, Dan. to ſob. *Junius.*] To open the mouth wide; to catch breath with labour.—The ladies *gaſp'd*, and ſcarcely could reſpire. *Dryden.*

Pale and faint,
He *gaſps* for breath; and, as his life flows from him,
Demands to ſee his friends. *Addiſon's Cato.*

To emit breath by opening the mouth convulſively:

I lay me down to *gaſp* my lateſt breath;
The wolves will get a breakfaſt by my death. *Dryden.*

To long for. This ſenſe is not proper, as nature never expreſſes deſire by gaſping.—The Caſtilian and his wife had the comfort to be under the ſame maſter, who, ſeeing how dearly they loved one another, and *gaſped* after their liberty, demanded a moſt exorbitant price for their ranſom. *Addiſon.*

GASP, *ſ.* The act of opening the mouth to catch breath. The ſhort catch of breath in the laſt agonies:

If in the dreadful hour of death,
If at the lateſt *gaſp* of breath,
When the cold damp bedews your brow,
You hope for mercy, ſhew it now. *Addiſon.*

GAS'PAR I'SLAND, a ſmall iſland in the Eaſtern Sea, which gives name to a channel between the iſlands of Banca and Billiton, called *Gaſpar Straits.* Lat. 1. 45. S. lon. 107. E. Greenwich.

GASPARI'NO (Barziza), one of the early Italian ſcholars, born in the latter part of the fourteenth century at Barziza, a place in the Bergamaſque, whence he derived his ſurname. His father's name was Bettino. He early acquired a taſte for the good authors of antiquity, and became a profeſſor of belles-lettres at the univerſity of Pavia, about the commencement of the fifteenth century, and continued there till 1407. He then paſſed ſome time at Venice, after which he was invited to the profeſſorſhip of rhetoric in Padua, where he alſo taught moral philoſophy. The charge he generouſly took upon himſelf of maintaining eight children of his deceaſed brother, reduced him to ſuch indigence, that he was compelled to ſell his books; but he was ſomewhat relieved by an augmentation of his ſalary. In 1418, Philip Maria Viſconti, duke of Milan, ſummoned him to his capital, in order to open a public ſchool of eloquence. He left Padua with regret; but the duke, by his friendſhip and munificence, rendered the change as agreeable as poſſible to him. He employed his leiſure time at Milan, in giving private inſtructions to young perſons of family, and in copying and correcting the manuſcripts of ancient authors. He likewiſe compoſed ſeveral works, in which he paid peculiar attention to the purity of his Latin ſtyle. The time of his death is not certainly known, but it was probably in the beginning of 1431. His works conſiſt of ſhort treatiſes on grammar and rhetoric; of orations compoſed upon various occaſions; of letters to his friends; and of other epiſtles written by way of exerciſe, and as models to his pupils. Of his Letters, there have been ſeveral editions, particularly one by Cord. Furietti, in 1723, to which are added his orations, and the works of his ſon Guiniforte, who was alſo a man of learning.

GASPE BAY, a bay on the coaſt of Canada, in the gulf of St. Lawrence, a little to the north of Cape Gaſpe: near which is the Indian ſettlement of Gaſpeſians.

GASPE'SIA, a country on the ſouth ſide of the mouth of St. Lawrence river, and on the north ſide of Chaleurs bay, in Lower Canada. Its eaſtern extremity is Cape Roſiers. The Indians called Gaſpeſians inhabit here.

GAS'SE, a town of Italy, in the principality of Piedmont, on the Po: five miles ſouth of Chivaſſo.

GASSEN'DI (Peter), a very eminent philoſopher and mathematician, born in 1592, at Chanterſier, about three miles from Digne, in Provence. He afforded early evidence that he poſſeſſed a lively genius, and a happy memory, which determined his parents, though they were but in moderate circumſtances, to beſtow upon him the beſt education in their power. When he was of a proper age to be ſent to ſchool, he was placed under the inſtructions of an excellent maſter at Digne, where he made a rapid progreſs in the knowledge of the Latin tongue, and alſo acquired a pre-eminence over his ſchool-fellows in rhetorical exerciſes. Afterwards he was ſent to ſtudy philoſophy for two years, under an able profeſſor at Aix; and at the expiration of that period, returned to his father's houſe at Chanterſier. He had not been long at home, before he was invited to teach rhetoric at Digne, when not quite ſixteen years of age; and about three years afterwards he was appointed to fill the vacant chair of philoſophy in the univerſity of Aix. During his reſidence at Digne he had ſedulouſly proſecuted his ſtudies in the learned languages, mathematics, and aſtronomy; and after a diligent examination of the different ſyſtems of philoſophy among the ancients, embraced that of Epicurus, of which he afterwards proved himſelf the moſt ingenious defender in modern times. When he entered upon his philoſophical profeſſorſhip at Aix, notwithſtanding that the authority of Ariſtotle was ſtill acknowledged in almoſt all the public ſchools, Gaſſendi, after the examples of Vives, Ramus, and others, ventured publicly to expoſe the defects of his ſyſtem. The lectures which contained his cenſures of the Ariſtotelian philoſophy, delivered in the indirect form of paradoxical problems, were publiſhed under the title of *Exercitationes Paradoxicæ adverſus Ariſtotelem.* This work, which gave great offence to thoſe who ſtill retained their predilection for ſcholaſtic ſubtlety, obtained the author no ſmall degree of reputation with ſeveral learned men, particularly with Nicholas Peireſc, the preſident of the univerſity of Aix, who determined to procure for him a ſituation in the church, in which he ſhould be enabled to purſue his favourite ſtudies at his leiſure, and without any moleſtation. After Gaſſendi had entered into holy orders, through the intereſt of Peireſc, and Joſeph Walter prior of Vallette, he was promoted to a canonry in the cathedral church of Digne, and admitted to the degree of doctor of divinity; and afterwards received the appointment of warden, or rector of the ſame church. In conſequence of theſe promotions he reſigned his profeſſorſhip at Aix, and retiring to Digne, applied himſelf cloſely to his philoſophical and aſtronomical purſuits. Among his other works which he wrote in this place was a ſecond book of his *Exercitationes Paradoxicæ*, intended to expoſe the futility of the Ariſtotelian logic. It was his firſt intention to purſue the plan ſtill further; but the violent oppoſition which he met with from ſome of the zealous and powerful advocates for the authority of Ariſtotle, induced him to deſiſt from all direct attacks upon his philoſophy. Still, however, he profeſſed his attachment to the ſyſtem of

of Epicurus, and defended it with great learning and ability. From Lucretius, Laertius, and other ancient writers, he undertook to frame a conſiſtent ſcheme of Epicurean doctrine, in which the phenomena of nature are immediately derived from the notion of primary atoms. But he was aware of the fundamental defect of this ſyſtem, and added to it the important doctrine of a divine ſuperintending mind, from whom he conceived the firſt motion and ſubſequent arrangement to have been derived, and whom he regarded as the wiſe governor of the world. He ſtrenuouſly maintained the atomic doctrine in oppoſition to the fictions of the Carteſian philoſophy, which were at that time obtaining great credit; and particularly aſſerted, in oppoſition to Des Cartes, the doctrine of a vacuum. On the ſubject of morals he explained the permanent pleaſure or indolence of Epicurus, in a manner perfectly conſiſtent with the pureſt precepts of virtue. In 1628 Gaſſendi, for the ſake of extending his acquaintance with the learned, viſited Holland, where his philoſophical and literary merit ſoon procured him many admirers and friends. While he was in that country he wrote an elegant and judicious apology for his friend the learned Merſenne, in reply to the cenſures of Robert Fludd, on the ſubject of the Moſaic philoſophy. After his return to France he continued his philoſophical, and particularly his aſtronomical, ſtudies, purſuing with great care a ſeries of celeſtial obſervations, in order to complete his ſyſtem of the heavens. Being called by a law-ſuit to Paris, he there formed an acquaintance with the men moſt diſtinguiſhed for learning and ſcience in that capital, and by his agreeable manners, as well as reputation, ſecured the eſteem of perſons of high rank and quality, and in particular of cardinal Richelieu, and of his brother the cardinal of Lyons. Owing to the application and intereſt of the latter, in 1645, Gaſſendi was appointed regius-profeſſor of the mathematics at Paris. This inſtitution being chiefly intended for aſtronomy, he read lectures on that ſcience to crowded auditories, by which he acquired great popularity, and roſe to high expectations. But the fatigues of that appointment were more than his ſtrength, already reduced by too intenſe application, was able to bear; and having caught a cold, which brought an inflammation upon his lungs, he was obliged, in 1647, to quit Paris, and to return to Digne, for the benefit of his native air. After having his health in ſome meaſure re-eſtabliſhed by the intermiſſion of his ſtudies, in 1653 he returned again to Paris, where he publiſhed the Lives of Tycho Brahe, Copernicus, Purbach, and Regiomontanus; and then reſumed, with as much intenſeneſs as ever, his aſtronomical labours. His feeble ſtate of health, however, was now unequal to ſuch exertions, which brought on a return of his diſorder, under which, with the aid of too copious and numerous bleedings, he ſunk in 1655, when in the ſixty-third year of his age. A little before he expired, he deſired his ſecretary to lay his hand upon the region of his heart; which when he had done, and remarked on the feeble ſtate of its pulſation, Gaſſendi ſaid to him, "You ſee how frail is the life of man!" which were the laſt words that he uttered.

Gaſſendi was the firſt perſon who obſerved the tranſit of Mercury over the ſun. Kepler had predicted that it would take place on the 7th of November, 1631. Gaſſendi, who was then at Paris, made due preparations to obſerve it; and, after having for ſome time miſtaken the appearance of that planet for a ſolar ſpot, became at length ſenſible of his error by the rapidity of its movement, and took care to calculate the time of its egreſs from the ſun's diſk, as well as its diſtance from the ſun's vertical point. From Gaſſendi's letters it appears, that he was often conſulted by the moſt celebrated aſtronomers of his time, as Kepler, Longomontanus, Snell, Hevelius, Galileo, Kircher, Bulliald, and others; and his labours certainly entitle him to a high rank among the founders of the reformed philoſophy. Gaſſendi poſſeſſed a large and valuable library, to which he added an aſtronomical and philoſophical apparatus, which, on account of their accuracy and worth, were purchaſed by the emperor Ferdinand III. and afterwards depoſited, with other choice collections, in the imperial library at Vienna. The manuſcripts which he left behind him, and the treatiſes formerly publiſhed by himſelf, were printed together, accompanied by the author's life, and publiſhed by Sorbiere, in ſix volumes, fol. 1658. They conſiſt of the philoſophy of Epicurus; the author's own philoſophy; aſtronomical works; the lives of Pierеſc, Epicurus, Copernicus, Tycho Brahe, Purbach, Regiomontanus, John Muller, &c. a refutation of the meditations of Des Cartes; and Epiſtles, and other treatiſes.

GAS'SION (John de), marſhal of France, born in 1609 at Pau, where his father was preſident of the parliament. At the age of ſixteen he entered into the gendarmes of the prince of Piedmont; and in 1627, and two years after, he ſerved under the duke de Rohan in the civil wars on the Calviniſt ſide, to which he was always attached. When the great Guſtavus entered Germany, Gaſſion joined him, and was made captain of his body-guard. He was afterwards raiſed to the rank of a field-officer in the cavalry, in which poſt he performed eſſential ſervices in many actions, and eſpecially at the battle of Leipſic. Guſtavus, who highly eſteemed his valour and fidelity, would have diſtinguiſhed him by ſome ſignal recompence, had he not ſoon after loſt his life at Lutzen. After that event, Gaſſion returned to France with his regiment, and entered under the marſhal de la Force in Lorrain, where he rendered himſelf the terror of the enemy. He performed many remarkable exploits, and was preſent in ſeveral conſiderable actions. The duke d'Anguien (Condé) gave him a liberal ſhare in the honour of the victory at Rocroi. He received a dangerous wound at the ſiege of Thionville, in recompence for which he obtained, in 1643, the marſhal's ſtaff. In the following year he was appointed lieutenant-general of the army in Flanders, nominally commanded by Gaſton duke of Orleans. He had a great ſhare in the capture of ſeveral towns in that diſtrict, which were formed into a government, and entruſted to him. At length, when at the height of his reputation, he received a mortal wound at the ſiege of Lens, in 1647. He was buried in the proteſtant church at Charenton. The marſhal de Gaſſion was characteriſed by a daring courage and ſpirit of enterpriſe which overcame all obſtacles. "Speculation (ſaid he) is a fine thing in the cloſet, but boldneſs and action are the requiſites in war." Richelieu, on this account, ſo much confided in him, that when urged with difficulties in a plan, he uſed to ſay, "They will be removed by Gaſſion." The marſhal himſelf, in anſwer to ſome repreſentations that were made him by an officer on the impoſſibility of ſomething he was going to undertake, replied, "I have that in my head and at my ſide which will overcome this ſuppoſed impoſſibility." He would never marry, giving as a reaſon, "that he valued life too little to impart it to any." The hiſtory of his life has been publiſhed by the abbé de Pure in four volumes, 12mo.

GAST, *ſ.* [Saxon.] A ghoſt; terror; gaſtlineſs.

To GAST, *v. a.* [from ȝaſt, Sax. See AGHAST.] To make aghaſt; to fright; to ſhock; to terrify; to fear; to affray:

When he ſaw my beſt alarm'd ſpirits
Bold in the quarrel's right, rous'd to the encounter,
Or whether *gaſted* by the noiſe I made,
Full ſuddenly he fled. *Shakeſpeare.*

GASTAL'DUS, *ſ.* In antiquity; an officer in a prince's court anſwering to the ſteward of the houſhold.

GASTAU'D (Francis), a French prieſt, and counſellor of eminence, born at Aix in Provence. When he was fourteen years of age he entered into the congregation of the Oratory, and went through his courſe of philoſophy at Marſeilles, and afterwards that of theology at Arles. At the expiration of five years he quitted the congregation, and removed to Paris, where he was admitted into orders, and officiated for ſome years in the pariſh church of St. Paul. He was greatly admired and followed as a preacher, and indeed poſſeſſed excellent qualifications for a pulpit orator. For, beſides much natural vivacity, he was diſtinguiſhed by the correctneſs and delicacy of his taſte, the eaſe of his addreſs, the chaſtity of his elocution, and, what is not often combined with the foregoing recommendations, the ſolidity and uſefulneſs of his matter. In 1699 he publiſhed, A Collection of Homilies on the Epiſtle to the Romans, &c. in two volumes 12mo. which is a work of conſiderable merit, and is preceded by an excellent delineation of the character of St. Paul. In the ſame year another piece came from his pen, of a very different nature from the former, entitled, The Funeral Oration of Maria-Angelica Carlier, Wife of M. Tiquet, Counſellor of the Parliament of Paris, who was beheaded for making an attempt upon the life of her huſband. This is a piece of pleaſantry, which the author's complaiſance towards ſome ladies of his acquaintance induced him to draw up, and it was ſent to the preſs without his knowledge. It occaſioned, however, ſome ſevere ſtrictures to be written againſt it by father Chauchemer, a Dominican, and a celebrated preacher, who very properly reproved the author for indulging in a ſportive vein on ſo ſerious a ſubject, and added to them A Moral and Chriſtian Diſcourſe on the Life and Death of Madame T.... Theſe pieces were collected together and publiſhed in 1699, in 8vo. The abbé Gaſtaud returned to Aix in 1700; and after the death of his elder brother, a celebrated advocate in the parliament of Provence, determined himſelf to embrace the ſame profeſſion. With this deſign he retired into the country, and applied with great diligence to the ſtudy of the law. He then took his degrees, and was admitted an advocate, after he had procured a diſpenſation from the court of Rome. At the bar he appeared with the ſame diſtinction as had formerly attended him in the pulpit, and was eminently ſucceſsful in conducting eccleſiaſtical cauſes, and thoſe in which the intereſts of the poor were involved. He was one of the warmeſt admirers of the celebrated Queſnel, and one of the moſt active opponents of father Giraud, and his brethren the Jeſuits, againſt whom he gained a famous cauſe in 1717. He alſo wrote a bitter piece againſt the order, entitled, The Policy of the Jeſuits unmaſked; and ſome treatiſes againſt the biſhop of Marſeilles, on the ſubject of grace and other topics, which occaſioned him to feel the ſevere vengeance of that prelate: for Gaſtaud was by his intereſt exiled to Viviers, in 1727; and after he had been permitted to return home, he was exiled to the ſame place a ſecond time in 1731, where he died in the courſe of the following year, and his corpſe was refuſed the rites of Chriſtian burial.

GAS'TEIN, a town of Germany, in the circle of Bavaria, and archbiſhopric of Saltzburg; celebrated for its warm baths and mines of lead, iron, and gold: thirty-ſix miles ſouth of Saltzburg, and ſixteen weſt-ſouth-weſt of Radſtadt.

GAS'TEL, a river of Wales, which runs into the Conway, in the county of Caernarvon.

GAS'TER, *ſ.* [Greek.] The medical term for the belly, the ſtomach, or the uterus.

GAS'TER, a fortreſs of Africa, in the country of Segilmeſſa.

GAS'TER, a bailiwic of Swiſſerland, belonging to the cantons of Schwitz and Glaris, to whom it was ſold by the houſe of Auſtria, in 1438.

GASTEROPEL'ECUS, *ſ.* in ichthyology. See SALMO *gaſteropelecus*.

GASTEROS'TEUS, *ſ.* in ichthyology, the STICKLEBACK; a genus of the thoracic order of fiſhes, the generic characters of which are, the tail carinated at the ſides, the back furniſhed with prickles, or ſpines, ſeparate one from the other. The body is long, laterally compreſſed, and covered with ſcuta, or bony plates, inſtead of ſcales. The head is long, and ſmooth; the jaws uſually of an equal length, and armed with ſmall teeth. The tongue is ſhort and blunt, the palate ſmooth. The eyes are placed on the ſides of the head; they are round, ſomewhat protruded, and covered with a membrane. The noſtrils are ſmall, lying midway between the eyes and mouth. The gill-coverts are round, ſtriated, and conſiſt of two laminæ. The membrane of the gills is in general quite concealed, and ſuſtained by from three to ſeven rays. The back is ſtraight, and the lateral line is parallel with it. The belly is thin. They have ſeven fins; two pectorals, two ventrals, one anal, one at the tail, and one at the back, with diſtinct ſpines between it and the head. The ventral fins are behind the pectorals, but above the ſternum: this ſhews an approach to the abdominal order.

Theſe fiſhes live in the ſea; but ſome ſpecies are found in freſh water. They feed on inſects, worms, and the ova of other fiſhes. No trace of this genus is to be found in the writings of the ancient naturaliſts. There are twenty-one ſpecies, three of which only are inhabitants of our rivers and ſhores; namely, that with three, that with ten, and that with fifteen, ſpines upon the back. The former are ſeen in immenſe quantities in the fens of Lincolnſhire, and the rivers that flow from them. At Spalding, they appear once every ſeven or eight years in the Welland, where they mount the river in ſuch vaſt columns, that they are uſed in manuring the land. An idea of their numbers may be formed, from a circumſtance mentioned by Pennant, of a man earning four ſhillings a-day by taking and ſelling them to the farmers at an halfpenny a buſhel. The cauſe of theſe temporary migrations of the ſtickleback, is ſuppoſed to ariſe from the vaſt quantities waſhed out of the fens by the floods, and collected in ſome deep hole, till, overcharged with numbers, they are obliged periodically to attempt a change of habitation. The endeavours they uſe, and the exertions they make, in getting from one place to another where obſtacles intervene, are very extraordinary; for, though many ſpecies among them are ſeldom known to be more than two inches in length, they have been ſeen to ſpring a foot and a half (nine times their own length) in perpendicular height from the ſurface of the water, and in an oblique direction much farther. They ſpawn in April and June on the aquatic plants; and are very ſhort-lived, ſcarcely ever attaining the third year. They are in general too ſmall to be of any eſſential ſervice as food to mankind; but in ſome parts of the continent they are of conſiderable uſe in fattening ducks and pigs.

1. Gaſteroſteus aculeatus, the three-ſpined ſtickleback, or banſtickle. The three ſpines on the back form the ſpecific character and the Engliſh name. There are 3 rays in the membrane of the gills, 10 in the pectoral fins, 2 in the ventrals, 9 in the anal, 12 in the tail, and 13 in the dorſal. The head is fore-ſhortened, and compreſſed at the ſides. The jaws are of equal length, and the aperture of the mouth pretty wide. The eyes are protruded; pupil black; iris ſilvery. The covert of the gills is large, and ſilver-coloured, as are the ſides. In ſome the neck and breaſt are of a beautiful red, which is ſo durable as to be viſible after the fiſh has been ſeveral months preſerved in ſpirits. Two of the ſcuta appear

pear at the breaſt, one at the belly, and thirteen on each ſide; at the tail, inſtead of the ſcuta, the ſkin is puffed up and wrinkled. The lateral line runs along above the bony plates, or ſcuta; it is ſomewhat irregular, but nearer to the back than to the belly. The fins are yellowiſh; thoſe of the belly are compoſed of a ſtrong ſpine jagged or toothed on both ſides, and of one ſoft ſhort ray; theſe ſpines are very ſharp and hard, and ſo knit into the bones, that even after the death of the fiſh it is a very difficult matter to bend them. Had not Providence given ſuch a protection to this little fiſh, which lives ſo ſhort a time, and which produces not a thouſandth part of the eggs that other fiſhes do, the race would ſoon be extinct. The firſt ray of the dorſal and anal fins is alſo a ſpine; the tail fin is ſtraight.

This fiſh is found both in running ſtreams and in ſtagnant waters. It grows not above three inches long; it ſpawns in April and May, laying its ova on aquatic plants; at that time they quit the lakes, and mount the communicating ſtreams. They live on the ova and young of other fiſh, and are reckoned very hurtful to the fiſhery, ſo that the fiſhermen always deſtroy them when they can; they feed alſo on worms and inſects. Though this ſpecies be very ſmall, it does not eaſily become a prey to the rapacious kinds on account of its ſtrong ſpines, as has been before remarked; but its moſt fatal enemies are various kinds of worms which pierce the inteſtines. Where the ſpecies is plenty, being little eſteemed as food, they are uſed as manure; near Dantzick they extract oil from them; and they are alſo uſed, mixed with clay, to fatten ducks, or to feed ſwine. Though this fiſh intrinſically be of ſmall value, yet it furniſhes ſome curious obſervations to the naturaliſt; this ſpecies is among fiſh what the ephemerides (who live but a day) are among the inſect tribe; for, while ſome ſpecies of fiſh live for ages, or at leaſt for many ſcores of years, this little creature finiſhes its courſe in the ſecond or third year after its birth; and, while others depoſit millions of eggs, this lays but very few. But Cepede ſees no reaſon to ſuppoſe this fiſh ſo ſhort-lived; he imagines the inſtances alluded to may have been accidental: and, if uſed as manure, ſurely the ſpecies muſt be prolific. The ſtomach is large, the inteſtinal canal ſhort, as in moſt of the voracious kinds. The liver is in three lobes; the gall-bladder is ſmall; the roe and ovary are double; the peritonæum (or membrane which encloſes the bowels) has ſeveral little black and white dots; and the ova, to the number of about 130 only in both ovaries, are of the ſize of millet-ſeed. There are fifteen ribs on each ſide; and the vertebræ are thirty in number.

The following are the remarks of Bloch on this ſpecies. "On the 9th of April, 1787, I examined ſeveral hundreds of theſe fiſhes. In ſome, whoſe body was much ſwelled, I found two ovaries, wherein the eggs were ſome whitiſh, ſome yellow, as large as poppy ſeed; in others, the eggs were not perfect; the fiſh were thin; and the ſoft roe conſiſted of lengthened quill-ſhaped bodies, ſo covered with yellow ſpots as to ſeem entirely of that colour: but in all, theſe parts were as yet very ſmall. Behind the roe, or the ova, were the kidneys, but I could diſcern no air-bladder. The liver, which was in two lobes, one long and the other ſhort, was in ſome reddiſh, in others yellow; in all, whoſe inteſtinal canal was furniſhed with fat, the liver was of the colour laſt-mentioned. The interior cavity of the belly was ſilver-colour, ſcattered with black dots. In ſome, the chin was of a bright yellow-green; in others, browniſh; in a few, red. In one only I found the ſolitary inteſtinal worm deſcribed by Pallas."

2. Gaſteroſteus ductor, the pilot-fiſh. Specific character, the body banded, four ſhort looſe ſpines on the back. The membrane of the gills has 6 rays, (Linnæus ſays 7, and makes it part of the ſpecific character,) the pectoral fins 15, the ventrals 6, the anal 16, the tail 18, the dorſal 24. The body is long. The head compreſſed, rounding off in front, without ſcales as far as the operculum. The mouth is ſmall; the jaws of equal length, and furniſhed with ſmall teeth; the palate has a curved row of ſimilar teeth in front, and the tongue has teeth all along; it is ſhort, fleſhy, and hardly moveable. The noſtrils are double, nearer the muzzle than the eyes; the eyes have a black pupil and yellow iris. We have remarked elſewhere that the colour of fiſhes, &c. is ſubject to much variation: this furniſhes one remarkable inſtance; for Muller deſcribes the iris as red; Haſſelquiſt black mingled with yellow; Pernetti yellow; Gronovius white; and Oſbeck yellow and white. The opercula are ſmooth, rounded, and without ſcales; the aperture of the gills is very wide, the membrane entirely covered. There are ſmall ſcales on the body; the back and belly are round and fleſhy; the anus is nearer the tail than the head. The lateral line is curved firſt upwards and then downwards, and is loſt at the end of the tail. The tail is raiſed on each ſide, which gives it a ſquare ſhape; ſimilar to many of the mackrel kind, among which this is placed by Bloch and ſeveral others: this ariſes from ſaw-ſhaped proceſſes on each ſide of the ſpondyles of the tail. The dorſal and anal fins have ſoft bifurcated rays; the rays of the other fins are variouſly ramified. The pectoral and ventral fins are of a grey colour, the anal and dorſal blueiſh; the tail-fin is grey at its origin, black in the middle, and white at the ends. There are five blue ſtripes or bands on the body; the intervals are white; but the number of ſtripes is not uniform.

This ſpecies is found in various parts of the world; Plumier made his drawing at the Antilles; Haſſelquiſt obſerved it in the Mediterranean near Ivica; Brunniche at Marſeilles; Oſbeck under the line; Loeffling in the Southern Ocean; Nieuhoff in the Eaſt Indies; and Kolbe at the Cape of Good Hope. It grows to a foot and a half in length; and is well-taſted. Pernetti calls it one of the beſt and handſomeſt fiſh of the ſea. Haſſelquiſt found the ſtomach filled with fiſh; indeed, its well-armed mouth ſhews it to be of the predatory kind. As it is commonly ſeen in company with the ſhark, it is called the *pilot-fiſh*, being ſuppoſed to point out prey to the ſhark: but this is very doubtful; it follows veſſels, as the ſhark does, to feed upon what may be thrown over-board, but it is obſerved to follow them after the ſhark has quitted them. Brunniche ſays they are ſeen at Marſeilles about the veſſels which winter there; Loeffling and Dutertre ſaw great numbers following veſſels when there were no ſharks; but they ſeek to ſwim near the ſhark for protection againſt other fiſh, for Haſſelquiſt obſerved that the dorado and other larger fiſh often devoured the pilot; but theſe are kept at a diſtance by the appearance of a ſhark; not that the ſhark has any friendſhip for the pilot, as pretended, or would ſpare him if in his power; but, as the ſhark turns about heavily to catch him, he nimbly jumps aſide; of which Dutertre was an eye-witneſs. Later writers however have juſtified the opinion of the ancients upon this matter. In the year 1802, in the philomathic ſociety of Paris, citizen Geoffroy, profeſſor in the muſeum of natural hiſtory, read a notice on certain habits common to the ſhark and to the fiſh called the *pilote* or pilot-fiſh, which was to the following effect: "An opinion long prevail d among mariners, that the ſhark has ſubjugated to its dominion a very ſmall fiſh of the *gadus* genus; and that this latter precedes his maſter in their voyages, points out to him ſuch places in the ſea as abound moſt in fiſh, diſcovers by the track the prey of which he is the fondeſt, and that, in recompence for ſuch ſignal ſervices, the ſhark, notwithſtanding his gluttonous diſpoſition, maintains the relations of peace and amity with ſo uſeful a companion. Naturaliſts, however, always on their guard againſt the exaggerations of voyagers, who could not divine the reaſons of ſuch an aſſociation, have

have called the fact in queſtion. I ſhall ſhew that this has been done erroneouſly; the obſervations that I have made on this ſubject, are accompanied with circumſtances ſo much in detail, as have ſcarcely, perhaps, occurred to any one before. On the 6th Prairial, year 6, (May 26, 1798,) I was on-board the frigate Alceſte, between Cape Bona and the Iſle of Malta. The ſea was calm, and the ſhip's company began to grow weary of its long duration, when their attention was ſuddenly directed to a ſhark, which they ſaw making towards the veſſel. He was preceded by his pilots, who kept about the ſame diſtance from the ſhark; the two pilots ſhaped their courſe towards the ſtern of the veſſel, viſited it twice, from one end to the other, and, after being ſatisfied there was nothing of which they could make their booty, they fell again into the track they were proceeding in before. During all their different movements, the ſhark never loſt them out of ſight, or rather followed them as exactly as if they had been drawing him in a train. No ſooner was the ſhark eſpied, than one of the ſeamen got ready a large hook, which he baited with a piece of bacon; but the ſhark and his companions had proceeded to the length of twenty metres and upwards (ſixty or ſeventy feet) before the man had adjuſted all his preparations; however, at a venture, he threw his lump of bacon into the ſea. The noiſe which the fall occaſioned was heard at a conſiderable diſtance; our voyagers were, it ſeems, aſtoniſhed at it, and ſuddenly ſtopped their courſe: on this the two pilots detached themſelves, and repaired to the poop of the veſſel in queſt of information. The ſhark, during their abſence, ſports on the ſurface of the water in a thouſand poſtures, throws himſelf on his back, replaces himſelf on his belly, dives in the ſea, but always appears again on the ſame ſpot. The two pilots, having got up to the ſtern of the Alceſte, came near the bacon, which they had no ſooner diſcovered, than they returned to the ſhark with more celerity than they had advanced. When they reached him, the ſhark was for proceeding on his route; but the pilots ſwimming, one at his right, and the other at his left, exert all their endeavours to get before him; ſcarcely had they done this, when they return together, and come a ſecond time to the ſtern of the veſſel; they were now followed by the ſhark, who thus, by the ſagacity of his companions, was enabled to diſcover the prey deſigned for him. It has been ſaid of the ſhark, that he has a very keen ſcent; I noticed with very particuliar attention (ſays citizen Geoffroy) what paſſed when he came up cloſe to the bacon. It appeared to me, that he only obtained his information at the inſtant when his guides had, as it were, indicated it to him; then it was that he ſwam with the greateſt velocity, or rather made a ſpring to catch at it. At firſt he brought off a piece, without being entangled by the harpoon; but, at the ſecond attempt, the hook pierced into his left lip, and he was taken and hoiſted on-board. It was not until two hours had elapſed, during which I was employed in the anatomy of this ſqualous fiſh, that I expreſſed my concern at not having ſeen more nearly the ſpecies of fiſh which became thus a volunteer in the ſervice of the ſhark: I was told, however, that it was eaſy to catch it, as it was certain it had not quitted the environs of the ſhip; and in a few moments after, I had the pleaſure to find one handed to me, which I knew belonged to the pilot or *fanfire* tribe, as the mariners call it, and to what is called the *gaſteroſteus ductor* by naturaliſts. It would undoubtedly be curious (adds citizen Geoffroy) to examine what intereſt could induce two animals, ſo different in their organization, their ſize, and their habits, to form this kind of aſſociation. Does the pilot feed on the excrements of the ſhark, as citizen Boſc imagines; and, in order to find ſafety and protection near ſo voracious a ſpecies, can it have impoſed on itſelf the painful duties of domeſticity?" Cepede has placed this and all the ſpecies which have more than two ſpinous rays to the ventral fin, in a ſeparate genus, *centronotus*, from κεντρον, a ſpine, and νωτος, the back; ſimilar in meaning therefore to *gaſteroſteus*.

3. Gaſteroſteus Japonicus, the Japan ſtickleback. Four dorſal ſpines, and the gill-membrane five-rayed. The dorſal fin has only 10 rays, the pectorals 12, the anal 9, the tail 22. Gmelin doubts whether it belongs to this genus or not; and Cepede has made it a diſtinct genus, naming it, from the nature of the ſcales, *lepiſacanthus*, (λεπις, a ſcale, and ακανθος, a ſpine,) for the ſcales are very broad, each armed with a recurved ſpine. Houttuyn obſerved it in the ſeas of Japan. Body yellow, five inches long. Head obtuſe; jaws rough, without teeth; gill-coverts not ſcaled, ſerrated behind; dorſal ſpines moveable, thick, ſtrong, unequal, placed in a cavity; ventral fins connected by a thick rigid ſpine an inch and a half long.

4. Gaſteroſteus occidentalis, the croſs-ſpine, or leather-coat. Specific character, ſeven looſe dorſal ſpines, and two before the anal fin. There is indeed another ſpine on the back, almoſt horizontal, pointed towards the head; but it is not moveable, and forms a part of the oſſa interſpinoſa. The ſpines are turned moſtly towards the tail; they are ſunk in a furrow, and faſtened to each other by a narrow ligament, which, when it pulls the firſt, cauſes the reſt to croſs each other; ſo that they look ſomething like *chevaux de friſe*. The membrane of the gills has 6 rays, the pectoral fins 16, the anal 9, the tail 16, and the dorſal 11. Behind the anal and dorſal fins, Bloch ſays, there are eight ſmall tufted fins, (called by Linnæus baſtard fins;) hence Bloch placed it among the Scombers.

The head is ſmall, ſmooth, and ſo compreſſed, that above the eyes it is not thicker than the blade of a knife; the noſtrils are ſingle, round, and midway between the mouth and eyes; the jaws are of equal length, armed with ſmall ſharp teeth; the two front teeth of the lower jaw are longer than the reſt, and behind theſe are ſeveral ſmall ones; the tongue is looſe, and ſlippery; the pupil of the eye is black, the iris ſilvery; the opercula are ſmooth; the hinder ones compoſed of three laminæ; the aperture is wide, the membrane concealed; the ſides are compreſſed, and without ſcales; the belly and back end ſharp. The lateral line is very faint; it forms an arch over the pectoral fin, then goes ſtraight to the middle of the tail fin, which is ſtiff. The anus is nearer to the head than to the tail; and lower down are two ſpines faſtened at the bottom by a membrane. The fins are blue, with four-branched rays; the pectorals and ventrals very ſhort. This ſpecies is found in ſeveral parts of the Mediterranean, eſpecially towards Provence and Languedoc. It is known alſo in ſeveral parts of America. Brown ſaw it at Jamaica, and Parra at the Havannah. It grows to a large ſize, weighing ſometimes forty pounds: it is good eating, ſome ſay better than the tunny.

5. Gaſteroſteus lyſan, the Arabian ſtickleback: 7 dorſal and 2 anal ſpines, and 8 rays in the membrane of the gills; 21 rays in the dorſal fin, 17 in the pectorals, 6 in the ventrals, 19 in the anal. Diſcovered by Forſkal on the coaſt of Arabia. Scales ſmall, lanceolate, ſhining; body blueiſh-brown, beneath white; ſhape oblong, lanceolate; lateral lines undulated about the operculum, ſtraight towards the tail.

6. Gaſteroſteus ovatus, the ovate ſtickleback. Specific character: dorſal ſpines 7, the firſt recumbent; anal ſpines 2. There are 6 rays in the membrane of the gills, 20 in the dorſal fin, 16 in the pectorals, 6 in the ventrals, 17 in the anal, 20 in the tail. Jaws and lips rough; dorſal ſpines directed alternately to the ſides, the firſt very ſmall, the next a little longer.

7. Gaſteroſteus Carolinus, the Carolina ſtickleback: 8 dorſal and 3 anal ſpines. The dorſal fin has 26 rays, the pectorals 18, ventrals 5, anal and tail 27 each. This

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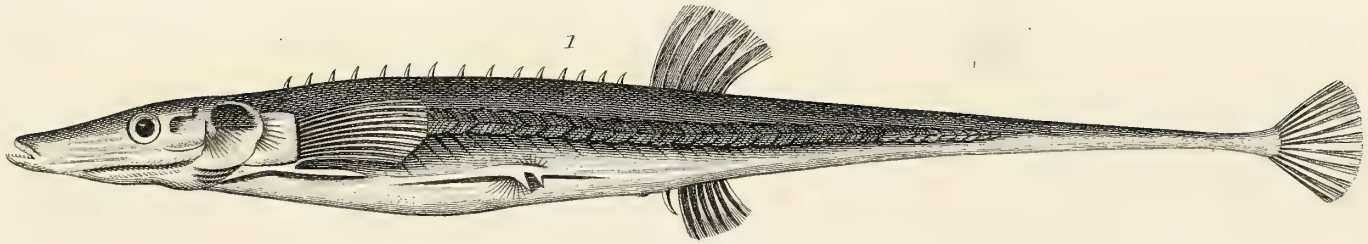

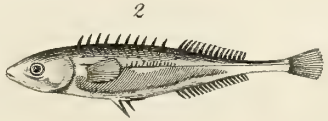

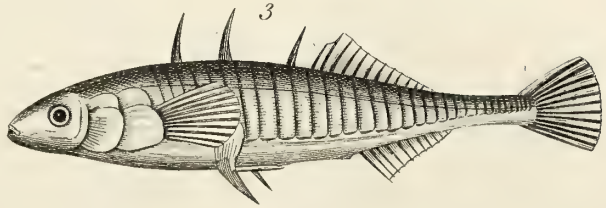

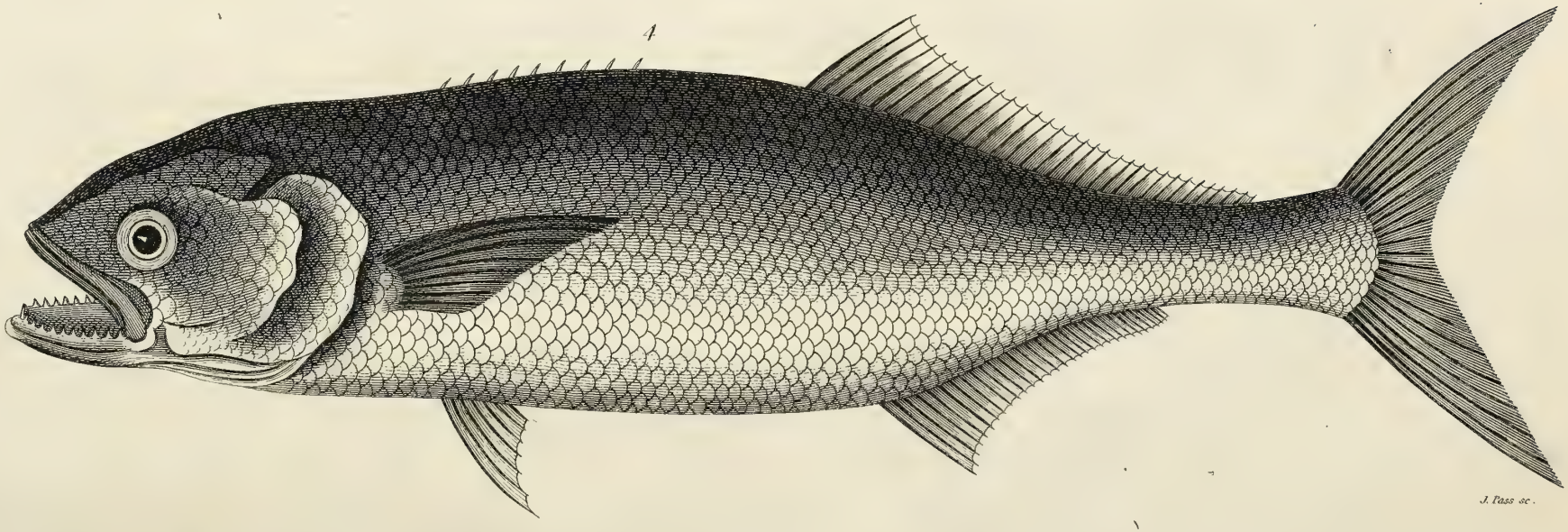

Fig. 1. The Fifteen-spined Stickleback. 2. Smaller Stickleback. 3. Three-spined Stickleback. 4. The Skippjack.

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and the following were ſent from Carolina by Dr. Garden to Linnæus. Inhabits Carolina. Body oblong-oval; lateral line ſtraight, ſubcarinate at the tail; dorſal and anal fins falcate; tail forked.

8. Gaſteroſteus Canadus, the Canadian ſtickleback: 8 dorſal ſpines, anal 0. Seven rays in the membrane of the gills, 33 in the dorſal fin, only 2 in each pectoral, 7 in each ventral, 26 in the anal, 20 in the tail. Inhabits Carolina; differs very little from the preceding.

9. Gaſteroſteus vadigo, the vadigo: 8 dorſal ſpines; lateral line crooked. The firſt dorſal ſpine is reclined towards the head; the pectoral fins conſiſt of many more than two rays; in other reſpects this differs little from the preceding. It is added by Cepede.

10. Gaſteroſteus ſaltatrix, the ſkipjack: 8 dorſal ſpines connected by a membrane, and 7 rays in the membrane of the gills. There are 26 rays in the dorſal fin, 16 in the pectorals, 6 in the ventrals, 27 in the anal, 21 in the caudal. This inhabits Carolina, deſcribed by Cateſby and Dr. Garden. It is perhaps the *Scomber ſaltiens* of Bloch, ſince the dorſal ſpines are not diſtinct, which is the generic character of the ſticklebacks. Gmelin ſays it is leſs prickly than the reſt, and reſembles a perch. There is only one row of teeth in the lower jaw, two in the upper; the dorſal ſpines are weak, occaſionally recumbent in a furrow, and the membrane which connects them is extremely thin. Tail-fin bifurcated.

11. Gaſteroſteus biaculeatus, the two-ſpined ſtickleback. Specific character: two dorſal ſpines. This and the following are deſcribed from Commerſon's manuſcripts, by Cepede; he has placed them in a diſtinct genus, as the tail is not carinated. The body and tail are covered with pretty large round ſcales, placed one over the other; but none are obſervable on the head, nor on the opercula, which are covered with broad plates. The teeth are ſmall, and ſtand apart; the lower jaw is the longeſt. The lateral line runs nearly in the middle of the body, and is marked with four very dark round ſpots. The dorſal fin begins about the middle or higheſt part of the back; it is falcated, and reaches to the tail; the anal fin is juſt oppoſite or under the dorſal, and is nearly of the ſame ſhape and extent; it is preceded by two ſpines inclined towards the tail; the tail-fin is very deeply furcated; the ventrals are much ſmaller than the pectorals.

12. Gaſteroſteus pentaculeatus, the five-ſpined ſtickleback. Specific character, five dorſal ſpines; ſcales hardly viſible. The head is much larger and thicker than in the preceding, and ends in a very blunt ſnout; the lateral line is crooked, and without any ſpot; the extremities of the tail-fin are much farther apart in proportion to their length, ſo that the fin ſeems rather ſemilunar than forked; the dorſal fin comes forwarder. The ſcales are not viſible to the naked eye. In other reſpects it reſembles the preceding.

13. Gaſteroſteus pemilipterus, the fat-finned ſtickleback. Specific character, 11 dorſal ſpines connected with the 13 articulated rays; part of that fin, the anal, and tail, adipous. Four rays in the membrane of the gills, 15 in each pectoral, 5 in each ventral, $\frac{3}{19}$ in the anal, and 19 in the tail, which is forked. This ſpecies is added by citizen Boſc; but Cepede has made it a ſeparate genus, *pimelipterus*, from *pimelè*, which in Greek ſignifies fat, and *pteron*, fin. It poſſeſſes ſome of the generic marks of the Gaſteroſteus, in particular the ventral fins lying farther back than the pectorals, but it has not the ſpines diſtinct on the back. Boſc diſcovered it in North America; and obſerves, that in habits it reſembles the G. ductor, or pilot fiſh, following the veſſels which traverſe the North Atlantic Ocean, and ſeizing with avidity the fragments of the nutritive ſubſtances which are thrown into the ſea. It is not eaſily caught, for it is cunning enough to take away the bait and avoid the hook. According to the ſame gentleman, the Engliſh diſlike this fiſh, but the French eat it. The head is ſmall; lips flexible; teeth ſmall but blunt; tongue oval. The irides brown mingled with white, and a ſilvery line underneath. The ſcales which cover the body and tail are round, large, and of a ſilvery colour, but brown at the ſides, joining into a conſiderable number of longitudinal brown ſtripes, which Cepede makes a part of the ſpecific character. The uſual length of this fiſh is eight inches, height two and a half, breadth one.

14. Gaſteroſteus auratus, the ſoft-finned ſtickleback. Specific character, the unarticulated rays of the fins almoſt as ſoft as the articulated ones; the lower lip hangs down very low. Six rays in the membrane of the gills, 23 in the dorſal fin, 11 in each pectoral, 6 in each ventral, 15 in the anal, and 12 in the tail, which is rounded. This and the following would not have been included in this genus but for the poſition of the ventral fins, for the dorſal contains, properly ſpeaking, no prickles. Cepede has made them a ſeparate genus, *cheilio*, which in Greek ſignifies a lip, in alluſion to the hanging lips. They are both from the manuſcripts of Commerſon, who met with them in the fiſh-market and boats at the Mauritius. The preſent ſpecies is of a gold yellow colour, with ſome little black dots on the lateral line. Its fleſh is white, and well taſted, but not much eſteemed becauſe the fiſh is very common; length a foot or more. The upper jaw is longeſt, and the upper lip is moveable; a row of ſmall teeth in each jaw, but none in the palate. The tongue is ſemi-cartilaginous, and partly free in its motions, but the tip of it is concealed under a little membrane ſtretching acroſs the lower jaw. The eyes are near together; the ſcales are ſmooth, and rounded, but do not cover the head and opercula; each operculum is compoſed of two pieces, and terminates in a membranous appendage; they are furrowed, but not prickly, nor dentated. The ſwimming-bladder lies along under the ſpine of the back. The whole fiſh is of a lengthened form; ſnout flatted; dorſal fin very long and low; ventrals very ſmall.

15. Gaſteroſteus fuſcus, the ſoft-finned brown ſtickleback. Specific character, unarticulated rays of the fins not rigid, lips pendent; colour brown; ventral fins white, and white ſpots on the dorſal and anal fins. This ſpecies reſembles the preceding in the number of rays in the fins, and in many other reſpects. It is, however, ſmaller, not exceeding nine or ten inches in length. The flat part of the ſnout is very ſhort; the pectoral fins are tranſparent, and the irides of a fiery red.

16. Gaſteroſteus pungitius, the ſmall or ten-ſpined ſtickleback. The number of ſpines, ten, is the ſpecific character. There are 3 rays in the membrane of the gills, 10 in the pectoral fins, 1 in the ventrals, 17 in the anal and tail, and 16 in the dorſal. The head of this little fiſh is like the *aculeatus*, but the body is of a more ſlender form. The ſides are yellow above the lateral line; below it, and on the belly, ſilvery; the ſides are ſmooth, having neither ſcales nor the ſcuta or bony plates of that ſpecies. The ventral fin conſiſts of one ſingle ſpine; and the firſt ray of the anal fin is ſharp alſo. The pectoral fins are yellowiſh; the anal, dorſal, and tail, grey; and the tail-fin is ſtraight, as in the preceding.

This fiſh weighs but an ounce and an half. "It is the ſmalleſt of all fiſh," ſays Bloch, "and the only one of which man can make no uſe." They are found in the Baltic and North Sea, and in all lakes and havens which communicate with the ſea; but are rarely caught, as on account of their diminutive ſize they eſcape through the meſhes of the nets: in the Seine they are found, according to Noel, higher up than Quilleboeuf. But, when taken among other fiſh, the fiſhermen generally throw them back as uſeleſs. According to Falck, they appear in ſhoals in all the freſh waters of Ruſſia and Siberia. The heart is triangular, and hardly ſo large as a grain of hemp-ſeed; but the liver is large, conſiſting of three lobes, one of which is ſo long that it reaches to

the anus; the little gall-bladder is faſtened to it. The ſpleen is triangular, and very ſmall. The ſtomach is long and large; the inteſtinal canal is ſhort, and has but one ſinuoſity. The roe and ovary are double. The air-bladder is ſimple, and the ſkin thereof thick. The peritoneum is white with black dots.

17. Gaſteroſteus ſpinachia, the fifteen-ſpined ſtickleback. Fifteen ſpines or prickles on the back are the certain mark to diſtinguiſh this ſpecies. There are 10 rays in the pectoral fins, 2 in the ventrals, 6 in the anal, 12 in the tail, and 6 in the dorſal. This is much larger than the preceding ſpecies; the body is ſlender, being only an inch thick, though ſometimes nine in length; the head is cylindrical; the body, towards the tail, is five-ſided; and the tail is flat. The head is ſmooth, brown above, white below. The aperture of the mouth is ſmall; the upper jaw protrudes beyond the lower; both are furniſhed with little ſharp teeth. The pupil of the eye is black; the iris ſilvery. The gill-covert, and ſcutum of the breaſt, are brown above, white and rayed below. The back and ſides are olive-coloured, the belly ſilvery. The lateral line is raiſed, ſharp, and compoſed of ſeveral ſmall ſcuta. On each ſide of the belly is a long narrow bony plate, which protrudes; the protruſion of theſe four corners with the ſpine of the dorſal fin give the fiſh the pentagonal form we have mentioned. The pectoral fins are lengthened; the ventrals conſiſt of two ſpines or prickles, of which the firſt is the longeſt; the firſt ray of the anal fin is a bent ſpine; the rays of the other fins are ſoft, and branched; the dorſal fin is oppoſite the anal; the tail-fin is round. The 15 ſpines on the back are bent backwards, and are not ſenſible to the touch when the fiſh has lowered them; they are ſmall compared with thoſe we have mentioned before. This ſpecies is found in the Baltic and North Seas: they are very plenty in Holland, and are often caught near Lubec. Willughby ſays they are never found on the coaſts of Britain; but in that he is wrong. They live on the ova and young of other fiſh, and on worms and inſects; ſmall crabs alſo have been found in their ſtomachs. This ſpecies remain always in the ſea, where they are caught among other fiſh; they are taken eaſily by making a great light, which draws them towards the nets. Lamp-oil is extracted from them, and they ſerve to manure the land: the poor people eat them.

18. Gaſteroſteus ſpinarella, the Indian ſtickleback. Four ſpines on the hind part of the head, the lateral ones as long as the belly. There are 3 rays in the membrane of the gills, 16 in the dorſal fin, 20 in the pectorals, 4 in the ventrals, 8 in the anal. As the ſpines are placed on the hind-head, and not abſolutely upon the back, Cepede, who multiplies genera at a vaſt rate, has created one for this fiſh, *cephalacanthus*, from κεφαλος, the head, and ακανθος, a ſpine or prickle. The head is broader than the body, and ſtriated all over; the two upper ſpines are more ſerrated, broader, but ſhorter, than the others; upon the whole the head ſomewhat reſembles that of the flying trigla. Inhabits India.

19. Gaſteroſteus centrolophus, the creſted ſtickleback. Specific character, a longitudinal creſt, and behind that a row of 3 ſpines, pointing forwards, very diſtinct from each other, but partly concealed under the ſkin. Four rays in the membrane of the gills, 17 in the pectoral fins, 6 in the ventrals, 21 in the anal, 39 in the dorſal fin, tail forked, with 23 rays. This is made a ſeparate genus by Cepede, for the ſame reaſon as the preceding, the ſpines being above the nape. He calls it Centrolophus; from *centron*, Greek, a ſpine, and *lophos*, a creſt. The dorſal and anal fins very low and long. Teeth very ſmall, equal, diſtinct; ſnout rounded; lower jaw longeſt; noſtrils double; the palate and tongue free from aſperities, the latter at liberty, white, dotted with black. The eyes are very large. Scales very ſmall, rhomboidal, and ſtrongly adherent, extending over the head and opercula as well as the body and tail; thoſe on the head extremely minute, and their ſhape not ſo well defined. The lateral line bends downwards, inſtead of following the curvature of the back. This ſingular ſpecies was tranſmitted from citizen Noel, of Rouen, to Cepede; it was caught at Fecamp, and nobody had ever ſeen ſuch a one before. The fiſhermen called it the *negro*, as it is entirely of a black colour; length one foot.

20. Gaſteroſteus acanthias, the ſmall-ſpined ſtickleback. Specific character, four ſmall ſpines before the dorſal fin, three rays in the membrane of the gills. Inhabits the ſeas of Denmark, according to Pontoppidan.

21. Gaſteroſteus glaucus, the blue ſtickleback. Specific character, 5 ſpines on the back, the firſt directed towards the ſnout; the lateral line undulated. This was called *glaucus* by the ancients, according to Rondeletius, from its blue or ſea-green colour. The body is long; the teeth very ſharp; the upper ſurface is of the colour quoted above, but the belly is very white. Fleſh fat, firm, and well-taſted.

GAST'LY, and its derivatives. See GHASTLY.

GAS'TON DE FOIX, duke of Nemours, and nephew of Louis XII. king of France, born in 1488. He was much beloved by his uncle, who called him his own work, and took pride in his opening virtues. He gave Gaſton the government of Milan, and made him general of his army in Italy. The young hero ſignaliſed his valour and abilities in various actions, which terminated in the battle of Ravenna, fought on Eaſter-day, 1512. After he had obtained the victory, he could not be diſſuaded from purſuing a body of Spaniſh infantry which retreated in good order. Making a furious charge on this brave troop, he was thrown from his horſe, and diſpatched by a thruſt of a pike. He periſhed in his twenty-fourth year, and the king's affliction for his death embittered all the joy ariſing from his ſucceſs.

GAS'TORF, a town of Bohemia, in the circle of Leitmeritz: eight miles ſouth-eaſt of Leitmeritz.

GASTOU'NI, a town of European Turkey, in the Morea: twelve miles eaſt of Chiarenza.

GAS'TRELL (Francis), a learned Engliſh prelate, born at Slapton, in Northamptonſhire, about the year 1662. He received his claſſical education at Weſtminſter ſchool, under the famous Buſby, where he was admitted king's ſcholar, and elected thence a ſtudent of Chriſt-church college, Oxford, in 1680. His collegiate ſtudies he proſecuted with great diligence and ſucceſs, and took his degree of bachelor of arts in 1684, and that of maſter of arts in 1687. Soon after this he was admitted into orders, and acquired diſtinguiſhed reputation by the ſolidity, elegance, and uſefulneſs, of his pulpit compoſitions. In 1694 he was admitted to the degree of bachelor of divinity, and was alſo appointed preacher to the honourable ſociety of Lincoln's-inn, London. The manner in which he acquitted himſelf in this reſpectable appointment gave ſo much ſatisfaction to his learned hearers, that in 1697 he was appointed to preach the lecture founded by the honourable Robert Boyle. During the ſame year he publiſhed the eight ſermons preached by him at that lecture, in one continued diſcourſe, that the ſtrength of the proofs therein uſed might appear more plainly from their connection, and entitled The Certainty and Neceſſity of Religion in general; or, the firſt Grounds and Principles of Humane Duty eſtabliſhed, &c. 8vo. As the reaſonings in this diſcourſe were principally intended to counteract the influence of atheiſtical notions, the author very properly determined to follow them up, by a ſeries of arguments in defence of the chriſtian religion againſt the deiſts. Accordingly, in 1699, he publiſhed another diſcourſe as a ſecond part of the ſame important ſubject, entitled The Chriſtian Revelation, and the Neceſſity of believing it eſtabliſhed; in Oppoſition to all the Cavils and Inſinuations of ſuch as pretend to allow Natural Religion, and reject the Goſpel, 8vo. In the year 1700 Mr. Gaſtrell

trell commenced doctor of divinity; at which time he was chaplain to the houſe of commons. In 1702 he was preſented by queen Anne to a canonry of Chriſt-church, in Oxford. At this time the diſpute between doctors South and Sherlock concerning the Trinity, being ſtill kept up with much zeal and ill temper, Dr. Gaſtrell publiſhed Some Conſiderations concerning the Trinity, and the Way of managing that Controverſy, 8vo. which ſoon paſſed through two editions; and coming to a third, in 1707, the author ſubjoined to that edition a vindication of it, in anſwer to ſome animadverſions of Mr. Anthony Collins in his Eſſay concerning the Uſe of Reaſon. In 1707, likewiſe, Dr. Gaſtrell publiſhed his excellent performance, entitled The Chriſtian Inſtitutes, or the ſincere Word of God; being a plain and impartial Account of the whole Faith and Duty of a Chriſtian; collected out of the Writings of the Old and New Teſtament: digeſted under proper Heads, and delivered in the Words of Scripture, 8vo. In the year 1711 Dr. Gaſtrell was choſen proctor in convocation for the chapter of Oxford; and was alſo nominated one of the chaplains in ordinary to queen Anne. In 1714 he publiſhed Remarks upon Dr. Clarke's Scripture Doctrine of the Trinity, to which that eminent man returned an anſwer at the end of his Reply to Mr. Nelſon, with candid and liberal acknowledgments of the learning and ſkill diſcovered by the remarker, and due commendations of the becoming temper and ſpirit with which he had written. Dr. Gaſtrell held the preacher's place at Lincoln's-inn till this year; when he reſigned it upon his promotion to the ſee of Cheſter. Of this dignity the merits of Dr. Gaſtrell rendered him well worthy; and as the revenues attached to it were but ſmall, he was permitted ſtill to hold his canonry of Chriſt-church *in commendam*. Dr. Gaſtrell was much afflicted with the gout during ſeveral years of his life, and at length fell a ſacrifice to that diſorder towards the latter end of 1725, when he was about ſixty-three years of age. His piety and virtues have been highly ſpoken of by his contemporaries; and of his learning and abilities his excellent writings afford ample proof. Beſides the articles already enumerated, he was the author of a ſermon, preached at the anniverſary meeting of the charity ſchools in London, and entitled The religious Education of poor Children recommended; and A moral Proof of a future State, publiſhed without his name. Other anonymous pieces have been attributed to him, but upon uncertain authority.

GAS'TRIC, *adj.* [from γαστηρ, Gr. the belly.] Belonging to the belly or ſtomach.

GASTRIC-JUICE, in phyſiology, a thin pellucid liquor, which diſtils from certain glands in the ſtomach, for the dilution and digeſtion of the food. See the article CHEMISTRY, vol. iv. p. 367.

GASTRIL'OQUIST, *ſ.* [from γαστηρ, Gr. the belly and *loquor*, Lat. to ſpeak.] One who ſpeaks from his belly, without ſeeming to move his lips. The ſame as VENTRILOQUIST.—*Gaſtriloquiſts* are perſons, who have acquired the art of modifying their voice, ſo that it affects the ear of the hearers, as if it came from another perſon, or from the clouds, or from under the earth. *Reid.*

GASTRI'TIS, *ſ.* [Greek; from γαστηρ, the ſtomach.] An inflammation of the ſtomach.

GASTROBRAN'CHUS, *ſ.* in ichthyology, the blind-fiſh, a genus of chondropterygious fiſhes, diſtinguiſhed by two little ſpiracles, or air holes, under the belly. This animal was firſt noticed by Kalm, as a ſpecies of lamprey; Linnæus (who has been followed by many naturaliſts) deſcribed it as a worm, making it his genus *Myxine*, next to the blood-ſuckers or leaches; but Modeer, Retzius, Abilgard, Bloch, Cepede, Turton, and Shaw, conſider it a fiſh. In order to account for this diverſity of opinion amongſt men of ſuch literary eminence, we ſhall be more particular in delineating its external and internal conformation, and have devoted an entire plate to the ſubject.

1. Gaſtrobranchus cæcus, the blind-fiſh. Specific character, no eyes, length not more than twelve inches. The utmoſt endeavours have in vain been taken to diſcover the optical organs, ſo extremely neceſſary in providing nouriſhment and food; and doubtleſs, as they are wanting, this animal muſt be endowed with the ſenſe of feeling in an exquiſite degree, that it may thence diſcover its food, and eſcape danger. It is ſhaped like an eel, and is uniform in thickneſs quite to the tail; very ſlippery; the ſides are reddiſh, the belly white, the back bluiſh. The mouth opens underneath, and is of an oblong ſhape, like that of the lamprey; there are two barbles, or feelers, on each ſide the mouth, and four above; between theſe laſt, there is an aperture, fig. 1. *a.* through which the fiſh, when it has faſtened upon any thing, ſpirts out the water it had ſucked in; and this aperture has a valve, which the fiſh can cloſe at pleaſure. There are two rows of teeth like a comb, the ſhape of which is ſeen at fig. 4. *bb.* there are nine in the upper range, eight in the lower, and they are of a bony ſubſtance, not cartilaginous as in the lamprey. In the palate there is a wrinkled membrane ſurrounding an oblong ſlit, fig. 3. *a.* by which the water paſſes to the aperture mentioned above; behind this ſlit is a recurved tooth, fig. 4. *a.* and then comes the aperture of the throat. The wrinkled membrane mentioned above is ſuppoſed by Cepede to be the organ of ſmell. There is no tongue, noſtrils, lateral line, ſcales, pectoral or ventral fins. The dorſal, anal, and tail, fins, are low, or narrow, and run into one, furniſhed with ſoft flexible rays, which cannot be counted becauſe of the thick membrane which covers them. Down both ſides, from head to tail, is a row of little apertures, fig. 1. *cc.* which produce a viſcous humour in great abundance. The two gills appear on the belly, as at fig. 2. *a.* and the anus is a long ſlit, fig. 2. *b.* there is a projecting line between them.

On the ſubject of the viſcoſity, or ſlime, produced by this fiſh, Kalm writes as follows: "I put one of theſe fiſh into a large veſſel of freſh ſea-water; in one hour the water was filled with a white clammy matter, like clear tranſparent glue; with a quill or ſtick it might be drawn out in threads, which would dry in the air; on ſtirring it about, this ſlime would ſtick about the inſtrument to the thickneſs of an inch, and then appeared like a covering of ice; at laſt the water became ſo thick, that, drawing it out in ropes, the fiſh was brought away with it. Freſh water was poured in; which, in about a quarter of an hour, became nearly as thick as the firſt. And I have been aſſured, that a boat half-full of water, if only one of theſe fiſhes were left in it, would, in a few hours, be entirely converted into this gluey matter." This fiſh, one would ſuppoſe, might be uſed with profit in the making of glue; but hitherto we believe this has never been done. The viſcoſity, or ſlime, is probably given to this animal as a defence from danger, to which the want of ſight muſt continually expoſe it. This fiſh is ten or twelve inches long; it is found in Denmark, Sweden, Norway, and Greenland. It can live only three or four hours out of the water. Among its ſingularities muſt be reckoned its mode of feeding, or gaining its nouriſhment: it faſtens by ſuction upon ſome fiſh, and with its comb-ſhaped teeth tears their fleſh, and they cannot ſhake it off, becauſe it hooks itſelf ſtill more ſecurely by means of the recurved tooth which we have deſcribed in the palate; but it ſeems impoſſible that this fiſh ſhould find its way by the anus into the body of the *gadus callarias*, or aſellus, to gnaw its inſide, as Gunner aſſerts; it is much more probable that thoſe fiſhes in whoſe body this has been found, have ſwallowed it, as they are moſtly voracious fiſh within whom it is ſaid to have been found.

It will appear from what has been ſaid, that the outward ſtructure of this fiſh is different in many points from all others hitherto known. Its interior conforma-

tion

tion differs no leſs. Removing the ſkin from the neck, a long, round, hollow, muſcle, appears, fig. 3. *b.* which encloſes a longer conical muſcle, which eaſily ſeparates, fig. 4. *dd.* The interior muſcle terminates towards the jaws in two broad tendons, the exterior in two narrow tendons. Theſe muſcles contain ſeveral parcels of filaments running tranſverſely. Behind theſe muſcles is the gullet, which, without widening much, paſſes to the inteſtinal canal, and this runs, without any ſinuoſity, to the anus; but the canal has ſeveral folds running lengthwiſe. The aqueous veſſels begin at fig. 3. and 4. *cc.* and conduct the water into ſmaller veſſels leading to the back and its veſſels; the aqueous veſſels at fig. 4. *ee.* carry the water towards the mouth, fig. 3. *ee.* whence it runs out, or elſe paſſes through the aperture above. The heart, fig. 3. *f.* ſends the blood to each veſicle through a branch of the great artery which covers the heart, and which divides into an infinity of ſmall veſſels. The large arteries and their branches being removed, there appear along the ſpine of the back as many veins, fig. 4. *ff.* conducting the arterial blood to the vena cava, which ſends it back to the heart. This arrangement cools the blood by means of the ſmall veſſels, which, in other fiſhes, is performed by the gills and their apertures. The lampreys, the rays, and the ſharks, have alſo fixed and immoveable gills; they breathe therefore as this does, with this difference, firſt, that the blood-veſſels are there ſeparated by a ſkin ſomewhat bending, while theſe veſſels in the preſent ſubject are ſtretched upon a rounded ſkin; ſecondly, the former ſuck in water through ſeven apertures, the latter has but two for that purpoſe. As the ſhark has five gills, the lamprey ſeven, our fiſh, which has ſix, ſhould, in the ſyſtem, be placed between theſe two genera. However, this is not the only fiſh with veſicular gills; the little ſea-horſe has veſſels inſtead of fringes at the gills.

The liver is in two parts, fig. 3. *gg.* of which the lower is the largeſt. On one ſide the inteſtinal canal appear the eggs, fig. 3. *h.* on the other a long and narrow kidney, *i.* the eggs are held together by a very thin membrane. Another fiſh which was examined contained beſides theſe ſmall eggs, ſeveral others of an oblong ſhape, of the ſize repreſented at fig. 4. *gggg.* they lie along the ſpine of the back, from the diaphragm nearly to the anus. Theſe eggs differ conſiderably from thoſe of fiſhes in general; they reſemble the ova of ſerpents. And in this fiſh the vent is much longer than in moſt others, and like the *ſilurus aſcitus*; but whether the eggs are hatched in the belly of the animal, ſo as to make this fiſh belong to the viviparous claſs, can only be determined by accurate obſervers on the ſpot where they breed. The pituitary glands are ranged on each ſide, as at fig. 4. *hh.* their outward orifices have been already ſhewn at fig. 1. *cc.*

2. Gaſtrobranchus magnus, the large blind-fiſh. Specific character, no eyes, length more than twelve inches. This is deſcribed by Cepede from a dried ſpecimen brought to the national muſeum at Paris by Dombey, and never noticed before. It is evidently of the ſame family, but belongs to another climate, being found about Chili, and probably in other parts of South America. It is at leaſt twice as long and thick as the preceding; the head is rounded, and thicker than the body; there were four barbles from the upper lip, but from the decayed ſtate of the ſpecimen it could not be determined whether there had been two depending from the lower lip, or not. The teeth were ſharp, compreſſed, triangular, and diſpoſed in two circular rows, the outer row conſiſting of twenty-two teeth, the inner of fourteen; a tooth longer than the reſt, and bent backwards, appears in the upper part of the mouth. The natural colours of this fiſh could not be determined. The tail is ſhort, rounded at the tip, and its fin unites to the anal. Theſe are the only fins; they are very ſhort, hardly perceptible, and conſiſting of membranes, but the rays could not be diſcerned in the dried ſpecimen.

GAS'TROCELE, *ſ.* [Greek; from γαστηρ, the ſtomach, and κηλη, a tumour or hernia.] A tumour or rupture of the ſtomach.

GASTROCNE'MIUS, *ſ.* [Greek; from γαστηρ, abelly, and κνημη, the leg.] A muſcle forming the belly or thick part of the leg.

GASTROCOL'ICUS, *ſ.* [Greek; from γαστηρ, the ſtomach, and κολον, the colon.] A medical term applied to a vein which proceeds from the ſtomach to the colon.

GASTRODYN'IA, *ſ.* [Greek; from γαστηρ, the ſtomach, and οδυνη, pain.] A pain or diſorder in the ſtomach.

GASTROL'ATER, *ſ.* [from γαστηρ, the belly, and λατρευω, Gr. to worſhip.] A glutton, one that makes a god of his belly. *Scott.*

GASTROL'OGY, *ſ.* [from γαστηρ, the belly, and λογος, Gr. a deſcription.] A treatiſe on the ſtomach and omentum.

GAS'TROMANCY, *ſ.* [γαστηρ, belly, and μαντεια, Gr. divination.] A ſpecies of divination practiſed among the ancients by the art of the ventriloquiſt, or by words ſeeming to come out of the belly. There is another kind of divination called *gaſtromancy*, which is performed by means of round tranſparent glaſſes, within which certain figures appear by magic art; and ſo called, becauſe the figures appear as in the *belly* of the veſſels.

GASTROR'APHY, *ſ.* [γαστηρ and ραπτω, Gr.] In ſtrictneſs of etymology this word ſignifies no more than ſewing up any wound of the belly; yet in common acceptation it implies, that the wound of the belly is complicated with another of the inteſtine. *Sharp.*

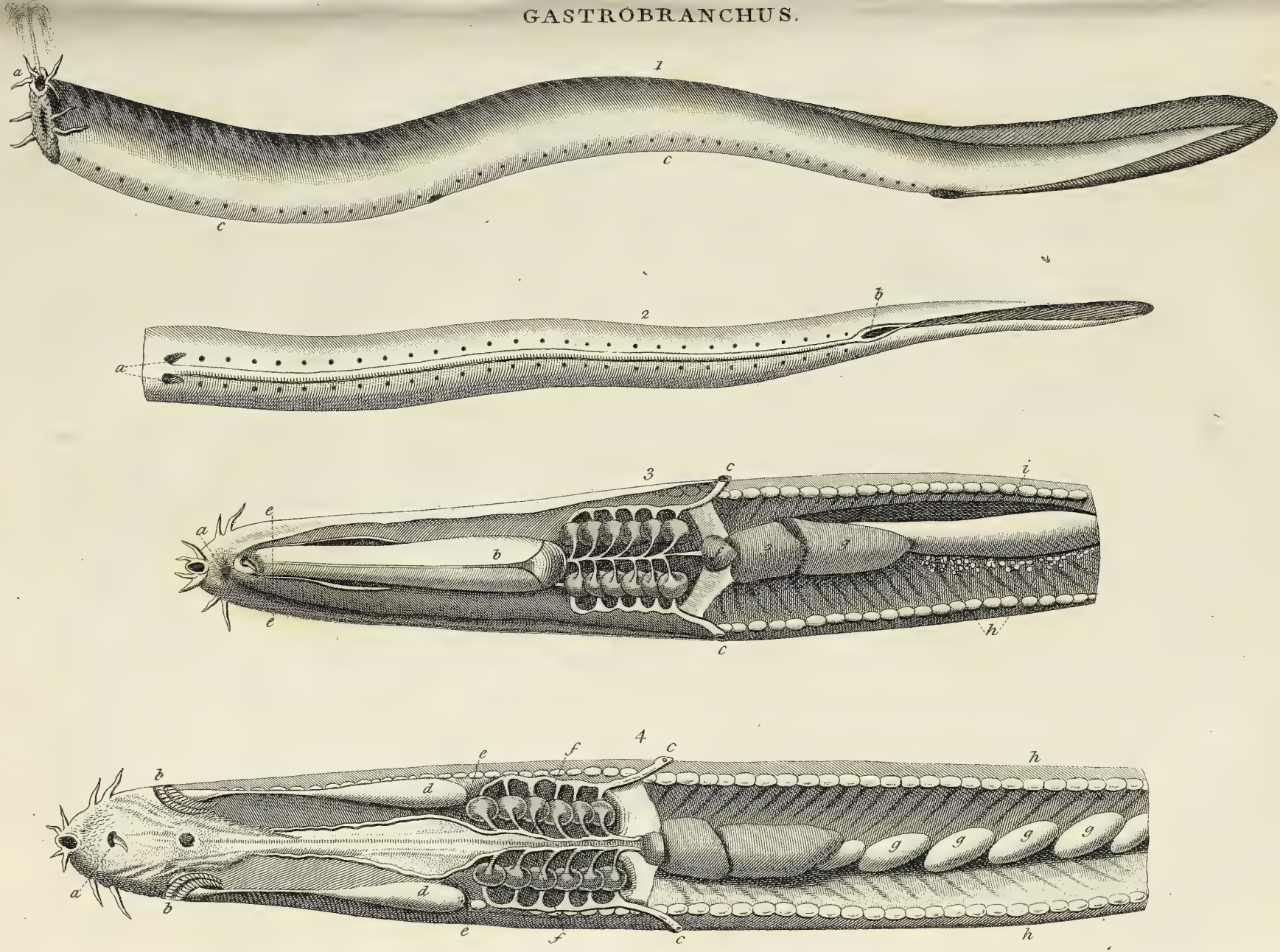
GASTROT'OMY, *ſ.* [*gaſtrotomia*, Lat. of γαστηρ, the belly, and τεμνω, to cut.] The operation of cutting open the belly and uterus, as in the Cæſarean operation.

GAT, the preterit of *get*.—Moſes *gat* him up into the mount. *Ex.* xxiv. 18.

GA'TA, a town of Spain, in the province of Eſtramadura, on a river of the ſame name: fifteen miles north-north-weſt of Corea.

GA'TA, a river of Spain, which riſes near the town of Gata, and runs into the Alagon, fifteen miles ſouth-weſt of Corea.

GAT'AKER (Thomas), a learned Engliſh divine, critic, and commentator, born in the parſonage-houſe of St. Edmund the King, in London, of which pariſh his father was incumbent, in 1574. He gave early indications of an uncommon genius, a moſt retentive memory, and ſurpriſing application. Having paſſed through the claſſes in the grammar-ſchool at ſixteen years of age, he was ſent in 1590 to St. John's college, Cambridge, where he diſtinguiſhed himſelf by the exemplarineſs and modeſty of his manners. He became an early proficient in the Greek tongue, and at the ſame time made himſelf maſter of the Hebrew; and he was held in ſo high eſteem for his learning and piety, that the truſtees of Sidney college, of which the foundation was laid in 1596, appointed him one of the fellows of that inſtitution, even before the building was erected. He at length quitted the univerſity, and, about the year 1601, he was elected preacher to the ſociety of Lincoln's Inn, the duties of which he diſcharged for ten years, much admired and careſſed by his reſpectable and learned auditory. In 1603, he took his degree of bachelor of divinity at Cambridge; and in 1611, having entered into the matrimonial ſtate, he was preſented to the rectory of Rotherhithe, in Surry, with which he was importuned to retain his former office; but he reſigned it, to the great regret of the learned body who had ſo long profited under his miniſtry. After entering on his new cure, he applied himſelf to the diſcharge of his paſtoral functions with great diligence and fidelity, notwithſtanding that for a long time he was afflicted by an almoſt perpetual headach, to which, very probably, his late and early ſtudies did not a little contribute. Mr. Gataker now main-



M.E.Bloch del.ᵗ

J.Pass sculp.ᵗ

The Blind Fish, or Myxine glutinosa of Linnæus.

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tained a literary correſpondence with Dr. Uſher, afterwards archbiſhop of Armagh, on the ſubject of ſome curious manuſcripts which he poſſeſſed, and among others of the famous Robert Groſthead, biſhop of Lincoln. Several of theſe letters are preſerved in the collection ſubjoined to the Life of Archbiſhop Uſher, by Dr. Richard Parr, and afford evidence not only of his profound erudition and critical acumen, but of his great modeſty and humility, and of the high eſteem in which he was held by that learned prelate. He publiſhed a volume of his ſermons, under the title Of the Nature and Uſe of Lots, a Treatiſe hiſtorical and theological, 1619, 4to. This work is diſtinguiſhed by great accuracy of method, acuteneſs of reaſoning, profound learning, perſpicuity, and elegance of ſtyle for the time in which it was written. It was deſervedly received with much applauſe by the greater part of the learned world; but at the ſame time it excited the ſtrictures of ſome individuals, with whom the author afterwards engaged in controverſy.

When, in 1642, the aſſembly of divines was appointed to ſit at Weſtminſter, Mr. Gataker was nominated one of that body, and attended in his place, from a pure deſire of rendering what ſervice he could to the religious intereſts of his country at that momentous criſis. Mr. Gataker alſo engaged with other members in writing the Annotations upon the Bible, which were publiſhed in the name of the aſſembly, and was, in particular, the author of thoſe upon Iſaiah, Jeremiah, and the Lamentations, which have been generally allowed to poſſeſs great merit. While he was thus employed, the earl of Mancheſter offered him the maſterſhip of Trinity college, which was the beſt preferment in the univerſity of Cambridge; but he declined it, partly from his ill ſtate of health, and partly on account of his devoting what time he could to the compoſition of two works, in which his learning and talents were advantageouſly diſplayed. The firſt was entitled *De Nomine Tetragrammato Diſſertatio, quâ Vocis Jehovah apud noſtros receptæ Uſus defenditur*, &c. 1645, 8vo. It has been often reprinted, and is inſerted among the author's *Opera Critica*, printed at Utrecht in 1698, folio, under the care of the celebrated Hermann Witſius. In the ſame collection may be found the other learned work, entitled *De Dipthongis ſive Bivocalibus Diſſertatio philologica, in qua Literarum quarundarum Sonus germanus Natura genuina Figura nova & Scriptura vetus veraque inveſtigatur*, 1646, 8vo. In 1648, he preſented to the world a work on the ſtyle of the New Teſtament, which juſtly gained him the character of being one of the ableſt philologiſts of his age. Its title is, *Thomæ Gatakeri Londinatis de Novi Teſtamenti Stylo Diſſertatio: qua Viri doctiſſimi Sebaſtiani Pfochenii de Linguæ Græcæ Novi Teſtamenti Puritate, in qua Hebraiſmis quæ vulgo finguntur quam plurimis larva detrahi dicitur Diatribe ad Examen revocatur*, &c. 4to. This work was but the *præcurſor* to a larger one of the ſame nature, of great uſe in illuſtrating the ſenſe of difficult paſſages in the Old and New Teſtaments. It is entitled *Thomæ Gatakeri Londinatis Cinnus; ſive Adverſaria miſcellanea Animadverſionum variarum, Libris ſex comprehenſa*, &c. 1651, 4to. The remaining books of this collection were publiſhed after the author's death by his ſon, Charles Gataker, under the title of *Adverſaria Miſcellanea-Poſthuma*, &c. 1659, folio. The pieces laſt mentioned are to be found in the author's *Opera Critica*. In 1651, Mr. Gataker alſo publiſhed a learned Latin diſcourſe on infant baptiſm, entitled *De Baptiſmatis Infantilis Vi & Efficacia Diſceptatio privatim habita inter V. C. Dom. Samuelem Wardum, Theol. Sac. Doct. & in Acad. Cantab. Prof. & Thomam Gatakerum*, 8vo. Three years afterwards he publiſhed another treatiſe on the ſame ſubject, entitled *Strictura ad Epiſtolam Joannis Davenantii de Baptiſmo Infantum*, 8vo. In 1652, he gave to the world his excellent edition of the emperor Antoninus's Meditations, with a valuable preliminary diſcourſe on the philoſophy of the Stoics. In the evening of his days he was attacked by the famous aſtrologer William Lilly, in his *Annus Tenebroſus*, becauſe that in the annotations on Jeremiah, ch. x. ver. 2, he had, with great ſenſe and learning, expoſed the vanity and abſurdity of the pretended ſcience of judicial aſtrology. Mr. Gataker's growing infirmities now indicated that his end was approaching; and ſoon after the publication of the piece laſt mentioned, he was ſeized with a fever, which proved fatal to him in the eightieth year of his age. Echard ſays of him, that he was "the moſt celebrated among the aſſembly of divines, being highly eſteemed by Salmaſius, and other foreigners; and it is hard to ſay which is the moſt remarkable, his exemplary piety and charity, his polite literature, or his humility and modeſty in refuſing preferments."

GA'TAM, [Heb. lowing of cattle.] A man's name.

GATE, *ſ.* [ȝeat, Sax.] The entrance or door of a city, caſtle, palace, or large building:

Open the *gate* of mercy, gracious God!
My ſoul flies through theſe wounds to ſeek thee. *Shakeſ.*

A frame of timber upon hinges, to give a paſſage into encloſed grounds:

Know'ſt thou the way to Dover?
—Both ſtile and *gate*, horſeway and footpath. *Shakeſ.*

An avenue; an opening.—Auſtria had done nothing but wiſely and politickly, in ſetting the Venetians together by the ears with the Turks, and opening a *gate* for a long war. *Knolles.*

In primitive times, the gates of cities were the places of judicature and common reſort. Here the governors, or elders of the city, met to hear complaints, adminiſter juſtice, make conveyances of titles and eſtates, and to tranſact all the affairs of the place, whence that verſe in the Pſalms, "They ſhall not be aſhamed when they ſpeak with their enemies in the gate," i. e. when they are accuſed by them before the court of magiſtrates. It is probable that the room, or hall, where the magiſtrates ſat, was over the gates, becauſe, in the ſcriptures, Boaz is ſaid to go up to the gate. The like did David, when he went to weep for the death of Abſalom. How conſiderable they became in time for largeneſs and ſumptuouſneſs, appears by the two kings of Iſrael and Judah being preſent at one of them in all their royal ſplendor, and convening thither four hundred prieſts of Baal, beſides their own guards and officers. It ſeems as if theſe places had been at firſt choſen for the conveniency of the inhabitants, who being all huſbandmen, and forced to paſs and repaſs, morning and night, as they went and came from their labour, might be more eaſily called as they went by, whenever they were wanted to appear in any buſineſs. Theſe gates were likewiſe markets for proviſions, like thoſe of the Romans, as appears by the prophet Elijah's foretelling an incredible plenty to happen the next day in the midſt of a famine, at the gates of Samaria. Thoſe who preſided were the elders, the heads of the people, the judges, and the officers. Abraham could not make his purchaſe from Ephron the Hittite, without having recourſe to the city gates.—See Gen. xxiii. 10.

GATE, at the end of the names of places, ſignifies a way or path, from the Saxon ȝeat, i. e. *porta*. The cuſtody of the gates of the city of London, is granted to the lord mayor, by charter king Henry IV.

GA'TEHOUSE, a town of Scotland, in the county of Kircudbright, ſituated near the mouth of the Fleet, not far from the Iriſh ſea, with a cotton manufacture. Sloops come up near to the town: thirteen miles weſt of Kircudbright, and ſixteen ſouth-weſt of New Galloway.

GATES, a county of the American States, in Edenton eaſtern diſtrict, north of Carolina, bounded on the north by the ſtate of Virginia, and ſouth by Chowan co. It contains 5392 inhabitants: chief town, Hertford.

GA'TESHEAD, a village of England, in the county of

of Durham, on the ſouth ſide of the Tyne, oppoſite to Newcaſtle, to which it appears like a ſuburb; celebrated for its grindſtones, which, under the name of Newcaſtle, are exported to all parts of the world.

GA'TEVEIN, *ſ.* The great vein which conveys the blood to the liver. *Bacon.*

GA'TEWAY, *ſ.* A way through gates of incloſed grounds.—*Gateways* between incloſures are ſo miry, that they cannot cart between one field and another. *Mortimer.*

GATH, a city of the Philiſtines, and the capital of the lordſhip of the Gittites: here part of the Anakims, the ancient terror of the Iſraelites, retreated after their expulſion from Canaan by Joſhua; and here the ark of God was carried in triumph during its captivity in this country, to the great terror and deſtruction of its inhabitants. Gath was ſettled as a frontier town of Philiſtia, on the borders of Iſrael, in the days of Samuel; and in the reign of Saul king of Iſrael, Goliath, a man of gigantic ſtature, and a native of this place, openly defied the armies of Iſrael, and was overcome by David, who in this gained a ſignal victory for Iſrael; for the Philiſtines, finding their champion defeated, immediately fled, and were purſued by the Iſraelites with great ſlaughter, to the gates of Ekron and of this city. Here David afterwards fled to avoid the fury of Saul; and we are informed that ſix hundred Gittites followed David from this place, who remained attached to his intereſt even during the rebellion of Abſalom. After this, in the wars of David with the Philiſtines, Gath and its dependencies ſurrendered to him; and in a ſubſequent battle, near this place, the race of Goliath was totally extirpated, and Gath very probably rendered of no conſequence, as nothing more occurs reſpecting it till Rehoboam's reign, who is ſaid to have built or rebuilt and fortified this city, with many others, for the defence of his kingdom. It was taken from Judah by Hazael king of Syria in the reign of Joaſh; and we again find it poſſeſſed by the Philiſtines in the reign of Uzzah, who, in his wars with them, deſtroyed the wall of Gath. See Joſh. xi. 21. xiii. 3. 1 Sam. v. 8. vii. 14. xvii. xxvii. 2 Sam. xv. 18, &c. 2 Kings, xii. 17. 1 Chron. xviii. 1. xx. 4, &c. 2 Chron. xi. 8. xxvi. 6.

GATH-HE'PHER, a city of Paleſtine, the birth-place of the prophet Jonah. 1 Kings, xiv. 25.

GATH-RIM'MON, a city of Paleſtine, ſituated in the tribe of Dan; and one of the cities of the Levites of the family of Kohath. Joſh. xix. 45. and xxi. 24. Alſo the name of another city of Paleſtine, ſituated in the half tribe of Manaſſeh weſt of Jordan, and one of the cities of the Levites of the family of Kohath. Joſh. xxi. 25.

To GATH'ER, *v. a.* [ȝaðeꝛian, Sax.] To collect; to bring into one place.—*Gather* ſtones—and they took ſtones and made an heap. *Gen.*—To get in harveſt.—The ſeventh year we ſhall not ſow, nor *gather* in our increaſe. *Lev.* xxv. 20.—To pick up; to glean.—Caſt up the highway, *gather* out the ſtones. *If.* lxii. 10.—To crop; to pluck:

What have I done?
To ſee my youth, my beauty, and my love,
No ſooner gain'd, but ſlighted and betray'd;
And like a roſe juſt *gather'd* from the ſtalk,
But only ſmelt, and cheaply thrown aſide,
To wither on the ground! *Dryden.*

To aſſemble.—They have *gathered* themſelves together againſt me. *Job.*—To heap up; to accumulate.—He that by uſury and unjuſt gain increaſeth his ſubſtance, ſhall *gather* it for him that will pity the poor. *Proverbs.*—To ſelect and take.—Save us, O Lord, and *gather* us from among the heathen, to give thanks unto thy holy name. *Pſ.* cvi. 47.—To ſweep together.—The kingdom of heaven is like unto a net that was caſt into the ſea, and *gathered* of every kind. *Mat.* xiii. 47.—To collect charitable contributions. To bring into one body or intereſt.—I will *gather* others to him, beſides thoſe that are *gathered* unto him. *If.* lvi. 8.—To draw together from a ſtate of diffuſion; to compreſs; to contract:

Immortal Tully ſhone,
The Roman roſtra deck'd the conſul's throne;
Gath'ring his flowing robe he ſeem'd to ſtand,
In act to ſpeak, and graceful ſtretch'd his hand. *Pope.*

To gain:

He *gathers* ground upon her in the chace;
Now breathes upon her hair with nearer pace. *Dryden.*

To collect logically; to know by inference.—From this doctrine of the increaſing and leſſening of ſin in this reſpect, we may *gather*, that all ſins are not alike and equal, as the ſtoics of ancient times, and their followers, have falſely imagined. *Perkins.*

Return'd
By night, liſtening where the hapleſs pair
Sat in their ſad diſcourſe, and various plaint,
Thence *gather'd* his own doom. *Milton.*

To pucker or draw together in needlework.

To GATHER *Breath.* [A proverbial expreſſion.] To have reſpite from any calamity:

The luckleſs lucky maid
A long time with that ſavage people ſtaid,
To *gather breath*, in many miſeries. *Spenſer.*

To GATH'ER, *v. n.* To be condenſed; to thicken:

When the rival winds their quarrel try,
South, Eaſt, and Weſt, on airy courſers borne,
The whirlwind *gathers*, and the woods are torn. *Dryden.*

To grow larger by the accretion of ſimilar matter.—Their ſnow-ball did not *gather* as it went; for the people came in to them. *Bacon.*—To aſſemble.—There be three things that mine heart feareth: the ſlander of a city, the *gathering* together of an unruly multitude, and a falſe accuſation. *Eccl.* xxvi. 5.—To generate pus or matter.—Aſk one, who by repeated reſtraints hath ſubdued his natural rage, how he likes the change, and he will tell you 'tis no leſs happy than the eaſe of a broken impoſthume after the painful *gathering* and filling of it. *Decay of Piety.*

GATH'ER, *ſ.* Pucker; cloth drawn together in wrinkles:

Give laws for pantaloons,
The length of breeches, and the *gathers.*
Part cannons, periwigs, and feathers. *Hudibras.*

GATH'ER-BAG, *ſ.* With hunters, the membrane incloſing a red deer in the hind's belly. *Phillips.*

GATH'ERER, *ſ.* One that gathers; one that collects; a collector.—I will ſpend this preface about thoſe from whom I have gathered my knowledge; for I am but a *gatherer* and diſpoſer of other men's ſtuff. *Wotton.*—One that gets in a crop of any kind.—I was a herdman and a *gatherer* of ſycamore fruit. *Amos.*

Nor in that land
Do poiſonous herbs deceive the *gatherer's* hand. *May.*

GATH'ERING, *ſ.* Collection of charitable contributions.—Let every one lay by him in ſtore, that there be no *gatherings* when I come. 1 *Cor.* xvi. 2.

GATINOI'S, or GASTINOIS, before the revolution, a province of France, which had in the eleventh century counts of its own; it was afterwards joined to Anjou. Of late years, it has partly belonged to the government of Orleans, and partly to the government of the Iſle of France, and diſtinguiſhed by the names of *Gatinois-Orleanois* and *Gatinois-François.* It now forms part of the departments of the Seine and Marne, Seine and Oiſe, and Loiret.

GATSCH, a town and caſtle of Hungary: twelve miles eaſt of Korpona.

GATT, a ſtrait of the ſea, between the Frich-Haff and the German Ocean.

GAT'TEN-TREE, *ſ.* The cornelian cherry. See CORNUS *maſcula*, vol. v. p. 212.

GATTEVIL'LE, a town of France, in the department of the Channel, a little to the north of Barfleur.

GATTINA'RI, a town of Italy, in the lordſhip of Vercelli, on the Seſia: it contains one parochial and ſeveral other churches and convents: ſix miles ſouth of Borgo di Seſia, and fifteen miles north of Vercelli.

GAT'TON. See AGATTEN.

GAT'TON, an ancient borough in the county of Surrey, three miles from Ryegate, and twenty from London. It was formerly a conſiderable town, though now reduced to a ſmall village. From the number of coins and other antiquities found here, it is ſuppoſed to have been a Roman ſtation. It was once deſtroyed by the Danes. It is a borough by preſcription; and has ſent members to parliament ever ſince the 29th of Henry VI. The river Mole riſes at Gatton; where it is noted for a valuable quarry of white free-ſtone.

GAU, GAW, GOU, or GOW, a termination in the German language, which ſignifies country, canton, or diſtrict.

GAV'ALS, a town of Ruſſia, in the government of Viborg: twenty-eight miles ſouth of Viborg.

GAVAN'TI (Bartholomew), a learned Italian writer, born at Monza, in the Milaneſe, about the year 1568. He entered into the congregation of clerks regular of St. Paul, called *Barnabites*, at Milan, and applied with great diligence to the ſtudy of the Greek and Hebrew languages, theology, and eccleſiaſtical antiquities. The reputation to which he roſe for his acquaintance with the ceremonials of the Romiſh church, its rubrics, and diſcipline, occaſioned his being called to Rome by pope Clement VIII. who appointed him to one of the principal poſts in the congregation of rites; and he was alſo elected general of his order. He died at Milan in 1638, in his ſeventieth year. He was the author of a work entitled *Theſaurus Sacrorum Rituum, &c.* which made its firſt appearance in 1627. It conſiſts of a commentary on the Rubrics of the Miſſal, and Roman Breviary, which has been very widely circulated, and paſſed through more than twenty editions, of which the beſt was publiſhed at Turin, with additions, by Merati, in 1736–1740, five volumes 4to. with engravings. An abridgment of it in the Latin language, and a tranſlation of the ſame into French, by Claude Arnaud, were publiſhed at Paris towards the middle of the ſeventeenth century. Gavanti was alſo the author of *Manuale Epiſcoporum*, 4to. and a Latin treatiſe On the Manner of conducting Diocеſan Synods, 1639, 4to.

GAU'BIL (Antony), a diſtinguiſhed Jeſuit, born at Caillac, in 1708. He was ſent by his ſociety as a miſſionary into China, where he paſſed thirty-ſix years, ſupporting by his aſtronomical knowledge and general ſcience, that reſpectability which the Jeſuits above all other Europeans have maintained among a people of ſuch diſſimilar manners. He obtained a knowledge of the Chineſe hiſtory and literature, which ſurpriſed the learned natives themſelves. He publiſhed A Hiſtory of Gentchiſcan, and of all the Dynaſty of the Mongous his Succeſſors, Conquerors of China; drawn from the Hiſtory of China; Paris, 1739, 4to. Gibbon ſays of it, "This tranſlation is ſtamped with the Chineſe character of domeſtic accuracy and foreign ignorance." He alſo gave a tranſlation of the Chouking; Paris, 1771, 4to. and he ſent ſeveral memoirs to father Souciet and Freret, which they have uſed in their works. This learned and laborious father died in 1759.

GAU'BIUS (Jerome-David), profeſſor of medicine at Leyden, and fellow of the royal ſociety of London, born in 1705, at Heidelberg. He received the firſt part of his education among the Jeſuits; but a fear leſt he ſhould be obliged to abjure his religion, induced his father to place him under the care of Franke, in the Orphan-houſe of Halle. The diſcipline in this eſtabliſhment, to which he had been entirely unaccuſtomed, was ſo ſevere, that he begged to be removed from it, and with this requeſt his father complied, and ſent him to Amſterdam to his brother John, a celebrated practitioner in medicine. His attention was now devoted to the ſtudy of phyſic, which he afterwards purſued with more diligence at Hardwyk, where he reſided a year; but the great celebrity of Boerhaave induced him to repair to Leyden, and this proved to him a fortunate change, as the penetrating eye of that immortal phyſician ſoon diſcovered the latent genius of his pupil, and thoſe talents by which he afterwards diſtinguiſhed himſelf. When Boerhaave, oppreſſed by his great labours and increaſing years, had reſolved to reſign his chemical chair, Gaubius, in conſequence of his recommendation, was appointed to ſucceed him. In 1738, he publiſhed his Inſtructions for writing Recipes, which gained him great and deſerved eſteem. But the moſt important of his works, is his Principles of Noſology, in which he ſhewed himſelf not unworthy of his great preceptor. He next publiſhed, in 1771, *Adverſaria varii Argumenti*, which was particularly intereſting to chemiſts; and in 1775 he excited conſiderable notice by his oration, delivered on the two-hundredth anniverſary of the foundation of the academy of Leyden, in which he traced out the principal epochs of the arts and ſciences in Holland. Beſides theſe and other works, Gaubius was the author of ſeveral papers in the Tranſactions of the Society of Haerlem, and ſuperintended new editions of different works, ſuch as, *Cramer's Elementa Artis Docimaſticæ*, Lug. Bat. 1749; *Albinus de Preſagienda Vita & Morte*, ibid. 1733: and he had a great ſhare in the tranſlation of Swammerdam's Book of Nature. He enjoyed the happineſs of continued good health to his ſeventieth year, and died on the 29th of November, 1780, at the age of ſeventy-five. His works, beſides thoſe already mentioned, are, *Inſtitutiones Pathologicæ Medicinalis*, Lug. Bat. 1758, 8vo. The ſcarcity of this valuable manual of pathology in Germany, and its great utility in academical lectures, induced profeſſor Ackerman of Altdorf to give a fourth edition of it, at Nuremberg, in 1787, with a great many additions, which tend partly to illuſtrate obſcure paſſages of the original, and partly contain new diſcoveries. *De Regimine Mentis quod Medicorum eſt, Sermo prior & alter*, Lug. Bat. 1747, 1764, 8vo. Argent. 1776, 8vo.

GAUDE, *ſ.* [The etymology of this word is uncertain: Skinner imagines it may come from *gaude*, French, a yellow flower, yellow being the moſt gaudy colour. Junius, from αγανος; and Mr. Lye finds *gaude*, in Douglaſs, to ſignify deceit or fraud, from *gwawdio*, Welſh, to cheat. It ſeems moſt eaſily deducible from *gaudium*, Latin, joy; the cauſe of joy; a token of joy: thence aptly applied to any thing that gives or expreſſes pleaſure.] An ornament; a fine thing; any thing worn as a ſign of joy. *It is not now much uſed:*

He ſtole th' impreſſion of her fantaſy,
With bracelets of thy hair, rings, *gaudes*, conceits,
Knacks, trifles, noſegays, ſweetmeats. *Shakeſpeare.*

Some bound for Guinea, golden ſand to find,
Bore all the *gaudes* the ſimple natives wear;
Some for the pride of Turkiſh courts deſign'd,
For folded turbants fineſt holland bear. *Dryden.*

To GAUDE, *v. a.* [*gaudeo*, Lat.] To exult; to rejoice at any thing:

Go to a goſſip's feaſt, and *gaude* with me,
After ſo long grief ſuch nativity. *Shakeſpeare.*

GAU'DEN, or GAWDING (John), an eminent Engliſh prelate, born in 1605, at Mayland, in Eſſex, of which pariſh his father was miniſter. He received his grammar-learning at Bury St. Edmund's; whence, at ſixteen years of age, he was ſent to St. John's college in Cambridge. About the year 1630, he married a daughter of ſir William Ruſſel, bart. of Chippenham, in Cambridgeſhire, and, removing to Oxford, became a member of Wadham college. In 1635, he was admitted to the degree of bachelor in divinity; and was afterwards appointed chaplain to Robert earl of Warwick, and pre-

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ferred to the rectory o Brightwell, in Berkſhire, and to the vicarage of Chippenham in Wilts. The earl of Warwick's politics being in direct oppoſition to thoſe of the court, his chaplain embraced the ſame ſide, and preached a ſermon before the houſe of commons in November, 1640, which proved ſo acceptable to them, that they voted him a preſent; and in 1641, he proceeded to the degree of doctor of divinity, and was preſented by the parliament to the valuable deanery of Bocking, in Eſſex. When the *covenant* was under diſcuſſion in the houſes of parliament, Dr. Gauden publiſhed a treatiſe againſt it, entitled, Certain Scruples and Doubts of Conſcience about taking the Solemn League and Covenant, &c. 1643, 4to. but after ſubſcription to it was enjoined by the votes of the lords and commons, he complied, and by that means retained his valuable livings. During the year 1648, the celebrated treatiſe entitled Εικων Βασιλικη, or the Portraiture of his Sacred Majeſty King Charles, in his Solitude and Sufferings, was firſt printed, and before the cloſe of it went through ſeventeen editions in England, beſides different impreſſions on the continent. That Dr. Gauden was the principal inſtrument in bringing it before the public, cannot be diſputed; and that he had a conſiderable ſhare in drawing it up, ſeems upon the whole more probable than that it was a production of king Charles himſelf. By aſcribing this treatiſe to the king, however, the moſt favourable impreſſions were created, both at home and abroad, of his piety, meekneſs, and humanity; and lord Shafteſbury ſuppoſes that it contributed, in a great meaſure, to procure for him in the church, the titles of *ſaint* and *martyr*. Dr. Gauden alſo publiſhed, *Hieraſpiſtes*, or, a Defence of the Miniſtry and Miniſters of the Church of England, 1653, 4to. The Caſe of Miniſters Maintenance by Tythes, plainly diſcuſſed in Conſcience and Prudence, 4to. A Treatiſe of Chriſtian Marriages, 1654, 4to. A petitionary Remonſtrance to Oliver, Protector, 1659, 4to. and Ιερα Δακρυα; *Eccleſiæ Anglicanæ Suſpiria*: the Tears, Sighs, Complaints, and Prayers, of the Church of England, ſetting forth her former Conſtitution, compared with her preſent Condition; alſo the viſible Cauſes, and probable Cures, of her Diſtempers; in four Books, 1659, folio.

After the death of biſhop Brownrigg, in 1659, Dr. Gauden was choſen his ſucceſſor as preacher at the Temple; and upon the reſtoration of Charles II. in the following year, he was made chaplain to his majeſty. He now zealouſly devoted himſelf to further all the meaſures of the court; and in a few months he publiſhed his *Antiſacrilegus*, or a Defenſative againſt the Plauſibleneſs or gilded Poiſon of that nameleſs Paper (ſuppoſed to be the plot of Dr. Cornelius Burgeſs and his partners) which attempts the King by the Offer of 500,000l. to make good by an Act of Parliament to the Purchaſers of Biſhops, &c. Lands, or illegal Bargain for ninety-nine Years, 4to. his ΑΝΑΑΥΣΙΣ: the looſing of St. Peter's Bands; ſetting forth the true Senſe and Solution of the Covenant in point of Conſcience, ſo far as it relates to the Government of the Church by Epiſcopacy, 4to. and his Analyſis of the Covenant, 4to. Dr. Gauden was not ſo modeſt but that he could plead with the king the merit of his ſervices to the church in theſe performances, and could dwell particularly on the honour which he had been the means of rendering to his father's memory, by publiſhing the Εικων Βασιλικη; in recompence of which he was promoted to the vacant ſee of Exeter, before the cloſe of the year 1660. That appointment proved a very beneficial one; for, from the fines for the renewal of leaſes, which had not been levied during the abolition of epiſcopacy, in a few months he realiſed the ſum of twenty thouſand pounds. But his ambition was not ſatisfied, and he loſt no opportunity of urging the king to tranſlate him to a better ſee; alleging that Exeter *had a high rack but a low manger*, and pleading his deſert and great ſervices. In the mean time he went on publiſhing different treatiſes in defence of the liturgy of the church of England, together with the Life of Mr. Hooker; and when, by the death of biſhop Duppa, in 1662, a vacancy took place in the rich ſee of Wincheſter, biſhop Gauden applied to the king to become his ſucceſſor; but his majeſty thought proper to beſtow it on Dr. Morley biſhop of Worceſter, and Gauden was forced to be contented with a tranſlation to the ſee which had been juſt quitted by his more fortunate rival. The diſappointment of his ambition had ſuch an effect upon him, that it brought on a violent malady, which put an end to his life ſoon after his removal to his new biſhopric, when he was about fifty-ſeven years of age.

GAUDEN'TIUS, a ſaint in the Romiſh calendar, and biſhop of Breſcia at the end of the fourth and beginning of the fifth century. We find no particulars related concerning him before his election to the ſee of Breſcia, in the year 387. He was one of the deputation ſent to Conſtantinople in 404, or 405, by Honorius and the Weſtern biſhops, to appeaſe the emperor Arcadius's reſentment againſt St. Chryſoſtom, and to intercede for his peaceable re-eſtabliſhment in his ſee. How long he lived after this is uncertain; ſome writers placing his death in the year 410, and others in 427. To him has been generally attributed The Life of Philaſter, which may be found in Surius, under the 18th of July; and he was the author of fifteen Diſcourſes, and other treatiſes on different ſubjects, addreſſed to Benevolus, one of the moſt conſiderable men in Breſcia; Letters, and other pieces, which are inſerted in the fifth volume of the Bibliotheca Patrum. The laſt and moſt complete edition of his works was publiſhed at Breſcia, in 1738, folio, together with thoſe of Philaſter, under the inſpection of cardinal Quirini.

There was another GAUDENTIUS, who flouriſhed at the ſame time with the preceding, and was a biſhop among the Donatiſts in Numidia. He wrote two Apologies in defence of his ſect, addreſſed to the tribune Dulcitius, the emperor's lieutenant in Africa; in conſequence of which he was involved in a controverſy of ſome continuance with St. Auguſtine. And there was alſo a third prelate of the ſame name, and of ſome celebrity, who lived about the commencement of the fifth century, and filled the ſee of Novara.

GAU'DERY, *ſ.* Finery; oſtentatious luxury of dreſs. —The triumph was not pageants and *gaudery*, but one of the wiſeſt and nobleſt inſtitutions that ever was. *Bacon.*

A plain ſuit, ſince we can make but one,
Is better than to be by tarniſh'd *gaud'ry* known. *Dryden.*

GAU'DIES, *ſ. pl.* Double commons, the commons allowed on gaudy days.

GAUDIL'OQUOUS, *adj.* [*gaudium*, joy, and *loquor*, Lat. to ſpeak.] Declaring good news. *Scott.*

GAUDIA'NO, a town of Italy, in the kingdom of Naples, and province of Baſilicata: ten miles north-eaſt of Venoſa.

GAU'DILY, *adv.* Showily.

GAU'DINESS, *ſ.* Showineſs; tinſel appearance.

GAU'DISCHKEHN, a town of Pruſſian Lithuania, ſituated on the Angerapp: five miles eaſt-ſouth-eaſt of Gumbinnen.

GAU'DIUM, *ſ.* [חדה *chadah*, to rejoice.] Joy; a term with phyſicians for a pleaſant commotion of the ſpirits.

GAU'DY, *adj.* Showy; ſplendid; pompous; oſtentatiouſly fine:

Coſtly thy habit as thy purſe can buy,
But not expreſt in fancy: rich, not *gaudy*;
For the apparel oft proclaims the man. *Shakeſpeare.*

GAU'DY, *ſ.* [*gaudium*, Lat.] A feaſt; a feſtival; a day of plenty. *A word uſed in the univerſity.*—He may ſurely be content with a faſt to-day, that is ſure of a *gaudy* to-morrow. *Cheyne.*

GAVE, the preterite of *give*:

Thou can'ſt not every day give me thy heart;
If thou can'ſt give it, then thou never *gav'ſt* it:
Love's riddles are, that though thy heart depart,
It ſtays at home, and thou with loſing ſav'ſt it. *Donne.*

GAVE,

GAVE, *ſ.* A term uſed in the ſouth-weſt part of France, to expreſs a river or brook; as, the Gave of Oleron, the Gave of Pau, &c.

GAV'EL, *ſ.* [ȝafel, Sax.] Tribute, toll, cuſtom, or yearly revenue; of which we had in old time ſeveral kinds.

GAV'ELCESTER, *ſ.* [Sax. *ſextarius victigalis*, Lat.] A certain meaſure of rent-ale: and among the articles to be charged on the ſtewards and bailiffs of the manors belonging to the church of Canterbury in Kent, according to which they were to be accountable, this of old was one; *de* gavelceſter *cujuſlibet bracini braciati infra libertatem maneriorum, viz. unam lagenam & dimidiam cerviſiæ.* This duty elſewhere occurs under the name of *tolceſter*; in lieu whereof the abbot of Abingdon was wont of cuſtom to receive the penny mentioned by Selden in his Diſſertation annexed to Fleta, cap. 8. Nor does it differ from what is called *oakgavel* in the Gloſſary at the end of Hen. I. *Law's Sax. Dict.*

GAV'ELET, *ſ.* [*gaveletum*, Lat.] An ancient and ſpecial kind of *ceſſavit* uſed in Kent, where the cuſtom of gavelkind continues, whereby a tenant, if he withholds his rents and ſervices due to the lord, ſhall forfeit his land: it was intended where no diſtreſs could be found on the premiſes, ſo that the lord might ſeize the land itſelf in the nature of a diſtreſs, and keep it a year and a day; within which time, if the tenant came and paid his rent, he was admitted to his tenement to hold it as before; but if not, the lord might enter and enjoy the ſame. The lord was to ſeek by the award of his court, from three weeks to three weeks, to find ſome diſtreſs upon the land or tenement, until the fourth court; and if in that time he could find none, at the fourth court it was awarded that the tenement ſhould be ſeized as a diſtreſs, and kept in the lord's hands a year and a day without manuring; and if the tenant did not in that time redeem it, by paying the rent and making amends to the lord, the lord, having pronounced his proceſs by witneſſes at the next county court, was awarded by his court to enter and manure the land as his own: and if the tenant would afterwards have it again, he was to make agreement with the lord. *Fitz. Ceſſ.* 60.

The word *gavelet* in its original ſignification imported *rent*; but it means alſo a proceſs for the recovery of rent peculiar to Kent, and London.—The gavelet thus prevailing by the cuſtom of Kent may be uſed whether there is a ſufficient diſtreſs on the land or not; but is reſtricted to gavelkind tenure. *Robins. on Gavelk.* 243. To London this writ was given for rent-ſervice generally by ſtat. 10 Edw. II. which is therefore called the ſtatute of gavelet. But by the words of the ſtatute it only lies where the lord cannot obtain payment by diſtreſs. *Wright's Ten.* 197. This remedy of gavelet, as well as that of ceſſavit, is now fallen into diſuſe; nor, whilſt they continued in uſe, were they applicable, except where the tenure was in fee. 1 *Inſt.* 142. *n.* 2.

GAVELET IN LONDON, *breve de gaveleto in London, pro reddito ibidem, quia tenementa fuerent indiſtringibilia.* The writ uſed in the huſtings of London, where the parties, tenant and demandant, appear by *ſcire facias*, to ſhew cauſe why the one ſhould not have his tenement again on payment of his rent, or the other recover the lands, on default thereof.

GAV'ELKIND, *ſ.* in law, a peculiar tenure or cuſtom, annexed and belonging to lands in Kent, whereby the lands of the father are equally divided at his death among all his ſons; or the land of the brother among all the brethren, if he have no iſſue of his own. *Lit.* 210. See the article TENURE. All the lands in England, it is ſaid, were of the nature of gavelkind before the year 1066, and deſcended to all the iſſue equally; but after the Norman conqueſt, when knight ſervice was introduced, the deſcent was reſtrained to the eldeſt ſon for the preſervation of the tenure. *Lamb.* 167. 3 *Salk.* 129. Except in Kent, for the ſuppoſed reaſon recorded in Blount, who relates that the Kentiſh men ſurrounding William the Conqueror with a moving wood of boughs, thus obtained a confirmation of their ancient rights.

In the reign of Henry VI. there were not above forty perſons in all Kent that held by any other tenure than this of gavelkind; which was afterwards altered upon the petition of divers Kentiſh gentlemen, in much of the land of that county, ſo as to be deſcendible to the eldeſt ſon, according to the courſe of the common-law, by ſtat. 31 Hen. VIII. c. 3; though the cuſtom to deviſe gavelkind land, and the other qualities and cuſtoms, remain. *Co. Lit.* 140. By ſtat. 34 and 35 Hen. VIII. c. 26, all gavelkind lands in Wales were made deſcendible to the heir, according to the common-law; whereby it appears, that the tenure of gavelkind was likewiſe in that principality.

Blackſtone relies on the nature of tenure in gavelkind, as a pregnant proof that tenure in free ſocage was a remnant of Saxon liberty. It is univerſally known what ſtruggles the Kentiſh men made to preſerve their ancient liberties, and the ſucceſs with which thoſe ſtruggles were attended. And as it is principally here that we meet with the cuſtom of gavelkind, we may fairly conclude that this was a part of thoſe liberties; agreeable to Mr. Selden's opinion that gavelkind, before the Norman conqueſt, was the general cuſtom of the realm. Yet tenure in gavelkind is ſaid to be only a ſpecies of a ſocage tenure, modified by the cuſtom of the country; the lands being holden by ſuit of court and fealty, which is a ſervice in its nature certain. *Wright*, 211. Wherefore, by a charter of king John, Hubert archbiſhop of Canterbury was authoriſed to exchange the gavelkind tenures holden of the ſee of Canterbury into tenures by knight's ſervice: and by the ſtatute of 21 Hen. VIII. c. 3, for diſgavelling lands in Kent, they are directed to be deſcendible, for the future, like other lands which were never holden by ſervice of ſocage. Now the immunities which the tenants in gavelkind enjoyed were ſuch as cannot be conceived ſhould be conferred on mere ploughmen and peaſants: from all which the learned commentator conceives it to be ſufficiently clear that tenures in free ſocage are in general of a nobler original than is aſſigned by Littleton, or after him by the bulk of common lawyers. 2 *Comm.* 84, 5. c. 6.

A father having gavelkind lands, had three ſons, one of whom died in the life-time of his father, leaving iſſue a daughter; and it was held that the daughter ſhall inherit the part of her father *jure repræſentationis*; and yet ſhe is not within the words of the cuſtom of dividing the land between the heirs male, for ſhe is the daughter of a male and heir by repreſentation. 1 *Salk.* 243. The heir at the age of fifteen years, it is ſaid, may give and ſell his lands in gavelkind, and ſhall inherit. *Co. Lit.* 111. The cuſtom of gavelkind is not altered, though a fine be levied of the lands at common law; becauſe it is a cuſtom that runs with the land. 6 *Edw.* VI.

Land in gavelkind was deviſed to the huſband and wife for life, remainder to the next heir male of their bodies, &c. They had three ſons, and it was adjudged that the eldeſt ſon ſhould not have the whole. *Dyer*, 133. A donee in tail of gavelkind lands had iſſue four ſons; and it was held, that all ſhould inherit: but if a leaſe for life is made of gavelkind, remainder to the right heirs of A.B. who hath iſſue four ſons, in this caſe the eldeſt ſon ſhall inherit the remainder, becauſe, in caſe of purchaſe, there can be but one right heir. 1 *Rep.* 102. If gavelkind lands come to the crown, and are regranted to hold *in capite*, &c. the land ſhall deſcend to all the heirs male as gavelkind. *Nelſ. Abr.* 895.

A wife ſhall be endowed of gavelkind land, of a moiety of the land whereof her huſband died ſeiſed, during her widowhood. *Co. Lit.* 111. And it has been adjudged, that the widow cannot have election to demand her thirds or dower at common law, ſo as to avoid the cuſtom, by which ſhe ſhall loſe her dower if ſhe marry a ſecond huſband. *Moor*, 260. The huſband ſhall be tenant by the curteſy of half the gavelkind lands of the wife, during the

the time he continues unmarried, without having any iſſue by his wife; but if he marry, he ſhall forfeit his tenancy by the curteſy. *Co. Lit.* 111. If the huſband had iſſue by his wife, and ſhe die, he ſhall be tenant by the curteſy of the whole land; and though he marry, he ſhall not forfeit his tenancy. 1 *Lil. Abr.* 649. It was formerly ſuppoſed, that although a father was attainted of treaſon or felony, the heir of gavelkind land ſhould inherit; for the cuſtom, as was ſaid, was, 'the father to the bough, and the ſon to the plough.' *Doct. & Stud.* c. 10. But it has been held, that, in matters of treaſon, which ſtrike at the foundations of policy and government, even gavelkind lands are forfeitable, and always were.

All lands in Kent ſhall be taken to be gavelkind, except thoſe which are diſgavelled by particular ſtatutes. 1 *Mod.* 98. If lands are alleged to be in Kent, it ſhall be intended that they are gavelkind, if the contrary doth not appear. 2 *Sid.* 153. By Hale Ch. J. Gavelkind law is the law of Kent, and is never pleaded, but preſumed; and it has been held, that the ſuperior courts may take notice of gavelkind generally without pleading: though not of the ſpecial cuſtom of deviſing it, which ought to be pleaded ſpecially. *Cro. Car.* 465. *Lutw.* 236, 754.

The gavelkind deſcent of lands in Ireland was an incident to the cuſtom of Taniſtry: and as ſuch fell to the ground with its principal, in conſequence of a ſolemn judgment againſt the latter in a caſe ann. 5 Jac. I. But in the reign of queen Anne the policy of weakening the Roman-catholic intereſt in Ireland was the cauſe of an Iriſh ſtatute to make the lands of papiſts deſcendible according to the gavelkind cuſtom, unleſs the heir conformed within a limited time. *Rob. on Gavelk.* c. 17. However, now by an Iriſh ſtatute of the preſent reign, 17 and 18 Geo. III. c. 49, the deſcent of the lands of papiſts is again reduced to the courſe of the common law. 1 *Inſt.* 176. *n.* 1.

GA'VELKOVEN, a town of Germany, in Lower Bavaria: twenty miles ſouth-eaſt of Landſhut.

GAVEL'LO, formerly an epiſcopal town of the Venetian ſtates, belongs at preſent to the kingdom of Italy: it is well-peopled, and ſituated on the road of Ferrara.

GAV'ELMAN, *ſ.* A tenant liable to tribute. And hence gavelkind has been thought to be land in its nature taxable. *Blount.*

GAV'ELMED, *ſ.* The duty or work of mowing graſs, or cutting of meadow land, required by the lord from his cuſtomary tenants: *Conſuetudo falcandi quæ vocatur* gavelmed. *Somn.*

GAU'ER, a river of Scotland, which forms a communication between Loch Lydoch and Loch Rannock.

GAV'EREN, a town of Flanders, on the Scheldt: ſeven miles from Ghent.

GAV'EREN. See WAVEREN.

GAU'ERS, a town of Sileſia, in the principality of Neiſſe: five miles north-north-weſt of Patſchau.

GAVE'TA (La), a town of Italy, in the kingdom of Naples, and province of Capitanata: ſixteen miles ſouth-ſouth-weſt of Manfredonia.

GAUGAME'LA, in ancient geography, a village of Aturia, lying between the rivers Lycus and Tigris; famous for Alexander's victory over Darius. It was not far from a more conſiderable place called *Arbela*; whence the latter gave the name to the victory. See ARBELA, vol. i. p. 37—38.

To GAUGE, *v. a.* [from *gauge, jaugé*, Fr. a meaſuring rod. It is pronounced, and often written, *gage.*] To meaſure with reſpect to the contents of a veſſel. To meaſure with regard to any proportion.—The vanes nicely *gauged* on each ſide, broad on one ſide, and narrow on the other, both which miniſter to the progreſſive motion of the bird. *Derham.*

GAUGE, *ſ.* A meaſure; a ſtandard.—If money were to be hired, as land is, or to be had from the owner himſelf, it might then be had at the market rate, which would be a conſtant *gauge* of your trade and wealth. *Locke.*

GAUGE-LINE, *ſ.* A line marked on the common gauging rod, uſed for the purpoſe of gauging liquids.

GAUGE-POINT, *ſ.* in ſolid meaſure, is the diameter of a circle, whoſe area is expreſſed by the ſame number as the ſolid content of that meaſure. Or it is the diameter of a cylinder, whoſe altitude is 1, and its content the ſame as that meaſure. Thus, the ſolid content of a wine gallon being 231 cubic inches; if a circle be conceived to contain ſo many ſquare inches, its diameter will be 17·15; which is therefore the gauge-point for wine meaſure. And an ale gallon containing 282 cubic inches; by the ſame rule, the gauge-point for ale meaſure will be found to be 18·95. And after the ſame manner may the gauge-point for any other meaſure be determined. Hence it follows, that when the diameter of a cylinder in inches is equal to the gauge-point in any meaſure, given likewiſe in inches, every inch in its length will contain an integer of the ſame meaſure. So in a cylinder whoſe diameter is 17·15 inches, every inch in height contains one entire gallon in wine meaſure; and in another, whoſe diameter is 18·95, every inch in length contains one ale gallon.

GAU'GER, *ſ.* An officer appointed by the commiſſioners of exciſe, to gauge, meaſure, or examine, all caſks, tuns, pipes, barrels, hogſheads, of beer, wine, oil, &c. before they are permitted to be ſold or otherwiſe diſpoſed of.

GAU'GING, *ſ.* The art of meaſuring the capacities or contents of all kinds of veſſels, and determining the quantity of fluids, or other matters contained within them. Theſe are principally pipes, tuns, barrels, rundlets, and other caſks; alſo backs, coolers, vats, &c. As to the ſolid contents of all priſmatical veſſels, as cubes, parallelopipedons, cylinders, &c. they are found by multiplying the area of the baſe by their altitude. And the contents of all pyramidal bodies, and cones, are equal to 1-3d of the ſame.

In gauging, it has been uſual to divide caſks into four varieties or forms, denominated as follows, from the ſuppoſed reſemblance they bear to the fruſtums of ſolids of the ſame names: viz. 1. The middle fruſtum of a ſpheroid; 2. The middle fruſtum of a parabolic ſpindle; 3. The two equal fruſtums of a paraboloid; 4. The two equal fruſtums of a cone. And particular rules, adapted to each of theſe forms, may be found in moſt books of gauging. But as the form is imaginary, and only gueſſed at, it hardly ever happens that a true ſolution is brought out in this way; beſides which, it is very troubleſome and inconvenient to have ſo many rules to put in practice. We ſhall therefore give one rule, which is not only general for all caſks that are commonly met with, but quite eaſy, and very accurate. Thus, add into one ſum, 39 times the ſquare of the bung diameter, 25 times the ſquare of the head diameter, and 26 times the product of thoſe diameters; multiply the ſum by the length of the caſk, and the product by the number ·00034; then this laſt product divided by 9 will give the wine gallons, and divided by 11 will give the ale gallons.

Or, $\overline{39B^2 + 25H^2 + 26BH} \times \frac{L}{114}$ is the content in inches; which being divided by 231 for wine gallons, or by 282 for ale gallons, will be the content. *For Example:* If the length of the caſk be 40 inches, the bung diameter 32, and the head diameter 24:

Here	-	$32^2 \times 39$	= 39936
and	-	$24^2 \times 25$	= 14400
and	-	$32 \times 24 \times 26$	= 19968
		the ſum -	74304
		multiplied by -	49
		and divided by 114)	2972160
		gives -	26071 cubic inches;

this divided by 231 gives 112 wine gallons, or divided by 282 gives 92 ale gallons.

GAUGING *by the Diagonal Rod*, is a method adapted for

for determining the contents of caſks by meaſuring the diagonal only, viz. the diagonal from the bung to the extremity of the oppoſite ſtave next the head. This is done by a ſquare rule, having 4 ſides or faces, being uſually 4 feet long, and hence called the *four-feet gauging rod.*—See a figure of it in the Engraving of *Gages.* Upon one face of this rule is a ſcale of inches, for taking the meaſure of the diagonal; to theſe are adapted the areas, in ale gallons, of circles to the correſponding diameters; and upon the oppoſite face are two ſcales, of ale and wine gallons, expreſſing the contents of caſks having the correſponding diagonals; and theſe are the lines which chiefly conſtitute the difference between this inſtrument and the ſliding rule; for all the other lines upon it are the ſame with thoſe in that inſtrument, and are to be uſed in the ſame manner.

To uſe the diagonal or four-feet GAUGING-ROD.—Unfold the rod, and put it in at the bung-hole of the caſk to be gauged, till its end arrive at the interſection of the head and oppoſite ſtave, or to the fartheſt poſſible diſtance from the bung-hole, and note the inches and parts cut by the middle of the bung; then draw out the rod, and look for the ſame inches and parts on the oppoſite face of it, and annexed to them are found the contents of the caſk, both in ale and wine gallons.—*For Example:* Let it be required to find, by this rod, the content of a caſk whoſe diagonal meaſures 34·4 inches; which anſwers to the caſk in the foregoing example, whoſe head and bung diameters are 32 and 24, and length 40 inches; for if to the ſquare of 20, half the length, be added the ſquare of 28, half the ſum of the diameters, the ſquare root of the ſum will be 34·4 nearly. Now, to this diagonal 34·4, correſponds, upon the rule, the content 91 ale gallons, or 111 wine gallons; which are but 1 leſs than the content brought out by the general rule above given.

The GAUGING SLIDING RULE, is alſo particularly adapted to the purpoſes of gauging. It is a ſquare rule, of four faces or ſides, three of which are furniſhed with ſliding pieces running in grooves. The lines upon them are moſtly logarithmic ones, or diſtances which are proportional to the logarithms of the numbers placed at the ends of them; which kind of lines was placed upon rulers by Mr. Edmund Gunter, for expeditiouſly performing arithmetical operations, uſing a pair of compaſſes for taking off and applying the ſeveral logarithmic diſtances: but inſtead of the compaſſes, ſliding pieces were afterwards added by Mr. Thomas Everard, as more certain and convenient in practice, from whom this ſliding rule is often called *Everard's Rule.*

GA'VI, a town of Italy, in the ſtate of Genoa, once very ſtrong, but the fortifications have been deſtroyed: twenty-five miles north of Genoa.

GA'VIA, a town of Spain, in the province of Grenada: four miles ſouth-ſouth-weſt of Grenada.

GAUJAC', a town of France, in the department of the Lannes: four leagues ſouth-eaſt of Dax.

GAUL, the name given by the Romans to the country which afterwards formed the kingdom of the Franks, or France.—See the article FRANCE, vol. vii. p. 647; and GALLIA, p. 192, of this volume.

GAUL'FRIDE, a man's name. *Chaucer.*

GAUL'MIN (Gilbert), a French writer, born at Moulins in 1585. He was of the profeſſion of the law, and became dean of the maſters of requeſts, counſellor of ſtate, and intendant of the Nivernois. He obtained the reputation of being one of the moſt learned men and acute critics of his time; but it has been aſſerted that his talents were rather thoſe which fitted him for ſhining in an aſſembly of ſuperficial admirers of literature, than for compoſing works of ſolid erudition. He was accuſtomed to harangue in public at the Luxemburgh, amid a crowd of auditors; and whatever might be his deficiencies, he certainly did not want confidence in his own acquirements. He was warmly attached to cardinal Mazarin, and ſeverely epigrammatiſed his enemies of the parliament. Upon the refuſal of the rector of his pariſh, for ſome reaſon, to marry him to the object of his choice, he declared in his preſence that he took ſuch a woman for his wife, and afterwards lived with her as ſuch. This circumſtance gave the name of *marriages à la Gaulmine* to unions of this kind, and their validity was legally examined, and pronounced null. His writings conſiſt of ſome Latin poems, and of notes and commentaries on ſeveral works of antiquity. He firſt publiſhed the Greek romance of Iſmenias and Iſmene, attributed to Euſtatius, with a Latin commentary. He died in 1665.

GAUL'ONITES, a ſect among the Jews, ſo named from Judas Gaulonites, who oppoſed the tribute raiſed by Cyrenius in the time of Auguſtus.

GAU'LOS, in ancient geography, a ſmall iſland of Sicily, in the African ſea, adjoining to Melite or Malta, with commodious harbours; a colony of Phœnicians, with a cognominal town. Gaulonitæ, the people. Now called *Gozo*, five miles to the weſt of Malta.

GAULT (Le), a town of France, in the department of the Loir and Cher, and chief place of a canton, in the diſtrict of Montdoubleau: eight miles north of Montdoubleau.

GAULTHE'RIA, *ſ.* [ſo named by Kalm from *Gaulthier*, a phyſician and botaniſt of Canada.] In botany, a genus of the claſs decandria, order monogynia, natural order bicornes, (erica, *Juſſ.*) The generic characters are—Calyx: perianthium double, approximating, permanent; outer two-leaved, ſhorter; leaflets half-ovate, concave, obtuſe; inner one-leafed, five-cleft, bell-ſhaped; ſegments half ovate. Corolla: one-petalled, ovate, half-five-cleft; border ſmall, rolled back; nectary of ten ſubulate, upright, very ſhort, bodies, or glands, ſurrounding the germ within the ſtamens. Stamina: filaments ten, ſubulate, bent in, ſhorter than the corolla, inſerted into the receptacle; antheræ two-horned, with the horns bifid. Piſtillum: germ roundiſh, flatted; ſtyle cylindric, the length of the corolla; ſtigma obtuſe. Pericarpium: capſule roundiſh, obtuſely five-cornered, flatted, five-celled, five-valved, opening into five parts at the top, covered all round with the inner perianth, changed into a roundiſh coloured berry, pervious at the top. Seeds: very many, ſubovate, angular, bony.—*Eſſential Character.* Calyx, outer two-leaved, inner five-cleft; corolla ovate; nectary with ten dagger points; capſule five-celled, covered with the inner calyx, now become a berry.

Species. 1. Gaultheria procumbens, or trailing gaultheria: leaves alternate, ovate, entire; ſtem ſhrubby, trailing. This plant has the appearance of Pyrola or Vaccinium, with a creeping root. It is a ſmall evergreen trailing ſhrub, a ſpan high, and ſcarcely branched; leaves terminating the ſtem, three or four, obovate, ſmooth, coriaceous, ſpreading, with a few acuminate ſerratures; flowers ſolitary, axillary, pendulous, peduncled; inner calyx and corolla white, or of an herbaceous colour, and rarely ſucceeded by fruit in England. The fruit is red on the outſide and fleſhy, reſembling a berry; the capſule within is very thin, and tubercled with the protuberance of the ſeeds; the partitions alſo within are very thin, and are faſtened to the axis and the furrows of the ſhell: there are five receptacles, which are fleſhy, flatted, bowed, fixed at the baſe, but looſe in the other parts, or connected with the axis of the fruit by a very thin membrane; ſeeds very ſmall, ſmooth, ſhining, ferruginous. Native of Canada, on a dry, ſterile, ſandy, ſoil. The leaves are uſed there in an infuſion, inſtead of tea.

2. Gaultheria antipoda, or antipodean gaultheria: leaves ſcattered, roundiſh, ſerrate-toothed; ſtem ſhrubby, diffuſed. Native of New Zealand.

Propagation and Culture.—1. The method of preſerving this plant in a garden, is to ſet it in a pot, filled with looſe undunged earth, placing it in the ſhade, and frequently watering it. Thus the plant may be kept alive two or three years, and bear flowers, but not fruit.

GAU'NERSDORFF, a town of Germany, in the archi-

archduchy of Auſtria: nine miles weſt of Ziſterzdorf, and ſixteen north-north-eaſt of Vienna.

GAUN'LESSE, a river of England, in the county of Durham, which runs into the Wear, at Biſhops Auckland.

GAUNT, *adj.* [as if *gewant*, from ȝepanian, Sax. to leſſen.] Thin; ſlender; lean; meagre:

Two maſtiffs, *gaunt* and grim, her flight purſu'd,
And oft their faſten'd fangs in blood embru'd. *Dryden.*

GAUNT'LY, *adv.* Leanly; ſlenderly; meagerly.

GAUNT'LET, *ſ.* [*gantelet*, Fr.] An iron glove formerly uſed for defence, and thrown down in challenges. It is ſometimes in poetry uſed for the *ceſtus*, or boxing glove.—A ſcaly *gauntlet* now, with joints of ſteel. *Shakeſp.*

Feel but the difference, ſoft and rough;
This a *gauntlet*, that a muff. *Cleaveland.*

GAVOT', *ſ.* [*gavotte*, Fr.] A kind of dance.—The diſpoſition in a fiddle to play tunes in preludes, ſarabands, jigs, and *gavots*, are real qualities in the inſtrument. *Arbuthnot.*

GAUPP (John), a German lutheran divine, and able mathematician, the ſon of a rich tradeſman at Lindau, in Swabia, where he was born, in 1667. The early part of his education he received at his native place, whence he was ſent to Ulm in 1682. Three years afterwards he removed to the univerſity of Jena, where he took the degree of maſter of arts. Having in that place contracted an acquaintance with John Andrew Schmid, he received from him a ſtrong bias in favour of mathematical ſtudies, and made conſiderable progreſs in them under his inſtructions. Afterwards he ſpent ſome time in different German univerſities, improving himſelf in theology and the mathematics; and then viſited Amſterdam and London, whence he returned to his native town. In 1693 he was admitted to the office of the miniſtry, in which he roſe to the ſtation of firſt paſtor of Lindau, about the year 1728. That part of his time which was not neceſſarily devoted to the duties of his profeſſion, he employed in mathematical purſuits, particularly in the ſtudy of aſtronomy and gnomonics. On theſe ſubjects he delivered lectures to a number of young perſons, and maintained a correſpondence with the moſt learned mathematicians of his time. His Ephemerides, and Obſervations, were very favourably received by the royal academies of ſciences at Paris and Berlin, and ſeveral of them are inſerted in the Memoirs of thoſe learned bodies. Many of the inſtruments which he made uſe of were conſtructed by himſelf, and he had begun the erection of an obſervatory, when death terminated his labours in 1738, at which time he had reached the ſeventy-firſt year of his age. He was the author of *Gnomonica Mechanica Univerſalis*, 1708, 4to. various calendars, and deſcriptions of eclipſes; ſermons; and treatiſes on the ſubject of finding Eaſter according to the Gregorian computation.

GAUR, a country of Aſia, ſituated between Balk and Candahar, with a town of the ſame name: 125 miles north-north-weſt of Candahar, and 150 eaſt of Herat.

GAUR, *ſ.* A Perſian prieſt.—The compariſon between the Bramins and the Perſian *gaurs*, who pretend to be the diſciples and ſucceſſors of the ancient magi, the followers of Zoroaſter, may be thought worth a learned diſquiſition. *Guthrie.*

GAU'RA, a town of Peru, in the juriſdiction of Chancay, containing about two hundred houſes and two churches, ſituated in a fertile country, and watered by a river of the ſame name: its chief commerce conſiſts in ſalt and ſalt beef.

GAU'RA, *ſ.* [from γαυρος, Gr. proud.] In botany, a genus of the claſs octandria, order monogynia, natural order calycanthemæ, (onagræ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, ſuperior, deciduous; tube cylindric, long, thicker at the baſe, containing four oblong glands growing to it; border four-cleft; diviſions oblong, acute, reflex. Corolla: petals four, oblong, riſing towards the upper lip, equal, with narrow claws, placed on the tube of the calyx. Stamina: filaments eight, filiform, broader at the top, ſtraight, ſhorter than the corolla: a nectareous gland of a conical form within the baſe of each; antheræ oblong, verſatile. Piſtillum: germ oblong, inferior, four-celled, many-ſeeded; the ſeeds fixed to a columnar receptacle; ſtyle filiform, length of the ſtamens; ſtigmas four, columnar, ovate, ſpreading. Pericarpium: drupe ovate, four-cornered, the corners flatted; often with one cell only, and one ſeed, with the veſtiges of the partitions and the abortive ſeeds. Seed: nut with one ſeed, oblong, angular, of a yellowiſh-bay colour, with a brown callus at the baſe.—*Eſſential Character.* Calyx four-cleft, tubulous; corolla four-petalled, riſing towards the upper ſide; nut inferior, one-ſeeded, four-cornered.

Gaura biennis, or biennial gaura, a ſingle ſpecies. Stem four or five feet high, ſending out ſeveral branches; leaves oblong, ſmooth, pale-green, ſitting pretty cloſe; flowers in cloſe tufts at the ends of the branches, pale roſe-coloured; appearing in September, and when the autumn proves favourable, ripening the ſeeds towards the end of October. Gaura agrees with Spathelia and Nitraria in having the ſhell of the fruit valved at the end. If there be only one ſeed, then it is oblong, and much acuminated; but Linnæus was miſtaken in ſuppoſing this to be the natural number. Native of Virginia and Pennſylvania. If the ſeeds are ſown on an open border ſoon after they are ripe, they will more certainly ſucceed than when they are ſown in the ſpring. When the plants come up, keep them clean from weeds, and thin them if they are too cloſe; tranſplant them in autumn where they are to ſtand, and ſupport the branches to prevent the autumnal winds from breaking them. See COMBRETUM and GUAREA.

GAVRAY', a town of France, in the department of the Channel, and chief place of a canton, in the diſtrict of Coutances: four leagues and a quarter north of Avranches, and three ſouth of Coutances.

GAU'RICO (Luca), an aſtronomer, equally famous for the ancient ſcience of aſtrology, born in 1475, at Giſuni in the kingdom of Naples. He became eminent for aſtronomical knowledge, and after having for ſome time taught that ſcience at Naples, he was appointed profeſſor in it at Ferrara, in 1507; at which time alſo he practiſed judicial aſtrology, and began to diſtinguiſh himſelf by bold predictions. One of theſe coſt him dear; for having foretold that John Bentivoglio would loſe his ſovereignty of Bologna, he was impriſoned by him, and received five violent ſhocks from a cord tied to his arm, while he was ſucceſſively let fall from a conſiderable height. He then removed to Venice, and thence to Rome in 1535. Pope Paul III. who was a believer in aſtrology, conferred upon him, in 1545, the biſhopric of Civita in Naples, with a liberal penſion; but he reſigned his epiſcopal office in 1550, and returned to Rome, where he quietly purſued his aſtronomical ſtudies. He died in 1558, in his eighty-third year. The works of Gaurico were publiſhed collectively at Baſil in three volumes, folio, 1575.

GAU'RICO (Pomponio), brother of the preceding, a learned profeſſor in the univerſity of Naples, and preceptor of Ferrante Sanſeverino, prince of Salerno. He acquired reputation by his Latin poems, conſiſting of eclogues, elegies, and epigrams, which are accounted to diſplay a poetical genius, though ſomewhat looſe in their ſtyle. He alſo publiſhed the lives of the Greek poets, and ſeveral treatiſes in architecture and phyſiognomy. He publiſhed ſome elegies under the name of Cornelius Gallus, but they were ſoon detected as ſpurious. His end was unfortunate; for having ſet out on a journey in 1530, on the road from Sorrento to Caſtel-

Caſtellamare, he was never more heard of; and it was conjectured that he was murdered and thrown into the ſea, in conſequence of the diſcovery of an amour which he had with a lady of rank.

GAU'RUS, a mountain of Campania, famous for its wines. *Lucan.*

GAUTHI'ER, or GAULTHIER (John Baptiſt), a French eccleſiaſtic, and voluminous writer, born at Louviers, in 1685. After being educated in grammar learning at his father's houſe, he was ſent to the college of Harcourt at Paris, where he went through his courſe of philoſophy; and in 1704, he entered on a courſe of theology in the ſchools of the Sorbonne. This he completed in 1706, and might have been admitted to his degrees, if he had not embraced the Janſeniſt opinions, which would not permit him to ſubſcribe to the requiſite formularies, and particularly to an approbation of the bull Unigenitus. He now entered into the ſeminary of St. Magloire, where he purſued his theological ſtudies with induſtry and ſucceſs, and acquired much eſteem by the exemplarineſs of his manners, the modeſty of his converſation, and the ardour of his piety. Returning afterwards to his native place, he was admitted into ſub-deacon's orders, and commenced a ſeries of catechetical lectures to young people, and of conferences for the inſtruction of junior eccleſiaſtics. The reputation which he acquired in theſe employments attracted the notice of M. le Normand, biſhop of Evreux, who prevailed upon him to enter into his family, where he applied himſelf cloſely to the ſtudy of eccleſiaſtical antiquities. But in this ſituation he could not eſcape his ſhare of the troubles with which thoſe of his party were haraſſed by the Jeſuits, after the year 1713; and being obliged to quit the dioceſe of Evreux, was received into the houſe of M. de Langle, biſhop of Boulogne. By that prelate he was admitted into prieſt's orders, and, after taking his degrees in law, nominated to a canonry in his cathedral. M. Gauthier's ſentiments, however, proving a bar to his taking poſſeſſion of that benefice, the biſhop made him his proctor, and afterwards his vicar-general. From this time M. Gauthier was the boſom friend and counſellor of his benefactor, who employed him in eſtabliſhing and conducting conferences among his eccleſiaſtics, and availed himſelf of his pen in various publications, particularly in the Letters and Memoirs, which he printed during his diſpute with the archbiſhop of Rheims, in 1723. After the death of M. de Langle, Gauthier retired to Paris, where he ſpent the remainder of his days in ſupport of the party with whom he had embarked againſt the Jeſuits. He loſt his life in 1755, in conſequence of an injury he received by being overturned in a carriage on his journey from Evreux to Paris, at which time he was ſeventy-one years of age. His writings bear teſtimony to the author's learning and acuteneſs, but at the ſame time ſhew that his pen was not unfrequently dipped in gall. They are, 1. The Poem of Pope, entitled an Eſſay on Man, convicted of Impiety, 1746, 12mo. 2. Letters intended to forearm the Faithful againſt Irreligion, 12mo. 3. The Jeſuits convicted of obſtinately ſanctioning the Practice of Idolatry in China, 1743, 12mo. 4. The Life of M. John Soanen, Biſhop of Senez, 1750, 8vo. 5. The Perſian Letters convicted of Impiety, 1751, 12mo. 6. A ſuccinct Hiſtory of the Parliament of Paris, during the Troubles at the Commencement of the Reign of Louis XIV. 1754, 12mo. 7. A poſthumous production, entitled, Theological Letters, in which the Sacred Scriptures, and the Faith of the Church on the Subjects of the Myſteries of the Trinity and the Incarnation, are vindicated and maintained, in Oppoſition to the impious and ſocinian Syſtem of Fathers Berruyer and Hardouin, Jeſuits, 1756, in 3 vols. 12mo. Prefixed to the firſt volume is a ſhort life of the author; and to the third is ſubjoined a tranſlation by him, from the Greek into French, of that valuable remain of Chriſtian antiquity, The Epiſtle to Diognetus.

GAUTS. See GHAUTS.

GAUZE, *ſ.* [from *gaze*, becauſe it may be ſeen through.] In commerce, a very thin ſlight tranſparent kind of ſtuff, woven ſometimes of ſilk, and ſometimes only of thread. To warp the ſilk for making of gauze, they uſe a peculiar kind of mill, upon which the ſilk is wound. There are alſo figured gauzes; ſome with flowers of gold and ſilver on a ſilk ground, which are chiefly brought from China.

GAUZEPOUR', a town and *pergunna* or diſtrict of Hindooſtan, ſituated on the eaſtward of Benares, in the territory of the *nawaub* or nabob of Oude.

GAW'AIN, GAW'EIN, a woman's name, ſiſter to king Arthur. *Chaucer.*

GAW'DED, *adj.* Fluſhed:

Our veil'd dames
Commit the war of white and damaſk in
Their nicely *gawded* cheeks. *Shakeſpeare.*

GAW'ILE, or GYALGUR', a town of Hindooſtan, in the country of Berar: twenty miles north-north-weſt of Ellichpour, and ſeventy-five weſt of Deogur.

GAWK, *ſ.* [ȝeac, Sax.] A cuckow. A fooliſh fellow. In both ſenſes it is retained in Scotland.

GAWN, *ſ.* [corrupted from *gallon.*] A ſmall tub, or lading veſſel. *A provincial word.*

GAW'NAGH LOUGH, a lake of Ireland, in the county of Longford, fifteen miles north-eaſt of Longford.

GAWN'TREE, *ſ.* [Scottiſh.] A wooden frame on which beer-caſks are ſet when tunned.

GAW'RAH, a river of Hindooſtan, which runs into the Ganges, five miles north of Canoga, in the country of Oude.

GAY, *adj.* [French.] Airy, cheerful, merry, frolic:

Smooth flow the waves, the zephyrs gently play;
Belinda ſmil'd, and all the world was *gay*.—
Ev'n rival wits did Voiture's fate deplore,
And the *gay* mourn'd, who never mourn'd before. *Pope.*

Fine; ſhowy.—A virgin that loves to go *gay*. *Bar.* vi. 9.

GAY, *ſ.* An ornament; an embelliſhment.—Moroſe and untractable ſpirits look upon precepts in emblem, as they do upon *gays* and pictures, the fooleries of ſo many old wives tales. *L'Eſtrange.*

GAY (John), an eminent Engliſh poet, born near Barnſtaple in Devonſhire, in 1688. He was deſcended from an ancient but reduced family; and, after receiving a ſlight education in the free-ſchool at Barnſtaple, was put apprentice to a ſilk-mercer in London; but he ſoon ſhewed his diſlike to ſuch a ſtation, and ſeparated from his maſter after a few years' negligent attendance. It is not improbable that a taſte for poetry might have been infuſed into him by his Barnſtaple ſchoolmaſter, Mr. Luck, who publiſhed a volume of Latin and Engliſh verſes. Poetical compoſition appears, at leaſt, to have been his purſuit from the time of his releaſe: and in 1711 he gave to the public his Rural Sports, inſcribed to Pope, then a young poet of the ſame age with himſelf, but riſing faſt to literary fame. This compliment, joined with the unaſſuming temper of Gay, laid a foundation of mutual friendſhip which death alone could divide. Gay was indolent and improvident, and his intercourſe with wits was not likely to improve his pecuniary circumſtances; he therefore accepted an offer in 1712, of reſiding with the ducheſs of Monmouth in quality of her ſecretary; an office, probably, only conſidered by her as an appendage of that princely rank which ſhe affected. This afforded him ſufficient leiſure to continue his court to the muſes, and the ſame year produced his mock-heroic poem entitled Trivia, or the Art of Walking the Streets of London. In a prefixed advertiſement he acknowledges himſelf indebted for ſeveral hints to Dr. Swift, to whoſe taſte ſuch a ſeries of comic delineation

was peculiarly ſuited. About this time Gay likewiſe engaged in dramatic writing. The Mohocks, a tragi-comical Farce, is attributed to his pen; and he brought upon the ſtage at Drury-lane, a comedy ſtyled The Wife of Bath, the reception of which was by no means flattering. His next appearance from the preſs, in 1714, was upon a ſingular occaſion. Pope and Ambroſe Philips had quarrelled about the reſpective merit of their paſtorals, of which thoſe of the former were written in the poliſhed, thoſe of the latter in the ruſtic, ſtyle. Gay, to ſerve the cauſe of his friend, undertook to compoſe a ſet of burleſque paſtorals, in which the manners of the country ſhould be exhibited in their natural coarſeneſs, with a view of proving, by a ſort of caricature, the abſurdity of Philips's ſyſtem of paſtoral. He entitled his work The Shepherd's Week, as the ſix pieces of which it conſiſted were denominated by days of the week. They go through the uſual topics of a ſet of paſtorals, in a ſtrain of parody which is often extremely humorous. But the effect was in one reſpect different from the original purpoſe, though it eſtabliſhed the credit of the poet. His pictures of rural life and its accompanying ſcenery were ſo extremely natural and amuſing, and intermixed with circumſtances ſo truly beautiful and touching, that they proved the moſt popular works of the kind in the language, and were read with pleaſure by thoſe who could not enter into the jeſt; and they have certainly gone far in eſtabliſhing the critical maxim, that paſtorals muſt be indebted for all their value to a cloſe adherence to nature. This performance was dedicated to lord Bolingbroke; and Gay, at this period, ſeems to have obtained a large ſhare of favour from the tory party then in power. As a proof of their kindneſs, he was appointed ſecretary to the earl of Clarendon in his embaſſy to the court of Hanover. The queen's death ſoon recalled him from this ſtation, and threw a damp upon his proſpects; but he was adviſed by his friends not to neglect the opportunity it had afforded him of ingratiating himſelf with the new family. He accordingly wrote a poetical epiſtle upon the arrival of the princeſs of Wales, which compliment procured him the honour of the attendance of the prince and princeſs at the exhibition of his next dramatic piece, in 1715, The What d'ye call it. This was a kind of mock-tragedy, conſiſting of ſerious action with comic language, ſo that the audience were at a loſs whether to laugh or cry. Its novelty, however, gave it temporary ſucceſs, and it was thought worthy of an attack from the preſs in a pamphlet. Gay's notions of true comedy ſeem not to have been very juſt; for the piece which he next brought on the ſtage, entitled Three Hours after Marriage, though aided by the conjoined wit of Pope and Arbuthnot, met with an unfavourable reception, owing, apparently, to the introduction of ſome incidents of too trivial a kind. His tragedy of The Captives, however, was received with applauſe in 1723. Some inſtances of court favour cauſed him next to employ himſelf in one of the works for which he is beſt known—his Fables, written profeſſedly for the inſtruction of the duke of Cumberland, and publiſhed with a dedication to that prince in 1726. Fable had not, in the Engliſh language, attained that rank in poetical compoſition which it had done in the French; nor can Gay ever ſtand in competition with La Fontaine. Yet there is conſiderable eaſe in his mode of narration, with much lively and natural imagery. In his ideas of the character of fable, he is far from accurate, and his morals are often negligently pointed. A ſecond part of the Fables, wholly directed to political topics, was publiſhed after his death, but was never much read in compariſon with the firſt, which has very generally been put into the hands of youth, and at this day forms one of the moſt popular works in Engliſh verſe. He naturally expected a handſome reward for this performance, but upon the acceſſion of George II. in 1727, nothing better was offered him than the poſt of gentleman-uſher to the young princeſs Louiſa. This he took rather as an indignity than a favour; and he declined the offer in a meſſage to the queen, ſaying that he was too old for ſuch a place. Solicitations were afterwards made in his behalf, but nothing was obtained, and his hopes at court came thus to an end. Had he remained a courtier, it is probable that he would never have been the author of a performance which acquired him public applauſe, far beyond any he had hitherto experienced. This was his famous Beggar's Opera, acted in 1727 at Lincoln's-inn-fields, after being refuſed at Drury-lane. Its origin is ſaid to have been a ſuggeſtion of Swift's, who, always in ſearch of the ludicrous, had remarked to Gay what an odd pretty ſort of a thing a Newgate Paſtoral might make. Gay turned it in his mind, but changed the idea for a Newgate Comedy, and joined to it the purpoſe of burleſquing the Italian operas. With this his diſappointments led him to blend much political ſatire, and the reſult was a compoſition unique in its kind, and of which the ſucceſs could not with any certainty be foreſeen. Its fate was for ſome time in ſuſpenſe; but at length it ſtruck the nerve of public taſte, and received unbounded applauſe. Sixty-three ſucceſſive repreſentations were inſufficient to ſatiate the metropolis, and it was performed a proportional number of times at all the provincial theatres. If the cauſe of this extraordinary ſucceſs be enquired, the anſwer is perhaps not very obvious. But it ſeems to indicate a kind of coarſeneſs in the national taſte, which could be delighted by the repetition of popular ballad-tunes, and the delineation of ſcenes of vice and vulgarity, painted indeed in a natural ſtyle, and in their incidents appealing to the feelings implanted in every human breaſt. But if the Beggar's Opera obtained applauſe on the ſtage, it underwent more ſerious cenſure in other places than almoſt any dramatic piece that has been exhibited. By making a highwayman the hero, and bringing him off in a kind of triumph, the author has been charged with rendering the character of a freebooter an object of popular ambition; and by furniſhing his perſonages with a plea for their diſhoneſty, drawn from the univerſal depravity of mankind, and particularly of thoſe in offices of authority, he has been accuſed of ſapping the foundations of ſocial morality. But that Gay himſelf had no miſchievous intentions in writing it, is univerſally admitted; and his friend Swift warmly defended it as a wholeſome ſatire againſt the corruption of the times. It is ſtill occaſionally repreſented; but ſo much has the taſte for muſic got above the ridicule attempted to be thrown upon it, that it is now neceſſary to decorate with all the graces of ſtudied melody, thoſe ſimple and popular airs which were meant as an humorous contraſt to Italian execution.

The unfavourable opinion of the tendency of the Beggar's Opera, entertained by the perſons then in power, became manifeſt by the refuſal of the lord chamberlain to permit a ſecond part of it, entitled Polly, to be acted. Gay's friends, and the party in oppoſition, gave, however, ſuch encouragement to its publication, that it was more profitable to him than even the firſt part; yet it was a very feeble and languid performance, and has ſunk into total neglect. A further recompence for any injury he ſuſtained by this exertion of power, was the kind patronage of the duke and ducheſs of Queenſbury, who took him into their houſe, and condeſcended to manage his pecuniary concerns. In ſuch a ſituation he might be thought to be raiſed above the impreſſions of court diſfavour; yet the dejection of ſpirits into which he fell, is in part aſcribed to this cauſe, though his natural indolence, and an habitual diſpoſition to bilious complaints, may ſufficiently account for it. He continued to employ his intervals of health and ſpirits in compoſition, and produced his Acis and Galatea, and the opera of Achilles, not acted till after his death; which event took place in December 1732, from an inflammation of the bowels, when he was aged only forty-four. He was ſincerely

cerely lamented by his friends, and his memory was honoured by a monument in Weſtminſter abbey, where he was interred, and an epitaph was written, in a ſtrain of uncommon ſenſibility, by Pope. The private character of Gay was that of eaſy good-nature and undeſigning ſimplicity. He was much beloved by his friends, who treat him in their letters, eſpecially Swift, with a freedom of advice partaking more of affection than of reſpect. He poſſeſſed little energy of mind, and had too much good nature to ſupport that independence to which his principles inclined him. Beſides the works already mentioned, he wrote ſeveral ſhort pieces of poetry, of which his two pleaſing ballads, All in the Downs, and 'Twas when the Seas were roaring, are the beſt known. Though as a poet he cannot be ranked in the higher claſs, yet he ſeldom fails to give his readers an ample ſhare of gratification, and perhaps we have no writer whoſe images and pictures are drawn with more originality from a ſtore of innate obſervation and abilities. Mr. Coxe, in his review of the life and literary character of Gay, agrees as little with Dr. Johnſon in his eſtimate of Gay as a poet, as he does on the tendency of the Beggar's Opera. Johnſon ſays that "Gay was a poet of the *lower* order; that he had in no degree the *mens divinior*, or dignity of genius." Mr. Coxe will not allow this to be a fair appreciation of Gay's poetical merit. He juſtly obſerves that 'Though Gay cannot be claſſed among the higheſt ranks in the temple of fame, yet he certainly does not deſerve to be placed in the loweſt order.—Although he did not attempt to excel in the higher flights of poetry, yet many paſſages in his Poems prove, that he was capable of uniting elevation of ſentiment with correſponding dignity of language.—His chief aim was to pleaſe, rather than to ſurpriſe; and it may be juſtly remarked, that few poets ever wrote with more ſucceſs on a greater variety of ſubjects than Gay;—Tragedy, Comedy, Operas, Fables, Ballads, Moral, Epic, Ruſtic, Town Eclogues, Paſtorals, and Poetical Epiſtles.—Next to Pope, perhaps, he is the Engliſh poet who moſt excelled in ſmoothneſs of verſification, correctneſs, felicity of diction, and in the purity of the rhymes; and none ever ſurpaſſed him in expreſſing ſimple thoughts in an appropriate manner.—That he was a moſt excellent claſſical ſcholar, is proved from his works; for no poet ever more frequently or more happily imitated the claſſics. He was no leſs converſant with the Italian poets, whom he imitated with equal felicity.—As a writer of Fables, Gay ſtands in a pre-eminent ſituation; the difficulty of this ſpecies of compoſition is ſufficiently evident from the ſmall number of writers who have excelled in Fables.—Since the æra of letters to the time of Gay, ſcarcely five authors can be mentioned, who deſerve peculiar notice: Æſop, Phædrus, Pilpay, and Fontaine; and of theſe only Phædrus and Fontaine wrote in verſe.' —Gay did not undoubtedly poſſeſs either the elegant brevity of Phædrus, or the captivating *naïveté* of La Fontaine; yet he diſplays more originality of invention than even Phædrus or La Fontaine. Their ſtories were moſtly taken from preceding authors; his, with a few exceptions, are entirely his own.—His language is a model for this ſpecies of compoſition; ſeldom above or below the ſubject: it is poetical without being too elevated; and familiar without being low.—Of his Fables may be ſaid, what Gay obſerves of Gulliver's Travels: —"From the higheſt to the loweſt this book is univerſally read, from the cabinet council to the nurſery."—And to him may be applied what La Harpe ſaid of Fontaine; that "he was at the ſame time the poet of children, and the poet of philoſophers."

GAY-HEAD, a peninſula on Martha's Vineyard, in North America, four miles in length and two in breadth, and almoſt ſeparated from the other part of the iſland by a large pond. The Indians inhabiting this part, when lately numbered, amounted to only 203. The ſoil is good, and only requires cultivation to produce moſt vegetables in perfection. There are evident marks of there having been volcanoes formerly on this peninſula. The mouths of four or five craters are plainly to be ſeen. The moſt ſoutherly and probably the moſt ancient, as it is grown over with graſs, now called the Devil's Den, is at leaſt twenty rods over at the top, fourteen and a half at the bottom, and full 130 feet at the ſides, except that which is next the ſea, where it is open. It is ſaid that veſſels uſed to guide themſelves in the night by the lights that were burning upon Gay-head. The ſea has made ſuch encroachments here, that, within thirty years, it has ſwept off twenty rods of land. The extremity of Gay Head is the ſouth-weſt point of the Vineyard. Lat. 41. 20. N. lon. 70. 50. W. Greenwich.

GAY'A, a town of Moravia, in the circle of Hradiſch: ten miles north-weſt of Straſnitz.

GAYE'TA, a town of Spain, in the province of Valentia: thirty miles from Valentia.

GAY'ETY, *ſ.* [*gayeté*, Fr. from *gay*.] Cheerfulneſs; airineſs; merriment; acts of juvenile pleaſure:

And from thoſe *gayeties* our youth requires
To exerciſe their minds, our age retires. *Denham.*

Finery; ſhow:

Our *gayety* and our guilt are all beſmirch'd,
With rainy marching in the painful field. *Shakeſpeare.*

GAY'LY, *adv.* Merrily; cheerfully; airily. Splendidly; pompouſly; with great ſhow:

The ladies, *gayly* dreſs'd, the Mall adorn
With curious dies, and paint the ſunny morn. *Gay.*

Like ſome fair flow'r, that early ſpring ſupplies,
That *gayly* blooms, but ev'n in blooming dies. *Pope.*

GAY'NESS, *ſ.* [from *gay*.] Gayety; finery. Not much in uſe.

GAZ. See GAS.

GA'ZA or AZ'ZA, a city of the Philiſtines, and the capital of the lordſhip of the Gazathites or Gazites; this city and its dependencies were a part of the original conqueſt of the Iſraelites, and reckoned in the tribe of Judah, it being taken, together with Aſkelon and Ekron, by that tribe; a part of the Anakims having ſheltered themſelves there after their expulſion from Canaan. It was again in the poſſeſſion of the Philiſtines when Samſon appeared; who when confined by them in this place, eluded their purpoſe of putting him to death by carrying off its gates, &c. here alſo happened the event that terminated Samſon's life. It was ſmitten by the king of Egypt in the days of Jeremiah, and in the Maccabean wars this place is frequently mentioned; as when Jonathan being denied admittance, laid ſiege to it and burned its ſuburbs, after which they treated with him, giving hoſtages of the ſons of the chief man of the city; it was however ſoon after entirely ſubdued by Simon the ſucceſſor of Judas, who diſplaced its refractory inhabitants and dwelt there with his followers. Gen. x. 19. Joſh. xi. 22. xv. 47. Judges i. 18. xvi. 1 Macc. xi. 61. 62. xiii. 43. &c.

GA'ZA or ADA'SA, a city of Paleſtine, ſituated in the tribe of Ephraim, upon the borders of that province, being a day's journey from Gaſera; here Judas Maccabeus encamped previous to the battle wherein he overcame Nicanor. 1 Chron. vii. 28. 1 Macc. vii. 40. 45.

GA'ZA, a town of Aſia, in Paleſtine, about a mile from the Mediterranean ſea, formerly a magnificent city, and ſtrongly fortified; it is now much reduced from its ancient grandeur, and hardly contains two thouſand inhabitants. The environs are exceedingly fertile, and produce, without art, pomegranates, oranges, dates, and flowers, in great requeſt even at Conſtantinople. Here is a manufacture of cotton, which employs five hundred looms in the town and neighbourhood; there are likewiſe great quantities of aſhes made by the Arabs, and

uſed

uſed in the manufacture of ſoap; but this manufacture has lately declined. The principal branch of commerce is furniſhed by the caravans, which paſs and repaſs between Egypt and Syria; and eſpecially the plunder of thoſe and other caravans which the Arabs bring thither, and diſpoſe of at a ſmall part of the real value. It is the reſidence of a Turkiſh pacha: fifty miles ſouth-weſt of Jeruſalem. Lat. 31. 28. N. lon. 52. 30. E. Ferro.

GA'ZA (Theodore), a learned Greek, native of Theſſalonica; after the deſtruction of which city by the Turks in 1430, he took refuge in Italy. He put himſelf to the ſchool of Vittorino da Feltre at Mantua, in order to learn Latin, at the ſame time aſſiſting his maſter in teaching Greek to his ſcholars; and ſuch was his application, that in three years he acquired the Latin language ſo perfectly as to become one of the moſt eloquent writers of it in his time. He was a profeſſor in the univerſity of Ferrara from 1441 to 1450, and was appointed its firſt rector upon its reform under the duke Leonello. He there taught Greek from a grammar of his own compoſition, and explained ſome of the orations of Demoſthenes. Before this period he was in ſuch a ſtate of indigence as to be obliged to copy Greek manuſcripts for a livelihood. From Ferrara he went into the ſervice of pope Nicholas V. and alſo obtained the munificent patronage of cardinal Beſſarion, who took him into his houſe, and placed ſo much confidence in his integrity, as to entruſt him with large ſums of money. After the pope's death he was ſome time with king Alphonſo at Naples; upon whoſe deceaſe he returned to Rome. In the time of Sixtus IV. he finiſhed his tranſlation of Ariſtotle upon Animals, undertaken at the inſtance of Nicholas V. and preſented it to his holineſs; but receiving from him only the paltry reward of fifty crowns, he is ſaid in a fit of indignation to have thrown the money into the Tyber. He then returned to Ferrara, and afterwards retired into Calabria, where it is probable that he died in 1478, though ſome writers make Rome the place of his death. Theodore Gaza was one of the moſt learned of thoſe of his country who imported Grecian literature into the Weſt, and has been highly commended by the principal ſcholars of that time. His Greek Grammar was firſt printed by Aldus in 1495, together with his treatiſe On the Grecian Months. He tranſlated from Greek into Latin, beſides Ariſtotle's work upon Animals, the Aphoriſms of Hippocrates, and Commentaries upon them by Galen; Theophraſtus on Plants; the Problems of Alexander Aphrodiſeus; Ælian's Tactics; *Dionyſius Halicarn. de Compoſitione Orationis*; ſome Homilies of John Chryſoſtom; and ſome other works. He alſo tranſlated *Cicero de Senectute* and *Somnium Scipionis* from Latin into Greek; and likewiſe a work of Savonarola. He engaged in the controverſy between the Platoniſts and Ariſtotelians, and compoſed a work againſt the notions of the former.

GAZA'LI, ſurnamed ABOU HAMED MOHAMMED ZEIM EDDIN AL THOUSI, was one of the moſt celebrated of the muſſulman doctors, born at Thous, a town in Khoraſan, in the year 450 of the Hegira, or 1058 of the Chriſtian æra. Nezam Almulk gave him the appointment of profeſſor in the college which he had founded at Bagdat, under the reign of Malec Schah; but Gazali relinquiſhed this ſituation for the ſake of embracing a life of retirement and ſtudy; and after having made the pilgrimage to Mecca, he returned to his native country, where he died in the year 505 of the Hegira. The reputation which he acquired by his learning and virtues, occaſioned him to be diſtinguiſhed, in the oriental manner, by many magnificent titles. Being aſked what means he had uſed to arrive at that eminence in ſcience to which he had attained, he anſwered, "that he had never been aſhamed to aſk for information on ſubjects concerning which he was ignorant." His moſt famous production is entitled *Ahia ôloum Eddin*, or The different Claſſes of the Sciences which relate to Religion. He was alſo the author of another work, entitled *Anis fil ovahedat*, or the Companion of Solitude, attributed to *Abou Hamel al* GAZALI, who is ſaid to have died in the year 705 of the Hegira; and he is to be diſtinguiſhed from another GAZALI, ſurnamed *Ali Ben Cofaibah*, who died in the year 878 of the Hegira, and was the author of a work entitled *Eſtehathâth al merahem*, or The Means of obtaining the Mercy of God.

GAZ'ARA or GAZERA, a ſtrong fortreſs in Paleſtine, where a detachment of the army of Gorgias, under Timothy, retreated after their defeat by Judas Maccabeus; and after ſuſtaining a ſiege of four days, the place was carried by ſtorm, and Timothy himſelf ſlain. It was again fortified by Simon the ſucceſſor of Judas, and occupied by John and the forces under him. 1 Macc. iv. 15. xiii. 53. xiv. 34. xvi. 1. 19. 2 Macc. x. 32. &c.

To GAZE, *v. n.* [ⲁγαζεσθαι, Gr. or rather ȝeȝean, Sax. to ſee.] To look intently and earneſtly; to look with eagerneſs.—*Gaze* not on a maid, that thou fall not by thoſe things that are precious in her. *Eccleſ.* ix. 5.—A lover's eyes will *gaze* an eagle blind. *Shakeſpeare.*

High ſtations tumults, but not bliſs, create;
None think the great unhappy, but the great.
Fools *gaze* on envy; envy darts a ſting,
Which makes a ſwain as wretched as a king. *Young.*

To GAZE, *v. a.* To view ſtedfaſtly:

Strait toward heav'n my wond'ring eyes I turn'd,
And *gaz'd* awhile the ample ſky. *Milton.*

GAZE, *ſ.* Intent regard; look of eagerneſs or wonder; fixed look.—Pindar is a dark writer, wants connexion as to our underſtanding, ſoars out of ſight, and leaves his readers at a *gaze*. *Dryden.*

With ſecret *gaze*,
Or open admiration, him behold,
On whom the great Creator hath beſtow'd
Worlds. *Milton.*

The object gazed on:

I muſt die
Betray'd, captiv'd, and both my eyes put out;
Made of my enemies the ſcorn and *gaze*;
To grind in brazen fetters, under taſk,
With my heav'n-gifted ſtrength. *Milton.*

GA'ZEFUL, *adj.* Looking intently:

The brightneſs of her beauty clear,
The raviſh'd hearts of *gazeful* men might rear
To admiration of that heavenly light. *Spenſer.*

GA'ZEHOUND, *ſ.* [ȝeze-hunꝺ, Sax.] A large ſpecies of grey-hound, anciently uſed in chaſing deer. See the article CANIS, vol. iii. p. 718.

See'ſt thou the *gazehound!* how with glance ſevere
From the cloſe herd he marks the deſtin'd deer! *Tickel.*

GAZ'EL, in zoology. See the article CAPRA, vol. iii. p. 775.

GA'ZEMENT, *ſ.* View:

Then forth he brought his ſnowy Florimele
Cover'd from people's *gazement* with a vele. *Spenſer.*

GA'ZER, *ſ.* [from *gaze*.] He that gazes; one that looks intently with eagerneſs or admiration.—His learned ideas give him a tranſcendent delight; and yet, at the ſame time, diſcover the blemiſhes which the common *gazer* never obſerved. *Watts.*

In her cheeks the virmil red did ſhew,
Like roſes in a bed of lilies ſhed;
The which ambroſial odours from them threw,
And *gazers* ſenſe with double pleaſure fed. *Spenſer.*

GA'ZER, the name of the place to which David purſued

purſued the Philiſtines. 2 Sam. v. 25. It is probably the ſame with GAZARA, or GAZERA.

GAZ'ERA. See GAZARA.

GAZ'ET, *ſ.* A ſmall Venetian coin.—A *gazet* is almoſt a penny, whereof ten do make a livre, that is, nine pence. *Coryat's Crudities.*

GAZ'ET (William), a Flemiſh prieſt, and ingenious writer, born at Arras in 1554. When young he taught the claſſics in the univerſity of Louvain, and about the year 1580 was preſented to the living of St. Mary Magdalen, at Arras. Afterwards he obtained a canonry of the cathedral church of St. Peter, at Aire, in Artois, and kept both thoſe benefices till his death in 1612, when fifty-ſeven years of age. His writings are, 1. *Magdalis, Tragœdia ſacra*, 1589, 8vo. 2. The Order and Succeſſion of the Biſhops and Archbiſhops of Cambray, 1597, 8vo. including a ſhort hiſtory of the moſt memorable events of their time, &c. 3. The Order of the Biſhops of Arras, after the Separation of that See from the Biſhopric of Cambray, 1598, 8vo. 4. *Theſaurus Precum & Litaniarum, ex Scripturæ Sacræ ſanctorumque Patrum Gazophylaciis depromptus*, 1602, 12mo. 5. The Eccleſiaſtical Hiſtory of the Low-countries, publiſhed after the author's death, 1614, 4to. 6. The Lives of the Saints, with moral Reflections, alſo poſthumous, in 2 vols. 1613, 8vo. 7. The Mirror of Conſcience. 8. The Holy Feaſt, or Exerciſes preparatory to the Reception of the Euchariſt. 9. Spiritual Exerciſes and Litanies for the whole Week, with Prayers, &c.

GAZET'TE, *ſ.* [*gazetta* is a Venetian halfpenny, the price of a news paper, of which the firſt was publiſhed at Venice.] A paper of news; a paper of public intelligence. It is accented indifferently on the firſt or laſt ſyllable.—An Engliſh gentleman without geography, cannot well underſtand a *gazette*. *Locke.*

All, all but truth, falls dead-born from the preſs;
Like the laſt *gazette*, or the laſt addreſs. *Pope.*

The firſt gazette in England was publiſhed at Oxford, the court being there, in a folio half-ſheet, Nov. 7, 1665. On the removal of the court to London, the title was changed to the *London Gazette*.

GAZETTEER', [from *gazette*.] A writer of news. An officer appointed to publiſh news by authority, whom Steele calls the loweſt miniſter of ſtate:

Satire is no more: I feel it die:
No *gazetteer* more innocent than I. *Pope.*

A book containing the names of cities, towns, villages, &c. in any kingdom or country. A title for a newſpaper:

Glaſſes and bottles, pipes and *gazetteers*,
As if the table even itſelf was drunk,
Lie a wet broken ſcene. *Thomſon.*

GA'ZI, *ſ.* A title among the Turks and Arabs, given to ſuch as have made war on Chriſtians, and extended the religion of Mahomet. *Scott.*

GA'ZINGSTOCK, *ſ.* A perſon gazed at with ſcorn or abhorrence.—Theſe things are offences to us, by making us *gazingſtocks* to others, and objects of their ſcorn and deriſion. *Ray.*

GAZ'NA, a decayed city of Aſia, once the capital of the Gaznavian empire; but which is now either entirely ruined, or become of ſo little conſideration, that it is not even noticed in our books of geography.—See the article HINDOOSTAN.

GAZ'NIN, a town of Aſia, in the kingdom of Candahar: 106 miles eaſt of Candahar.

GAZOL'DO, a town of Italy, in the duchy of Mantua: thirteen miles weſt-north-weſt of Mantua.

GAZO'LO, a town of Italy, in the duchy of Mantua: thirteen miles ſouth-weſt of Mantua.

GAZOM'ETER. See GASOMETER.

GA'ZONS, *ſ.* in fortification, turfs, or pieces of freſh earth covered with graſs, cut in form of a wedge, about a foot long, and half a foot thick, to line or face the outſide of works made of earth, to keep them up, and prevent their mouldering.

GA'ZUL, *ſ.* An Egyptian weed, of which the fineſt ſort of glaſſes are made.

GDOV, a town of Ruſſia, in the government of Peterſburg, on the eaſt coaſt of the Tchudſkoc Lake: ninety miles ſouth-ſouth-weſt of Peterſburg.

GE-HO, a town of Chineſe Tartary: twenty-three miles ſouth-ſouth-eaſt of Pora, and one hundred north-eaſt of Pekin.

GEAR, *ſ.* [ȝyꝑian, to clothe; ȝeaꝑne, Sax. furniture.] Furniture; accoutrements; dreſs; habit; ornaments.—Array thyſelf in her moſt gorgeous *gear*. *Spenſer.*

To ſee ſome radiant nymph appear
In all her glitt'ring birthday *gear*,
You think ſome goddeſs from the ſky
Deſcended, ready cut and dry. *Swift.*

The traces or furniture by which horſes or oxen draw:

The frauds he learned in his frantic years
Made him uneaſy in his lawful *gears*. *Dryden.*

Stuff. *Hanmer.*—If fortune be a woman, ſhe is a good wench for this *gear*. *Shakeſpeare.*—[In Scotland.] Goods or riches: as, he has *gear* enough.—[From ȝeaꝑa, Sax.] Employment.—That to ſir Calidore was eaſie *geare*. *Spenſer.*—Such is alſo the plain ſenſe of the word in that paſſage of Milton's Comus, which Johnſon has grievouſly misjoined to the firſt ſenſe. *Maſon's Suppl.*

To GEAR, *v. a.* To dreſs; to put harneſs on a horſe.

GE'ARON, or JAROON, a town of Perſia, in the province of Farſiſtan; celebrated for its excellent fruits, raiſins, pomegranates, dates, and quinces: ſeventy miles ſouth-eaſt of Schiras.

GEARS, *ſ.* A ſea term; the jeers, an aſſemblage of ſmall tackle.

GE'ASON, *adj.* [ȝæꝛne, Sax. *rarus*.] Wonderful.—It to Leeches ſeemed ſtrange and *geaſon*. *Hubb.*

GEAS'TER, *ſ.* in botany. See LYCOPERDON.

GEAT, *ſ.* [corrupted from *jett*.] The hole through which the metal runs into the mold. *Moxon.*

GEAUNE, a town of France, in the department of the Landes, and chief place of a canton, in the diſtrict of St. Sever: four leagues ſouth-eaſt of St. Sever, and ſix eaſt-north-eaſt of Orthez.

GE'BA, a city of Paleſtine, ſituated in the tribe of Benjamin, and one of the cities of the Levites of the family of Kohath. Here was a garriſon of the Philiſtines in the reign of Saul, that was routed by his ſon Jonathan; and from this place David purſued the Philiſtines to Gazer. It was rebuilt by king Aſa with the ſtones intended for the building of Ramah; from this place alſo were the idolatrous prieſts and worſhip expelled by Joſiah; and near this place Holofernes encamped in the days of Judith. Joſh. xxi. 17. 1 Sam xiii. 3. 2 Sam. v. 25. 1 Kings, xv. 22. 2 Kings, xxiii. 8. Judith, iii. 10.

GE'BA, a town and country of Africa, on a river of the ſame name, which ſoon after joins the river St. Domingo. Lat. 12. 10. N. lon. 13, 30. W. Greenwich.

GE'BAH. See GIBEAH.

GE'BAL, the name of a place mentioned by Ezekiel; the ancients of which are ſaid to have been the calkers of the ſhips of Tyre. Ezek. xxii. 9. Mr. Maundrell, who viſited this place, obſerves, "This was probably the city of the Giblites mentioned Joſh. xiii. 5. whom king Hiram made uſe of, in preparing materials for Solomon's temple, as appears from 1 Kings, v. 18, where the word rendered *ſtone-ſquarers*, is in the Hebrew *Giblim*, or Giblites, and in the Septuagint, *Biblioi*, or the men of Byblus; the former the Hebrew, and the latter the Greek, name of this place, which difference may alſo be obſerved in Ezek. xxvii. 9, where our tranſlation has *the ancients of Gebal*, and the Septuagint *the elders of Byblus*. It was famous for the birth and temple of Adonis,

Adonis, and was anciently a place of great beauty, and no ſmall extent, as appears from the many heaps of ruins, and the fine pillars ſcattered up and down in the gardens near the town." See BYBLUS.

GEBAU', a town of Bohemia, in the circle of Boleſlaw: ſix miles ſouth of Benatek.

GEBAU' (New), a town and caſtle of Sileſia, in the principality of Oppeln: nine miles and a half ſouth-eaſt from Falkenburg.

GEB'BAR, a town of Aſiatic Turkey, in the province of Diarbekir: ten miles ſouth-eaſt of Jadida.

GEBEN'NA, a town and mountain of Gaul. *Lucan.*

GE'BER (John), a chemiſt and aſtronomer, commonly conſidered as an Arabian, though born at Seville in Spain; but Leo Africanus aſſerts, that he was a Greek, who afterwards embraced Mahometaniſm. As the word *geber* ſignifies a king, this circumſtance, it is probable, gave riſe to the fabulous report of his having been a ſovereign in India. The events of his life, and the period when he flouriſhed, are at beſt uncertain. According to ſome, he was a nephew of Mahomet, and lived in the ſeventh century; whilſt others place him in the eighth or ninth. He was not only an excellent aſtronomer, and corrected many errors in the Almageſt of Ptolemy, but was alſo the firſt reviver of chemiſtry; and therefore he is mentioned with great reſpect by Boerhaave, who ſays that he found in his works many obſervations and experiments which were afterwards publiſhed as new. That he involved himſelf in the myſteries of alchemy muſt be aſcribed to the taſte of the period at which he lived. The alchemiſts make him the inventor of an univerſal medicine, as Cardan does of algebra. His works were written in Arabic, but were eagerly tranſlated into other languages. They were preſented by Golius, in Arabic manuſcript, to the library of the univerſity of Leyden, where they are ſtill preſerved. Thoſe which have been printed are: 1. *Syntaxis Aſtronomica, ſive Demonſtrativum Opus Aſtrologiæ, Libri IX.* Nuremberg, 1533, folio, tranſlated by Gerrard de Sabionetta. 2. *De Inveſtigatione Perfectionis*, Baſle, 1561, folio, with ſome alchemiſtic works, collected by Gratarola. 3. *Liber Fornacum*, in Gratarola's collection, ibid. 1572, 8vo. 4. *De Alchymia, Traditio Summæ Perfectionis, in duos Libros diviſa.* 5. *Liber Inveſtigationis Magiſterii*, Straſb. 1588, 8vo. 6. *Summa Perfectionis Magiſterii*, Venice, 1542, 8vo. improved from a manuſcript in the Vatican, Dantzic, 1682, 8vo. 7. *Chymia, ſive Traditio Summæ Perfectionis & Inveſtigatio Magiſterii*, Leyden, 1668; of this work there is another edition improved by George Horn, with the addition of *Medulla Alchymiæ Gebricæ.* 8. *Enarratio Methodica trium Gebri Medicinarum, in quibus continetur Lapidis Philoſophici vera Confectio*, Amſterdam, 1678, 8vo. 9. *La Eſpoſizione di molti Secreti della Natura*, Venice, 1544, 8vo. 10. *Geomanica*, tranſlated into Italian, 1552. Golius gave a Latin tranſlation of the alchemical works of Geber, under the title of *Lapis Philoſophorum*, which was publiſhed firſt at Leyden, in folio, and afterwards in quarto. An Engliſh tranſlation, by Richard Ruſſel, appeared at Leyden, in 1668, 8vo.

GE'BERSDORF, a town of Germany, in the circle of Upper Saxony, and principality of Querfurt: one mile north of Dahme.

GEBESEE', a town of Germany, in the circle of Upper Saxony, in Thuringia: eight miles north-north-weſt of Erfurt.

GE'BIM, a city of Paleſtine, ſituated moſt probably in the tribe of Judah. Iſaiah, x. 31.

GEB'LITZ, a town of Bohemia, in the circle of Leitmeritz: two miles ſouth-weſt of Leitmeritz.

GE'BRES. See GABRES, p. 151, of this volume.

GEC'CO, *ſ.* A name given by the Indians to the poiſon with which they anoint their arrows, or infuſe under their nails, or inſtil by a puncture, to deſtroy the life of an enemy, or thoſe they wiſh to kill by a ſlow poiſon. See the article POISON.

GECK, *ſ.* [ȝeac, Sax. a cuckow; *geck*, Germ. a fool; *gawk*, Scottiſh.] A bubble eaſily impoſed upon. *Hanmer. Obſolete.*—Why did you ſuffer Jachimo to taint his noble heart and brain with needleſs jealouſy, and to become the *geck* and ſcorn o' th' other's villainy? *Shakeſp.*

Why have you ſuffer'd me to be impriſon'd,
And made the moſt notorious *geck* and gull,
That e'er invention play'd on? *Shakeſpeare.*

To GECK, *v. a.* To cheat; to trick.

GECK'O, *ſ.* A ſpecies of lizard. See LACERTA.

GEDALI'AH, [of גדל Heb. greatneſs, and יה the Lord, i. e. the greatneſs of the Lord.] A governor left at Jeruſalem during the Babyloniſh captivity.

GED'DES (Alexander), a learned Scotch catholic divine, born at Arradowl in Bamffſhire, in 1737. His parents were reputable, but not opulent; and in whoſe library the principal book was an Engliſh edition of the Bible, which they taught their ſon to read at a very early period. By the care and frequency with which he peruſed that book, the principal facts contained in it became familiar to his mind in his infancy, and before he attained his eleventh year, he knew all its hiſtory by heart. In 1758, he was ſent to the Scotch college at Paris; and not long after he began to attend the lectures in the college of Navarre, under M. Buré and de Sauvent, and of Lavocat for the Hebrew language, at the Sorbonne. His proficiency intereſted the laſt-mentioned profeſſor ſtrongly in his favour, who wiſhed him to remain at Paris; but through the advice of other friends he was prevailed upon to return to Scotland in 1764. The firſt appointment which he had as prieſt was among the catholics in the county of Angus; from which ſituation he removed, in 1765, to Traquaire, where he reſided nearly three years in the capacity of domeſtic chaplain to the earl of that name. In the autumn of 1768 he quitted Traquaire, and returned to Paris, where he ſpent the following winter, devoting his time to the conſultation of books and manuſcripts in the king's and other libraries, and making extracts from the Hebrew. In the ſpring of 1769 he returned to Scotland, and undertook the charge of a conſiderable Roman-catholic congregation at Auchinhalrig, in Bamffſhire. In 1779 the univerſity of Aberdeen, from a regard to his learning and merits, conferred on him the degree of doctor of laws: an honour by which that body had not before diſtinguiſhed any Roman-catholic ſince the reformation. About this period Dr. Geddes removed to London, for the ſake of being within reach of greater facilities for proſecuting the grand work to which his courſe of ſtudies had for ſome time been ſubſervient, which was a new Engliſh tranſlation of the Books of the Old and New Teſtament from their original languages. For a few months after his arrival at the metropolis, he officiated as prieſt in the imperial ambaſſador's chapel, till it was ſuppreſſed at the end of the year 1780, by an order from the emperor Joſeph II. and afterwards he preached occaſionally at the chapel in Duke-ſtreet, Lincoln's-inn-fields, till Eaſter, 1782, at which time it is believed that he entirely declined the public exerciſe of all clerical functions. Dr. Geddes had formed the deſign of a new tranſlation of the Bible while he was a ſtudent at Paris; and about the year 1760, he began a courſe of reading neceſſary to qualify him for entering on ſo great an undertaking. When it was underſtood that Dr. Geddes was ſeriouſly bent on the deſign of a new tranſlation of the Bible, he met with much diſcouragement and oppoſition from the leſs enlightened members of his own communion, originating in their well-known dread of permitting the laity to have acceſs to the ſcriptures in their native language. In theſe circumſtances, ſays he, "I had but little hopes of ever being able to proſecute the plan, when Providence threw me into the arms of ſuch a patron as Origen himſelf might have been proud to boaſt of: a patron who, for theſe ten years paſt, has, with a dignity peculiar to himſelf, afforded me every convenience that my heart

heart could desire towards the carrying on and completing my arduous work." That patron was the late lord Petre, a catholic nobleman, whose memory is entitled to the respect of Christians of every denomination, for the zeal which he discovered in promoting the extension of biblical literature. In 1786, Dr. Geddes published his Prospectus of a new Translation of the Bible, from corrected Texts of the Originals, compared with the ancient Versions, &c. 4to. which attracted considerable notice, and afforded evidence of the approbation which the author's plan met with from distinguished protestant ecclesiastics, particularly the late Dr. Kennicott, "on whose tomb," as Dr. Geddes justly observed, "every biblical student ought annually to strew the tributary flower." In the following year he published an Appendix to the preceding, in the form of a Letter to Dr. Louth, Bishop of London, suggesting a variety of queries, doubts, and difficulties, relative to a vernacular version of the Scriptures; and also, A Letter to Dr. Priestley, intended to prove, by one prescriptive Argument, that the Divinity of Jesus Christ was a primitive Tenet of Christianity, 8vo. In 1788, Dr. Geddes published his proposals for printing by subscription this new Translation of the Bible, &c. containing, besides the conditions of subscription, specimens of his translation and notes. In 1790, he published A General Answer to the Queries, Counsels, and Criticisms, that have been communicated to him since the Publication of his Proposals, &c. replete with learning, ingenuity, and good humour. Annexed to it is a list of the subscribers to his work, in perusing which the liberal mind will be gratified by observing catholic monasteries in Germany, colleges in the English and Scotch universities, catholic and protestant bishops, and clergy of different denominations, all united in giving encouragement to a design for promoting a more intimate acquaintance with the sacred scriptures. But, notwithstanding that the list of subscribers was respectable, their number was by no means adequate to the magnitude of the undertaking, and could scarcely afford the author hopes of being reimbursed the expences which his work must necessarily require, much less compensate him for the excessive exertion to which he had devoted himself. And, though lord Petre's generosity secured to him all the comforts of life, and the means necessary to commence his work, yet it could not be expected that it could indemnify him against the risk attending a plan which demanded an extensive public patronage. Trusting, however, that, when the first fruits of his labours made their appearance, the liberal and discerning would not suffer his services in the cause of literature and truth to want encouragement, he determined to commence the publication of his great undertaking. Accordingly, in 1792, the first volume appeared, entitled The Holy Bible, or the Books accounted Sacred by Jews and Christians, &c. faithfully translated from the corrected Texts of the Originals; with various Readings, explanatory Notes, and critical Remarks, 4to. This volume comprises the Pentateuch and the book of Joshua, and sufficiently satisfied all liberal and competent judges, that the author had not undertaken a task to which his learning and abilities were inadequate. Soon after its publication, however, three catholic bishops, sustaining the character of vicars-apostolic, and the titles of Rama, Acanthos, and Centuriæ, addressed pastoral letters to their respective flocks, warning them against the reception and use of Dr. Geddes's version. This episcopal stretch of power occasioned a correspondence between Dr. Geddes and the bishop of Centuriæ, in the course of which the latter announced his suspension of the doctor from the exercise of his ecclesiastical functions, unless, within a prescribed time, he should submit to an injunction contained in the pastoral letters. Such conduct the doctor resented with becoming spirit, and wrote a highly animated letter to the bishop, informing him that he was not afraid of his threatenings, and should laugh at his censures, so long as he was conscious that he deserved them not; and that he would never submit to the injunction, because he deemed it rash, ridiculous, and informal. In 1794, the author published a longer Letter to the Right Reverend John Douglas, Bishop of Centuriæ, and Vicar-Apostolic in the London District, in which he protested to the world against the bishop's tyrannical proceedings, and exposed them, on the ground of reason, as well as on received principles of ecclesiastical discipline, with much solid argument, not unmixed with a happy vein of irony. In 1797, he published the second volume of his new translation, containing the books of Judges, Samuel, Kings, Chronicles, and the Prayer of Manasseh. In 1800, he also published, A modest Apology for the Roman-catholics of Great Britain, addressed to all moderate Protestants, and particularly to the Members of both Houses of Parliament, 8vo. In this work the author's learning, accurate knowledge of ecclesiastical history, liberality, and moderation, appear to eminent advantage; and it affords such a view of the creed of the more enlightened part of the modern British catholics, as shews that they neither merit proscription nor persecution; while it ably and satisfactorily establishes their claims, on the footing of justice and policy, to a share in every privilege which the most favoured of their fellow-subjects enjoy. It was Dr. Geddes's next intention to present to the public a new translation of the Book of Psalms; but, during the last year of his life, his studies and literary labours were greatly interrupted by attacks of a painful disease, which baffled all remedies or palliatives, and terminated his life on the 26th of February, 1802, when in the sixty-fifth year of his age. No person was a more strenuous and uniform advocate for uncontrouled freedom of opinion, and freedom of discussion, than Dr. Geddes; and he was, in the strictest sense of the word, a genuine catholic, extending his good-will to all of every sect and party, and disposed to grant to others every privilege which he claimed for himself. Besides the articles already mentioned, Dr. Geddes was the author of, 1. A Letter to a Member of Parliament, 1787, 8vo. on the expediency of a general repeal of all penal statutes that regard religious opinions. 2. *Epistolæ macaronica ad Fratrem de iis quæ gesta sunt in nupero Dissentientium Conventu, &c.* 1790, 4to. 3. *Carmen Seculare pro Gallica Gente, Tyrannide aristocratica erepta*, of the same date, 4to. 4. *Ver-vert*, or the Parrot of Nevers, a Poem, in four Cantos, freely translated from the French of J. B. Greffet, 1793, 4to. 5. The Battle of B—ng—r, or the Church triumphant, a comic-heroic Poem, in nine Cantos, 1797, 4to. and several other poetical pieces, satirical or sprightly, written by way of relaxation from his severer studies.

GED'DES (James), a learned Scotch philosophical writer, born at Tweedale in 1710. At a proper age he was sent to the university of Edinburgh, where he studied the different branches of philosophy, and made great proficiency in the mathematical sciences under the celebrated Colin Maclaurin. After he had finished his philosophical course, his attention was directed to the law, for which profession he was designed; and when he had gone through the usual preparatory studies, he was admitted an advocate. For several years he practised at the bar with growing reputation, and afforded flattering hopes of rising to eminence in his profession; but they were frustrated by his being carried off in a decline, when aged between thirty and forty years. He retained through life that relish for ancient literature which he had imbibed in his youth; and devoted what time he could spare from the duties of his profession and the necessary affairs of his family, to the study of the ancient poets, philosophers, and historians. The only production of his pen which has been published is posthumous, and

and entitled An Eſſay on the Compoſition and Manner of Writing of the Ancients, particularly Plato, 1748, 8vo. Several other papers were left behind him in an unfiniſhed ſtate, which were deſigned to form another volume.

GED'DES (Michael), a learned Engliſh divine, who flouriſhed in the beginning of the eighteenth century. He was for ſome time ſettled at Liſbon, in the capacity of chaplain to the Engliſh factory in that city, the duties of which he diſcharged from the year 1678 to 1688, when he returned to his native country, where he died in 1714. His works conſiſt of, 1. The Hiſtory of the Church of Malabar, from the Time of its being diſcovered by the Portugueſe in 1501, and of the Synod of Diamper, celebrated in the year 1599; 1694, 8vo. 2. The Church Hiſtory of Ethiopia, including an Account of the two great Roman Miſſions into that Empire, &c. 1696, 8vo. 3. The Council of Trent no free Aſſembly; more fully diſcovered by a Collection of Letters and Papers of the learned Dr. Vargas, and other great Miniſters, who aſſiſted at the ſaid Synod in conſiderable Poſts, &c. 1697, 8vo. 4. Miſcellaneous Tracts, in three volumes, 1702, 8vo. &c. relating to ſubjects in civil and eccleſiaſtical hiſtory, particularly that of Spain and Portugal, and to the catholic controverſy; and a poſthumous volume, entitled Several Tracts againſt Popery, together with the Life of Don Alvaro de Luna, 1715, 8vo.

GE'DEON, a man's name in the book of Judith.

GE'DER, a city of Paleſtine, and the ſeat of one of the kings ſubdued by Joſhua. Joſh. xii. 13.

GED'ERAH, a city of Paleſtine, belonging to the tribe of Judah; ſituated in the low parts of that province. Joſh. xv. 36.

GED'ERN, a town of Germany, in the circle of the Upper Rhine, belonging to the prince of Stolberg: ſeven miles north-eaſt of Ortenburg, and twenty-four eaſt-north-eaſt of Frankfort on the Maine.

GED'EROTH, a city of Paleſtine, belonging to the tribe of Judah; ſituated in the low parts of that province. It was taken by the Philiſtines in the reign of Ahaz king of Judah. Joſh. xv. 41. 2 Chron. xxviii. 18.

GEDEROTHA'IM, a city of Paleſtine, belonging to the tribe of Judah; ſituated in the low parts of that province. Joſh. xv. 36.

GEDI'DA, a town of Arabia Deſerta: ſixty miles weſt of Ana.

GE'DOR, a city of Paleſtine, belonging to the tribe of Judah; ſituated in the mountains of that province. The Simeonites ſeized upon this place in the reign of Hezekiah, on account of the excellent paſture it was poſſeſſed of. Joſh. xv. 58. 1 Chron. iv. 39, 40, 41.

GEDO'YN (Nicholas), a celebrated abbé, born at Orleans in 1667. He was educated at the Jeſuits' college in Paris, and afterwards entered into the ſociety, in which he continued ten years. He then quitted it, and appeared in the world in the character of a man of letters. In order to improve himſelf in politeneſs, he frequented the ſchool of the celebrated Ninon de l'Enclos, who had the credit of forming ſo many perſons of taſte and faſhion. He was preſented with a canonry of the Holy Chapel in 1711, and the abbacy of Notre-Dame de Beaugency in 1732. His literary reputation opened to him the doors of the academy of belles-lettres in 1711, and of the French academy in 1719. He died in 1744. The abbé Gedoyn obtained great applauſe by two tranſlations, that of Quintilian, and of Pauſanias. The firſt is accounted one of the moſt elegant performances of the kind; but in avoiding a ſervile tranſcription of his author, he has ſometimes indulged himſelf in deviations from his ſenſe. The tranſlation of Pauſanias is alſo elegant, and is enriched with learned notes; its exactneſs has, however, been called in queſtion. He likewiſe publiſhed *Œuvres Diverſes*, 1745, 12mo. a collection of diſſertations on moral and literary topics: and he left in manuſcript ſeveral curious diſſertations, among which is an Examination of Milton's Paradiſe Loſt, which he decides to be a gloomy work; a ſentence which reflects no credit on his literary acumen.

GEE, a term uſed by waggoners to their horſes when they would have them go faſter, or to the right hand.

GEELE, or GHEELE, or GHELE, a town of Brabant: ten miles north-weſt of Dieſt.

GEEMSKER'SKOI NOS, a cape on the eaſt coaſt of Nova Zembla. Lat. 77. 10. N. lon. 95. E. Ferro.

GEEONG', a town of the iſland of Borneo. Lat. 5. 10. N. lon. 117. 10. E. Greenwich.

GEER. See GEAR.

GEER (Charles de), knight of the polar ſtar, member of the academies of Stockholm and Upſal, and a celebrated naturaliſt, born in 1720, and in his fourth year accompanied his parents to Holland, from which he returned to Sweden at the age of eighteen. He ſtudied at Utrecht, and having conceived an early attachment to entomology, in conſequence of ſome ſilk-worms being preſented to him, his fondneſs for the ſtudy of nature was confirmed by an acquaintance with the celebrated Muſchenbroek. In the mean time he continued his ſtudies at Upſal, under Klingenſtierna, Celſius, and Linnæus; and, on account of the great progreſs he made, he was allowed to undertake the management of his property four years ſooner than he otherwiſe could have done. As he had a conſiderable ſhare in the iron works of Dannemora, and it was exceedingly difficult and expenſive to keep them free of water, he did a great ſervice to theſe mines by the activity with which he promoted the improvements in the machinery. About this period alſo he invented an apparatus for drying corn by the heat of the ſmelting-houſes, which had been before loſt, ſo that from 12 to 14,000 tons of corn were dried annually in this manner at his works. The riches which he thus acquired he privately ſhared with the poor; he alſo built or repaired churches, and eſtabliſhed various ſchools. Though the direction of ſo many objects required the greater part of his time and attention, he devoted his hours of recreation to the ſtudy of inſectology, which, by means of his great penetration and the helps he employed, ſuch as works of every kind on the ſubject, magnifying glaſſes, &c. he carried to a great degree of perfection. In 1761, he was appointed marſhal of the court, and knight of the polar ſtar; and in 1772 he was made commander of the order of Vaſa, with the grand croſs, and the year after a baron. Through his life he was tormented with the gout, which, having attacked the vital parts, put an end to his exiſtence on the 8th of March, 1778. De Geer had a ſtrong attachment to natural hiſtory from his youth, and particularly entomology. He cauſed the obſervations he made to be inſerted in the tranſactions of learned ſocieties; but as they daily increaſed, he reſolved to publiſh them in ſeparate volumes, the firſt of which appeared in 1752, under the title of *Mémoires pour ſervir à l'Hiſtoire des Inſectes*, with 37 plates. Nineteen years after, the ſecond volume appeared; and in 1779, the ſeventh and laſt. In this elaborate work the ingenious author has brought forward a great deal of new information in regard to inſects; and many of the figures were delineated by himſelf. But this work, conſiſting of ſeven large volumes quarto, with a great many plates, was exceedingly dear; and it had alſo become ſcarce, for the greater part of the copies of the firſt volume were deſtroyed by fire. This deficiency, however, was in ſome meaſure ſupplied by a German tranſlation, the production of the celebrated Goeze of Quedlingburg, and by theſe means the work was made much better known. The tranſlator enriched it with a variety of notes, and conſiderable additions, together with references to various other writers. Profeſſor Retzius, of Lund, has given a kind of extract from de Geer's

work in Latin, for the uſe of thoſe who cannot procure the original, and who are unacquainted with the French or the German. It is entitled *Car. L. B. de Geer Genera & Species Inſectorum, e generoſiſſimis Auctoris Scriptis extraxit, digeſſit, Latinè quoad partim reddidit, & terminologiam Inſectorum Linneanam addidit, A. J. Retzius*, Lipſ. 1783, 8vo. De Geer wrote alſo, in the Swediſh language, An Oration on the Procreation of Inſects, Stock. 1754; together with various papers in the Tranſactions of the academies of Stockholm and Upſal.

GEER'VLIET, a town of Holland, in the iſland of Putten: five miles from the Brill.

GEESCH, a village of Africa, in Abyſſinia, near the ſource of the Nile. Lat. 10. 59. N. lon. 86. 56. E. Greenwich.

GEESE, the plural of *gooſe*.

GEETE, a river of Brabant, which runs into the Demer at Dalen.

GEE'VACH, mountains of Ireland, between the counties of Leitrim and Roſcommon: nine miles north-eaſt of Boyle.

GEFFERY, a man's name.

GEF'LE, a river of Sweden, which paſſes by the town ſo called, and runs into the Gulf of Bothnia about ten miles below.

GEF'LE or GIAWLE, a town of Sweden, in the province of Geſtricia, on an arm of the Gulf of Bothnia, which divides the town and ſurrounds it, forming two iſlands. The town is ancient, populous, and commercial, with many rich merchants, but neither regular nor handſome. The harbour is good: the principal exports are iron, pitch, tar, and planks. Two thirds of the inhabitants are fiſhermen: ſixty miles north of Upſal. Lat. 60. 50. N. lon. 17. 1. E. Greenwich.

GEFREE'S, a town of Germany, in the circle of Franconia, and principality of Bayreuth: twelve miles north-north-eaſt of Bayreuth.

GEGA'NII, a family of Alba, part of which migrated to Rome under Romulus. One of the daughters called Gegania was the firſt of the veſtals created by Numa. *Plutarch.*

GE'GE, a river of Pruſſian Lithuania, which runs into the Wilde two miles ſouth-eaſt of Plaſchken.

GEGEN'DE, a town of European Turkey, in the province of Bulgaria, on the Danube: twenty miles weſt of Nicopoli.

GE'GENY, a town of Hungary; twenty-three miles eaſt of Gros Wardein.

GEHA'ZI, [Heb. the valley of viſion.] A man's name.

GEHEN'NA, [Heb. the valley of Hinnom.] A valley near Jeruſalem where the idolatrous Iſraelites ſacrificed their children to Moloch.

GEH'MEN, a town of Germany, and capital of a lordſhip, in the circle of Weſtphalia, ſituated on the Aa, within the biſhopric of Munſter. The inhabitants are lutherans and calviniſts, and have each a church: ſixteen miles north-eaſt of Weſel. Lat. 51. 55. N. lon. 24. 29. E. Ferro.

GEHO'FEN, a town of Germany, in the circle of Upper Saxony, and county of Mansfeld: three miles ſouth of Artern.

GEHR'DEN, a town of Germany, in the circle of Lower Saxony, and principality of Calenberg: ſix miles weſt-ſouth-weſt of Hanover.

GEH'REN, a town of Germany in the circle of Upper Saxony, and county of Schwartz: ten miles ſouth of Arnſtadt.

GEGUIOM'ENUS, *adj.* [Gr. from *γυιοω*, to diſmember.] In pathology, enervated; weak; deficient in the uſe of the limbs, or functions of the body.

GEISO'MA, *ſ.* [Gr. from *γεισον*, the eaves of a houſe.] In phyſiology, the prominent parts of the eye-brows, which hang over the eyes like the eaves of a houſe.

GE'JER (Martin), a learned German lutheran divine, born at Leipſic in 1614, and received his education at the univerſity in his native city. He was created a doctor of divinity, profeſſor of Hebrew, miniſter of St. Thomas's, and afterwards preacher, confeſſor, and member of the eccleſiaſtical council of the elector of Saxony. He died in 1681, in the ſixty-ſeventh year of his age. He was the author of learned and uſeful Commentaries, in the Latin language, on the Pſalms, Proverbs, Eccleſiaſtes, and the Book of Daniel; a treatiſe On the Mourning of the Hebrews, in the ſame language; and many other works abounding in erudition. They were collected together and printed in two volumes folio, at Amſterdam, in 1695 and 1696.

GEI'ERSBERG, a mountain of Sileſia, in the principality of Neiſſe: ſeven miles ſouth of Ziegenhals.

GEI'KIN, a river of Perſia, which ſeparates the province of Kerman from Mecran, and runs into the Indian ſea, twenty leagues ſouth-weſt of Cape Jaſques.

GEIL, a river of Germany, which riſes in the county of Tyrol, paſſes through the country of Upper Carinthia, and joins the Drave, near Willach.

GEIL'BERG, a mountain of Germany, in the duchy of Carinthia: ſix miles north-weſt of Mauten.

GEIL'DORF. See GAILDORF.

GEIL'EKIRCHEN, a town of Germany, in the circle of Weſtphalia, and duchy of Juliers: eight miles north-weſt of Juliers. Lat. 51. 2. N. long. 23. 42. E. Ferro.

GEILS'DORF, a town of Germany, in the circle of Upper Saxony, and country of the Vogtland: five miles ſouth-ſouth-weſt of Plauen.

GEI'SENFELD, a town of Germany, in Upper Bavaria: ten miles north of Pfaffenhofen, and nine ſouth-eaſt of Ingolſtadt.

GEI'SENHEIM, a town of Germany, in the circle of the Lower Rhine, and electorate of Mentz: ſeventeen miles weſt of Mentz.

GEI'SING, a town of Germany, in the circle of Upper Saxony, and margraviate of Meiſſein: one mile ſouth of Lauenſtein.

GEI'SINGEN, a town of Germany, in the circle of Swabia, in the principality of Furſtenberg: fourteen miles north of Schaffhauſen, and twenty-nine north-weſt of Conſtance.

GEIS'LEDE, a river of Germany, in the circle of the Lower Rhine, which runs into the Leine, near Heiligenſtadt, in the territory of Eichsfeld.

GEISLIN'GEN, an imperial town of Germany, in the circle of Swabia, on the Kocher; containing two churches, and four gates: twelve miles weſt of Ulm. Lat. 48. 34. N. lon. 27. 31. E. Ferro.

GEIS'MAR, a village of Germany, in the circle of the Upper-Rhine, and principality of Heſſe-Caſſel, with a mineral ſpring: three miles weſt-north-weſt of Fritzlar, and thirteen ſouth-ſouth-weſt of Caſſel.

GEIS'MAR, a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe: fourteen miles north-north-weſt of Caſſel, and twenty-two weſt of Gottingen. Lat. 51. 19. N. lon. 26. 43. E. Ferro.

GAIS'SELBORING, a town of Germany, in Lower Bavaria: nine miles ſouth-weſt of Straubing.

GEIS'SERN, a town of Germany, in the circle of Bavaria, and archbiſhopric of Saltzburg: thirty-two miles ſouth of Saltzburg.

GEIS'SING SEE, a lake of Germany, in the duchy of Carinthia: twelve miles north of Feltkirchen.

GEIS'TAL, a river of Germany, in the duchy of Stiria, which runs into the Kainach, near Moſkirchen.

GEIST UNS FRAU, a town of Germany, in the duchy of Stiria: ſix miles from Windiſch Weiſtritz.

GEIS'POLTZHEIM or GEISPOTZHEIM, a town of France, in the department of the Lower Rhine, and chief place of a canton, in the diſtrict of Straſburg: two leagues ſouth-ſouth-weſt of Straſburg, and two eaſt of Molſheim.

GEIS'ZLINGEN. See GEISLINGEN.

GEITH'AYN, a town of Germany, in the circle of Upper Saxony, and circle of Leipzig; twenty miles ſouth-ſouth-eaſt of Leipzig, and forty weſt of Dreſden. Lat. 51. 1. N. lon. 30. 25. E. Ferro.

GEKELEMUEKPECHU'ENK, a town of the Delaware Indians, on a creek of the ſame name, a head water of the Muſkingum. This was the northernmoſt Moravian ſettlement on Muſkingum river: twelve miles north-eaſt by north of Salem, and ſeventy-eight north weſterly of Pittſburg.

GE'LA, a town on the ſouthern parts of Sicily, about ten miles from the ſea, according to Ptolemy, which received its name from a ſmall river in the neighbourhood, called *Gelas*. It was built by a Rhodian and Cretan colony, 713 years before the chriſtian era. After it had continued in exiſtence 404 years, Phintias, tyrant of Agrigentum, carried the inhabitants to Phintias, a town in the neighbourhood, which he had founded, and he employed the ſtones of Gela to beautify his own city. Phintias was alſo called *Gela*. The inhabitants were called *Gelenſes*, *Geloi*, and *Gelani*. *Virgil*.

GEL'ABLE, *adj.* [from *gelu*, Lat.] What may be congealed, or concreted into a gelly.

GELA'LA, *ſ.* in botany. See ERYTHRINA.

GELA'NOR, a king of Argos, who ſucceeded his father, and was deprived of his kingdom by Danaus the Egyptian. *Pauſanias*.

GELAS'INUS, *ſ.* [Gr. from γελαω, to laugh.] An epithet, in phyſiology, of the four middle fore-teeth, becauſe they are ſhewn in laughter.

GELA'SIUS I. pope of Rome, an African by birth, admitted to the papal dignity in 492, on the death of Felix III. to whom he had been ſecretary. He was the author of various writings, ſtill extant: among which are Sixteen Letters, and ſeveral fragments of letters, directed to different public characters; a treatiſe, *De Anathematis Vinculo*; A Diſcourſe againſt the Senator Andromachus, and other Romans, who wiſhed to reſtore the feaſt called *lupercalia*, which Gelaſius had ſuppreſſed; A Treatiſe againſt the Pelagian Hereſy; and An Account of the Circumſtances which took place on the Abſolution of the Prelate Miſenus. The above-mentioned pieces are all inſerted in the fourth volume of the *Collectio Conciliorum*. But the moſt celebrated of this pontiff's productions is A Treatiſe againſt Eutyches and Neſtorius, concerning the two Natures in Chriſt. Several catholic writers, among others Baronius and Bellarmine, have attempted to prove that this is not a genuine production of this Gelaſius, but is to be attributed to Gelaſius of Cyzicus. In Cave and Dupin, however, the reader may find the moſt ſatisfactory proofs of its genuineneſs. The treatiſe itſelf is inſerted in the eighth volume of the *Biblioth. Patr.* and in the *Antidotum adverſus Hæreſes*, publiſhed at Baſil in 1528, folio. Gelaſius alſo is thought to have been the author of the *Codex Sacramentarius*, which is a collection of ſuch forms of public prayers and adminiſtration of the ſacraments as were in uſe in the church of Rome in his time, digeſted in a new order, and including many additional forms of his own. The manuſcript of this Codex lay hid unnoticed for many ages, until, in 1562, upon the diſperſion of the Florentine library, it fell into the hands of Paul Petau, by whoſe ſon it was placed in the library of Chriſtina queen of Sweden. By that princeſs it was entruſted to Joſeph Maria Thomaſius, who printed it for the firſt time at Rome, in 1680, 4to. In 1685 it was reprinted at Paris, under the inſpection of father John Mabillon, together with ſome other ancient liturgies, and very learned diſſertations on the old Gallican liturgy, in one volume 4to.

GELA'SIUS II. pope, deſcended from an illuſtrious family at Gaeta in Campania, of which city he was a native. His chriſtian name was John, and the ſurname by which he was commonly diſtinguiſhed before his elevation to the pontificate was taken from the place of his birth. In early life he embraced the monaſtic ſtate among the Benedictines at Monte Caſſino, where he applied himſelf with great diligence to his ſtudies, and acquired a high character for learning, abilities, and virtue. Upon the death of pope Paſchal in 1118, John of Gaeta was unanimouſly choſen his ſucceſſor by the cardinals and Roman clergy, when he took the name of Gelaſius II. He however held this dignity but little more than one year; for being attacked by the pleuriſy, he cauſed himſelf to be carried to the monaſtery of Clugny, where he died in January 1119. There are extant ſix Letters of his in the tenth volume of the *Collectio Concil.* and The Life of Eraſmus biſhop of Gaeta, in Latin proſe, and thoſe of Anatolia and Cæſarius, in Latin verſe. The pieces laſt mentioned were publiſhed at Rome, with the Life of Gelaſius, by the abbot Conſtantine Cajetan, in 1639.

GELA'SIUS, biſhop of Cæſarea, in Paleſtine, nephew of St. Cyril of Jeruſalem, ſucceeded Euzoius in the ſee of Cæſarea in the year 380. Theodoret ſpeaks in high terms of his character, and praiſes a homily of his on the Epiphany, of which he has preſerved a fragment in his third dialogue concerning Hereſies. St. Jerome alſo claſſes him among the eccleſiaſtical writers of his age, and commends him for the correctneſs and poliſh of his ſtyle, but ſays that he would not publiſh his works. According to father Labbé, ſome fragments of the writings of this biſhop, explanatory of the Apoſtles' Creed, and of the traditions of the church, are to be found in the Greek collection of teſtimonies, under the name of John Damaſcenus, in the Codex Claromont. Photius aſſures us, that he had read a tranſlation into Greek by this author, of the two books in continuation of Euſebius, written by Ruffinus. Fabricius, however, maintains, that the work which Photius read, was no other than the Hiſtory of the Council of Nice; and he aſks, how the hypotheſis that this biſhop of Cæſarea ſhould have been the tranſlator of Ruffinus's Hiſtory is to be reconciled with chronology? ſince the latter was not given to the public till the year 400, and Gelaſius was dead in 394.

GELA'SIUS, ſurnamed CYZICENUS, from the place of his birth, was the ſon of a preſbyter of the church at Cyzicum, and flouriſhed about the year 476. By ſome writers he is ſaid to have been biſhop of Cæſarea, in Paleſtine; but others, and thoſe particularly who appear to have examined with the greateſt care the circumſtances related concerning him, make no mention of his having been raiſed to the epiſcopal dignity. When young, he found in his father's poſſeſſion a manuſcript containing an account of the proceedings of the council of Nice, which had formerly belonged to Dalmatius biſhop of Cyzicum. As the Catholics were at that time perſecuted by the Eutychians, under the countenance of the emperor Baſiliſcus, and as that ſect boaſted that the decrees of the council of Nice were favourable to their principles, he determined to draw up a new hiſtory of that council, with the deſign of confuting their repreſentations. This hiſtory was publiſhed at Paris, by Robert Balfour, a Scotchman, in Greek and Latin, with notes, in 1559, octavo; and it is inſerted in the ſecond volume of the *Collectio Concilior.*

GELAS'MUS, *ſ.* [Gr. from γελαω, to laugh.] That ſpecies of inſanity which burſts forth in violent laughter, without any apparent or aſſignable cauſe.

GEL'ATINE or GELAT'INOUS, *adj.* [*gelatus*, Lat.] Formed into a jelly; viſcous; ſtiff and coheſive.—That pellucid *gelatinous* ſubſtance is an excrement caſt off from the ſhoals of fiſh that inhabit the main. *Woodward.*—You ſhall always ſee their eggs laid carefully up in that ſpermatic *gelatine* matter, in which they are repoſited. *Derham.*

To

To GELD, *v. a.* preter. *gelded* or *gelt*; part. paſſ. *gelded* or *gelt*; [*gelten*, Germ.] To caſtrate; to deprive of the power of generation.—*Geld* bull-calf and ram-lamb as ſoon as they fall. *Tuſſer.*—Lord Say hath *gelded* the commonwealth, and made it an eunuch. *Shakeſpeare.*—To deprive of any eſſential part:

He bears his courſe, and runs me up
With like advantage on the other ſide,
Gelding th' oppoſed continent as much
As on the other ſide it takes from you. *Shakeſpeare.*

To deprive of any thing immodeſt, or liable to objection.—They were diligent enough to make ſure work, and to *geld* it ſo clearly in ſome places, that they took away the very manhood of it. *Dryden.*

GEL'DENHAUR (Gerard), a divine and hiſtorian, born at Nimeguen in 1482. He received his education firſt at Deventer, and then at Louvain, where he contracted an intimacy with Eraſmus. Being recommended to the court of Charles V. then archduke, he was for ſome time reader and hiſtorian to that prince; but his inclination for a more ſettled life cauſed him to accept of the poſt of Latin ſecretary and private reader to Philip biſhop of Utrecht, which he held till the death of that prelate. In 1526 he was ſent by Maximilian of Burgundy to Wittemberg, in order to examine the ſchools and the ſtate of religion in that country. He was ſo much impreſſed with what he there ſaw, that he openly joined the lutheran party, and went to Worms, where he married, and undertook the education of youth. His friend Eraſmus was ſo diſpleaſed with his change of religion, that he wrote againſt him, under the name of Vulturius, and complains much of his conduct towards himſelf. Geldenhaur removed to Augſburg, and then to Marpurg, where he was firſt profeſſor of hiſtory, and afterwards of theology. He died of the plague in that place, in 1542. He publiſhed Latin poems, orations, and epiſtles, and alſo ſeveral hiſtorical works, of which the principal are, *Hiſtoria Batavica*; *Hiſtoriæ ſuæ Ætatis Lib.* VII. *Germanicarum Hiſtor. Illuſtratio*; *Deſcriptio Inſulæ Batavorum*; *De Viris illuſtribus Inferioris Germaniæ*; *Catalogus Epiſcoporum Traject.* He alſo wrote ſome pieces in controverſial divinity.

GEL'DER, *ſ.* [from *geld.*] One that performs the act of caſtration:

Geld later with *gelders*, as many one do,
And look of a dozen to geld away two. *Tuſſer.*

GEL'DER-ROSE, *ſ.* [A roſe brought from *Guelderland.*] In botany. See VIBURNUM.

GEL'DING, *ſ.* [from *geld.*] Any animal caſtrated, particularly an horſe. See the article HORSE.—Though naturally there be more males of horſes, bulls, or rams, than females; yet artificially, that is, by making *geldings*, oxen, and wethers, there are fewer. *Graunt.*

GEL'ENAU, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg: five miles weſt-north-weſt of Greiffenſtein.

GEL'ID, *adj.* [*gelidus*, Lat.] Extremely cold:

From the deep ooze and *gelid* cavern rous'd,
They flounce. *Thomſon.*

GELID'ITY, *ſ.* [from *gelid.*] Extreme cold.

GEL'IDNESS, *ſ.* [from *gelid.*] Extreme cold.

GEL'ILOTH, a city of Paleſtine, belonging to the tribe of Benjamin; ſituated upon the ſouthern boundary of that province. Joſh. xviii. 17.

GELE'NIUS (Sigiſmund), born of a good family at Prague, about the year 1498. Eraſmus, conceiving an eſteem for him at Baſil, recommended him to John Frobenius as a corrector of his preſs; which laborious office he accepted, and had a great number of Hebrew, Greek, and Latin, books, to correct: he alſo tranſlated many works from the Greek into Latin; and publiſhed a dictionary in four languages, Greek, Latin, German, and Sclavonian. Profitable and honourable employments were offered him in other places, but nothing could tempt him to quit his peaceful ſituation at Baſil. He died in 1555. All his tranſlations are highly eſteemed.

GELI'SE, a river of France, which runs into the Baiſe at Lavardac.

GEL'LERT (Chriſtian Furchtegott), extraordinary profeſſor of philoſophy at Leipſic, a favourite writer of the Germans, and one of the moſt eſteemed of their poets, born in 1715, at Haynichen, near Freyberg, where his father was a clergyman. His poetical genius made its firſt appearance at the early age of thirteen; but as it was obſerved and foſtered by no friend, Gunther, Neukirch, and Hanke, were the models whom he imitated. At the ſchool of Meiſſen, where he was initiated in the ſciences, he formed a friendſhip with Gartner and Rabener, which continued during their lives. In 1734 he ſtudied theology at Leipſic; and at the end of four years returned home and commenced preacher; but, being of a timid diſpoſition, he made no figure as an orator. As the natural weakneſs of his conſtitution, ſickly and hypochondriac from infancy, forbade him to aim at extenſive learning, he endeavoured to acquire only as much as might render him uſeful. His firſt attempts in poetry, called *Beluſtigungen des Verſtandes und Witzes*—Amuſements of Reaſon and Wit, begun in 1742, procured him a great deal of reſpect, on account of his eaſy and agreeable manner of writing, as well as of the goodneſs of heart every where diſplayed in theſe productions. The bad ſtate of his health, and the labour which his ſermons coſt him, induced him to lay aſide his eccleſiaſtical views, and to devote himſelf entirely to the academical inſtruction of youth. In this ſituation, he endeavoured not only to enrich the minds of his pupils with uſeful knowledge, but to form their taſte, improve their hearts, and inſpire them with ſentiments of religion and virtue. In 1744 he took the degree of maſter of arts; and next year publiſhed the firſt volume of his Fables, ſome plays, and The Swediſh Counteſs, the firſt original German romance worthy of notice. On account of the infirm ſtate of his health, he ſolicited for no public employment; but in 1751 he was appointed to the office of extraordinary profeſſor of philoſophy, with a handſome ſalary. This he retained until his increaſing indiſpoſition put an end to his exiſtence on the 13th of December, 1769. By the agreeable and ſimple ſtyle which Gellert employed in his writings, he contributed, in a great degree, to improve taſte and morals throughout Germany, and particularly among the higher and lower orders. In his fables and ſpiritual ſongs he has diſplayed the whole force of his genius. In the former, he ſucceſsfully imitates La Fontaine, and ſhews the ſame delicate vein of humour, the ſame livelineſs and eaſe, united to the keeneſt ſatire. Gellert's firſt attempt in the theatrical way was his comedy of The Mendicant Nun, which originated from one of the tales he was then compoſing. All his comedies abound with the moſt beautiful traits and nobleſt thoughts; but they are deficient in the true *vis comica*, continued intereſt in the plan, and ſpirit and preciſion in the language. His characters are borrowed from the circle of city life, and are all truly German. In 1745 he wrote The Affectionate Siſters, a piece in three acts, which is remarkable for being the firſt affecting comedy in the German language. The Prize in the Lottery, of all Gellert's pieces, was the beſt received on the ſtage. The Sick Wife is an after-piece, in one act, in which the poet converted one of his tales into a drama. Gellert's different works have gone through a great many editions, and have been tranſlated into almoſt all the languages of Europe. The following are the German editions: 1. *Leben der Schwediſchet Grafinn*—Life of the Swediſh Counteſs, Leipſic, 1745, 8vo. ibid. 1758. 2. *Luſtſpiele*—Comedies, ibid. 1747, 8vo. 3. *Troſtgründe Wider ein ſiccches Leben*, ibid. 1747, 8vo. 4. Fables and Tales, ibid. 1748; there is a Hebrew tranſlation

tranſlation of theſe fables by Abraham, a Jew. 5. *Briefe nebſt einer praktiſchen Abhandlung von dem guten Geſchmak in Briefen*—Letters, together with a practical Treatiſe on good Taſte in Letter-writing, ibid. 1751, 8vo. 6. *Lehrgedicht und Erzälungen*—Didactic Poems and Tales, ibid. 1754. 7. *Sammlung vermiſchter Schriften*—Collection of Miſcellaneous Pieces, ibid. 1757, 8vo. 8. *Geiſtliche Oden und Lieder*—Sacred Odes and Hymns, ibid. 1757, 8vo. 9. *Gellerts und Rabeners achtzehn Briefe*—Gellert's and Rabener's eighteen Letters, ibid. 1760. 10. *Von der Beſchaffenheit dem Umfang und Nutzen der Moral*—On the Nature, Extent, and Uſe of Morality, ibid. 1766, 8vo. 11. *Moraliſche Vorleſungen*—Moral Eſſays, publiſhed after the author's death, by J. A. Schlegel and G. L. Heyer, ibid. 1770, 2 vols. 8vo. 12. *Sammtliche Schriften*—Complete Collection of his Works, ibid. 1766, 10 vols. 8vo. this is a beautiful edition, but incomplete: a new edition improved by ſome of his friends appeared after his death at Leipſic, in eight volumes, with engravings. 13. *Anhang zu ſeinem Sämmtliche Schriften*—Appendix to his Works, 1770.

GELL'HEIM, a town of Germany, in the circle of the Upper Rhine, and principality of Naſſau Weilburg: thirteen miles weſt of Worms, and twenty-three north-weſt of Manheim.

GEL'LI (Giambatiſta), an Italian poet, born at Florence in 1498. He was of mean origin, and followed the trade of a cordwainer. He was not void, however, of the advantages of education, and he became diſtinguiſhed for literature in his native place, and was one of the chief ornaments of the academy degli Umidi. His two proſe comedies, entitled *La Sporta* and *L'Errore*, were accounted the beſt compoſitions of the kind then in the language. He tranſlated into Italian from the Greek, the Hecuba of Euripides. His other works are *I Capprici del Bottaio*, conſiſting of dialogues, which are ſaid to be faulty in point of decency; other dialogues, chiefly on phyſical topics, entitled *La Circe*; ſome remarks on the difficulty of reducing the Italian language to rule; diſſertations upon the poems of Dante and Petrarch; other tranſlations, verſes, &c. He died in 1563.

GEL'LIBRAND (Henry), an Engliſh mathematician and aſtronomer in the ſeventeenth century, born at London in 1597. When he was eighteen years of age he was admitted a commoner of Trinity college, in Oxford, where in 1619 he took his degree of bachelor of arts. He very early conceived a ſtrong inclination for the mathematics, upon accidentally hearing one of ſir Henry Saville's lectures in that ſcience, and applied to it with equal diligence and ſucceſs. Having taken orders, he ſettled as a curate at Chiddingſtone, in Kent; but his paſſion for mathematical ſtudies determined him to quit that ſituation, and to return to the univerſity. Here his ſole attention was devoted to the mathematics, in which he made ſuch proficiency at the time of his taking his degree of maſter of arts in 1623, that he attracted the friendſhip of ſeveral able mathematicians who flouriſhed at that time, particularly of the celebrated Henry Briggs, then Savilian profeſſor of geometry at Oxford. While he continued in the purſuit of theſe ſtudies, the profeſſorſhip of aſtronomy in Greſham college, London, becoming vacant by the death of the celebrated Gunter, Mr. Gellibrand became a candidate, and was choſen to fill that poſt by the electors, in January 1626. From that time he lived in a cloſe intimacy with Mr. Briggs, who took great pleaſure in communicating to him his mathematical diſcoveries, and at the time of his death confided to him the taſk of completing his Britiſh Trigonometry, which he did not live to finiſh. Mr. Gellibrand having added to it a preface, and the application of the logarithms to plane and ſpherical trigonometry, conſtituting the ſecond book of the work, the whole was printed at Gouda in Holland, under the care of Adrian Vlacq, in 1663. It was entitled, *Trigonometria Britannica, ſive de Doctrina Triangulorum, Libri duo*, &c. folio. From Mr. Gellibrand's ſituation at Greſham college, and his intercourſe with the lovers of mathematical ſtudies, he had an opportunity of contributing ſeveral pieces to the improvement of navigation, which ſcience would probably have been farther benefited by him, had he not been immaturely carried off by a fever in 1636, in the fortieth year of his age. Beſides his part of the *Trigonometria Britannica*, he was the author of An Appendix concerning Longitude, ſubjoined to Captain Thomas James's Voyage for the Diſcovery of the North-weſt Paſſage, 1633, 4to. 2. A Diſcourſe mathematical on the Variation of the magnetic Needle; together with the admirable Diminution lately diſcovered; annexed to Wright's Errors in Navigation detected, &c. 1635, 4to. 3. A Preface to the Sciographia of John Wells, of Brambridge, Eſq. 1635, 8vo. 4. An Inſtitution trigonometrical, explaining the Doctrine of plane and ſpherical Triangles, after the moſt exact and compendious Way, by Tables of Sines, Tangents, &c. with the Application thereof to Queſtions of Aſtronomy and Navigation, 1634, 8vo. and afterwards republiſhed with enlargements by William Leybourn, 1652, 8vo. 5. An Epitome of Navigation, with the neceſſary Tables, &c. and an Appendix concerning the Uſe of the Quadrant, Fore-ſtaff, and Nocturnal, 8vo. 6. *Oratio in Laudem Gaſſendi Aſtronomiæ, habita in Aula Ædis Chriſti, Oxon*; and of ſeveral unpubliſhed manuſcripts on the Doctrine of Eclipſes, Lunar Aſtronomy, Ship-building, &c.

GEL'LIUS (Aulus), called by ſome writers AGELLIUS, a learned Roman grammarian and critic, flouriſhed at Rome, his native city, in the ſecond century, under the emperors Adrian and Antoninus Pius, and died at the beginning of the reign of Marcus Aurelius Antoninus. He ſtudied grammar under Sulpicius Apollinaris, and rhetoric under Titus Caſtritius and Antonius Julianus. In his youth, he viſited Athens, and enjoyed the ſociety of many learned men, particularly Calviſius Taurus, Peregrinus, Proteus, and Herodes Atticus. To gratify a laudable curioſity, and to collect literary and philoſophical information, he travelled through a great part of Greece. On his return to Rome he devoted himſelf to the ſtudy and practice of the law, and was appointed a judge. He was converſant with the ancient writers on the Roman law, and ranked among his friends many reſpectable lawyers of his own time. The frequent citations which are made from his work by writers on Roman law, render it probable that he poſſeſſed a conſiderable ſhare of profeſſional reputation. The *Noctes Atticæ* of Aulus Gellius may be juſtly allowed a reſpectable place among the treaſures of antiquity. The author, as he himſelf informs us in his preface, gave the name of Attic Nights to his work, from the circumſtance that a great part of it was written while he reſided in Athens, and furniſhed an amuſing occupation for many long winter evenings. His object was, to provide his children as well as himſelf with that kind of entertainment, with which they might properly relax and indulge themſelves, in the intervals of more important buſineſs. From the manner in which the collection was made, its contents are neceſſarily miſcellaneous, and of unequal value. "Whatever book," ſays he, "came into my hand, whether it was Greek or Latin, or whatever I heard, that was either worthy of being recorded, or agreeable to my fancy, I wrote down without diſtinction and without order." Theſe minutes became the baſis of this work, in which the author takes up his collections in the ſame accidental arrangement in which they were made, and comments upon them. The work conſiſts of a vaſt variety of critical obſervations upon authors; of hiſtorical and biographical anecdotes, with reflections; of brief diſcuſſions on various topics, grammatical, antiquarian, moral, philoſophical, phyſical, &c. among which, if many things be trivial, or unintereſting, there are alſo much amuſing information, and many ingenious obſervations: it is particularly valu-

able, as a large collection of fragments of ancient authors, not elsewhere to be found. Whatever place critics may agree to assign to Aulus Gellius among Roman authors with respect to Latinity, he will not be denied the praise of diligent research, and extensive erudition. This work was first edited, in folio, at Rome in 1469, by Sweinheim and Panartz, and notes on this author were published the same year at Rome by the learned John Andreas, bishop of Aleria. The second edition was published in 1472 by Jenson at Venice; several other editions appeared in the fifteenth century. Among the editions of the sixteenth century are those of Aldus, in 8vo. at Venice in 1515; at Paris with the notes of Badius Ascensius, in folio, 1519, 1524, and 1536; at Basil, in 8vo. with the notes of Mosellanus, in 1526; and, at Paris, with the valuable critical researches of Henry Stephens, in 8vo. 1585. Later editions, worthy of notice, are, in 8vo. *in usum Delphini*, 1681, in 18mo. by the Elzevirs, at Amsterdam, 1651; *cum Notis Variorum*, at Leyden, 1660; by Gronovius, in 4to. 1706; and, at Leipsic, in two volumes 8vo. by Conradus, in 1762. A very elegant translation of this amusing, but in many parts obscure and difficult author, with useful notes, was given in English, in three volumes 8vo. by Mr. Beloe, in 1795.

GEL'LY, *s.* [*gelatus*, Lat.] Any viscous body; viscidity; glue; gluey substance.—The white of an egg will coagulate by a moderate heat, and the hardest of animal solids are resolvable again into *gellies*. *Arbuthnot*.

The tapers of the gods,
The sun and moon, become like waxen globes,
The shooting stars end all in purple *gellies*,
And chaos is at hand. *Dryden*.

GEL'LY CAI'RN, a mountain of Scotland, in the county of Perth: eight miles north of Creiff.

GEL'MAH or KALMAH, a town of Africa, in the country of Algiers: fifty miles east of Constantina.

GELMU'DEN or GELMUYEN, a town of the United Dutch States, in Overissel, situated on the south side of the Vecht, near the Zuyder See: six miles east-north-east of Campen, and three south-east of Vollenhove.

GELN'HAUSEN, a town of Germany, in the circle of the Upper Rhine, and county of Hanau Munzenburg, on the Kintzig; declared imperial by a sentence of the chamber of justice, in 1734; but the count of Hanau and the elector Palatine, to whom it was mortgaged, refused their consent: and the town is now subject to the count of Hanau, who purchased the elector's lesre: twelve miles east of Hanau. Lat. 50. 7. N. lon. 26. 48. E. Ferro.

GE'LON, king or tyrant of Syracuse. See SYRACUSE.

GELOSCOPY, *s.* [γελος, laughter, and σκοπεω, Gr. to view.] A kind of prediction drawn from the manner in which any one laughs. *Scott*.

GELSEM'INUM, *s.* in botany. See BIGNONIA and JASMINUM.

GELT, *s.* [from *geld*.] A castrated animal; gelding. *Not used*.—The spayed *gelts* they esteem the most profitable. *Mortimer*.

GELT, the participle passive of *geld*.—Let the others be *gelt* for oxen. *Mortimer*.

GELT, *s.* [corrupted for the sake of rhyme from *gilt*.] Tinsel; gilt surface:

I won her with a girdle of *gelt*,
Emboss with bugle about the belt. *Spenser*.

GELT, a river of England, in the county of Cumberland, which runs into the Irting, about a mile south-east from Brampton.

GEM, *s.* [*gemma*, Lat.] A jewel; a precious stone of whatever kind.—The basis of all *gems* is, when pure, wholly diaphanous, and either crystal or an adamantine matter; but we find the diaphaneity of this matter changed, by means of a fine metallic matter. *Woodward*.

Stones of small worth may lie unseen by day;
But night itself does the rich *gem* betray. *Cowley*.

Features of men who on fame's list enroll'd,
Gave life and lustre to the world of old;
Worthies, whose statues fail'd time's flood to stem,
Yet live effulgent in the deathless *gem*.

The first bud of any thing:

From the joints of thy prolific stem
A swelling knot is raised, call'd a *gem*;
Whence, in short space, itself the cluster shows. *Denham*.

In mineralogy, the word *gem* denotes all such stones as are considered by mankind as precious. These are the diamond, the ruby, the sapphire, the topaz, the chrysolite, the beryl, the emerald, the hyacinth, the amethyst, the garnet, the tourmalin, the opal; and to these may be added, rock crystal, the finer flints or pebbles, the cat's eye, the oculus mundi or hydrophanes, the chalcedony, the moon-stone, the onyx, the cornelian, the sardonyx, agates, and the Labrador stone; for all which, see under their respective titles in this work; and the article MINERALOGY.—With respect to their lustre and colour, the diamond is valued for its transparency, the ruby for its purple, the sapphire for its blue, the emerald for its green, the hyacinth for its orange, the amethyst carneol for its carnation, the onyx for its tawny, the jasper, agate, and porphyry, for their vermilion, green, and variegated colours, and the garnet for its transparent blood-red. These gems are found more or less coloured and spotted, and sometimes quite limpid and colourless. In this case the diamond-cutter or polisher knows how to distinguish their different species, and appreciate their value, by their different degrees of hardness upon the mill. For the cutting or polishing of gems, the fine powder of the fragments of those that are next in degree of hardness is always required to grind away the softer; but as none of them are harder than the diamond, this can only be polished by its own powder.

With regard to the texture of gems, M. Magellan observes, that all of them are foliated or laminated, and of various degrees of hardness. Whenever the edges of these laminæ are sensible to the eye, they have a fibrous appearance, and reflect various shades of colour, which change successively according to their angular position. These are called by the French *chatoyantes*; and what is a blemish in their transparency, often enhances their value on account of their rarity. But when the substance of a gem is composed of a broken texture, consisting of various sets of laminæ differently inclined to each other, it emits at the same time various irradiations of different colours, which succeed one another according to their angle of position. This kind has obtained the name of *opals*, and are valued in proportion to the brilliancy, beauty, and variety, of their colours. Their crystallization depends on the same cause which produces that of salts, earths, and metals, which see under the article CRYSTALLOGRAPHY, vol. v. p. 414–425.

OF FACTITIOUS GEMS.

Factitious or artificial gems are commonly called *pastes*; many of which possess all the lustre and brilliancy of real gems, but want their hardness. The art of compounding factitious gems is both interesting and ingenious; and has long formed a very considerable branch of the jeweller's trade.—The rules to be observed in making the bases or pastes are, 1. That the vessels in which they are made be firmly luted, and the lute left to dry before they are put into the fire. 2. That such vessels be chosen for the work as will best resist the fire. 3. That the powders be prepared on a porphyry stone; not in a metal mortar, which would communicate a foreign tinge to them. 4. That the just proportion in the quantity of the several ingredients be nicely ob-

ſerved. 5. That the materials be all well mixed; and, if not ſufficiently baked the firſt time, to be committed to the fire again, without breaking the pot: for if this be not obſerved, they will be full of bliſters and air-bladders.—To render the paſte as hard as poſſible, and capable of retaining the utmoſt durability and beauty: Take of prepared cryſtal ten pounds; ſalt of polverine ſix pounds; ſulphur of lead two pounds: mix theſe well together into a fine powder; make the whole with pure water into a hard paſte; and make this paſte into ſmall cakes of about three ounces weight each, with a hole in their middle; dry them in the ſun, and afterwards calcine them in a potter's furnace. After this, levigate them to a perfect fineneſs on a porphyry ſtone, and ſet this powder in pots in a glaſs-furnace to purify for three days; then caſt the whole into water, and afterwards return it into the furnace, where let it ſtand fifteen days, in which time all foulneſs will diſappear, and the paſte will greatly reſemble the natural jewels. To give this the colour of the emerald, add to it braſs thrice calcined; for a ſea-green, braſs ſimply calcined to a redneſs; for a ſapphire, add zaffer, with manganeſe; and for a topaz, manganeſe and tartar. All the gems are imitated in the ſame way of working as the making of coloured glaſſes; the baſes for which are ſo hard, that they very much approach the natural gems.

The colours of all the gems made of the ſeveral paſtes, ſhould be deeper or lighter, according to the work for which the ſtones are deſigned; and it is to be obſerved that ſmall ſtones for rings, &c. require a *paler* colour, and large ones a *paler*. Beſides the colours made from manganeſe, verdegris, and zaffer, which are the ingredients moſt commonly uſed, there are ſeveral ſuperior ones which care and ſkill may often fabricate. Very fine red may be made from gold, and one not much inferior from iron; a very fine green from braſs or copper; a ſky-colour from ſilver, and a much finer one from the granite of Bohemia.

Another much-approved method of making paſte for coloured gems, is this: Take a quantity of ſaccharum ſaturni, or ſugar of lead, made with vinegar in the common way; ſet it in ſand, in a glaſs veſſel well luted from the neck downwards; leave the mouth of the veſſel open, and continue the fire twenty-four hours; then take out the ſalt, and if it be not red, but yellowiſh, powder it fine, and return it into the veſſel, and keep it in the ſand-heat twenty-four hours more, till it becomes of the colour of red cinnabar. The fire muſt not be ſo ſtrong as to melt it, for then the proceſs would be ſpoiled. Pour diſtilled vinegar on this calcined ſalt, and ſeparate the ſolution from the dregs; let the decanted liquor ſtand ſix days in an earthen veſſel, to give time for the finer ſediment to ſubſide; filter the liquor, and evaporate it in a glaſs veſſel, and there will remain a pure ſalt of lead; dry this well, then diſſolve it in fair water; let the ſolution ſtand ſix days in a glazed pan; let it ſubſide, then filtre the clear ſolution, and evaporate it to a yet more pure ſalt; repeat this operation three times; put the now perfectly pure ſalt into a glaſs veſſel, ſet it into a ſand-heat for ſeveral days, and it will be calcined to a fine impalpable powder, of a lively red. This is *the true ſulphur of lead*.—Take all the other ingredients as in the common compoſition of the paſtes of the ſeveral colours, only inſtead of red lead, uſe this powder; which will well reward the trouble of the operation.

A paſte or baſis proper for receiving colours may alſo be made by well-pounding and mixing ſix pounds of white ſand cleanſed, three pounds of red lead, two pounds of purified pearl-aſh, and one pound of nitre. A ſofter paſte may be made in the ſame manner, of ſix pounds of white ſand cleanſed; red lead, and purified pearl-aſh, of each three pounds; one pound of nitre, half a pound of borax, and three ounces of arſenic. For common uſe a pound of common ſalt may be ſubſtituted for the borax. This glaſs cannot be recommended, as being very ſoft, and will not bear much wear if employed for rings, or ſuch imitations of ſtones as are expoſed to much rubbing; but for ear-rings, ornaments worn on the head, or breaſt, &c. it may laſt a conſiderable time.—To give paſte the different colours, the proceſs is as follows:

AMETHYST.—Take ten pounds of either of the compoſitions deſcribed under *Colouring of* GLASS, (in this volume,) one ounce and a half of manganeſe, and one dram of zaffer; powder and fuſe them together.—For *Black*. Take ten pounds of either of the above compoſitions, one ounce of zaffer, ſix drams of manganeſe, and five drams of iron, highly calcined; and proceed as before.—For *Blue*. Take of the ſame compoſition ten pounds, of zaffer ſix drams, and of manganeſe two drams; and proceed as with the foregoing.

CHRYSOLITE.—Take of either of the compoſitions for paſte above-deſcribed, prepared without ſaltpetre, ten pounds, and of calcined iron five drams; and purſue the ſame proceſs as with the reſt.

RED CORNELIAN.—Take of the compoſitions mentioned under *Colouring of* GLASS, two pounds; of glaſs of antimony one pound; of ſcarlet oker two ounces; and of manganeſe one dram. Fuſe the glaſs of antimony and manganeſe with the compoſition; then powder them, and mix them with the other, by grinding them together, and fuſe them with a gentle heat.

WHITE CORNELIAN.—Take of the compoſition juſt referred to two pounds; and of yellow oker well waſhed two drams; and of calcined bones one ounce. Mix them, and fuſe them with a gentle heat.

DIAMOND.—Take of the white ſand ſix pounds; of red lead four pounds; of pearl-aſh purified three pounds; of nitre two pounds; of arſenic five ounces; and of manganeſe one ſcruple. Powder and fuſe them.

EAGLE-MAKINE.—Take ten pounds of the compoſition under GLASS; three ounces of copper highly calcined with ſulphur; and one ſcruple of zaffer. Proceed as before.

EMERALD.—Take of the ſame compoſition with the laſt nine pounds; three ounces of copper precipitated from aquafortis; and two drams of precipitated iron.—Or, Take of natural cryſtal four ounces; of red-lead four ounces; verdegris forty-eight grains; crocus martis, prepared with vinegar, eight grains: let the whole be finely pulverized and ſifted; put this into a crucible, leaving one inch empty: lute it well, and put it into a potter's furnace, and let it ſtand there as long as they do their pots. When cold, break the crucible; and a matter will remain of a fine emerald colour, which, after it is cut and ſet in gold, will equal in beauty an oriental emerald.

GARNET.—Take two pounds of the compoſition under GLASS; two pounds of the glaſs of antimony, and two drams of manganeſe.—For vinegar garnet, take of the compoſition for paſte deſcribed above, two pounds; one pound of glaſs of antimony, and half an ounce of iron, highly calcined; mix the iron with the uncoloured paſte, and fuſe them; then add the glaſs of antimony powdered, and continue them in the heat till the whole is incorporated.—For *Gold yellow*, Take of the compoſition ten pounds, and one ounce and a half of iron ſtrongly calcined; proceeding as with the other.—For *Deep purple*, take of the compoſition ten pounds; of manganeſe one ounce; and of zaffer half an ounce.

RUBY.—Take one pound of either of the above compoſitions for paſte, and two drams of *calx Caſſii*, or precipitation of gold by tin; powder the paſte, and grind the calx of gold with it in a glaſs, flint, or agate, mortar, and then fuſe them together. A cheaper ruby may be made with half a pound of either of the above compoſitions, half a pound of glaſs of antimony, and one dram and a half of the calx of gold proceeding as before.

Sapphire.—Take of the compoſition for paſte ten pounds; of zaffer three drams and one ſcruple; and of the *calx Caſſii* one dram. Powder and fuſe them. Or the ſame may be done by mixing with the paſte one-eighth of its weight of ſmalt.

Topaz.—Take of the compoſitions mentioned under Glass in this volume, ten pounds, omitting the ſalt-petre; and an equal quantity of the *Gold-coloured hard* Glass. Powder and fuſe them.—For *Turquoiſe*, Take of the compoſition for blue paſte already deſcribed, ten pounds; of calcined bone, horn, or ivory, half a pound. Powder and fuſe them.—For *Opake white*, Take of the compoſition for paſte ten pounds; and one pound of calcined horn, ivory, or bone; and proceed as before.

Such is the method of manufacturing factitious gems by the working jewellers in London.—The following is the mode adopted by the jewellers in France, as deſcribed by M. Fontanieu, of the royal academy of ſciences in Paris:

Of the Bases or Pastes.—Although the different calces of lead are all adapted to produce the ſame effect in vitrification, yet M. Fontanieu prefers lead in ſcales, and next to that minium, as being the moſt conſtantly pure. It is neceſſary to ſift through a ſilk ſieve the preparations of lead one wiſhes to make uſe of in the vitrification, in order to ſeparate the groſſer parts, as alſo the lead found in a metallic ſtate when white lead in ſcales is employed. The baſe of factitious gems is calx of lead and rock-cryſtal, or any other ſtone vitrifiable by the calces already mentioned. Pure ſand, flint, and the tranſparent pebbles of rivers, are ſubſtances equally fit to make glaſs: but as it is firſt neceſſary to break the maſſes of cryſtal, ſtones, or pebbles, into ſmaller parts; ſo by this operation particles of iron or copper are frequently introduced, and to theſe duſt or greaſy matters are alſo apt to adhere. The artiſt therefore begins by putting the pounded cryſtal or pebbles into a crucible, which he places in a degree of heat capable of making the maſs red hot; he then pours it into a wooden bowl filled with very clear water; and ſhaking the bowl from time to time, the ſmall portions of coals furniſhed by the extraneous bodies ſwim on the ſurface of the water, and the vitrifiable earth, with the iron, &c. reſts on the bottom. He then decants the water; and having dried the maſs, he pounds it, and ſifts the powder through the fineſt ſilk ſieve: he then digeſts the powder during four or five hours with marine acid, ſhaking the mixture every hour. After having decanted the marine acid from the vitrifiable earth, he waſhes the latter until the water no longer reddens the tincture of turnſol. The ſaid earth being dried, is paſſed through a ſilk ſieve, and is then fit for uſe. Nitre, ſalt of tartar, and borax, are the three ſpecies of ſalts that enter with quartz and the ſeveral calces of lead into M. Fontanieu's vitrifications.

Much of the ſucceſs in the jeweller's art depends on the accurate proportion of the ſubſtances made uſe of to form the cryſtal which ſerves as a baſe to the factitious gems. After having tried a great variety of receipts, our author found they might be reduced to the following:—1. Take two parts and a half of lead in ſcales, one part and a half of rock-cryſtal or prepared flints, half a part of nitre, as much borax, and a quarter part of glaſs of arſenic. Theſe being well pulverized and mixed together, are to be put into a Heſſian crucible, and ſubmitted to the fire. When the mixture is well melted, pour it into cold water: then melt it again a ſecond and a third time; taking care, after each melting, to throw it into freſh cold water, and to ſeparate from it the lead that may be revived. The ſame crucible ſhould not be uſed a ſecond time, becauſe the glaſs of lead is apt to penetrate it in ſuch a manner as to run the riſk of loſing the contents. One muſt alſo be careful to cover the crucible well, to prevent any coals getting into it, which would ſpoil the compoſition.

2. Take two parts and a half of white ceruſe, one part of prepared flints, half a part of ſalt of tartar, and a quarter part of calcined borax: melt the mixture in a Heſſian crucible, and then pour it into cold water; it is then to be melted again, and waſhed a ſecond and a third time, the ſame precautions being obſerved as for the firſt baſe.

3. Take two parts minium, one part rock cryſtal, half a part of nitre, and as much ſalt of tartar: this mixture being melted, muſt be treated as the former.

4. Take three parts of calcined borax, one part of prepared rock-cryſtal, and one part of ſalt of tartar; theſe being well mixed and melted together, muſt be poured into warm water: the water being decanted and the maſs dried, an equal quantity of minium muſt be added to it; it is then to be melted and waſhed ſeveral times as directed above.

5. That paſte called by Fontanieu *Mayence baſe*, and which he conſiders as one of the fineſt cryſtalline compoſitions hitherto known, is thus prepared: Take three parts of fixed alkali of tartar, one part of rock-cryſtal or flint pulverized: the mixture to be well baked together, and then left to cool. It is afterwards poured into a crucible of hot water to diſſolve the frit; the ſolution of the frit is then received into a ſtone-ware pan, and aquafortis added gradually to the ſolution till it no longer effervеſces: this water being decanted, the frit muſt be waſhed in warm water till it has no longer any taſte; the frit is then dried, and mixed with one part and a half of fine ceruſe or white lead in ſcales; and this mixture muſt be well levigated with a little diſtilled water. To one part and a half of this powder dried add an ounce of calcined borax: let the whole be well mixed in a marble mortar, then melted and poured into cold water as the other baſes already deſcribed. Theſe fuſions and lotions having been repeated, and the mixture dried and powdered, a twelfth part of nitre muſt be added to it, and then melted for the laſt time; after which a very fine cryſtal will be found in the crucible.

6. For a compoſition for furniſhing very fine white paſte: Take eight ounces of ceruſe, three ounces of rock-cryſtal pulverized, two ounces of borax finely powdered, and half a grain of manganeſe; having melted and waſhed this mixture in the manner directed above, it will produce a very fine white cryſtal paſte.

Of the Colours.—The calces of metals are the ſubſtances uſually employed to colour factitious gems; and on the preparation of theſe calces depends the vividneſs of their colours.

From Gold.—To obtain the mineral purple known by the name of *precipitate of Caſſius*, M. Fontanieu employs the following different proceſſes:—1. Diſſolve ſome pure gold in aqua regia, prepared with three parts of precipitated nitrous acid and one part of marine acid; and to haſten the diſſolution, the matraſs ſhould be placed in a ſand bath. Into this ſolution pour a ſolution of tin in aqua regia. The mixture becomes turbid, and the gold is precipitated with a portion of the tin, in the form of a reddiſh powder; which, after being waſhed and dried, is called precipitate of Caſſius. The aqua regia employed to diſſolve the tin is compoſed of five parts nitrous acid and one part of marine acid: to eight ounces of this aqua regia are added ſixteen ounces of diſtilled water. Some leaves of Malacca tin, about the ſize and thickneſs of a ſixpence, are then put into this diluted aqua regia, till it will diſſolve no more of them: which operation requires twelve or fourteen days; though it might probably be haſtened by beating the tin ſtill thinner, and then rolling it into the form of a hollow cylinder, or turning it round into ſpiral convolutions, and thus expoſing a greater extent of ſurface to the action of the menſtruum. In order to prepare more readily the precipitate of Caſſius, M. Fontanieu puts into a large jug eight ounces of ſolution of tin, to which he adds four pints of diſtilled water: he after-

wards pours into this metallic lye a ſolution of gold, drop by drop, taking care to ſtir the whole with a glaſs tube: when the mixture becomes of a deep purple colour, he ceaſes dropping the ſolution of gold; and in order to haſten the precipitation of the mineral purple, pours into the mixture a pint of freſh urine. Six or ſeven hours after, the precipitate is collected at the bottom of the veſſel: the fluid is then decanted; and the precipitate, waſhed once or twice, is dried till it becomes a brown powder for uſe.—2. Pour into a veſſel of fine tin with a thick bottom four ounces of the ſolution of gold; three minutes after add two pints of diſtilled water. Let this mixture ſtand in the tin veſſel during ſeven hours, taking care to ſtir it every hour with a glaſs tube; afterwards pour it into a conical glaſs jug, and add to it a pint of freſh urine: the mineral purple is ſoon precipitated, and then it is to be waſhed and dried. —3. Diſtil in a glaſs cornute placed in a bath of aſhes, ſome gold diſſolved in aqua regia, made with three parts nitrous and one part marine acid; when the acid is paſſed over and the gold contained in the cornute appears dry, leave the veſſel to cool, then pour into it ſome new aqua regia, and proceed to diſtil as before. Replace the aqua regia twice upon the gold, and diſtil the ſame. After theſe four operations, pour by little and little into the cornute ſome oil of tartar *per deliquium*, which will occaſion a briſk effervescence: when this ceaſes, diſtil the mixture till it becomes dry, and then put ſome warm water into the cornute. Shake the whole, and pour it into a cucurbit, when a precipitate is depoſited, the colour of which is ſometimes brown and ſometimes yellow: after having waſhed this precipitate, dry it. M. Fontanieu ſays, this mineral purple was much ſuperior to the foregoing, ſince two grains of it only were ſufficient to an ounce of the baſe, whilſt it required of the other two a twentieth part of the baſe. And he adds, that he found a means of exalting the colour of the precipitate of Caſſius, by putting to it a ſixth part of its weight of glaſs of antimony finely powdered, and of nitre in the proportion of a dram to eight ounces of the baſe.

From Silver.—The calx of ſilver, being vitrified, produces a yellowiſh-grey colour. This calx enters only into the compoſition of the yellow artificial diamond, and the opal. M. Fontanieu introduces it into the baſe in the form of luna cornea. In order to prepare it, he directs to diſſolve the ſilver in precipitated nitrous acid, and afterwards to pour into it a ſolution of ſea-ſalt: a white precipitate is obtained; which, being waſhed and dried, melts very readily in the fire, and is ſoon volatilized if not mixed with vitrifiable matters. To make the yellow diamond, twenty-five grains of this luna cornea are put to an ounce of the fourth baſe above deſcribed: the doſe of ſilver may be diminiſhed according to the ſhade of yellow that one wiſhes to procure.

From Copper.—The calx of copper imparts to white paſte or glaſs the fineſt green colour; but if this metal be not exactly in a ſtate of calx, it produces a browniſh red colour. *Mountain blue*, *verdegris*, and the reſidue of its diſtillation, are the different preparations of copper which this artiſt employs to make the artificial emeralds.

From Iron.—Although it has been aſſerted, that the calces of iron introduce a very fine tranſparent red colour into white glaſs, M. Fontanieu could only obtain from it a pale red a little opake. The calx of iron that he employed was in the proportion of the twentieth part of the baſe.—There are ſeveral ways of preparing the calx of iron called *crocus Martis*, or *ſaffron of Mars*. By digeſting filings of ſteel with diſtilled vinegar, then evaporating and replacing the vinegar ten or twelve times upon theſe filings and drying them alternately, a calx of iron is obtained, which muſt be ſifted through a ſilk ſieve, and then calcined. The calx of iron thus obtained by the vinegar, introduces into the baſes a green colour, inclining to a yellow. By the following proceſs a ſaffron of Mars of the fineſt red colour is obtained: Let an ounce of iron filings be diſſolved in nitrous acid in a glaſs cornute, and diſtilled over a ſand-bath to dryneſs. After having replaced the acid or the dry calx, and re-diſtilled it a ſecond and a third time, it is then edulcorated with ſpirits of wine, and afterwards waſhed with diſtilled water.

From the Magnet.—It is neceſſary to calcine the magnet before it be introduced into the vitrifications: having therefore torrified the magnet during two hours, it muſt be waſhed and dried. It is only employed in compoſitions of the opal.

From Cobalt.—The calx of cobalt is only proper to introduce a blue colour into glaſs gems; but this metal is rarely found free from iron and biſmuth, and therefore it is firſt neceſſary to ſeparate them from it. This is done by calcining the ore of cobalt in order to diſengage the arſenic: afterwards the calx muſt be diſtilled in a cornute with ſal ammoniac, and the iron and the biſmuth are found ſublimed with this ſalt. The diſtillation muſt be repeated with the ſal ammoniac till this ſalt is no longer coloured yellow. The cobalt which remains in the cornute is then calcined in a potſherd, and becomes a very pure calx; which being introduced into the baſe, in the proportion of a nine-hundredth part, gives it a very fine blue colour, the intenſity of which may be increaſed at diſcretion by the addition of calx of cobalt. In order to prepare *black enamel* reſembling that which is called *black agate* of Iceland; melt together a pound and a half of one of the baſes, two ounces of the calx of cobalt, two ounces of crocus Martis, prepared with vinegar, and two ounces of manganeſe.

From Tin.—The calx of tin is not vitrifiable alone, and when deprived of its caloric is of a white colour; it renders opake the glaſs with which it is melted, and forms white enamel. For this purpoſe, calcine the putty of tin; then waſh and dry it, and ſift it through a ſilk ſieve. Take ſix pounds of the ſecond baſe, the ſame quantity of the calcined putty of tin, and forty-eight grains of manganeſe.

From Antimony.—Antimony is only ſuſceptible of vitrification when its calx contains caloric, and then it produces a reddiſh or hyacinth coloured glaſs; but if the antimony be in a ſtate of abſolute calx, ſuch as the diaphoretic antimony, then it is no longer vitrifiable, and may be ſubſtituted for calx of tin to make white enamel. M. Fontanieu introduces the glaſs of antimony in the compoſition of artificial topazes. For the oriental topaz, he takes twenty-four ounces of the firſt baſes and five drams of the glaſs of antimony. To imitate the topaz of Saxony, he adds to each ounce of the baſe five grains of the glaſs of antimony. For the topaz of Brazil, he takes twenty-four ounces of the firſt baſe, one ounce twenty-four grains of glaſs of antimony, and eight grains of the precipitate of Caſſius.

From Manganese.—This mineral, employed in a ſmall quantity, renders the glaſs whiter; a larger quantity produces a very fine violet colour, and a ſtill larger proportion renders the glaſs black and opake.

There are two ways of preparing manganeſe: 1. The moſt ſimple conſiſts in expoſing it to a red heat, and then quenching it with diſtilled vinegar; it is afterwards dried and powdered, and paſſed through a ſilk ſieve. 2. Haudiquer de Blancour deſcribes the ſecond manner of preparing the manganeſe, proper to furniſh a red colour, and names it *fuſible manganeſe*. Take of manganeſe of Piedmont one pound; torrify and pulverize it; then mix it with a pound of nitre, and calcine the mixture during twenty-four hours; afterwards waſh it repeatedly in warm water, till the water of the lyes has no longer any taſte; dry the manganeſe, and mix with it an equal weight of ſal ammoniac; levigate this mixture on a ſlab of porphyry with oil of vitriol diluted with water to the ſtrength of vinegar. Dry the mixture, and introduce it into a cornute; diſtil by a graduated fire;

fire; and when the ſal ammoniac is ſublimed, weigh it, and add to the mixture an equal quantity. Then diſtil and ſublime as before, and repeat the operation ſix times, being careful at each time to mix the ſal ammoniac and the manganeſe upon the porphyry with diluted oil of vitriol.

Of the Heat necessary for Factitious Gems.—M. Fontanieu obſerves, that there are three degrees of heat very different in their energy. The fire kept up in the wind furnaces in the laboratories of chemiſts, is leſs active than that whoſe effect is accelerated by the means of bellows; and a fire ſupported by wood, and kept up during ſixty hours without interruption, produces ſingular effects in vitrification, and renders the glaſs finer and leſs alterable. When recourſe is had to the forge, in order to operate a vitrification, it is neceſſary to turn about the crucible from time to time, that the maſs may melt equally. Some coal alſo ſhould be replaced, in proportion as it conſumes towards the nozel of the bellows; for without this precaution, we ſhould run the riſk of cooling the crucible oppoſite to the flame, and probably of cracking it, when all the melted maſs running among the coals would be totally loſt. Though this is the readieſt way of melting, it ſhould not be employed out of choice; for the crucible often breaks, or coals get into it, and reduce the calx of lead to a metallic ſtate.

Compositions for imitating the choicest Gems.—1. For the white diamond: Take the baſe of Mayence. This cryſtal is very pure, and has no colours.—2. For the yellow diamond: To an ounce of the fourth baſe, add for colour twenty-five grains of luna cornea, or ten grains of glaſs of antimony.—3. For the emerald: To fifteen ounces of either of the baſes, add for colour one dram of mountain-blue, and ſix grains of glaſs of antimony. Or, to an ounce of the ſecond baſe, add for colour twenty grains of glaſs of antimony and three grains of calx of cobalt.—4. For the ſapphire: To twenty-four ounces of the Mayence baſe, add for colour two drams forty-ſix grains of the calx of cobalt.—5. For the amethiſt: To twenty-four ounces of the Mayence baſe, add for colour four drams of prepared manganeſe and four grains of precipitate of Caſſius.—6. For the beril: To twenty-four ounces of the third baſe, add for colour ninety-ſix grains of glaſs of antimony and four grains of calx of cobalt.—7. For the black agate: To twenty-four ounces of either of the baſes, add two ounces of the mixture directed above under *Cobalt*.—8. For the opal: To an ounce of the third baſe, add for colour ten grains of luna cornea, two grains of magnet, and twenty-ſix grains of abſorbent earth.—9. For the oriental topaz: To twenty-four ounces of the firſt or third baſe, add for colour five drams of glaſs of antimony.—10. For the topaz of Saxony: To twenty-four of the ſame baſe, add for colour ſix drams of the glaſs of antimony.—11. For the topaz of Braſil: To twenty-four ounces of the ſecond or third baſe, add for colour one ounce twenty-four grains of the glaſs of antimony and eight grains of precipitate of Caſſius.—12. For the hyacinth: To twenty-four ounces of the baſe made with rock-cryſtal, add for colour two drams forty-eight grains of glaſs of antimony.—13. For the oriental ruby: To ſixteen ounces of the Mayence baſe, add for colour a mixture of two drams forty-eight grains of the precipitate of Caſſius, the ſame quantity of crocus Martis prepared in aquafortis, the ſame of golden ſulphur of antimony and of fuſible manganeſe, with the addition of two ounces of mineral cryſtal. Or, to twenty ounces of the baſe made with flint, add half an ounce of fuſible manganeſe and two ounces of mineral cryſtal.—14. For the balaſs ruby: To ſixteen ounces of the Mayence baſe, add the above colouring powder, but diminiſhed a fourth part. Or, to twenty ounces of the baſe made with flints, add the ſame colouring powder, but with a fourth leſs of the manganeſe.

The *factitious* gems are diſtinguiſhed from the *natural*, by their ſoftneſs and fuſibility; by their ſolubility in acids; by their cauſing only a ſingle refraction of the rays of light; and, in many caſes, by their ſpecific gravity, which exceeds 2·76 in all precious gems of the firſt order, as the diamond, ruby, ſapphire, &c.

Beſides the imitation of the gems above deſcribed, the jewellers have a method of making counterfeit brilliants, called *doublets*, which are formed of two pieces of white tranſparent glaſs, or of cryſtal, laid over each other, and cemented uniformly together, with the colouring matter incloſed in the centre. The manner of conſtructing them is as follows: Let the cryſtal or glaſs be firſt cut in the form of a brilliant, except that the figure muſt be compoſed from two ſeparate pieces, divided in an horizontal direction a little lower than the middle. After the two plates of the intended gem are thus cut, and fitted ſo exactly that no diviſion can appear when they are laid together, the upper part muſt be poliſhed ready for ſetting; and then the colour muſt be put betwixt the two plates by the following method. "Take of Venice or Cyprus turpentine two ſcruples; and add to it one ſcruple of the grains of maſtich perfectly pure, and finely powdered. Melt them together in a ſmall ſilver ladle, or other veſſel, and put to them gradually any of the coloured ſubſtances mentioned below, ſtirring them together as the colour is put in, that they may be thoroughly commixed. Warm then the doublets to the ſame degree of heat as the melted mixture; and paint the upper ſurface of the lower plate, and put the upper one inſtantly upon it, preſſing them to each other, but taking care that they may be conjoined in the moſt equable manner. When the cement or paint is quite cold and ſet, the redundant part of it, which has been preſſed out of the joint of the two pieces, ſhould be carefully ſcraped off the ſide, till there be no appearance of any colour on the outſide of the doublets: and they ſhould then be ſkilfully ſet; obſerving to carry the mounting over the joint, that the deception might not be diſcovered, and that the upper piece may be well ſecured from ſeparating from the under one.—The colours are communicated by the following pigments, &c.—The ruby may be imitated by mixing a fourth part of carmine with ſome of the fineſt crimſon lake that can be procured.—The ſapphire may be counterfeited by very bright Pruſſian blue, mixed with a little of the above-mentioned crimſon lake, to give it a caſt of purple. The Pruſſian blue ſhould not be very deep-coloured, or but little of it ſhould be uſed: for otherwiſe, it will give a black ſhade that will be injurious to the luſtre of the doublets.—The emerald may be counterfeited by diſtilled verdigris, with a little powdered aloes. But the mixture ſhould not be ſtrongly heated, nor kept long over the fire after the verdigris is added: for the colour may be ſoon impaired by it.—The reſemblance of the garnet may be made by dragon's blood; which, if it cannot be procured of ſufficient brightneſs, may be aſſiſted by a very ſmall quantity of carmine.—The amethyſt may be imitated by the mixture of ſome Pruſſian blue with the crimſon lake; but the proportions can only be regulated by experiment, as different parcels of the lake and Pruſſian blue vary extremely in the degree of ſtrength of the colour.—The yellow topazes may be counterfeited by mixing powdered aloes with a little dragon's blood, or by good Spaniſh arnotto: but the colour muſt be very ſparingly uſed, or the tinge will be too ſtrong for the natural appearance of that ſtone.—The chryſolite, hyacinth, vinegar garnet, eagle marine, and other more dilute colours, may be formed in the ſame manner, by leſſening the proportions of the colours, or by compounding them together correſpondently to the hue of the gem to be imitated; to which end it is proper to have an original ſtone, or an exact imitation of one, at hand when the mixture is made, in order to the more perfect adaptation of the colours to the effect deſired: and when

these precautions are taken, and the operation well conducted, it is practicable to bring the doublets to so near a resemblance of the true gems, that none but the best judges can distinguish them. The method of detecting them, is to hold the doublet betwixt the eye and the light, in such a position that the light may pass through the upper plate of the brilliant, when it will be readily seen that there is no real colour in the substance of the gem.

Of ANTIQUE GEMS.

There is perhaps no species of research which falls under the eye of the antiquarian, so full of interest and valuable information, as far as regards the taste and refinement of remote ages, and the consequent progress of the fine arts, as that which results from an investigation of the antique gems. These consist of all the precious stones above described, cut and polished by the art of the lapidary, and engraved or ornamented by the inimitable artists of ancient days, with the portraits of heroes and gods, of legislators and philosophers, of hieroglyphics, allegories, and attributes, and of numberless figures under various forms and attitudes, as devices for busts, medallions, signets, rings, bracelets, and all those ancient ornaments wherewith princes and princesses were wont to be distinguished, when they were "sumptuously decked out with jewels and precious stones." The object which artists had in view by engraving these gems, was to record or immortalize, on such unperishable materials, the noble actions of their ancestors, the attributes of the gods, the feats of kings and heroes, the celebration of religious rites, of victories, and the secular games, by which devices the mind might be furnished at a single glance, with a retrospective view of the principal passages and events in the history and mythology of ancient times.

In what age, or in what country, the art of grinding and engraving precious stones first took its rise, has been a question of great difficulty and doubt; and concerning which the opinions of mankind have been much divided. The honour of this invention was for a long time attributed to the Greeks, and afterwards to the Egyptians; but more modern research seems now inclined to bear away the palm in favour of the Asiatics, and the aboriginal inhabitants of Hindoostan; from whence it appears to have found its way into Egypt, and thence to the Greeks. For this information the public are principally indebted to the laudable exertions of the literary society of Calcutta, founded by the late ingenious and learned sir William Jones; from whose investigation of the Shanscrit language, and the rites and ceremonies of the ancient bramins, it is shewn that the art of polishing and engraving precious stones was practised in Asia long before the time of Moses. Though the figures expressed on these very antique gems are in some respects neatly and cleanly cut, yet they have the awkward coarseness and stiffness of the Egyptian style, which adds but little to the beauty of the stone, or to the ornament of the wearer. But the stone itself, and the symbol engraved upon it, were at first the only objects of consideration, without regard to elegant forms, or resplendent colours; and however coarsely or slightly these Asiatic and Egyptian antiques are finished, they will for ever afford the highest gratification to those who set a just value upon authentic monuments of the infant world, and of the origin and progress of its ideas and arts—which we have indeed inherited, but not always improved.

Many of these curious antiques, by the signs and symbols impressed upon them, manifest the most ingenious and correct representations of nature. Death was represented with crooked legs; beauty and youth, by long tresses of hair; power, by long hands; swiftness and agility, by long feet. These gradations of antique gems rank among the earliest of the Grecian arts; and are not, as Winckelmann insinuates, "precious gems of Etruscan workmanship." It has been shewn by M. Pauw, that the Egyptians engraved the *pietrê durê*, or gems, full two thousand years before the christian era; but it has been proved that similar works of art amongst the ancient Greeks, cannot date from an earlier period than the time of Homer; which is generally, and upon rational grounds, conceived to have been about the time of the reign of David and Solomon in Judea: yet it appears that the mechanical art of common engraving had reached the Greeks long before they began to reckon by Olympiads. Their gems being engraved in intaglio, on the flat part of perforated scarabees, demonstrates that they were not worn or mounted as rings, though they might be used for sealing; and as they are evident imitations of the old Egyptian sacred scarabees with hieroglyphical figures, it follows pretty obviously that the art of cutting and engraving gems came long afterwards to the Greeks by the way of Egypt,—as did their architecture and many other branches of science; which has been satisfactorily proved by M. Denon and others, in their recent promulgation of Egyptian antiquities.—See the article EGYPT, vol. vi. p. 374-378.

Indeed, if the silence of Homer as to the knowledge of engraved gems in any part of Greece is not decisive of the fact above stated, we have the unexceptionable authority of the sacred writings in support of it; in which we find that the Egyptians and the Israelites, in the time of Moses, had rings and engraved gems long before the epoch of the siege of Troy; and at a period when, by whatever system of chronology we chuse to reckon, the Greeks had not even emerged from barbarity. For at a much more remote era, Pharaoh had taken the sealring from his finger, and placed it on that of Joseph; and Moses had been directed to build the holy sanctuary from the offerings of the people, among which were "onyx-stones, and stones to be set in the ephod of the high-priest and his breast-plate." *Exod.* xxv. 7. Of these he was directed to take "two onyx-stones, and *grave* on them the names of the children of Israel; six of their names on one stone, and the other six names on the other stone, according to their birth." And "with the work of an engraver in stone, like the engravings of a *signet*, shalt thou engrave them; and set them in ouches of gold, and put them on the shoulders of the ephod, that Aaron the high-priest bear their names before the Lord upon his shoulders for a memorial." And he was further directed to "make for Aaron a breast-plate of judgment, and to set it in settings of stones, four rows, each containing three; which stone shall be, with the names of the children of Israel, twelve, according to their names, like the engravings of a signet." *Exod.* xxviii. 9-21. It is also to be noticed, that the onyx-stones, and stones to be set for the ephod, were brought, not by the *commonalty* of the Israelites, but by the *rulers of the people*; *Exod.* xxv. 27; which plainly indicates their *then* great scarcity and high prices, much beyond the reach of common people. And it is curious to remark that the diamond, which was then found only in Asia, is mentioned as one of the *engraved* stones in the second row of the breast-plate; and that consequently the art of engraving and cutting it must be of much higher antiquity than is commonly supposed.

But when the art of cutting and engraving gems had diffused itself throughout the Persian, Grecian, and Roman, empires, there seems to have been no bounds to the extravagance of the rich and great in procuring those jewels for dress and ornament. Rings, bracelets, earrings, necklaces, clasps, girdles, sashes,—nay, even the robes, gowns, and shoes, of the great and noble, were richly set and variegated with engraved gems. The same taste and profusion also adorned the helmets, breast-plates, bucklers, sword-handles, and scabbards,—and even the saddles and horse-furniture of their warriors. And indeed this profusion of ornamental gems is still anxiously sought for by the Turkish and Persian nobles, and

and by the beys of Egypt. Yet the art of engraving gems amongſt the eaſtern nations was at firſt cultivated, not ſo much to gratify an oſtentatious pride, as from the neceſſity which compelled thoſe people to have recourſe to ſeals or ſtamps; for no writing was held to be authentic, unleſs accompanied with the ſignet of the perſon who dictated it. Jezebel, writing a letter in the name of Ahab, carefully impreſſes it with the ſeal of that prince, that her orders might be executed without heſitation. The Perſian and Parthian monarchs practiſed the ſame cuſtom; and Ahaſuerus preſented his ring to Eſther, as the uſual mark of confidence and eſteem. Alexander, the conqueror of Darius, always uſed the ſeal of that unfortunate monarch when he ſent his mandates into Aſia; and at Babylon, every great man had his particular ſignet; a manifeſt proof of the high antiquity of private ſeals, which are ſo much the taſte in our own times.

It would be ſuperfluous for us to enumerate the various kinds and uſes of the ornamental rings of the ancients, enriched with the moſt curious devices of the deſigner and engraver.—"They loaded their fingers with princely fortunes,"—ſays Pliny, xxxiii. 1. and ſome of the greateſt and moſt renowned warriors had ſo high a regard for their rings and engraved gems, that they bequeathed them to the commonwealth, to prevent dilapidation. Pompey placed in the capitol of Rome the rings, gems, and jewels, which he had collected among the ſpoils of Mithridates. Cæſar gave to the temple of Venus Genetrix his cabinet of *dactyliotheca*, which he had collected at an immenſe expence. Marcellus dedicated his invaluable ſtore to the temple of Apollo Palatinus. And ſo infatuating was this rage for ornamental rings, that the inferior claſſes,—juſt the ſame as in our own days,—were ſo anxious of imitating their ſuperiors, that gilt, and braſs, and even iron, rings, were coveted and worn, from the faſcinating principle of faſhion alone, among the very loweſt orders of the people. *Pliny* xxxiii. 1.

Among the Egyptian gems, the greater part have the form of the conſecrated ſcarabeus or beetle, and the figures are engraven on its ſurface. They afterwards ground or cut away the lower part of the ſcarabeus, preſerving the upper ſurface, cut into an oval form, to be more commodiouſly ſet into a ring or ſeal. Such was the origin of the oval engraved ſtones, which are ſtill called *ſcarabs*, although the figure of the inſect no longer appears. The ſcarabeus was conſidered by the Egyptians as a ſymbol of the ſun, the ſource of generation, probably becauſe they imagined that the ſcarab poſſeſſed the faculty of ſelf-production; it was alſo regarded as an emblem of courage, for they imagined that all theſe inſects were males, and conſequently beheld them with a kind of veneration. The Etruſcan ſcarabs, which are numerous, rarely exceed the natural ſize of the inſects they repreſent; but thoſe of the Egyptians are frequently of an extraordinary thickneſs, and ſome of them are four inches in length. Engraved ſtones of this kind were eſteemed as amulets or preſervatives from unlucky accidents, or from the malice of enemies. With theſe the forms of divinities and the veſtments of the prieſts were decorated, and they were diſtributed as honourable diſtinctions to perſons who had become eminent either in military employments, or in the offices of civil adminiſtration. That theſe ſtones were generally attached to the dreſs or to the perſon, appears by their being perforated, ſo as to admit a ſtring, by which they were either ſuſpended from the neck or faſtened on the arm.

It has excited ſurpriſe among antiquarians, that the Etruſcans, a nation ſo diſtant from Egypt, ſhould have had the ſame ſingular kind of engraved ſtones; but the circumſtance merely ſhews that the Etruſcans copied the Egyptians, and probably, in adopting the ſcarabs of Egypt, they likewiſe adopted the ſuperſtitious practices then prevailing in that country. But from theſe Egyptian and Etruſcan gems, which are to be claſſed among the earlieſt productions of the glyphic art, we may conclude, that although they carried the mechanic operation to a conſiderable height, they made little or no progreſs in the poetical or more refined part. We muſt however diſtinguiſh the real Egyptian ſtyle from the Egyptio-Grecian, which took place when Egyptian gems were afterwards executed by Greek artiſts.

We diſcover on thoſe gems the divinities of the country, and all the hieroglyphics of their ſymbolical writing. Among theſe divinities we find their Iſis, Oſiris, Horus, Anubis, Harpocrates, &c. ſometimes ſingle, and ſometimes united. The flower of the lotus or perſea often ornaments their forehead, or its ſtalk is held like a ſceptre in the hand of the divinity, who is ſometimes repreſented as ſailing in a bark of the papyrus. The ſiſtrum or rattle, the ſitula or ewer, and the whip or ſcourge, are occaſionally repreſented.—See the engravings which illuſtrate the article EGYPT in our ſixth volume.

The Greeks, when once in poſſeſſion of the art of engraving gems, were not long in bringing it, like other arts of fancy and delineation, to the higeſt imaginable perfection. Raſpe, the editor of Taſſie's catalogue, juſtly obſerves, that their improvements were not improvements of the mechanical parts of the art, or of the tools or method of engraving, for theſe, on account of their great ſimplicity, could have undergone but little variation from their beginning. The improvements of the Greeks aroſe from a more extenſive uſe of the tool—a better choice, and happier treatment of their ſubjects—from their conſummate knowledge and imitation of nature, and finally, from a ſublimer taſte, in which Homer was their maſter, and nature their guide.

The Egyptian ſculpture has one remarkable deficiency; the Egyptian ſtatues hang their limbs in idleneſs and inactivity; their legs and their arms adhere to the body in one dead maſs. Grecian art firſt made the marble ductile, and the ſtone ſuſceptible of delicate forms. It breathed life into a ſtatue, and touched into motion the fairy group contained in a ring. The commercial intercourſe of the Greeks with other nations—their conſtant emulation, ariſing from their own ſmall independent ſtates—their encouragement from aſpiring individuals, who purchaſed fame with the talents of the artiſt—their athletic exerciſes, and the natural beauty of their forms, and the genial influence of their country and climate—all conſpired to give the moſt powerful impulſe to their genius; and not the leaſt of theſe cauſes was the varied enchantment of their fabled heroes, gods, and goddeſſes. Was it wonderful that they, who ſo early felt the merits of Homer, ſhould expreſs his beauties by the efforts of the glyphic art? beauties ſo different from the infantine inventions of Africa and Aſia, ever cramped and confined by the ſuperſtition of their mythology. From the ſtudy of nature and her laws, the Greeks formed their immortal works; ſhe alone was their ſtandard, the teſt of art and ſcience, of genius and taſte.

The Romans before they were acquainted with the Greeks, from the earlieſt period of the republic, were in the habit of wearing rings. Thoſe of their ſenators were originally made of iron, and veſtiges of this primæval ſimplicity were perceivable in their marriage ceremonies and in their triumphs. In the former, the bridegroom preſented an unadorned ring of iron to his bride; and in the latter, the triumpher, while the ſlave placed on his head a crown of gold, wore, like that ſlave, a ſimple iron ring on his finger. Such was the plain ornament with which Marius triumphed over Jugurtha. In proceſs of time, only their ambaſſadors enjoyed the privilege of publicly wearing a gold ring. The nobility were at length diſtinguiſhed by this mark from the plebeians; theſe latter were only allowed rings of ſilver; and when a ring of gold was beſtowed on one of them by a dictator or a queſtor, he was admitted into the equeſtrian order.

On

On the contrary, whenever a Roman knight had diſſipated his wealth, he was compelled to give up his gold ring; and if any diſgraceful act rendered a citizen incapable of holding a public office, he was deſpoiled of his ring, and his ſeal was eraſed.

This famous republic for a long time regarded the liberal arts with diſdain, not diſtinguiſhing them from mere manual employments; they therefore made ſcarcely any progreſs in them. Afterwards, when they penetrated with their arms into Greece and Aſia, and obſerved the high eſteem in which artiſts were held, they ſeemed to poſſeſs other eyes and finer feelings. The rude conquerors admired and pillaged theſe treaſures of Greece, and invited Dioſcorides, Solon, and their numerous brethren, to the Roman capital. Yet for a length of time the Romans were debarred by their religious inſtitutions from the uſe of the graver. Numa, following the example of Pythagoras, had long conceived that a knowledge of the divinity could only be acquired by the mind, and imagined that it was derogatory to employ material and periſhable objects to repreſent it. The Romans therefore abſtained from engraving any image of the gods; but afterwards adopting the religious rites of other nations, they became, like thoſe nations, the ſlaves of ſuperſtition. Caprice at length invented all kinds of ſubjects to be engraven on their ſeal-rings.

A multiplicity of rings, which had been hitherto prohibited, was now allowed; and, from having been originally uſed as ſeals, became curious as well as neceſſary ornaments. They adorned the ſtatues of their gods with them, that they might have a plea for their own profuſion, and at length became ſo faſtidiouſly delicate, that they had lighter rings to wear in the ſummer. The Greeks and other nations had adopted the finger on the left hand for the honourable diſtinction of the ring; on the left hand it was more conveniently worn; more ſecure from friction, while the right was free to act. But when magnificence ſucceeded to the ancient frugality, they covered all their fingers with rings, and even carried ſeveral on one finger, and mounted ſeveral engraved ſtones in one ring.

Among their domeſtic uſes of rings and ſeals was that of their being ſubſtituted for the uſe we make of keys; one part of the ſeal formed the wards of a key. They ſealed their cheſts, and their wine veſſels, and whatever they wiſhed to preſerve from the rapacity of their domeſtics. But their chief uſe was to ſeal their letters. After the letter was folded, or their tablet cloſed, they tied round it a flaxen ſtring, and at the point where the tie finiſhed they put their wax. The letter thus ſealed became a ſacred depoſit; and when the bearer preſented it to the perſon addreſſed, he was very particular to make him obſerve both the cover and the ſeal. This cuſtom has been preſerved from age to age. In the middle ages they appear at times to have been diſtreſſed for ſeals; for St. Bernard apologiſes, in one of his letters, for not having ſealed them, having miſlaid his ring; and he informs pope Eugenius, that his ſeal having been *counterfeited*, he intends for the future to have a ſeal which ſhall bear his portrait and his name.

As the head of every family had his own ring, no engraver was permitted to make the ſame ring for two different perſons, and they employed the moſt ſevere prohibitions againſt it. Yet forgeries were numerous; and frauds and ſtratagems were ſucceſsfully accompliſhed by ſuch means, by the enemies of the Romans. Pompey, (the ſon of Pompey the Great) a naval commander, anticipating his melancholy end, and fearful of the purpoſe to which his enemies might convert his ring, threw it into the ſea after his defeat. At the bed alſo of a dying man, his friends and heirs ſolicitouſly ſtood to watch the fate of his ring. From various motives many called aloud to incloſe it in his funeral urn; and if the dying man was ſilent reſpecting its deſtiny, they indecently ſnatched it from his finger ere he expired: a circumſtance which the moral Seneca condemns among the perverted manners of his age.

Julius Cæſar had for his ſeal, a Venus armed with a dart, of which there are numerous copies; this was to flatter his pride of anceſtry, pretending that he deſcended from Venus and Æneas. Auguſtus, when he aſſumed the empire, had a ſphynx, which, at length, he abandoned to elude the pleaſantries of the wits; this ſphynx, they ſaid, portends riddles. Afterwards he adopted the head of Alexander; and at length his own portrait, engraved by Dioſcorides. Pompey's ſeal was a lion holding a ſword: when, after his aſſaſſination, it was preſented to Cæſar, the crafty rival burſt into tears. The ſeal of Mecænas was a frog; an animal which he made highly dreadful to the people; for as it was uſually annexed to his tax bills, the hoarſe voice of the frog they declared to be truly unmuſical. It was ſaid that this amphibious animal was ſymbolical of the power Mecænas was inveſted with, both in land and ſea affairs. Sylla, become haughty by taking Jugurtha priſoner, had the event engraven on the ſeal with which he conſtantly ſealed his letters. This (ſays Plutarch) touched Marius to the quick; ſo ſlight and frivolous was the beginning of the enmity of thoſe celebrated rivals, which afterwards produced ſuch implacable animoſity, and cauſed ſo much Roman blood to be ſhed. Scipio Africanus bore on his ſeal the portrait of Syphax, whom he had conquered. Theſe inſtances ſufficiently ſhew that engraved ſtones recorded hiſtorical events of the higheſt importance, at the ſame time that they performed the office of ſeals. And thus we find that gems preſerve to us a multitude of ſigns and ſymbols intereſting towards the hiſtory of the manners and cuſtoms of antiquity. The fineſt copies of ſtatues and groupes, ſome of which ſtill exiſt, while others are loſt and gone, are executed on precious ſtones; the faces and features of illuſtrious men, eminent for their genius or their power, are faithfully retained, and often more perfectly than on medals, which are ſo frequently injured by friction and time. In gems, the artiſts have found an infinite number of ſubjects for their imitation and improvement, from the age of Raphael and Michael Angelo, to Reynolds and Fuſeli; poets and hiſtorians are no leſs indebted. From theſe precious treaſures of antiquity we may every day learn more and more to perfect our taſte, exerciſe our curioſity, and adorn our imagination with the moſt elevated and the moſt beautiful ideas. They conſtitute a library without books, a gallery of pictures without paintings, and ſculpture without marble.

Cold and phlegmatic minds, however, have frequently murmured at the expence of time neceſſary to inveſtigate and acquire this art, as well as againſt thoſe charming fictions with which Homer, Heſiod, and ſucceeding poets, have embelliſhed their works; but did theſe inventions not diſcloſe important truths, and frequently the moſt uſeful inſtructions, ſtill can it be wiſe to deſtroy a ſyſtem which peopled and animated all nature, a mythology which made a ſolemn temple of the vaſt univerſe? "Thoſe flowers whoſe ſparkling and varied beauty we ſo much admire, are the tears of Aurora. It is the breath of Zephyrus which gently agitates the leaves, while the murmurs of the waters are the ſighs of the Naiads. A god impels the wind; a god pours out the rivers! Grapes are the gift of Bacchus. Ceres preſides over the harveſt. Orchards are the care of Pomona. Does a ſhepherd ſound his reed on the ſummit of a mountain, it is Pan who with his paſtoral pipe returns the amorous lay. When the ſportſman's horn rouſes the inchanted ear, it is Diana armed with her bow and quiver; more nimble than the ſtag ſhe purſues, when ſhe takes the diverſion of the chaſe. The ſun is a god, who, riding on a car of fire, ſcatters through the univerſe a flood of light. The ſtars are divinities, who meaſure the eternal path of time with their golden beams.

GEM.

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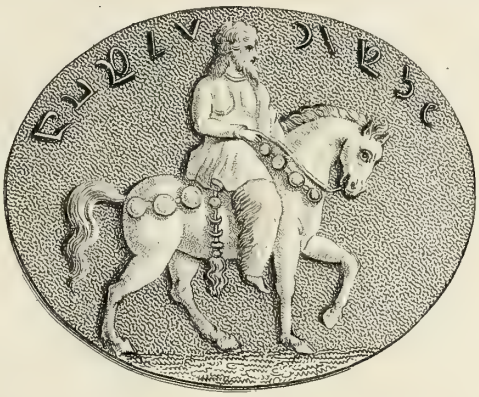

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Egyptian, Persian, and Indian Gems.

J. Chapman sc.

London. Published as the Act directs, Nov.r 6th 1806, by J. Wilkes.

beams. The Moon, the lovely ſiſter of the Sun, with milder glory ſlowly paces on her car through the ſilence of the night, and conſoles the world for the abſence of her brother. Neptune reigns in the ſeas, ſurrounded by the Nereids, who dance to the joyous ſhells of the Tritons. In the higheſt heaven is ſeated Jupiter, the father and ſovereign of men and gods; ſubſervient to his will rolls the thunder, formed by the Cyclops in the cavern of Lemnos; his ſmile rejoices nature, while his nod ſhakes the foundations of Olympus. Circling the throne of their ſovereign, or recumbent on purple beds, the other divinities quaff ambroſia from the golden cup preſented by the youthful Hebe. In the midſt of this bright circle ſhines with diſtinguiſhed luſtre the unrivalled beauty of Venus, adorned only by her magic ceſtus, about which the Graces, the Smiles, and the Sports, for ever play; in her hand is a ſmiling boy, whoſe power all earth, all heaven, confeſs and feel."—See the elegant diſplay of Antique Gems, publiſhed by Murray, 4to. 1804.

Of the IMITATION of ANTIQUE GEMS.

Since faſhion, in all ages, has been found to lead the follies and the fancies of mankind; and ſince the prices of precious ſtones and engraved gems, while thus the vogue, were ſo enormous that none but the higher ranks could accompliſh their purchaſe; it is not ſurpriſing that the idea of counterfeiting them in coloured paſte or glaſs, ſhould have been very early ſuggeſted by the ancient lapidaries; particularly as ſuch brilliant baubles, from their reſplendent colours, and beautiful workmanſhip, have alike excited the admiration and taſte of the bulk of the people in every nation on the earth, whether ſavage or civilized. No wonder then that the famous old glaſs manufactories of Egypt, Tyre, and Sidon, ſhould have furniſhed ſo many of theſe articles as objects of commerce. In Egypt they made, even in the remoteſt antiquity, rich coloured glaſs jewels, emeralds, and enamels, which they ſold to the Phœnician traders, who diſperſed them in commerce over different parts of the world,—juſt as our Chriſtian traders have ſince done on the coaſts of Guinea, Senegal, and Madagaſcar, bartering theſe and ſuch like baubles for amber, gold, ſlaves, girls, and other commodities.

In this artifice of imitating the antique gems by coloured paſtes and glaſs enamel, both the Greeks and Romans made ſuch wonderful progreſs, that for a long time they paſſed off theſe counterfeits for real jewels, and highly elevated and enriched the fabricators of them. The Romans, from their perfect imitation of the *lapis obſidianus*, an Ethiopian opaque ſtone ſimilar to the black glaſſy lava of Iceland, called it *vitrum obſidianum*; and the red opaque, like jaſper, they called *hæmatimon*; and they had likewiſe, as Pliny adds, Hiſt. Nat. xxxvi. 26, "*album, et murrhinum, aut hyacinthos ſapphiroſque imitatum, et omnibus aliis coloribus.*" By *vitrum murrhinum*, Pliny undoubtedly meant a glaſs or paſte which imitated the reſplendent colours of thoſe celebrated *vaſa murrhina*, which were firſt exhibited at Rome in the triumphal entry of Pompey, after his victory over Mithridates; and for which afterwards ſuch extravagant prices were paid by the Romans, that it almoſt ſurpaſſes the conception or belief of the moſt credulous antiquarian. Three hundred talents!—no leſs than 30,000l. ſterling—Petronius is ſaid to have paid for one ſingle bowl of that kind; and which he afterwards broke to pieces to prevent Nero from ſeizing it, who had boaſted that he ſhould enrich his ſideboard with this coſtly and precious veſſel. Antiquarians have been extremely puzzled to find out what theſe *vaſa murrhina* could poſſibly have been made of. Variegated agate, ſardonyx, china, and even glaſs externally ornamented with cameo-work, have been tried and fitted to the occaſional deſcriptions which the ancients have left us of theſe vaſes; but in a manner which is far from proving ſatisfactory. For neither do the materials of china or glaſs correſpond with the extraordinary prices for which they ſold; nor agree in their fabric with Pliny's deſcription, who ſays that "they were held in the higheſt eſtimation on account of the ſingularity and refulgence of their colours, their ſpots winding round into purple and milk-white, and a third bright, burning, reddiſh, or flame-colour, ariſing alternately from the different ſhades of this inimitable admixture. All the accounts too, of the country from which the *myrra, murrha*, or myrrhine vaſes, were brought, appear equally vague and uncertain; it ſeems however agreed, that they were the product of the *eaſt*, or India. If indeed theſe vaſes were formed of variegated agate, or ſardonyx, with ſtrata or ſtripes of milk-white onyx, or chalcedons, and ſaturated with amethyſt, or purple, bright red, and the varying ſhades thence ariſing, and cut into the ſize and thinneſs which Pliny mentions, the ſubſtance being very little thicker than that of a goblet, then they muſt have been wonders in nature and art, which the rich and luxuriant might fancy and buy at exorbitant prices. Even in theſe, or in any other days, they would be looked upon deſervedly and juſtly as great curioſities; for extenſive as our knowledge is in the productions of the mineral kingdom, where ſhall we find agates and ſardonyxes of the ſize which Pliny and other writers deſcribe, as neceſſary to give the dimenſions or content of the myrrhine vaſes, without flaw or fracture?

But although the origin of the real murrhine vaſes ſtill remains in a ſtate of doubt and uncertainty, yet the ingenious imitation of them in glaſs and porcelain, of which we were ſpeaking, has been clearly and ſatisfactorily aſcertained. Of this ſpecies is the juſtly prized Barbarini vaſe, which was brought to England by ſir William Hamilton, and now in the poſſeſſion of his grace the duke of Portland. It is perhaps one of the moſt intereſting examples of the powers of the imitative art now exiſting, in the improvement or enhancement of the value of cheap materials. But ſtill further to ſhew the ingenuity of our anceſtors in this imitative ſcience, thouſands of antique impreſſions of gems of coloured glaſs or paſte, have been dug up amongſt the ruins of Alexandria, Rome, Naples, Puzzolo, and other ſeats of ancient magnificence. Many of the moſt admired engravings in the real antique gems, are now only to be found in imitative paſte impreſſions; but which having been formed from the laſt originals, are in conſequence become of a ſimilar value. Inſtances of this fact are verified in the Florentine Muſeum; in Stoſch's elaborate work on Ancient Gems; in Winckelman's Deſcription of Stoſch's Cabinet; and, above all, in Mr. Townley's noble collection, which has long done honour to the Britiſh metropolis.

Heraclius, in the ninth century, was a diſtinguiſhed fabricator of antique gems, which were frequently uſed as jewels in royal and ducal crowns, in ornaments about the altar, and in ſtate equipage and furniture. In that age of ſuperficial enquiry, coloured glaſs or paſte was often ſold for fine emerald, ſapphire, and ruby. The famous emerald of the abbey of Reichenaw near Conſtance, though a choice preſent from the emperor Charlemagne, has of late been diſcovered to be nothing more than a lump of fine green-coloured glaſs.—The equally celebrated emerald vaſe in the cathedral at Genoa, came into the poſſeſſion of the Genoeſe as an equivalent for a large ſum of money, in 1101, at the taking of Cæſarea in Paleſtine; nor was any impoſition ever ſo much as ſuſpected; for in 1319 they pawned, and afterwards redeemed it, for 1200 marcs of gold, which is nearly 30,000l. ſterling: and yet this jewel turns out to be nothing but a lump of coloured glaſs!

This imitative art of fabricating the antique gems in paſte and glaſs, though of ſo much importance to the jeweller's trade, was at firſt a ſecret in the hands only of ſome particular individuals, and it died with them;

ſo that every new artiſt was for a long time obliged to re-invent the method; until at length M. Homberg, having once more brought the art to great perfection, generouſly gave the whole proceſs to the world, never again to be forgotten or loſt.

The great object of the operation is to take the impreſſion of the gem in a very fine earth, and to preſs down upon this a piece of pure glaſs, ſoftened or half melted at the fire, ſo that the figures of the impreſſion made in the earth may be nicely and perfectly expreſſed upon the glaſs. In general, the whole proceſs much reſembles that of the common foundery. But when it is brought to the trial, there occur a number of difficulties which were not to be foreſeen, and which would not at all affect the common works of the founder. For his purpoſe, every earth will ſerve that is fine enough to receive the impreſſion, and ductile enough not to crack in the drying: theſe all ſerve for the founder's uſe, becauſe the metals which they caſt are of a nature incapable of mixing with earth, or receiving it into them, even if both are melted together, ſo that the metal always eaſily and perfectly ſeparates itſelf from the mould; but it is very different in theſe caſts of glaſs. They are compoſed of a matter which differs in nothing from that of the mould, but that it has been run into this form by the agency of fire, and the other has not yet been ſo run, but is on any occaſion ready to be ſo run, and will mix itſelf inſeparably with the glaſs in a large fire: conſequently, if there be not great care taken, as well in the choice of the glaſs as in the manner of uſing it, when the whole is finiſhed there will be found great difficulty in ſeparating the glaſs from the mould, and often this cannot be done without wholly deſtroying the impreſſion.

All earths run more or leſs eaſily in the fire, as they are more or leſs mixed with ſaline particles in their natural formation. As all ſalts make earths run into glaſs, and as it is neceſſary to uſe an earth on this occaſion for the making a mould, it being alſo neceſſary to the perfection of the experiment that this earth ſhould not melt or run, it is our buſineſs to ſearch out for this purpoſe ſome earth which contains but very little ſalt. Of all the ſpecies of earth which M. Homberg examined, none proved ſo much diveſted of ſalts, or ſo fit for the purpoſe, as the common tripoli, uſed to poliſh glaſs and ſtones. Of this earth there are two kinds; the one reddiſh, and compoſed of ſeveral flakes or ſtrata; the other yellowiſh, and of a ſimple ſtructure. Theſe are both to be had in the ſhops. The yellowiſh kind is the beſt of the two, and is commonly called *Venetian tripoli*. This receives the impreſſions very beautifully; and never mixes with the glaſs in the operation, which the red kind is apt to do. M. Homberg employed both kinds at once in the following manner: firſt, powder a quantity of the red tripoli in an iron mortar, and ſifting it through a fine ſieve ſet it by for uſe; then ſcrape with a knife a quantity of the yellow tripoli into a ſort of powder, and afterwards rub it till very fine in a glaſs mortar. The finer this powder is, the finer will be the impreſſion, and the more accurately perfect the caſt. The artificer might naturally ſuppoſe, that the beſt method to obtain a perfect fine powder of this earth, would be by waſhing it in water; but he muſt be cautioned againſt this. There is naturally in this yellowiſh tripoli a ſort of unctuoſity, which when it is formed into a mould keeps its granules together, and gives the whole an uniform gloſſy ſurface: now the waſhing the powder takes away this unctuoſity; and though it renders it much finer, it makes it leave a rough granulated ſurface in the mould.

When the two tripolis are thus ſeparately powdered, the red kind muſt be mixed with ſo much water as will bring it to the conſiſtence of paſte, ſo that it may be moulded like a lump of dough between the fingers: this paſte muſt be put into a ſmall crucible of a flat ſhape, and about half an inch or a little more in depth, and of ſuch a breadth at the ſurface as is a little more than that of the ſtone whoſe impreſſion is to be taken. The crucible is to be nicely filled with this paſte lightly preſſed down into it, and the ſurface of the paſte muſt be ſtrewed over with the fine powder of the yellow tripoli not wetted. When this is done, the ſtone, of which the impreſſion is to be taken, muſt be laid upon the ſurface, and preſſed evenly down into the paſte with the finger and thumb, ſo as to make it give a ſtrong and perfect impreſſion; the tripoli is then to be preſſed nicely even to its ſides with the fingers, or with an ivory knife. The ſtone muſt be thus left a few moments, for the humidity of the paſte to moiſten the dry powder of the yellow tripoli which is ſtrewed over it: then the ſtone is to be carefully raiſed by the point of a needle fixed in a handle of wood; and the crucible being turned bottom upwards, it will fall out, and the impreſſion will remain very beautifully and correctly taken.

The red tripoli being the more common and the cheaper kind, is here made to fill the crucible only to ſave the other, which alone is the ſubſtance fit for taking the impreſſion. When the ſtone is taken out, it muſt be examined, to ſee whether any thing be lodged in any part of the engraving, becauſe if there be any of the tripoli left, there will certainly be ſo much wanting in the impreſſion. When the crucible and paſte are dry, a piece of glaſs muſt be choſen of a proper colour, and cut to a ſize proper for the figure; this muſt be laid over the mould, but in ſuch a manner that it does not touch the figures, otherwiſe it would ſpoil them. The crucible is then to be brought near the furnace by degrees, and gradually heated till it cannot be touched without burning the fingers; then it is to be placed in the furnace under a muffle, ſurrounded with charcoal. Several of theſe ſmall crucibles may be placed under one muffle; and when they are properly diſpoſed, the aperture of the muffle ſhould have a large piece of burning charcoal put to it, and then the operator is to watch the proceſs, and ſee when the glaſs begins to look bright: this is the ſignal of its being fit to receive the impreſſion. The crucible is then to be taken out of the fire; and the hot glaſs muſt be preſſed down upon the mould with an iron inſtrument, to make it receive the regular impreſſion: as ſoon as this is done, the crucible is to be ſet at the ſide of the furnace out of the way of the wind, that it may cool gradually without breaking. When it is cold, the glaſs is to be taken out, and its edges ſhould be grated round with pincers, which will prevent its flying afterwards, which is an accident that ſometimes happens when this caution has been omitted, eſpecially when the glaſs is naturally tender. The different coloured glaſſes are of different degrees of hardneſs, according to their compoſition; but the hardeſt to melt are always the beſt for this purpoſe, and this is known by a few trials.

If it be deſired to copy a ſtone in relief which is naturally in creux, or to take one in creux which is naturally in relief; there needs no more than to take an impreſſion firſt in wax or ſulphur, and to mould that upon the paſte of tripoli inſtead of the ſtone itſelf: then proceeding in the manner before directed, the proceſs will have the deſired ſucceſs.

A more ſimple and eaſy method than the above, is by taking the caſts in gypſum, or plaſter of Paris as it is commonly called. For this purpoſe, the gypſum muſt be finely pulveriſed, and then mixed with clear water to the conſiſtence of thick cream. This is poured upon the face of the gem or ſeal of which the impreſſion is wanted, and which muſt be previouſly moiſtened with oil to facilitate the ſeparation of the caſt; and in order to confine the liquid plaſter, it is only neceſſary to pin a ſlip of oiled paper round the ſides of the ſeal by way of a cap or rim. When the plaſter is dry, it is to be taken off, and ſet before the mouth of the furnace, in order to free it entirely from moiſture; then it is fit to be uſed as a matrix in the ſame way as that formed with the tripoli

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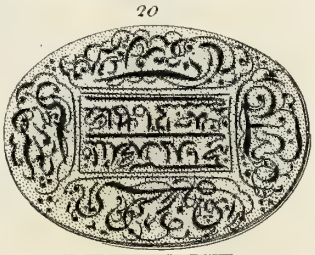
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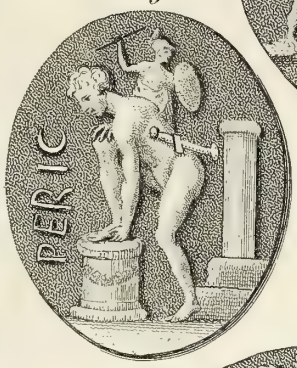
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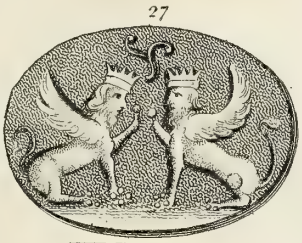
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J. Chapman sc.

Antique Seals or Signets, Rings, Bracelets &c.

London, Published as the Act directs, Dec.r 22 d 1806, by J. Wilkes

earths. Only no crucible or other receptacle is at all neceſſary; the caſts being formed like ſo many ſmall cakes half an inch thick, and thus put into the furnace with the bits of glaſs upon them. The glaſs, after coming to a proper heat, is preſſed down upon the mould with an iron ſpatula to receive the deſired impreſſion, the preſſure requiſite being more or leſs according to the ſize of the ſtone.

The art of taking impreſſions of gems ſeems not to have been altogether loſt even in the Gothic ages; and it was revived in Italy in the time of Laurence of Medici and Pope Leo X. but it was not cultivated in an extenſive manner till the beginning of the eighteenth century, when M. Homberg reſtored it, as already mentioned. In this he is ſaid to have been greatly aſſiſted and encouraged by the then duke of Orleans regent of France, who uſed to amuſe himſelf with that celebrated chemiſt in taking off impreſſions in paſte from the king of France's and his own collections of gems. M. Clachant the elder, an engraver of ſome note, who died at Paris in 1781, alſo learned this art from his royal highneſs, to whoſe houſehold his father ſeems to have belonged. Mademoiſelle Feloix next cultivated this art. She had been taught by her father, who in quality of garçon de chambre to the regent had often aſſiſted in the laboratory of his maſter, where he acquired this knowledge. Her collection conſiſted of 1800 choice imitations, with many originals, of the antique gems.

Baron Stoſch, a Pruſſian, who travelled over Europe in queſt of original engraved ſtones and impreſſions of ancient gems, for the elegant work which he publiſhed and Picart engraved, was well acquainted with this art. He had taught it to his ſervant Chriſtian Dehn, who ſettled at Rome, where he made and ſold his well known ſulphur impreſſions and paſtes. He had collected 2500 articles. Dolce has arranged them in a ſcientific order, and given a deſcriptive catalogue of them. It was chiefly from Dehn's collection that the taſte for ſulphurs and paſtes has become ſo univerſal. They are great objects of ſtudy, and often require much learning to explain them. They have unqueſtionably ſerved to extend and improve the art of engraving on ſtones; and have been of infinite uſe to painters, to ſtatuaries, and to other artiſts, as well as to men of claſſical learning and fine taſte.

It is however very difficult to take off impreſſions, and perfectly to imitate various coloured cameos. It cannot be properly done in wax, ſulphur, plaſter, or glaſs of one colour only. The difficulties ariſing from their ſize and form, and from the various nature of the different ſorts of glaſs, which do not well unite into different ſtrata, are very numerous: nor could the completeſt ſucceſs in this chemical and mechanical branch of the art for a long time produce a tolerable cameo. Impreſſions or imitations, if unaſſiſted by the tool of the engraver, do not ſucceed; becauſe the undercutting and deep work of moſt of the originals require to be filled up with clay or wax, that the moulds may come off ſafe without injuring them. Hence the impreſſions from theſe moulds come off hard and deſtitute of delicacy, ſharpneſs, and preciſion of outline, till the underworking of the moulder is cut away. But Mr. Reiffenſtein at Rome, by his genius, perſeverance, and the aſſiſtance of able artiſts, at length overcame theſe difficulties; and had the ſatisfaction of ſucceeding, and producing variegated cameos which can hardly be diſtinguiſhed from the originals.

M. Lippart of Dreſden, an ingenious glazier, and an enthuſiaſt in the fine arts, practiſed this branch not unſucceſsfully; but not finding ſufficient encouragement for his paſtes of coloured glaſs, or perhaps from local difficulties in making them well and cheap, he abandoned the purſuit. He ſubſtituted in its place impreſſions of fine white alabaſter or ſelenite plaſter. Such impreſſions, when carefully ſoaked in a ſolution of white Caſtile ſoap, then dried, and rubbed over with a ſoft bruſh, take a very agreeable poliſh. They ſhow the work perhaps to better advantage than red or white ſulphurs do; but they are not ſo durable, and are liable to be defaced by rubbing. Of theſe impreſſions M. Lippart publiſhed three different collections, each of them containing one thouſand articles; and to the merit of having increaſed the number of Mademoiſelle Feloix and Chriſtiano Dehn's collections, which are all inſerted in his, he added that of employing two learned Germans to arrange and deſcribe them. The firſt thouſand were arranged and deſcribed by the late profeſſor Chriſt at Leipſic, and the ſecond and third thouſand by profeſſor Heine at Goettingen. Nor did M. Lippart ſtop here: but to make the ſtudy of antiquity more eaſy and acceptable to artiſts, he ſelected out of the whole collection of three thouſand, a ſmaller one of two thouſand of the beſt and moſt inſtructive ſubjects, of which he himſelf drew up and publiſhed a deſcription in Germany.

But of all the ingenious men who have taken impreſſions of engraved gems in ſulphur and in paſte, no one has carried that art to ſuch perfection as Mr. James Taſſie of Leiceſter-ſquare, London. His knowledge in various branches of the fine arts, particularly in that of drawing, naturally led him to it. The elegant portraits which he models in wax, and afterwards moulds and caſts in paſte, which entirely reſemble cameos, are highly eſteemed by the public. Mr. Taſſie, profiting of all the former publications of this ſort, and by expence, induſtry, and acceſs to many cabinets in England and other kingdoms to which former artiſts had not obtained admiſſion, has now increaſed his collection of impreſſions of ancient and modern gems to the number of upwards of ſixteen thouſand articles. It is the greateſt collection of this kind that ever exiſted; and ſerves for all the purpoſes of artiſts, antiquaries, ſtudents, men of taſte, and even philoſophers. The great demand for his paſtes was perhaps at firſt owing to the London jewellers, who introduced them into faſhion by ſetting them in rings, ſeals, bracelets, necklaces, and other trinkets. The reputation of this collection having reached the late empreſs of Ruſſia, ſhe was pleaſed to order a complete ſet; which being executed in the beſt ſtyle, were arranged in elegant cabinets, and placed in the noble apartments of the ſuperb palace at Czarſko Zelo.

Mr. Taſſie, in executing this commiſſion, availed himſelf of all the advantages which the improved ſtate of chemiſtry, the various ornamental arts, and the knowledge of the age, ſeemed to afford. The impreſſions were taken in a beautiful white enamel compoſition, which is not ſubject to ſhrink or form air-bladders; which emits fire when ſtruck with ſteel, and takes a fine poliſh; and which ſhows every ſtroke and touch of the artiſt in higher perfection than any other ſubſtance. When the colours, mixed colours, and nature of the reſpective originals, could be aſcertained, they were imitated as completely as art can imitate them; inſomuch that many of the paſte intaglios and cameos in this collection are ſuch faithful imitations, that artiſts themſelves have owned they could hardly be diſtinguiſhed from the originals. And when the colour and nature of the gems could not be authenticated, the paſtes were executed chiefly in tranſparent colours; conſtant attention being beſtowed to preſerve the outlines, attributes, and inſcriptions. And it is to this valuable collection of Mr. Taſſie's antique gems, that the editors of the Encyclopædia Londinenſis are indebted for moſt of the ſcarce and valuable ancient portraits given in this elaborate work.

In the hope of inviting into more general notice this intereſting, but neglected, branch of the fine arts, we are further induced to give ſome engravings of curious antique and other Gems, ſelected and copied from the choiceſt caſts in the valuable collection of Mr. Taſſie, above-mentioned. The ſubjects in Plate I. are as follow:

low: Fig. 1. An Egyptian antique, in green jaſper; the device an eye, with a ſquare faſtened to the under eye-lid, and a ſmall triangle: the whole incloſed in a ring of a ſerpent, the emblem of eternity. 2. An hieroglyphic inſcription, in burnt cornelian, very deeply cut with the engraver, in the ſame manner as on the obeliſks and other monuments of Egyptian antiquity, which ſee under the article EGYPT, vol. vi. p. 348, &c. 3. An Egyptian prieſt, in cornelian, ſitting upon a throne of a mitred ſphynx, giving his benediction with his right hand, and holding in his left a ſceptre in the form of a javelin. Before him ſtands a nilometer, and over his head a winged globe. Mr. Raſpe, the ingenious editor of Mr. Taſſie's "Deſcriptive Book of Gems," 2 vols. 4to. obſerves on this gem, "that figures of bearded men are not to be found among any of the Egyptian works of remote antiquity; for that the Egyptians always ſhaved." He therefore hazards a conjecture, "whether this figure might not be the image of *Phtha*, the only God of the primitive Egyptians; and whoſe wiſdom and benevolence were repreſented by the ſphynx and the ſerpent Cnuphis; and which the Gnoſtics afterwards repreſented by the ſymbol of the abraxas, or elſe by the figure of a bearded old man crowned, whom they called *God the Father, creator of the univerſe*. Theſe bearded figures are frequently found upon the monuments of Perſepolis, and upon the Perſepolitan cylinders, with ſymbols and hieroglyphics undoubtedly Egyptian; ſo that the monuments repreſenting the cuſtoms of Egypt and ancient Perſia, might probably belong to Egypt, while under the dominion of the Perſians, or even to the Perſians after the conqueſts of Cambyſes."

Fig. 4. A prieſt of Iſis, in green jaſper, fighting with a griffin; a very curious Egyptian antique. 5. A winged ſphynx, in cornelian, ſcratching its ear with the left foot. 6. A lion, conſecrated to Cybele, with a gooſe ſtanding on his back, in jaſper; one of the moſt antique gems at preſent known, and a true emblem of the rude or primitive ſtate of engraving on precious ſtones. 7. A Perſian lady, in yellow cornelian, ſitting in the manner of the people of the eaſt upon a ſopha, having a child upon her knee playing with a crown. 8. An Indian king and queen, with their guards or attendants, of rude antique workmanſhip, cut in lapis lazuli. They are ſeated on a kind of throne, dreſſed in the ſtyle and manner of the ancient Indian bas-reliefs found near Bombay, in the grottos of Salſette, and the iſland of Elephanta, as well as in ſeveral other parts of India, either in grottos, choultries, or ancient pagodas, built and decorated with a profuſion of ſimilar characters, which the reader will ſee by turning to the two engravings of ancient Indian columns, p. 66-67, in our ſecond volume, under the article ARCHITECTURE. 9. A Perſian cylinder of loadſtone, with an inſcription; and in the other compartment a magician with a beard, a tiara, and long plaited robe, having his two hands raiſed on high, holding a ſceptre terminating in a lotus; oppoſite to him ſtands a ſoldier, as if in deep conſultation. There are likewiſe two ſmall figures in tunics, turned towards the ſoldier, and occupying the interval which ſeparates them. Between the two lines of the inſcription are four curious heads. The characters are Perſepolitan; and are found in numerous long inſcriptions among the ruins of Chelminar in Perſia, which antiquarians conſider as the ſcite of the once magnificent Perſepolis, or Suſa, the ſumptuous reſidence of the Perſian kings. There has been ſome controverſy between philologiſts concerning the alphabet to which theſe characters ought to be aſſigned; and from a ſuppoſition that it contains only five different figures, an analogy has been imagined to ſubſiſt between theſe and certain Iriſh characters called *ogham*, which only conſiſt of unity repeated to the fifth time, and whoſe value changes according to the manner in which it is placed relatively to an imaginary line.—See Vallancey's Iriſh Grammar, 4to. On a cloſe examination, however, it will be found that they perfectly reſemble the Chineſe character, which is not a character of articulate ſounds, but of ideas; and that ſome of theſe very characters are to be found in the Chineſe dictionary, ranged by roots or elementary figures, called *pou*. And with reſpect to theſe cylinders or amulets, whether they were made in Perſia as commonly ſuppoſed, or in Egypt for the Perſians after they had conquered that country, they will nevertheleſs tend to prove, 1ſt. the very great antiquity of the Chineſe character: 2d. that it has been formerly known and cultivated on this ſide of the Ganges: 3d. that the Perſians, or their magi, uſed it before they adopted the Phœnician, Chaldean, Syrian, Armenian, or Arabian, characters: and, 4thly, that even the Egyptians when conquered by the Perſians, were converſant with theſe amulets, and had ſome idea of the characters. The partizans, therefore, of that ſingular analogy which pretends to explain Egyptian hieroglyphics by the old Chineſe characters, may derive ſome advantage from this diſcovery. They will no longer be under the neceſſity of ſending Egyptian colonies to Perſepolis, to the Indies, or to China, in this viſionary enquiry, which appears upon the whole little leſs than chimerical.

Fig. 10. A Parthian king on horſeback, very elegantly cut in an amethyſt, with an inſcription; brought from Baſſora. 11. A curious Perſian cylinder of black jaſper, with allegorical figures in front. 12. A continuation of the figures drawn out from the ſame cylinder, which was ſuppoſed to be a protecting charm againſt danger and diſeaſe. 13. An Egyptian cylinder of chalcedony or white agate, with a good engraving of the ſymbolical god *Apis*, which is the true Egyptian character, and plainly demonſtrates that theſe amulets were manufactured as well in Egypt as in Perſia.—All the gems repreſented in this engraving are of the higheſt antiquity.

Plate II. contains the following very curious antiques, chiefly in ſeals, rings, bracelets, &c. Fig. 14. An onyx, with the buſt of *Horus* or Harpocrates prieſt of the Egyptian *Oſiris*, as a child, making the ſignal for ſilence. He has a flower of the lotus on his forehead, and upon his breaſt a globe, from whence two ſerpents iſſue. The head is ſhaved, except a ſmall treſs of hair behind the right ear, agreeable to *Macrobius*, i. 21. who ſays, "The Egyptians repreſented the Sun with the head ſhaved, except on the right ſide, where the hair was left." He is alſo ſeen with a ſimilar treſs of hair on the knee of the figures of *Iſis*, brought from the mummy-pits; which circumſtance correſponds with the obſervations of the learned Bryant, who has demonſtrated *Horus* or *Orus* to be an Egyptian title of the ſun, from *our*, or *ur*, light and fire; whence Ὧρος or Ἱερεὺς, as a prieſt or deity. This gem, conſidering its great antiquity, and as being of Egyptian workmanſhip, has great merit in the attitude and force of expreſſion. 15. A winged lion couchant, cut in a yellow cornelian, with an inſcription. It is a ſeal of the ancient Perſians. 16. A cupid, in cornelian, with the right hand ſecured in a bandage, and a wreath of flowers round his neck; a ſignet of the Greeks. 17. A cornelian, with the uncovered head of a ſatyr or faun, the excellent production of ſome unknown Greek artiſt. 18. A ſulphur, with the head of Io in front, characteriſed by the tips of her horns juſt emerging out of her beautiful hair, which expreſſes the moment of her tranſformation into an heifer. According to Ovid, ſhe became a goddeſs by the name of Iſis; and accordingly we here find the necklace of Iſis as a further deſignation of her character. 19. A cornelian, with a Perſian device, repreſenting a ſoldier in the act of killing a winged lion: very ancient. 20. A Perſian ſignet, cut in cornelian, with an inſcription extremely well executed. Of this gem general Campbell gives the following account: "It was the ſeal of queen Fatima, of the race of Mahomed el Mudany. She was daughter of the ſultan Khan Mahomed Goſſein Kelany, of the race of the kings

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J. Chapman sc.

Historical and Allegorical Subjects.

London, Published as the Act directs, Nov.r 2.d 1806, by J. Wilkes.

of Ghilan in Perſia; who, flying from his country, ſettled in the city of Tunda, now called *Ghour*, and which, in its proſperity, was the capital of the extenſive kingdom of Patan. The verſes engraved upon the ſeal ſignify: Thou gaveſt me for my help ſix gifts; knowledge, experience, liberality, faith, clemency, and health; but thou alone, O God, art juſt! the only one upon whoſe title there is no ſpot." The date, which clears up all doubts as to the identity and the epoch of this Fatima, is not expreſſed in numeral figures, but by the numeral letters of the inſcription itſelf, taken together and calculated by addition; whence it appears that this Perſian queen muſt have lived about ſix hundred years after the birth of Muhamed el Mudany; and conſequently this ſeal muſt have been engraved between ſeven and eight hundred years.

Fig. 21. Two winged lions rampant, on a ſulphur; betwixt them an erected palm-branch or hieroglyphical figure, with an inſcription at the top: it is a Perſian ſignet. 22. Mercury, or *Hermes Pſychagogos*, the conductor of ſouls, cut in a ſtriped onyx, carrying in his left arm the figure of an old man naked. He is characteriſed by the petaſus on his right ſhoulder, and the caduceus in his right hand. In mythology, Mercury is conſidered as the pacificator amongſt men, as well as the meſſenger of the gods. His petaſus or winged cap is the emblem of his ſervitude to the ſuperior deities; and his caduceus is the emblem of peace, and was the inſtrument he uſed in performing his office of conducting the ſouls of men to *hades*, the regions of the dead. 23. Achilles putting on his buſkins, in cornelian; at a diſtance Minerva is ſeen in the act of caſting the javelin. This and the preceding are very curious gems in the old Grecian ſtyle. The latter is very ſingular, and perhaps unique, with regard to the Roman inſcription PERIC, which ſeems to allude to the great danger of the Greeks, which Achilles went to diſpel. 24. A typhon or giant, cut in white agate or chalcedony, with his left arm wrapped in a ſkin, and throwing a huge ſtone with his right. Thus the giants were of old depicted, having the lower extremities formed like the bodies and tails of ſerpents, in the place of legs and feet. 25. A cornelian, with Cybele mounted on a lion, wearing a mural crown, her ſceptre in the left hand, and a bunch of corn in her right, emblematical of the fecundity of the earth. 26. A cornelian, with a nereid, perhaps Amymone, carried off by a triton: it is a beautiful gem. 27. A yellow jaſper, with two winged lions, bearing the heads of kings, bearded, and crowned: it is a very ancient Perſepolitan gem. 28. A ſulphur, with an Indian bull, characteriſed by the bunch upon the back, and a creſcent or half moon on the rump: it is a very ancient and uncommon gem, of Indian workmanſhip. 29. An emerald, with a lion, over which is an inſcription in Shanſcrit characters; this is alſo an Indian gem, brought from Benares in Bengal. 30. A hyacinth, with the buſt of a Parthian or Perſian king, having a tiara on his head ornamented with pearls, and pendants in his ears. The inſcription is in a character at preſent undefined, though it bears a great reſemblance to the Chaldaic Hebrew. Whether theſe gems repreſent the Parthian Arſæcidæ, whoſe ſucceſſion is well known, or the Perſian Saſſanides, who ſubdued the Parthians that were ſo formidable to the Romans in the 225th year of the Chriſtian era, and who reigned over Perſia till 651, has not been ſatisfactorily aſcertained; though it appears that they had preſerved a part of the cuſtoms and religious practices of the ancient Perſians, who were anceſtors both of the Parthians and Saſſanides. Theſe gems found their way to England from Baſſora. 31. An Arabian device in the ſhape of a heart, cut in green jaſper, very ſplendidly engraved, with an Arabic inſcription in the centre, and written round in a form reſembling embroidered muſlin. 32. An Egyptian buſt of Iſis, in green jaſper, with a head-dreſs of feathers placed on her veil, which hangs down upon her ſhoulders, and ſeems to be decorated with embroidery and fillets of pearls, as well as round her neck. The head-dreſs is nothing more than the veil folded back upon the forehead, and lined with feathers; ſo that it bears ſtrict analogy with the wings that are conſtantly found with a globe and two ſerpents among the hieroglyphics ſculptured upon the Egyptian monuments and temples; hence the gem is perfectly characteriſtic. The gems in this engraving are claſſed from the choiceſt ſpecimens in Mr. Taſſie's vaſt collection.

Plate III. conſiſts principally of cameos. Fig. 33. A group of the nymphs of Nyſa teaching the young Bacchus to ride upon a lion: a gem very finely executed. 34. Jupiter hurling his thunderbolts at the giants; deſcriptive of the Titanic war. This fine ſubject was preſerved in the Farneſe Muſeum at Naples, with the name of the artiſt ΑΘΗΝΙΟΝ, and has deſervedly a place among the choiceſt of the cameos. In the heathen mythology, the giants and Titans are fabled to have ſprung from the earth, and are repreſented with two ſerpents inſtead of thighs and legs, in alluſion to their origin being ſimilar to that of reptiles, which creep out of, and return into, the bowels of the earth. Authors, however, are not agreed as to the preciſe form or number of the Titans. The forms are ſculptured on many ancient monuments, but with ſome variation. In this cameo the ſerpents commence cloſe up to the trunk; but in a ſarcophagus of the ſculptor Penna, preſerved in the pope's muſeum at Rome, they commence only at the knees. Ten Titans appear there in combat, but the gods are not repreſented. In the muſeum of the Roman college is alſo preſerved a relievo, in ſilver, of Pallas ſtriking Enceladus, one of the Titans, with lightning; a ſubject which is alſo found among the moſt valuable gems and medals. In reference to the Titanic war, or war of the giants, Milton alludes in that ſublime paſſage,

Hell heard th' unſufferable noiſe—
——————confounded chaos roar'd,
And felt tenfold confuſion! *Paradiſe Loſt.*

Fig. 35. Roman nuptials. This gem is a ſardonyx; and the figures repreſent a female friend, or perhaps Juno Pronuba, delivering the betrothed to her ſpouſe, who receives her in the attitude of ceremony, holding her right hand in his. The ceremony may be that called *coemptio*, which was much more common than the *diffareatio*. Tacitus ſays the latter, which was the more ſolemn form, was generally laid aſide, becauſe it included many troubleſome and expenſive ceremonies. The contract of the coemptio was made by the parties mutually giving and receiving a piece of money. The bride was crowned with flowers, marjoram, or vervain; and her head and upper part of the face was covered with the *flammeum* or wedding veil. This we find diſtinctly repreſented in all remains of ancient ſculpture which exhibit the marriage rite. In the beautiful gem in the collection of his grace the duke of Marlborough, repreſenting the marriage of Cupid and Pſyche, the flammeum covers the face of the little god as well as that of the bride. In this gem the figures are moſt claſſically expreſſed, and the draperies are inimitable.

Fig. 36. This cameo repreſents Danae in gentle repoſe, and not at all elated by the golden ſhower which pours into her boſom. The god of love appears ſolicitous to drop the curtain or veil, to obſtruct or provoke the deſires of Jupiter. The figure of Danae is extremely well ſtudied, after a bas-relief of Leda, by Michael Angelo.

Fig. 37. Ganymede giving the cup to the eagle; executed probably after a deſign of Michael Angelo. This cameo is beautifully engraved, and is in the collection of his grace the duke of Marlborough. 38. Minerva deſtroying a giant; in antique paſte. 39. A cornelian, with an heroic figure of Jupiter. In his right hand he holds the thunderbolt, and the ægis or goat's ſkin in his left;

left; upon which the obſervations of the abbé Winckelman are both learned and juſt. It is, according to Herodotus, a kind of Lybian dreſs, different from the buckler; for here the buckler, ſeen from within, is at the feet of Jupiter. The eagle is on his right hand. In the field is inſcribed the name of the excellent but unknown artiſt.

Fig. 40. An amethyſt, repreſenting Scylla in the act of killing a youth by the blows of a paddle, whom ſhe holds by twiſting her ſerpents round his body, while he is furiouſly attacked by her dogs. She is figured in this gem conformably to the fine deſcriptions given of her by Virgil, Ecl. iv. v. 74. Æn. iii. v. 424; and by Ovid, Met. xiv. v. 59; which pourtray the lower parts as terminating in a fiſh, bull-dogs, and ſerpents; and much like the ſublime fancy of Milton in his portraiture of *Sin*. 41. An emblem of Victory, preparing to ſacrifice a bull to the god of war. This is an antique paſte, in the choice collection of Charles Townley, Eſq. whoſe invaluable gems have furniſhed numerous caſts to Mr. Taſſie's catalogue.

Plate IV. exemplifies ſeveral beautiful ſubjects in the fabulous hiſtory and gymnaſtic or ſecular games of the ancients. Fig. 42. One of the Genii, or benevolent ſpirits, which, in demonology, was ſuppoſed to preſide over the affairs of men. See the articles DÆMON, and DEMONOLOGY, in our fifth volume. 43. Mount Olympus, the ſeat or court of Jupiter and the gods. This beautiful cameo is in the collection of his grace the duke of Marlborough; which collection, for the honour of this country, is allowed to be the fineſt and moſt valuable in Europe. 44. A ſulphur, with Apollo's victory over Marſyas. This gem is not more valued on account of the inimitable grace and ſpirit diſplayed by the artiſt, than for the preciſion and truth with which it illuſtrates the fable. The ſubject is, Marſyas bound to a tree in order to be flayed alive; a puniſhment inflicted on this preſumptuous muſician for his temerity in attempting to contend in muſical ſkill with Apollo. The god is repreſented in a fine attitude, holding his lyre, and looking contemptuouſly on his fallen rival, whoſe hands are bound behind him to a tree. The young Scythian, employed to flay him, kneels at the feet of the god, as if ſupplicating for mercy; it has been conjectured that he is meant for Olympus, the diſciple of Marſyas. The double pipe of Marſyas is ſuſpended on a leafleſs tree. An air of triumphant dignity marks the character of Apollo, which is finely contraſted with the tortured and convulſive ſenſations of Marſyas, the anatomical markings of which are bold and decided. The conception of the attitude is perfect, for the figure powerfully characteriſes defeat and ſubjection, and the blighted tree to which he is bound is, perhaps, no bad emblem of his faded honours. This was the ſubject which the cruel Nero adopted for his ſeal. He had the folly to conceive himſelf to be the firſt muſician of his age; and when he ſelected for the ſubject of his ſeal, Apollo the vanquiſher of Marſyas, he intimated to his rivals that they ſhould not expect a more fortunate end, if they attempted to contend with him. Another prince, of a very different character, and who only felt his happineſs to conſiſt in diffuſing it around him, the magnificent Lorenzo de Medicis, alſo choſe the ſame ſeal, but from a more laudable motive: he ſelected it for the finiſhed beauty of the workmanſhip: it bears his initials, and on all his choiceſt gems he had them engraven. This antique is, in fact, one of the moſt precious remains of ancient art, and the applauſe which it has obtained in all times is ſufficiently proved by innumerable copies. The fable of Marſyas is perhaps beſt told by Diodorus Siculus. The hiſtorian records, "that they contended who could produce the greateſt pleaſure and effect, each on his own inſtrument. The inhabitants of Nyſa were their judges. The god opened the conteſt by playing an air on his lyre. Marſyas then breathed on the double flute, his own invention; and the judges, enchanted by the ſoftneſs and novelty of the ſounds which he ſkilfully drew forth, awarded him the prize. Apollo, having obtained a further hearing, mingled the celeſtial powers of his voice with the varied ſounds of his lyre; and thus carried the votes: but Marſyas repreſented, that the queſtion to be decided was not the charm of the voice, but that of the inſtrument; and that it was unjuſt to contend with a ſingle art, by blending two which were diſtinct. The god replied, that he had employed no other means than thoſe which Marſyas himſelf had uſed; the *finger*, and the *mouth*. The argument of the god was held to be good; and on the third trial, Apollo was finally declared triumphant. Indignant at the temerity of the unfortunate Marſyas, his inhuman rival flayed him alive." Such is the tale of Diodorus. The allegorical explanation of this fable by Fortunio Liceti, in his Hieroglyphics, is very ingenious. He conceives this fable was invented to expreſs the ſuperiority of the lyre over the flute; or rather vocal over inſtrumental muſic.

Fig. 45. An agate, with Juno riding upon an eagle, having a ſceptre in her hand, and a flowing veil above, which forms a circle round her head, incloſing ſeven of the brighteſt ſtars. This gem has been copied upon ſeveral of the imperial medals, and particularly on thoſe of Fauſtina, to deſignate the conſecration of a Roman empreſs. 46. An antique paſte, with one of the ſecular games. The ſubject is that of a deſultor or vaulter, changing his attitudes on twelve horſes in full ſpeed, holding a crown in his right hand, with Victory by his ſide, who puts another crown on his head. Theſe aſtoniſhing performances of the ancient *deſultores*, appear to have influenced the equally ſurpriſing feats of horſemanſhip now exhibited in the circus of London, and in that of Weſtminſter. Frederic the Great, king of Pruſſia, was the owner of this gem, on which he put a high value.—See the article DESULTOR, vol. v. p. 766. Fig. 47. An amethyſt, with a ſuperb figure of Amphitrite, traverſing the ocean on a pair of ſea-horſes, conducted by a cupid, and her feet ſupported by a dolphin: a gem of great value.

Fig. 48. A magnificent engraving, in rock-cryſtal, repreſenting the chariot-races in the circus of ancient Rome. Here are eight cars, with four horſes to each, running the courſe round the *ſpina*, which is ornamented with an obeliſk in the centre, ſix boundaries, two altars, a chapel, and two *preſbeutæ* or diſtributors of prizes, which ſeem to be a branch of palm, and a vaſe. The emblem of Victory is pourtrayed on a high column at the ſide of the ſpina. The *agonothetes* or crier, who regulates the ſignal for ſtarting, is placed in the foreground of this gem; which is allowed to give a better idea of the interior of the Roman circus, than any monument of antiquity at preſent known. On each ſide of the courſe are the repoſitories for the chariots; and at the upper end are the ſeats and boxes for the ſpectators, ſupported by colonnades, which form the entrance into the circus.

Fig. 49. A cornelian, on which is engraved a quoit-player throwing his quoit; one of the ſecular games. 50. A cornelian, with a boxer in the attitude of engaging his adverſary, having on a pair of thoſe horrid gauntlets or gloves, which were called *ceſtus*, and which were loaded or armed with lead, in order to give a more terrible blow. Virgil, in his beautiful deſcription of the feſtivals at the funeral of Anchiſes, has given an affecting repreſentation of their manner and effect. 51. A ſulphur, on which is engraved the genius or emblem of Victory, ſtopping a chariot with two horſes in full ſpeed, ſuppoſed to be one of the greateſt acquiſitions of a charioteer. 52. A cornelian, with another figure of Victory, drawn in a car by two large ſerpents; emblematic of the games of the circus.

The reader will notice, that the lines drawn under each

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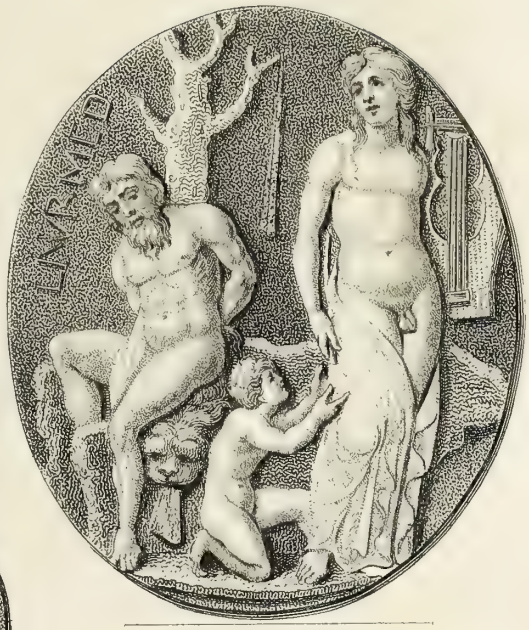

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J. Chapman sculp.t

Mythology and Secular Games.

London Published as the Act directs, Febry 7th 1807, by J. Wilkes

each figure in the four correſponding engravings, denote the ſize or dimenſions of the gem from which each of the drawings was taken.

The great object of the ſecular games, both in Greece and Rome, was to promote military exerciſes, and to acquire that agility, addreſs, and valour, which decided the fate of battles, created emulation in the ranks, and rouſed men to hazard every danger. They were the ſchool and exhibition of the only virtue which was then regarded, *military* virtue; and hence reſembled the tournaments in the age of chivalry. We are ſtruck with the force of an obſervation made by the ingenious Mr. Raſpe on this ſubject: "In whatever point of view we conſider theſe games, ſays he, they are too much neglected at preſent. We have the parade, military exerciſes, and martinets ſufficient for all the great military evolutions; but have we any to form the mind, the heart, or the body, of the ſoldier? We are tormented with a number of diſeaſes, ſince we have loſt the prudence and the habit of preventing or curing them by ſuitable exerciſes. We become dull, heavy, awkward, and embarraſſed, becauſe we have not learnt, or have ceaſed to employ, the ſtrength of our limbs. There are ſoldiers who can ſcarcely walk, and horſemen who know not how to mount their horſes, and even ſailors who are afraid of their element. The education, the diſcipline, and manner of living, of the ancients, had great advantages over ours. I do not view theſe games with the prejudices of the antiquary, nor with a predilection for maſters of dancing, fencing, riding, wreſtling, or boxing; their merits have been diſcuſſed by phyſicians and by military men. Baron Grothauſs pronounced in 1778, at the univerſity of Gottingen, a curious diſcourſe on the ſubject, and has ſince proved by his own and his ſervants example, that nothing is wanting but reſolution to attain, by proper exerciſes, the activity, agility, and ſtrength, of the ancient ſoldier."

In the opinion of others, however, the ancients carried their gymnaſtic exerciſes to a dangerous extreme; which conſiderably injured their health, and rendered them incapable of more uſeful employments. The acute and eccentric De Pauw, in his obſervations on the Greeks, declares "that the gymnaſtic was a moſt pernicious art, and only enervated the human race. Thoſe who conſtantly exerciſed themſelves in boxing or wreſtling, became leaner every day from their thighs to their feet, while their ſuperior parts acquired a prodigious bulk. Thoſe who inceſſantly practiſed leaping or foot-racing became meagre from their head to their haunches, while their inferior parts were of an enormous ſize. The *Diſcoboli* were thoſe athletics who flung large and heavy quoits, made of wood or ſtone, but much thicker in the middle than at the extremity; theſe they were to launch to the extremity of the career, which muſt have required a moſt violent exertion. Theſe men had monſtrous fleſhy arms, with necks that loſt all their flexibility, which they could neither turn to the right or left, becauſe the head violently preſſed the vertebra, to increaſe the power of flinging the quoit. The nervous ſyſtem of man cannot, without injury, undergo theſe violent exerciſes, which the new theories of new philoſophers have lately attempted to revive. When nature feels herſelf oppreſſed in any part of the human body, ſhe inſtantly avenges her own cauſe; thus theſe violent wreſtlers found, while their hands became ſtronger, their feet became more feeble; while the foot-racer found his feet fortified at the expence of his weakened arms." A moderated uſe of theſe games, it has been contended, would certainly not have proved ſo pernicious; but it is anſwered by M. de Pauw, that this moderation could never have been practiſed, becauſe the whole was founded on emulation; each was reſolved to out-do his antagoniſt or rival, and for one athlete who won a wreath, a hundred periſhed in their feeble eſſay, and bit the duſt on which a rival triumphed.—See the article GAME, p. 199, of this volume.

The colours of antique gems, as choſen by artiſts for particular purpoſes, appear not to have been altogether fortuitous, but in many inſtances ſtudied, and judiciouſly adapted to the ſubjects and paſſages which were to be illuſtrated or expreſſed. Thus we find Neptunes and Leanders engraved on beryl, which, from its beautiful ſea-green colour, ſeems by nature adapted to ſuch ſubjects. Hence alſo Bacchus's and Silenus's, the lovers of wine, are depicted on the purple amethyſt; Apollo, or the Sun, on the golden topaz; Proſerpines and Plutos, on jet and lava: an obſervation worthy of notice, inaſmuch as it tends to prove the ſtrict attention of the ancients to minuteneſs of character, and uniformity of claſſification, in their numerous works.

To GEM, *v. a.* [*gemma*, Lat.] To adorn, as with jewels or buds.

To GEM, *v. n.* [*gemmo*, Lat.] To put forth the firſt buds:

Laſt roſe, in dance, the ſtately trees, and ſpread
Their branches, hung with copious fruit; or *gemm'd*
Their bloſſoms. *Milton.*

GEMAAGIDID', or DELGUMUTU, a town of Africa, in the empire of Morocco: forty-five miles ſouth-weſt of Morocco.

GEMAP'PE, or JEMAPPE, a town of Hainault, ſituated at the junction of the rivers Haiſne and Trouille; remarkable on account of an obſtinate battle fought there on the 5th of November, 1792, between the Auſtrians and the French republican army commanded by general Dumourier, for particulars of which ſee the article FRANCE, vol. vii. p. 783.

GEMA'RA, or GHEMARA, the ſecond part of the ſcriptures of the Jews.—See the article TALMUD.

GEMA'TRIA, *ſ.* in Jewiſh antiquity, a kind of arithmetical cabbala.

GEM'BIEZ, or GEMBOCK, a town of Poland, in the palatinate of Kaliſh: ſixteen miles eaſt-north-eaſt of Gneſne.

GEMBLOU'RS, or GIBLOU, a town of Brabant, ſituated on the river Orneau, which runs into the Sambre; it is more conſiderable on account of its ancient abbey than on any other account; which had anciently the privilege of coining money; and was formerly in poſſeſſion of a celebrated library, containing a number of valuable and ancient manuſcripts, among which was the *Chronicum Gemblacenſe*, well known among the learned, begun by Sigebert, a monk, who died in the year 1112, and continued by Anſelm, the abbot, to his death, in 1137. The town was twice burned down, viz. on the 6th of Auguſt, 1678, and on the 17th of Auguſt, 1712. On the 31ſt of January, 1578, a battle was fought near Gemblours between the Spaniards, under Don John of Auſtria, and the army of the States General: moſt of the chief officers of the latter were abſent at Bruſſels, only the ſieur de Coigny, and colonel Barflour, a Scotchman, remaining with the troops; they wiſhed to have retreated, but were compelled to an engagement, in which they loſt their cannon, thirty pair of colours and four ſtandards, and de Coigny himſelf was taken priſoner. Ten miles north-weſt of Namur, and eleven north-eaſt of Charleroy.

GEMEAU'X, a town of France, in the department of the Côte d'Or, and chief place of a canton, in the diſtrict of Is-ſur-Tille: two miles ſouth-eaſt of Is-ſur-Tille.

GEMEL'LI CARRE'RI (Francis), a writer of travels, and an advocate at Naples. He made a tour through Europe in 1683, of which he publiſhed a relation in one volume. In 1693 he undertook a voyage round the world, which he completed in 1698: and of this he publiſhed an account in 1700, which was ſeveral times re-

edited,

edited, and was tranſlated into French and Engliſh. It is an entertaining performance, but of dubious authority, abounding with fabulous narrations. He is, however, frequently quoted, and his book is conſidered as valuable for the objects of curioſity it points out, and the direction it gives for ſafe and uſeful travelling.

GEMELLIP'AROUS, *adj.* [*gemelli* and *pario*, Lat.] Bearing twins.

GE'MENT, *adj.* [*gemo*, Lat. to lament.] Lamenting, groaning. *Not much uſed. Cole.*

GEMERI'AH, *ſ.* [Heb. completion.] A man's name.

GEM'ERIE, *ſ.* [from *gem.*] A cabinet, a place in which jewels are kept. *Not uſed. Cole.*

GEMESI'E, a ſtrong fort on the river St. John, in North America, which was taken by the Engliſh in 1674.

To GEM'INATE, *v. a.* [*gemino*, Lat.] To double.

GEMINA'TION, *ſ.* [from *geminate.*] Repetition; reduplication.—Be not afraid of them that kill the body; fear him, which, after he hath killed, hath power to caſt into hell: yea, I ſay unto you, with a *gemination*, which the preſent controverſy ſhews not to have been cauſeleſs, fear him. *Boyle.*

GEMIN'GEN, a town of Germany, in the palatinate of the Rhine: ſix miles north-weſt of Heilbronn.

GEM'INI, in aſtronomy, a conſtellation of the northern hemiſphere, one of the forty-eight old conſtellations, and the third in order of the zodiacal ſigns, Aries, Taurus, Gemini, &c. This conſtellation is denoted by two children, or twins, and is diſtinguiſhed by this mark, ♊, in almanacs and books of aſtronomy. This conſtellation was anciently depicted by a couple of young kids, by the Egyptians and eaſtern nations, as denoting that part of the ſpring when theſe animals bring forth; but the Greeks altered them to two children, which ſome of them make to be Caſtor and Polltix, ſome Hercules and Apollo, and others Triptolemus and Jaſon; but the Arabians afterwards changed the figures into two peacocks, their religion not allowing them to paint or draw any human figure. Sir Iſaac Newton thinks the figures had ſome reference to the Argonautic expedition. The ancients attributed to every ſign of the zodiac one of the principal deities for its tutelary power. Phœbus had the care of Gemini, and hence the argument of aſtrologers about the agreement of the ſun and this conſtellation. The ſtars in the ſign Gemini are, in Ptolomy's catalogue 25, in Tycho's 25, in Hevelius's 38, and in the Britannic catalogue 85.

GEMINIA'NI (Francis), an eminent muſician, born at Lucca about 1680. He ſtudied the theory of muſic under Aleſſandro Scarlatti, and the practice of the violin under Lunati, furnamed Il Gobbo, and finally under Corelli. The reputation he obtained cauſed him for a time to be placed at the head of the orcheſtra at Naples. In 1714 he came to England, where he excited great admiration by his performances, and was patroniſed by many of the nobility. His particular patron was baron Kilmanſegge, favourite of George I. to whom he dedicated his firſt work in 1716, conſiſting of twelve ſolos for the violin. Theſe were allowed to be more maſterly and elaborate than thoſe of Corelli, and gave a high idea of his muſical talents. He afterwards formed twelve ſolos of Corelli, and ſix of his ſonatas, into concertos. In 1732 he publiſhed his ſix firſt concertos, entitled *Opera Seconda*; and ſoon after, *Opera Terza*, a ſecond ſet of concertos; which works placed him at the head of all living maſters in that kind of compoſition. His ſecond ſet of ſolos, commonly called his *French Solos*, appeared in 1739; "but, (ſays Dr. Burney,) they were more admired than played;" his third ſet, in 1741, "was ſo laboured, difficult, and fantaſtical, as never to be played, in either public place, or private concert." In 1742 he printed a long-promiſed work, entitled *Guida Armonica, o Dizionario Armonico*, or a ſure Guide to Harmony and Modulation, &c. of which the muſical critic above-mentioned ſays, that "it was a kind of mill, in which good muſic was to be ground with little trouble and no genius." He ſpeaks alſo with little reſpect of Geminiani's next work, a Treatiſe on Good Taſte, and Rules for playing in Good Taſte; but he mentions as a very uſeful performance, his Art of Playing on the Violin, 1748. About 1756 he publiſhed a very ſingular compoſition, called The Enchanted Foreſt, in which he endeavoured to repreſent by mere ſound all the events of the fine epiſode in the thirteenth canto of Taſſo's Jeruſalem. His other works were two books of Harpſichord Pieces, and two books on the Art of Accompaniment, both mentioned as too difficult for practice. In 1761 he paid a viſit to his friend and pupil Dubourg, in Dublin, where he was maſter of the royal band. The loſs of an elaborate treatiſe on muſic in that city, ſaid to have been ſtolen from his chamber, is ſuppoſed to have haſtened his death, which took place in September, 1762. Dr. Burney ſums up his character by ſaying, that "he was a great maſter of harmony, and very uſeful to our country in his day; but though he had more variety of modulation, and more ſkill in diverſifying his parts, than Corelli, yet his melody was inferior, and there is a confuſion in the effect of the whole, which gives to each of his compoſitions the effect of a rhapſody, or extemporaneous flight, rather than a poliſhed and regular production." He allows, however, that his ſixth concerto of the ſecond ſet is the moſt perfect and pleaſing compoſition of the kind within his knowledge.

GEM'INOUS, *adj.* [*geminus*, Lat.] Double.—Chriſtians have baptized theſe *geminous* births, and double connaſcencies, with ſeveral names, as conceiving in them a diſtinction of ſouls. *Brown.*

GE'MIST (George), ſurnamed Pletho, an eminent Greek philoſopher, born at Conſtantinople in 1390. He appears to have reſided principally in the Peloponneſus, where he acquired a high character for learning, prudence, and exemplary manners. He was a zealous advocate for Platoniſm, as it was modelled in the Alexandrian ſchools, and maintained a violent controverſy with the Ariſtotelians. He was alſo a ſtrenuous defender of the Greek church againſt the Latins, and obtained ſo high a reputation in his own communion, that the moſt learned men in it were accuſtomed to conſult him on the points in debate between them and their adverſaries. Gemiſt loſt no opportunity of expatiating on the ſuperior excellence of his favourite ſyſtem, and made many converts from among the literary characters of that age; and had the honour of ranking the illuſtrious Coſmo de Medici in the liſt of his diſciples. By his influence with that patron of ſcience and literature, the foundation of a Platonic academy was laid at Florence; and he was the firſt preſident of that inſtitution. He died at the advanced age of one hundred years, but at what place is not known. He was the author of numerous works written in the Greek language, which afford ample evidence of his profound and various erudition, and of his intimate knowledge of the Alexandrian philoſophy. The principal of them are, *De Geſtis Græcorum poſt Pugnam ad Mantineam, duobus Libris digeſta*, firſt printed in the original by Aldus, together with Xenophon and Herodian, 1503, folio, and with a Latin verſion by Mark Ant. Antimachus, 1540; *De Virtutibus Libellus*, firſt publiſhed in Greek and Latin, 1552, 8vo. and afterwards in various forms, and with the comments of different annotators; *De Rebus Peloponneſiaſis conſtituendis Orationes duæ*, printed by Plantin in Greek and Latin, 1575, folio, with an Appendix, containing a deſcription of all the places in the Peloponneſus, their longitudes and latitudes, taken from Ptolemy, and corrected by the author; *De Platonicæ et Ariſtotelicæ Philoſophiæ Differentiæ*, printed at Paris in Greek in 1541, 8vo. and with a Latin verſion at Baſil, in 1574, 4to. and *In Oracula magica Zoroaſtris Commentarii*, firſt printed in Greek and Latin at Paris, in 1538, 8vo. in which

which the author exhibits twelve fundamental articles of the Platonic religion, and gives an elegant compendium of the whole Platonic philoſophy.

GEM'ITUS, *ſ.* [from *gemo*, to groan.] The medical term for groaning: the noiſe made by a perſon in pain.

GEM'MA, *ſ.* in botany, the bud or rudiment of the embryo leaf or bloſſom, called alſo the *gem*. It conſiſts of ſtipules, or petioles, or cortical ſcales; hence buds or gems are called *ſtipular*, *petiolar*, or *cortical*. See BOTANY, vol. iii.

GEM'MA (Reinier), a learned Dutch mathematician, born at Dockum in Frieſland, in 1508. He was educated to the medical ſcience, of which he became a profeſſor in the univerſity of Louvain. But he was more eminent for his proficiency in mathematics and aſtronomy, which he taught with diſtinguiſhed reputation, and the character of being one of the beſt aſtronomers of his time. The fame of his great ſcientific knowledge, and of the excellent inſtruments which he made uſe of in the illuſtration of it, occaſioned his being frequently invited to the court of the emperor Charles V. but he always modeſtly declined the overtures made to him, preferring the tranquillity of his literary retreat to the honours which he might expect from princely favour. He died at Louvain in 1555, at forty-ſeven years of age. He had the ſurname of *Friſius* given him, from the country in which he was born. The moſt celebrated of his works were, 1. *Methodus Arithmeticæ*. 2. *De Uſu Annuli aſtronomici*. 3. *De Locorum deſcribendorum Ratione, deque Diſtantiis eorum inveniendis*. 4. *Libellus de Principiis Aſtronomiæ & Coſmographiæ, &c.* 5. *Demonſtrationes Geometricæ de Uſu Radii aſtronomici, &c.* 6. *De Aſtrolabio Catholico Liber*. Gemma had a ſon, named CORNELIUS, born at Louvain in 1535, and died in 1579. He was a poet, philoſopher, and phyſician, and taught the mathematical ſciences at Louvain with conſiderable reputation. He was the author of, 1. *De Arte Cyclognomicæ, &c.* 2. *De Naturæ divinis Characteriſmis, ſeu Coſmocritico*. 3. *De prodigioſa Specie Naturaque Cometæ*, occaſioned by the extraordinary new ſtar in the conſtellation Caſſiopeia, in 1572.

GEM'MARY, *adj.* Pertaining to gems or jewels.—The principle and *gemmary* affection is its tranſfluency: as for irradiancy, which is found in many gems, it is not diſcoverable in this. *Brown*.

GEMMA'TION, *ſ.* [*gemmatio*, Lat. from *gemma*, a bud.] In botany, the formation of buds; in mineralogy, the formation of gems.

GEM'MEOUS, *adj.* [*gemmeus*, Lat.] Tending to gems.—Sometimes we find them in the *gemmeous* matter itſelf. *Woodward*.—Reſembling gems.

GEM'MI, a mountain of Switzerland, making part of the great chain which ſeparates the canton of Berne from the Valais: twenty miles eaſt of Sion.

GEMMIF'EROUS, *adj.* [*gemma*, a gem, and *fero*, Lat. to bear.] Bearing gems; producing jewels. *Cole*.

GEMMIP'AROUS, *adj.* [from *gemma*, a bud, and *pario*, Lat. to produce.] Producing; bearing buds.

GEMMOS'ITY, *ſ.* The quality of being a jewel.

GEMO'NA, on the road from the Venetian territory to Germany, is an old but opulent borough, where all merchandiſe coming from Germany are detained and ſearched by officers of the cuſtoms: its diſtrict contains two villages, and two thouſand inhabitants.

GEMO'NA, a town of Italy, in the country of Friuli, taken by the French republican army in the beginning of 1797: twelve miles north-north-weſt from Udina.

GEMO'NIÆ SCA'LÆ, or GRADUS GEMONII, *ſ.* Among the Romans, the place or rather the inſtrument by which criminals ſuffered death, ſimilar to the gallows or gibbet in England. Some ſay they were thus denominated from the perſon who raiſed them; others, from the firſt criminals that ſuffered on them; and others, from the verb *gemo*, "I ſigh or groan."—The *gradus gemonii*, according to Publius Victor or Sextus Rufus, was a place raiſed on ſeveral ſteps, from whence they precipitated their criminals; others repreſent it as a place whereon offenders were executed, and afterwards expoſed to public view. The *gemoniæ ſcalæ* were in the tenth region of the city, near the temple of Juno. Camillus firſt appropriated the place to this uſe, in the year of Rome 358.

GEMO'NIS, *ſ.* [Gr. from γεμω, to be full.] The eagle-ſtone; ſo called becauſe it was thought to aſſiſt women in travail.

GEMO'TE, *ſ.* A meeting; the court of the hundred. *Obſolete*.

GEM'OZAC, a town of France, in the department of the Lower Charente, and chief place of a canton, in the diſtrict of Saintes: three leagues and a half ſouth of Saintes, and one and three quarters weſt of Pons.

GEM'UND, or GMUND, an imperial town of Germany, in the circle of Swabia. The magiſtracy is choſen out of the body of the people. Its aſſeſſment in the matricula of the empire was 142 florins; and the tax to the chamber of Wetzlar 101 rixdollars 41 kruitzers: twenty-four miles eaſt of Stuttgart. Lat. 48. 46. N. lon. 27. 24. E. Ferro.

GEM'UND, or GEMUNDEN, a town of Germany, in the circle of Franconia, and biſhopric of Wurzburg, on the north ſide of the Maine, where it is joined by the united ſtreams of the Saal and the Sinn: thirty-ſeven miles eaſt of Frankfort, and twenty-five weſt of Schweinfurt.

GEM'UND, a town of Germany, in the duchy of Carinthia: ten miles north-eaſt of Saxenburg, and thirty-two north-weſt of Clagenfurt. Lat. 46. 56. N. lon. 31. 14. E. Ferro.

GEM'UND, or GEMUNDEN, a town of Germany, in the archduchy of Auſtria, ſituated on the Traun See; celebrated for its ſalt-works: twenty-four miles ſouth-ſouth-weſt of Lintz, and 108 weſt-ſouth-weſt of Vienna. Lat. 47. 56. N. lon. 31. 33. E. Ferro.

GE'MUND, a town of Germany, in the archduchy of Auſtria: twelve miles north-north-weſt of Zwetl, and ſixty-eight north-weſt of Vienna. Lat. 48. 32. N. lon. 32. 42. E. Ferro.

GEM'UNDE, a town of Germany, in the circle of Weſtphalia, and duchy of Juliers, on the Ruhr: forty-one miles weſt-north-weſt of Coblentz. Lat. 50. 37. N. lon. 24. 2. E. Ferro.

GEMUN'DEN, a town of Germany, in the circle of the Upper Rhine, and county of Leiningen; famous for its fairs: three miles eaſt of Weſterburg.

GEMUN'DEN, a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe-Caſſel: ſixteen miles ſouth-weſt of Fritzlar, and twenty-eight ſouth-weſt of Caſſel.

GEMUR'SA, *ſ.* [from *gemo*, Lat. to groan.] An exceſcence growing between the toes; ſo called from the pain it occaſions in walking.

GEN-TSING, a town of China, in the province of Se-tchuen: eighty-ſeven miles north-weſt of Hoei-li.

GENA'DEL, a mountain of Africa, in the country of Nubia, over which the Nile paſſes, and forms a cataract, forty-five miles north of Jalac.

GE'NAP, or GENEPPE, a town of Brabant, ſituated on the Dyle: five miles eaſt of Nivelle.

GENBERA'BA, a town of Perſia, in the province of Irak: one hundred miles eaſt of Amadan.

GENÇAY', a town of France, in the department of the Vienne, and chief place of a canton, in the diſtrict of Civray: four leagues north-north-eaſt of Civray, and four ſouth of Poitiers.

GEND'ARMES, GENS D'ARMES, or *men at arms*, *ſ.* in the French armies, a denomination given to a ſelect body of horſe, on account of their ſucceeding the ancient gendarmes, who were thus called from their being completely clothed in armour.

GEN'DER, *ſ.* [*genus*, Lat. *gendre*, Fr.] A kind; a ſort:

The other motive,
Why to the public court I might not go,
Is the great love the general *gender* bare me. *Shakeſ.*

A ſex.—Things are frequently conſidered with relation to the diſtinction of ſex or *gender*. *Lowth.*—[In grammar.] A denomination given to nouns from their being joined with an adjective in this or that termination.—See the article GRAMMAR, in this volume.

To GEN'DER, *v. a.* [*engendrer*, Fr.] To beget. To produce; to cauſe.—Fooliſh and unlearned queſtions avoid, knowing that they do *gender* ſtrife. 2 *Tim.* ii. 23.

To GEN'DER, *v. n.* To copulate; to breed.—Thou ſhalt not let thy cattle *gender* with a diverſe kind. *Lev.* xix. 19.

GENDRAY', a town of France, in the department of Jura, and chief place of a canton, in the diſtrict of Dole: three leagues and three quarters eaſt of Auxonne.

GEN'DRE (Gilbert-Charles le), marquis de St. Aubin, born in 1688, and made a counſellor in the parliament of Paris, and afterwards a maſter of requeſts. He died at Paris in 1746. He is known by two eſteemed works. Theſe are, *Traité de l'Opinion, ou Mémoires pour ſervir à l'Hiſtoire de l'Eſprit Humain*, 6 vols. 12mo. 1733; ſince twice reprinted with augmentations; and conſiſts of a great variety of hiſtorical examples to elucidate the power of opinion in the ſciences, accompanied with ſuitable reflections. *Antiquités de la Maiſon de France*, 4to. 1739: this is a work of deep and curious reſearch concerning the origin of the regal dynaſties of France; but the new ſyſtem on the ſubject propoſed by the author has not been generally acquieſced in.

GEN'DRE (Louis le), an hiſtorical writer, born of an obſcure family at Rouen in 1659. He received a literary education chiefly through the favour of M. de Harlai, then archbiſhop of Rouen, afterwards of Paris; and being brought up to the church, he was preſented by the ſame patron, in 1690, with a canonry in the cathedral of Paris. Gratitude induced him on the death of De Harlai to publiſh two eulogies upon him in French, and a life more in detail in Latin, the ſtyle of which was much approved. He next eſſayed his talent at hiſtorical panegyric in Eſſays on the Reign of Louis le Grand, 4to. 1697, which he preſented in perſon to the monarch, and which were ſo well received by the public as to paſs through four editions in eighteen months. They have ſince, however, ſunk into the oblivion juſtly attached to temporary adulation. He now aimed at the rank of a proper hiſtorian, and after the ſeparate publication of part of his deſigns, he gave to the world his Hiſtory of France to the Death of Louis XIII. Paris 1718, 3 vols. folio, and 8 vols. 12mo. This is accounted one of the moſt exact abridgments of French hiſtory, and is written with elegant ſimplicity. A treatiſe upon The Manners and Cuſtoms of the French at different Periods of the Monarchy, before publiſhed by him, is added to this work. He alſo compoſed a Life of the Cardinal d'Amboiſe, with a Parallel of the celebrated Cardinals who have governed States, 1724, 4to. and 2 vols. 12mo. This work underwent ſome criticiſm from the *Mém. de Trevoux*, to which the author wrote a reply. His literary merits were rewarded by the abbacy of Notre-Dame de Claire-Fontaine in the dioceſe of Chartres. He died at Paris in 1733, at the age of ſeventy-four. By his will he left bequeſts for various ſingular foundations, ſome of which, after exciting diſputes relative to their fulfilment, were applied by authority to the inſtitution of prizes in the univerſity of Paris. He left five hiſtories of his own life, each compoſed in a different ſtyle and manner, which he directed to be made public.

GENEALO'GICAL, *adj.* Pertaining to deſcents or families; pertaining to the hiſtory of the ſucceſſions of houſes.—Among the reſt was the room in which James I. died, and a portico with a *genealogical* tree of the houſe of Cecil painted on the walls. *Gough's Topog.*

GENEAL'OGIST, *ſ.* [γενεαλογεω, Gr. *genealogiſte*, Fr.] He who traces deſcents.—Conſidering what traſh is thought worthy to be hoarded by *genealogiſts*, the following may not be a deſpicable addition to thoſe repoſitories. *Walpole.*

GENEAL'OGY, *ſ.* [γενεα and λογος, Gr.] Hiſtory of the ſucceſſion of families; enumeration of deſcent in order of ſucceſſion; pedigree.—See the article DESCENT, vol. v. p. 751-757.

GEN'EARCH, *ſ.* [γενεα, a generation, and αρχος, Gr. a chief.] The head of a family, the chief of a tribe or family.

GEN'EATH, *ſ.* [Saxon.] A hind, a farmer. *Cole. Obſolete.*

GEN'EBRARD (Gilbert), a French prelate, and one of the moſt learned men of his time, born at Riom in Auvergne, in 1537. When young he entered into the benedictine order at the abbey of Maufac, in the dioceſe of Clermont, and went to proſecute his ſtudies at Paris, where he learned Greek under Turnebius, philoſophy under Carpentier, and theology under Claude de Saintes. His application was inceſſant, and his progreſs in the different branches of learning and ſcience proportionate, particularly in the learned languages and theology. In 1563 he was admitted to the degree of doctor of divinity by the college of Navarre, and was afterwards appointed regius-profeſſor of the Hebrew language. This poſt he filled for thirteen years with diſtinguiſhed reputation, and had, among other eminent diſciples, the celebrated Francis de Sales, who was accuſtomed to glory in having enjoyed the inſtructions of ſo great a maſter. He was alſo preferred to the priory of St. Denys de la Chartre, at Paris, and to the priory of Semur in Burgundy. In 1576 Peter Danes, biſhop of Lavaur, reſigned his ſee into the king's hands, under the expectation that Genebrard would be nominated his ſucceſſor; but the latter was diſappointed of that dignity by the intrigues of the preſident De Pibrac, who procured the bulls of inſtitution to be iſſued in favour of his own brother. Genebrard was ſo incenſed at loſing this ſee through miniſterial interference, that he became hoſtile to the politics of the court, and joined the army of the League, of which he became a zealous advocate. The numerous writings which he publiſhed againſt thoſe who ſupported the meaſures of the court and the reformed religion, were uncommonly bitter and furious. They were ſo congenial, however, with the ſpirit of the league, that the duke de Mayenne, the head of that body, nominated him to the archbiſhopric of Aix, and he was conſecrated and took poſſeſſion of that ſee in 1593. Here he ſtill continued his hoſtility to the court, and declaimed in his ſermons againſt the king, even when the cauſe of his own party was become hopeleſs. When the league was finally broken, and the whole kingdom had ſubmitted to Henry IV. Genebrard retired to Avignon, where he publiſhed a treatiſe *De Sacrarum Electionum Jure, ad Eccleſiæ Romanæ Reintegrationem*; in which he maintained that the elections of biſhops belong of right to the clergy and people, and argued violently and abuſively againſt the nominations of kings and princes. For publiſhing this book he was proſecuted before the parliament of Aix, who in 1596 decreed that it ſhould be burnt by the hands of the common executioner, and, after depriving the author of his ſee, condemned him to baniſhment from the kingdom, prohibiting his return to it on pain of death. Afterwards they permitted him to retire to his priory at Semur, where he died in 1597, when ſixty years of age. His numerous writings ſhew him to have been a perſon of conſiderable erudition, particularly in biblical and rabbinical literature. He wrote A Sacred Chronology, 8vo. more exact than any which had at that time appeared; Notes upon the Scripture; A Commentary upon the Pſalms, 1577, 8vo. in which the author particularly applies himſelf to reconcile the Hebrew text with the vulgar Latin; A Tranſlation of the Canticles into Iambic Verſe; Three Books concerning the Holy Trinity, 1569, 8vo. Latin

tranſlations

tranſlations from the Hebrew of the *Seder Olam Rabba*, and the *Seder Olam Zuta*, or the Greater and Leſſer Chronology of the Jews; A Diſcourſe againſt Joſeph Abo, David Kimchi, and another Jew, who oppoſed ſome articles of the Chriſtian Religion, 1566; tranſlations of David Kimchi's treatiſe On the Meaſure of Hebrew Verſe, of Commentaries on the Canticles by R. R. Salomon Jarchi, Abraham Aben Ezra, and an anonymous Author, and of Extracts from Maimonides, Elias Levita, Jacob Ben Solomon, &c. An Introduction to the Reading of Hebrew and the other Eaſtern Languages without Points; Notes upon the Hebrew Grammar; tranſlations from the Greek into Latin of ſeveral Liturgies, of A Treatiſe of Zecharias Mitylenenſis againſt the Philoſophers who ſay that the World is eternal, of Origen's *Philocalia*, &c. an edition of Origen's Works, with a Latin verſion, 1578; and a tranſlation into French of The Works of Joſephus, in two vols. 8vo.

GEN'ERABLE, *adj.* [from *genero*, Lat.] That may be produced or begotten.

GENERAC', a town of France, in the department of the Gard: five miles ſouth of Nimes.

GEN'ERAL, *adj.* [*general*, Fr. *generalis*, Lat.] Comprehending many ſpecies or individuals; not ſpecial; not particular.—To conclude from particulars to *generals* is a falſe way of arguing. *Broome.*—Lax in ſignification; not reſtrained to any ſpecial or particular import.—Where the author ſpeaks more ſtrictly and particularly on any theme, it will explain the more looſe and *general* expreſſions. *Watts.*—Not reſtrained by narrow or diſtinctive limitations.—A *general* idea is an idea in the mind, conſidered there as ſeparated from time and place, and ſo capable to repreſent any particular being that is conformable to it. *Locke.*—Relating to a whole claſs or body of men, or a whole kind of any being.—They, becauſe ſome have been admitted without trial, make that fault *general* which is particular. *Whitgifte.*—Public; compriſing the whole:

Nor fail'd they to expreſs how much they prais'd,
That for the *general* ſafety he deſpis'd
His own. *Milton.*

Not directed to any ſingle object.—If the ſame thing be peculiarly evil, that *general* averſion will be turned into a particular hatred againſt it. *Spratt.*—Having relation to all:

The wall of Paradiſe upſprung,
Which to our *general* ſire gave proſpect large
Into his nether empire neighb'ring round. *Milton.*

Extenſive, though not univerſal. Common; uſual:

I've been bold,
For that I knew it the moſt *general* way. *Shakeſpeare.*

General is appended to ſeveral offices: as, *Attorney General, Solicitor General, Vicar General*, &c.

GEN'ERAL, *ſ.* The whole; the totality; the main, without inſiſting on particulars.—In particulars our knowledge begins, and ſo ſpreads itſelf by degrees to *generals*. *Locke.*—An hiſtory painter paints man in *general*; a portrait painter a particular man, and conſequently a defective model. *Reynolds.*—The public; the intereſt of the whole. *Not in uſe*:

Neither my place, nor aught I heard of buſineſs,
Hath rais'd me from my bed; nor doth the *general*
Take hold on me; for my particular grief
Ingluts and ſwallows other ſorrows. *Shakeſpeare.*

The vulgar. *Not in uſe.*—The play, I remember, pleaſed not the million; 'twas caviare to the *general:* but it was, as I received it, and others, whoſe judgment in ſuch matters cried in the top of mine, an excellent play. *Shakeſpeare.*—One that has the command over an army:

The war's whole art each private ſoldier knows,
And with a *gen'ral's* love of conqueſt glows. *Addiſon.*

GEN'ERAL IS'SUE, in law, a plea to the fact of *Not Guilty*, in criminal caſes, in order to trial by the country, or by peers, &c. *H. P. C.* 254. In civil ſuits, there are various pleas, which are general iſſues, according to the ſpecies of the action. See the article PLEADING.

GENERA'LE, *ſ.* The uſual commons in a religious houſe; a flouriſh on the drum to aſſemble the troops.

To GEN'ERALISE, *v. a.* [from *generalis*, Lat.] To reduce to a genus.—Sometimes the name of an individual is given to a general conception, and thereby the individual in a manner *generaliſed. Reid.*

GENERALIS'SIMO, *ſ.* [*generaliſſime*, Fr. from *general.*] The ſupreme commander. It is often rather a title of honour than office.—Pompey had deſerved the name of great; and Alexander, of the ſame cognomination, was *generaliſſimo* of Greece. *Brown.*

GENERAL'ITY, *ſ.* [*generalité*, Fr. from *general.*] The ſtate of being general; the quality of including ſpecies or particulars.—Becauſe the curioſity of man's wit doth with peril wade further in the ſearch of things than were convenient, the ſame is thereby reſtrained unto ſuch *generalities* as, every where offering themſelves, are apparent to men of the weakeſt conceit. *Hooker.*—The main body; the bulk; the common maſs.—By his own principles he excludes from ſalvation the *generality* of his own church; that is, all that do not believe upon his grounds. *Tillotſon.*—The wiſeſt were diſtracted with doubts, while the *generality* wandered without any ruler. *Rogers.*

GEN'ERALLY, *adv.* [from *general.*] In general; without ſpecification or exact limitation.—I am not a woman to be touch'd with ſo many giddy fancies as he hath *generally* taxed their whole ſex withal. *Shakeſpeare.*—Extenſively, though not univerſally. Commonly; frequently. In the main; without minute detail; in the whole taken together.—*Generally* ſpeaking, perſons deſigned for long life, though in their former years they were ſmall eaters, yet find their appetites encreaſe with their age. *Blackmore.*

GEN'ERALNESS, *ſ.* Wide extent; though ſhort of univerſality; frequency; commonneſs.—They had, with a general conſent, rather ſpringing by the *generalneſs* of the cauſe than of any artificial practice, ſet themſelves in arms. *Sidney.*

GEN'ERALSHIP, *ſ.* The office of a general commander, the manœuvres of a general in the command of an army; ſkill; dexterity.

GEN'ERALTY, *ſ.* The office of general. The whole; the totality.—The municipal laws of this kingdom are of a vaſt extent, and include in their *generalty* all thoſe ſeveral laws which are allowed as the rule of juſtice and judicial proceedings. *Hale.*

GEN'ERANT, *adj.* [*genero*, Lat. to produce.] Producing, begetting.

GEN'ERANT, *ſ.* [*generans*, Lat.] The begetting or productive power.—In ſuch pretended generations the *generant* or active principle is ſuppoſed to be the ſun, which, being an inanimate body, cannot act otherwiſe than by his heat. *Ray.*

To GEN'ERATE, *v. a.* [*genero*, Lat.] To beget; to propagate.—Thoſe creatures which being wild *generate* ſeldom, being tame *generate* often. *Bacon.*—To produce to life; to procreate:

God created the great whales, and each
Soul living, each that crept, which plenteouſly
The waters *generated* by their kinds. *Milton.*

To cauſe; to produce.—Sounds are *generated* where there is no air at all. *Bacon.*—Whatever *generates* a quantity of good chyle, muſt likewiſe *generate* milk. *Arbuthnot.*

GENERA'TION, *ſ.* [from *generate*; *generation*, Fr.] The act of begetting or producing.—Seals make excellent impreſſions; and ſo it may be thought of ſounds in their firſt *generation:* but then the dilation of them, without

out any new ſealing, ſhews they cannot be impreſſions. *Bacon.*—A family; a race.—Thy mother's of my *generation:* what's ſhe, if I be a dog? *Shakeſpeare.*—Progeny; offſpring:

The barb'rous Scythian,
Or he that makes his *generation* meſſes
To gorge his appetite, ſhall to my boſom
Be as well neighbour'd. *Shakeſpeare.*

A ſingle ſucceſſion; one gradation in the ſcale of genealogical deſcent.—This *generation* ſhall not paſs 'till all theſe things be fulfilled. *Matt.* xxiv. 34.—An age.—Every where throughout all *generations* and ages of the chriſtian world, no church ever perceived the word of God to be againſt it. *Hooker.*

Dr. Darwin, in the firſt volume of his Zoonomia, has ſuggeſted a new hypotheſis reſpecting the myſterious functions of *generation.* He imagines that the embryo is the produce of the male alone, and that the female only gives it lodgment and nutrition. He does not, however, ſuppoſe its firſt rudiments to be a miniature of the future animal, but merely a ſimple living filament, which receives all its parts by accretion. This fibril, dropping among the nutritive particles prepared by the female, is ſtimulated to action; and, bending into the form of a ring, embraces one of theſe particles, and coaleſces with it. This new organization acquires new irritabilities, chooſes or rejects other particles offered to it, has ſenſation ſuperadded to it, and, in proceſs of time, the powers of aſſociation and volition. The living filament, being a part of the father, has certain propenſities belonging to him, which give the baſis of a ſimilarity of ſtructure; and this is altered or modified by the nutritive particles derived from the mother. Other alterations proceed from the imagination of the father at the inſtant of *generation,*—the extremities of the ſeminal glands imitating the motions of the organs of ſenſe; and thus the ſex of the embryo is produced, which is *male* or *female* according as the image of the one or the other of theſe organs predominated in the father's imagination at the critical period. All augmentations are in conſequence of an irritation or ſenſation of a peculiar kind, which may be termed *animal appetency,* which ſeeks the particles that it wants; and this operates even after birth, and, in the innumerable ſeries of ages, has produced all the diverſities of forms in animals, accommodated to their different modes of life:—for the author ſuppoſes a perpetual progreſs toward perfection in all animated beings, and imagines that none of them are at preſent as they originally exiſted, but have gradually arrived at the ſtate in which we now ſee them, from that of a ſimple and uniform living filament. For the inſufficiency of this hypotheſis, ſee the article CONCEPTION, vol. v. p. 4-12, and the correſpondent engraving.

GENERA'TION, in the mathematics, is applied by many writers to various arithmetical operations; or in geometry to the formation of different magnitudes. Thus 20 is the product generated of 4 and 5; ab that of a and b; 4, 8, 16, &c. the powers generated of or from the root 2; and a^2, a^3, a^4, &c. thoſe from the root a. So alſo, a circle is generated by the revolution of a line about one of its extremities, a cone by the rotation of a right-angled triangle about its perpendicular, a cylinder by the rotation of a rectangle about one of its ſides, or otherwiſe, by the motion of a circle in the direction of a right line, and keeping always parallel to itſelf.—The *generating* line or figure, in geometry, is that which, by any kind of ſuppoſed motion, may generate, or produce, any other figure, plane, or ſolid. Thus a line, according to Euclid, generates a circle; or a right-angled triangle, a cone, &c. and thus alſo Archimedes ſuppoſes his ſpirals to be generated by the motions of generating points and lines; the figure thus generated being called the *generant.*—It is a general theorem in geometry, that the meaſure of any generant, or figure produced by any kind of motion of any other figure, or generating quantity, is equal to the product of this generating quantity drawn into the length of the path deſcribed by its centre of gravity, whatever the kind of motion may be, whether rotatory, or direct, &c. In the modern analyſis, or fluxions, all ſorts of quantities are conſidered as generated by ſome ſuch motion, and the quantity hereby generated is called a *fluent.*—See FLUXIONS and GEOMETRY.

GEN'ERATIVE, *adj.* [*generatif,* Fr. from *genero,* Lat.] Having the power of propagation.—He gave to all, that have life, a power *generative,* thereby to continue their ſpecies and kinds. *Raleigh.*—Prolific; having the power of production; fruitful.—If there hath been ſuch a gradual diminution of the *generative* faculty upon the earth, why was there not the like decay in the production of vegetables? *Bentley.*

GENERA'TOR, *ſ.* [from *genero,* Lat.] The power which begets, cauſes, or produces.—Imagination aſſimilates the idea of the *generator* into the reality in the thing engendered. *Brown.*

GENE'RIC, or GENERICAL, *adj.* [*generique,* Fr. from *genus,* Lat.] That which comprehends the genus, or diſtinguiſhes from another genus, but does not diſtinguiſh the ſpecies.—Though wine differs from other liquids, in that it is the juice of a certain fruit; yet this is but a general or *generic* difference; for it does not diſtinguiſh wine from cyder or perry; the ſpecific difference of wine, therefore, is its preſſure from the grape. *Watts.*

GENE'RICALLY, *adv.* [from *generic.*] With regard to the genus, though not the ſpecies.—Theſe have all the eſſential characters of ſea-ſhells, and ſhew that they are of the very ſame ſpecific gravity with thoſe to which they are ſo *generically* allied. *Woodward.*

GENERO'SITY, *ſ.* [*generoſité,* Fr. *generoſitas,* Lat.] The quality of being generous; magnanimity; liberality.—Can he be better principled in the grounds of true virtue and *generoſity* than his young tutor is? *Locke.*

GEN'EROUS, *adj.* [*generoſus,* Lat. *genereux,* Fr.] Not of mean birth; of good extraction:

Your dinner, and the *generous* iſlanders
By you invited, do attend your perſon. *Shakeſpeare.*

Noble of mind; magnanimous; open of heart.—Pray for others in ſuch forms, with ſuch length, importunity, and earneſtneſs, as you uſe for yourſelf; and you will find all little ill-natured paſſions die away, your heart grow great and *generous,* delighting in the common happineſs of others, as you uſed only to delight in your own. *Law.*

A *generous* virtue of a vigorous kind,
Pure in the laſt receſſes of the mind. *Dryden.*

That *gen'rous* boldneſs to defend
An innocent or abſent friend. *Swift.*

Such was Roſcommon, not more learn'd than good,
With manners *gen'rous,* as his noble blood. *Pope.*

It is uſed of animals. Spritely; daring; courageous:

So the imperial eagle does not ſtay
Till the whole carcaſe he devour.
As if his *gen'rous* hunger underſtood
That he can never want plenty of food,
He only ſucks the taſteful blood. *Cowley.*

Liberal; munificent:

Faſt by the margin of her native flood,
Whoſe wealthy waters are well known to fame,
Fair as the bordering flowers the princes ſtood,
And rich in bounty as the *gen'rous* ſtream. *Heigh.*

Strong; vigorous.—Having in a digeſtive furnace drawn off the ardent ſpirit from ſome good ſack, the phlegm, even in this *generous* wine, was copious. *Boyle.*

Thoſe who in ſouthern climes complain,
From Phœbus' rays they ſuffer pain,

Muſt

Muſt own that pain is well repaid,
By *gen'rous* wines beneath a ſhade. *Swift.*

GEN'EROUSLY, *adv.* [from *generous.*] Not meanly with regard to birth. Magnanimouſly; nobly:

When all the gods our ruin have foretold,
Yet *generouſly* he does his arms withhold. *Dryden.*

Liberally; munificently.

GEN'EROUSNESS, *ſ.* [from *generous.*] The quality of being generous.—Is it poſſible to conceive that the overflowing *generouſneſs* of the divine nature would create immortal beings with mean or envious principles? *Collier.*

GENESAN', a town of Aſiatic Turkey, in the Arabian Irak: ninety miles ſouth of Bagdad.

GEN'ESIS, *ſ.* [from γινομαι, to bring forth, or γενναω, Gr. to beget.] Generation; the firſt book of Moſes, which treats of the production of the world.—See the article BIBLE, vol. iii. p. 8.

GEN'ESIS, in geometry, denotes much the ſame as *generation*, being the formation of a line, ſurface, or ſolid, by the motion or flux of a point, line, or ſurface; as of a globe by the rotation of a ſemi-circle about its diameter, &c.—In the geneſis of figures, the line or ſurface which moves, is called the *deſcribent*; and the line round which, or according to which, the revolution or other motion is made, the *dirigent*.

GENESSEE', a townſhip of the American States, in Ontario county, New-York, having 217 electors.

GENESSEE', a large tract of land in the ſtate of New-York, bounded north and north-weſt by lake Ontario, ſouth by Pennſylvania, eaſt by the weſtern part of the military townſhips, in Onondago county, and weſt by lake Erie and Niagara river. It is a rich tract of country, and well watered by lakes and rivers; one of the latter, Geneſſee river, gives name to this diſtrict. It is generally flat, the river ſluggiſh, the ſoil moiſt, and the lakes numerous.

GENESSEE RIVER. See GHENESSE.

GE'NEST (Charles Claude), a French poet and philoſopher, was born at Paris in 1636. In his youth he reſolved to go to the Indies to ſeek his fortune; but the ſhip in which he ſailed being taken by the Engliſh, he was brought to London, where he ſubſiſted himſelf for ſome time by teaching French. On his return to his own country he obtained the poſt of preceptor to mademoiſelle de Blois, afterwards ducheſs of Orleans. He afterwards became almoner to the ducheſs, ſecretary to the duke of Maine, and was preſented to the abbacy of St. Vilmer, in the dioceſe of Boulogne. He entered the French academy in 1698, and died at Paris in 1719. The abbé Geneſt, though a courtier, was ſincere and ſimple in his manners, and eſtimable in his character. He derived a taſte for natural philoſophy from the lectures of Rohault, the diſciple of Deſcartes, and for metaphyſics from the converſation of Boſſuet. A love for poetry and polite literature was natural to him. He compoſed various works, of which ſome of the principal are: *Principes de Philoſophie*, 1716, 8vo. an elaborate performance in verſe, in which the Carteſian ſyſtem is explained, and proofs are adduced of the exiſtence of a God, and the immortality of the ſoul: its verſification is more praiſed than its poetical ſpirit: Occaſional Pieces of Poetry: A Diſſertation upon Paſtoral, in Proſe: ſeveral tragedies; of theſe, the only one which has kept poſſeſſion of the ſtage is Penelope: the ſentiments of this tragedy are ſo moral, that the rigid Boſſuet did not ſcruple to declare that he ſhould give his approbation to public ſpectacles, were the pieces repreſented always equally pure.

GEN'ET, *ſ.* [French. The word originally ſignified a horſeman, and perhaps a gentleman or knight.] A ſmall-ſized well-proportioned Spaniſh horſe.—You'll have your nephews neigh to you; you'll have courſers for couſins, and *genets* for germanes. *Shakeſpeare.*—It is no more likely that frogs ſhould be engendered in the clouds, than Spaniſh *genets* be begotten by the wind. *Ray.*

He ſhews his ſtatue too, where plac'd on high,
The *genet* underneath him ſeems to fly. *Dryden.*

GEN'ET (Francis), a French prelate and eſteemed caſuiſt, was born at Avignon in the year 1640. He purſued his ſtudies in his native place, and, after going through his claſſical courſe, entered on that of philoſophy, in which for a time he was a diſciple of Scotus, but afterwards relinquiſhed his ſyſtem, and became zealouſly attached to the philoſophy and theology of Aquinas. He alſo applied to the ſtudy of the canon law, and was admitted to the degree of doctor in civil and canon law at Avignon, in 1670; on which occaſion he acquired much reputation by the theſes which he maintained againſt ſimony. The abilities which he diſcovered recommended him to the notice of cardinal Grimaldi, archbiſhop of Aix, who for ſome time made uſe of his talents in the management of the eccleſiaſtical concerns of his metropolitan diſtrict. Afterwards he was employed by M. le Camus, biſhop of Grenoble, in a celebrated viſitation which that prelate appointed to take place through his dioceſe, in which M. Genet's province was to reſolve the caſes of conſcience which ſhould be propoſed. The manner in which he conducted himſelf in this buſineſs, induced M. le Camus to engage him on the compoſition of a ſyſtem of moral theology. To this work M. Genet devoted much time and labour, and produced it, at different periods, in ſix volumes, 12mo. under the title of *Morale de Grenoble*. It has undergone various impreſſions, of which the beſt was publiſhed in the year 1715, in eight volumes, 12mo. A Latin tranſlation of it was publiſhed in the year 1702, by the abbé Genet, the author's brother, and himſelf the author of Caſes of Conſcience relative to the Sacraments. The *Morale de Grenoble* has been condemned by the more relaxed caſuiſts, as much too ſtrict and ſevere; but it met, nevertheleſs, with a very favourable reception in France, where it was read with great approbation, as well as in Italy and other catholic countries. Soon after its publication pope Innocent XI. created the author canon and prebend of the cathedral church at Avignon; and in the year 1685 appointed him biſhop of Vaiſon. His epiſcopal functions he diſcharged with exemplary watchfulneſs and diligence until they were interrupted in the year 1688, in conſequence of his having ventured to receive into his dioceſe the religious belonging to a new convent at Toulouſe, which Louis XIV. had ſuppreſſed. This act expoſed him to the reſentment of the king, by whoſe order he was arreſted, and confined priſoner for fifteen months in the iſle of Rhe; whence he was releaſed at the particular requeſt of the pope. He was accidentally drowned in 1702, when he had juſt completed his ſixty-ſecond year.

GENETE'IL, a town of France, in the department of the Mayne and Loire, and chief place of a canton, in the diſtrict of Baugé: two leagues and a quarter north of Baugé, and one and three quarters ſouth-weſt of le Lude.

GENETHLI'ACAL, *adj.* [γενεθλιακος, of γενεθλη, Gr. nativity.] Pertaining to nativities as calculated by aſtronomers; ſhewing the configurations of the ſtars at any birth.—The night immediately before he was ſlighting the art of thoſe fooliſh aſtrologers, and *genethliacal* ephemeriſts, that uſe to pry into the horoſcope of nativities. *Howel's Vocal Foreſt.*

GENETHLI'ACI, *ſ.* in aſtrology, are perſons who erect horoſcopes, or pretend to foretell what ſhall befall a perſon, by means of the ſtars which preſided at his nativity. The ancients called them *chaldæi*, and by the general name *mathematici*: accordingly, the ſeveral civil and canon laws which we find made againſt the mathematicians, only reſpect the Genethliaci, or aſtrolo-

gers. They were expelled Rome by a formal decree of the ſenate; and yet found ſo much protection from the credulity of the people, that they remained in the city unmoleſted. Antipater and Archinapolus have ſhewn that genethliology ſhould rather be founded on the time of the conception, than on that of the birth.

GENETHLIAL'OGY, *ſ.* [*genethlialogia*, Lat. γενεθλιαλογια, Gr.] The ſcience of calculating nativities, or predicting the future events of life from the ſtars predominant at the birth.

GENETHLIAT'IC, *ſ.* [γενεθλη, Gr.] He who calculates nativities.—The truth of aſtrological predictions is not to be referred to the conſtellations: the *genethliatics* conjecture by the diſpoſition, temper, and complexion, of the perſon. *Drummond.*

GENE'VA, *ſ.* [a corruption of *genevre*, French, a juniper-berry.] The ardent ſpirit called *gin*.—We uſed to keep a diſtilled ſpirituous water of juniper in the ſhops. At preſent only a better kind is diſtilled from the juniper-berry: what is commonly ſold is made with no better an ingredient than oil of turpentine, put into the ſtill with a little common ſalt and the coarſeſt ſpirit. *Hill.*

GENE'VA, a free city and republic, many years in alliance with the Swiſs, ſituated on the confines of Savoy, France, and Swiſſerland, at the ſouthern extremity of the lake, called the *lake of Geneva*, or the *Leman-lake*; the Rhône paſſing through it, and dividing it into two unequal parts. Julius Cæſar made it a place of arms. It flouriſhed greatly under the ſucceſſors of Cæſar: the inhabitants became Chriſtians in the third century, and, at leaſt as early as the middle of the fourth, it was made the ſee of a biſhop. The invaſions of the hords of people from the north, the diſorders, ravages, and revolutions, which followed, were not leſs ſenſibly felt at Geneva, than in other parts of the weſtern empire. This city and neighbouring country fell to the Burgundians, afterwards to the Franks. Charlemagne, when he aſſembled his army at Geneva to march againſt the Lombards, augmented the privileges of the citizens, and granted them free fairs. In the diſmemberment of the vaſt eſtates of Charlemagne, Geneva became ſucceſſively annexed to the kingdom of Arles and Burgundy. In the year 1032, it was united to the German empire; but the authority of the emperors, not yet well eſtabliſhed, was hardly at all regarded in the diſtant provinces; the great vaſſals were become independent. Neceſſity had taught the towns to provide for their defence, by uniting and forming a government within themſelves; and the chiefs of the empire, too feeble to maintain their proper authority, protected the aſſociations of the common people, and augmented their liberties, as a balance to the tyranny of the lords and the clergy. In the midſt of this confuſion, which frequent revolutions and profound ignorance had prolonged for ſeveral centuries, the clergy, under one chief, whom the pope had rendered powerful, had begun to join a great portion of temporal juriſdiction to their ſpiritual juriſdiction, already too extenſive. Thus, the biſhops of Geneva, like the biſhops of Lauſanne and Sion, had obtained of the emperors the title of princes and ſovereigns over the city, and a conſiderable ſurrounding country. On the other hand, the counts of the Geneveſe, that is to ſay, the country in the neighbourhood of Geneva, originally only officers of the emperors, though now become vaſſals of the biſhop, aſpired to an excluſive adminiſtration of juſtice both in the town and country. The bulls of the emperors and the popes ſerved rather to keep up theſe diſputes than to decide them. The people, preſſed alternately by theſe two powers, profited by their diſputes to confirm and extend their privileges. They were leſs afraid of the authority of the biſhop, who had a greater intereſt at ſtake. Nevertheleſs, a third power was formed in the neighbourhood, which menaced the liberty of the city. The counts of Savoy became powerful by the ſucceſſive poſſeſſions of ſeveral provinces; and, among the reſt, the Geneveſe adopted the pretenſions of the ancient counts, and aſpired to the ſovereignty of a town at once a frontier and flouriſhing. Several attempts were made by different princes, but nothing very alarming, till, in the beginning of the ſixteenth century, Charles III. a fiery and enterpriſing prince, by conſent of the biſhops, frequently came into the town with a great deal of parade, to gain ſome and intimidate others; and to make a ſhow of his authority, put to death ſome citizens who dared to reſiſt his tyrannic will. A citizen of Geneva, named Berthelier, who had obtained the freedom of Friburg, in Swiſſerland, inſinuated to the chiefs of that republic the benefit of an alliance with Geneva, and that it would be to their intereſt to prevent the latter city from falling into the power of an ambitious neighbour. A treaty was concluded, and two parties aroſe in Geneva, one which remained attached to the intereſt of the duke, and the other on the ſide of liberty. The former were called *Mamelukes*, from the troops of Egypt who were ſo called. The others received the ſurname of *Huguenots*, which was afterwards given to all the proteſtants of France. This latter term is, without doubt, a corruption of the German word *eidgnoſs*, which ſignifies bound or confederate by oath. The duke Charles, irritated by this tranſaction, entered Geneva with a body of troops, by a breach in the wall, and compelled the people to renounce their new alliance, and, by ſolicitations among the Swiſs cantons, perſuaded Friburg to deſiſt from the treaty, promiſing not to injure the liberties of Geneva. Nevertheleſs, Berthelier was ſacrificed to his vengeance, and the biſhop, ſurrounded by a numerous guard, entered into the council general, and depoſed the magiſtrates. Fortunately for Geneva, they quitted the town ſoon after theſe ſudden acts of violence, and gave the citizens time to recover from their terror and conſternation. A new alliance was entered into between the towns of Berne, Friburg, and Geneva, in the year 1526, which the duke of Savoy was not able to prevent, and occaſioned long wars between the republic and Savoy. The biſhop, in his turn, being embroiled with the duke, was reduced to demand the right of the citizenſhip of Geneva, to enjoy the protection of the new alliance, which he confirmed.

At this time the doctrine of the reformation began to be received by the people, fired by the enthuſiaſm of liberty, which invited them to throw off the yoke both eccleſiaſtical and political. The biſhop, whoſe actions had almoſt always been weak or deceitful, was become deſpicable in the eyes of the people and the duke. His imprudent menaces and precipitate retreat, ſerved to ſtrengthen the cauſe of the reformers. Of their two allies, one exhorted the Geneveſe not to ſeparate from the communion of the church of Rome. The other preſſed them to confirm their liberty by ſhaking off the eccleſiaſtical yoke. In 1535, in full council, the doctrines of the reformation were adopted; in conſequence of which the canton of Friburg renounced the alliance. The celebrated John Calvin arriving accidentally at Geneva, towards the cloſe of the following year, was induced to remain and complete the work that was begun. Geneva was now regarded as the centre and aſylum of the reformed religion, both by the French and Italians, and by the retreat of the perſecuted proteſtants, the arts and commerce became daily more flouriſhing, and population increaſed. In 1559, an academy was founded, under the direction of Theodore Beza. In 1536, the cantons of Berne and Friburg, and the Valais, ſeized on ſome of the provinces belonging to the duke of Savoy, near the lake of Geneva, which procured ſome reſpite of hoſtilities to the new republic. In 1584, a perpetual alliance was entered into between Berne, Zurich, and Geneva, which formed the bond of union between Geneva and Swiſſerland. In 1602, an attempt was made

by Charles duke of Savoy, to ſeize on the city by ſurpriſe. Some troops approached the ramparts of Geneva in the night, and a number of ſoldiers had already ſcaled a baſtion, and penetrated into the town. By a fortunate accident the citizens were alarmed time enough to repulſe the enemy, and drive them from their walls. The memory of this deliverance was long preſerved by an anniverſary fête. A war commenced in conſequence of this perfidy, but was followed by a ſolemn peace the following year, ſigned at St. Julien, the 21ſt of July, 1603; at which time the conſtitution of the republic, and the claſſes of the people, were eſtabliſhed and ſettled in the following manner: Thoſe who had obtained permiſſion to eſtabliſh their domicilium in the city, or on its territory, were termed *domiciliés*. This permiſſion was ſolely for one year, and was revocable at will. Their only privilege was to live under the protection of the government. Thoſe who were born in country-places, dependent on the ſtate, and had acquired property, were named *ſubjects*. Thoſe diſtinguiſhed by the title of *inhabitants* were ſuch as were formerly ſimply domiciliated, but to whom the edict of 1782 afterwards granted the right of commerce and labour. The claſs called *natives* were thoſe born of inhabitants. The laſt claſs, ſuperior to all the others, was that of *citizen*; but the ſon of a citizen, when born out of the country, was conſidered as a ſimple *bourgeois*; nor could he be admitted into the ſenate. A citizen was eligible to the firſt employments in the republic, and might become a member of the *petit conſeil*. It was on account of this ſuperiority of title, that Rouſſeau afterwards aſſumed it with ſo much triumph, as a check to the pride of thoſe *noble ſubjects* who were his greateſt antagoniſts. From the general aſſembly of citizens and burgers, the inferior councils, inveſted with the executive power, derived their origin. Theſe formed three colleges. The college or council of *twenty-five*, which regulated the police: the council of *ſixty*, whoſe proper department was ſimilar to that of our privy-council: and the council of *two hundred*, ſuperintendent of the other councils. Four *ſyndics* preſided at theſe councils, whoſe charge was annual. The moſt important, and the moſt ſplendid office was that of *procureur général*, choſen from the council of two hundred. The object of his department was to ſupport the rights of the citizens, and to protect the conſtitution. His commiſſion was uſually for three years, but it might be extended to ſix.

To give even a general idea of the repeated commotions that have diſturbed the repoſe of Geneva, ſince the above period, would greatly exceed the limits of our plan. Suffice it to obſerve, that previous to the revolution of 1782, Geneva had undergone three political changes ſince the commencement of the eighteenth century. In the firſt, in 1707, the citizens had demanded the re-eſtabliſhment of periodical general aſſemblies; and although they had, in a great meaſure, ſucceeded according to their wiſhes, yet the ſenate, taking advantage of the arrival of a body of Swiſs troops, had cauſed ſome of the leaders to be executed: among theſe, fell the illuſtrious Fatio; who, contrary to all forms of juſtice, and, after a general amneſty, pronounced by themſelves, was, by order of the ſenate, ſhot in his priſon. The next cauſe of complaint aroſe from the two councils taking to themſelves the right of impoſing taxes, and of erecting fortifications without the conſent of the general council. This diſpute increaſed; till, in 1738, the parties coming to open hoſtilities, France, Zurich, and Berne, offered their mediation, which was accepted. Their interference, doubtleſs, was friendly, and their deciſion was impartial: but this act, which was then thought to be a benefit, afterward proved the calamitous ſource of the greateſt miſeries to Geneva. Their edict confirmed to the council-general all legiſlative, confederative, and elective, power, as well as the right of making war and peace, of impoſing taxes, and of augmenting the fortifications; and, that no future diſputes might ariſe, the three powers agreed to become joint guarantees to the new law.

The third revolution had its riſe in the unjuſt decree, paſſed in 1762, againſt J. J. Rouſſeau, as noticed above. This decree occaſioned *remonſtrances* on the neglect of the law, which, in the eagerneſs of their zeal, the ſenate had violated. The *remonſtrants* argued, that, as the ſenate would not redreſs the grievances which had been produced by infringing the law, their complaints ought to be ſubmitted to the deciſion of the council-general, whoſe duty it was "to watch over the laws, ſo that no change whatſoever ſhould be made without its conſent." The *recuſants* inſiſted that the ſenate were the proper judges, whether they had infringed the law, or not; and that, as no matter could be brought before the council-general, unleſs propoſed by the ſenate and council of two hundred, the ſenate and council therefore were to determine whether this complaint ſhould be heard: in fact, that they poſſeſſed a *negative power*, by which they could, in their own body, cruſh all remonſtrances, and prevent the propoſal of any queſtion, which they did not wiſh ſhould be inveſtigated. The ſenate thus refuſing to ſuffer any appeal to the council-general, the conſequence was, that, at the election of ſyndics, who were to be choſen by the council-general from the members of the ſenate, the citizens, in turn, rejected the whole liſt. They were obliged by law only to elect ſuch as were *agreeable* to them; and, by the ſame law, they were permitted to refuſe a part, or the whole, of the names which were offered: as, then, none were *agreeable*, they rejected all. The ſenate now had recourſe to the ruinous expedient of ſoliciting foreign aſſiſtance; and, inſtead of liſtening to terms of accommodation with their countrymen, they appealed to the inſidious power of France. The cantons of Zurich and Berne, to which the ſenate likewiſe applied, delayed, for a while, their interference: but, finding that the ſenate perſiſted in its determination, they at length joined in a meaſure which they could not prevent. Their mediation was ſo unpleaſant to the citizens, that, when their propoſals for a reconciliation were offered to the council-general, they were rejected by a large majority. The guaranteeing powers then retired to Soleure, where they pronounced a *decree*, which the duc de Choiſeul, at that time prime-miniſter of France, in vain attempted to compel the Geneveſe to reſpect. Their reſiſtance was unconquerable, and the decree, ſo far from being put in force, was not even ſuffered to be read in the general aſſembly. The ſenate now found the neceſſity of entering into ſome terms of agreement; and, in 1768, a treaty was concluded, by which the council-general, in exchange for its right of refuſal in election of ſyndics, received the privilege of electing one half of the council of two hundred. The citizens obtained, likewiſe, the right of *re-election*, or of annually excluding from the ſenate four of its members, who, after a ſecond excluſion, could not again be choſen. This power was given as a balance to the *droit négatif* of the ſenate, concerning which, nothing was ſtipulated.

During theſe troubles, the contention was between the citizens and the magiſtrates; between two parties, in whom equal power was veſted, ſtruggling for the ſuperiority: but there was another, and a more numerous, claſs of men at Geneva, whoſe liberties ſeem to have been but little regarded. The *citizens*, whoſe anger was ſo vehement againſt the ariſtocracy, appear to have forgotten that *they*, in fact, formed a part of that ariſtocracy; that they were the governors, while the *natives* were the governed and oppreſſed. Though debarred from all power of making or aſſenting to laws by which they were bound, forbidden to engage in the practice of the liberal profeſſions, excluded from the benefit of trial by their equals, and deprived of the fruits of their own induſtry,

duſtry, by reſtrictions on their commerce, the natives, by a curiouſly ſingular expedient of tyranny, were called on to bear the principal burthen of the expences of the ſtate. Men in this ſituation, hearing the word *liberty* ſounded in their ears, would naturally wiſh for a ſhare of that bleſſing, for which others were contending. Accordingly, we find that, in the late revolution, they had aſſerted their right to the privileges of citizens. Their pretenſions, however, had been declared criminal and ſeditious by the ſenate: the citizens, too, diſapproved them; but on what ground ſhould the *natives* be enſlaved, while the *citizens* were free? When the rights of men were in contention, why ſhould not *their* rights be inveſtigated, and, when known, why not aſſerted and eſtabliſhed? The contrary, however, happened; and, in the treaty of 1768, the natives were forgotten by both the other parties, who only thought of ſecuring their own cauſe, while they neglected the liberties of their countrymen.

The deſire of freedom, when once excited, is not eaſily repreſſed. The *natives* ſoon perceived that little attention had been beſtowed on their intereſts; and they openly complained of the hardſhips of their ſubjection. The ſenate anſwered their arguments, in that kind of logic at which tyrants are ſo expert, by baniſhing one of their body for ten years, for having, according to his ſentence, *wiſhed to uſurp the title of citizen, and for having defended his pretenſions by arguments deſtructive of the conſtitution*; and the *citizens*, that they might not be backward in the good work of oppreſſion, complained that the *natives* encroached on their excluſive privilege of trade; and obtained an order, pointing out the narrow limits beyond which they were not to ſtep. Thus, driven to extremes by two parties, they found a tempter in a third. The *recuſants*, who were the chiefs of the ariſtocratic party, ſeeing themſelves fruſtrated in their deſigns on the citizens, ſecretly encouraged the natives, becauſe they were in oppoſition to the citizens; and thus, paradoxical as it may appear, aſſiſted the cauſe of liberty, becauſe they wanted to be tyrants. The miniſter of France, alſo, *appeared* to befriend them. Thus ſituated, is it wonderful that they ſhould ſay, that "they no longer would be the ſlaves of citizens who loved liberty only for themſelves; and that if the walls of Geneva were to incloſe a people who were ſovereign, and another who were ſubject, they would deſert a country to which they had no attachment?"

Under theſe circumſtances, matters were hurried to extremity by the folly of the ſenate, who impriſoned a *native* for ſinging ſome ſatirical verſes, in which he aſſerted that he was a *citizen*. When judgment was to be pronounced on the priſoner, the natives aſſembled, and declared their reſolution to ſuccour him, if any ſevere puniſhment was to be inflicted. The puniſhment was trifling, and the priſoner was carried home crowned with laurels. On that ſame night, contrary to his ſentence, which confined him to his houſe, he appeared in public among his claſs. The ſenate were determined to ſuſtain their decree; and, on this occaſion, forgetting their diſputes with the citizens, applied to them to put themſelves in arms; and the citizens, after conteſting with the ſenate for years, joined them at the inſtant when the oppreſſion was to be removed from themſelves to the natives. So eaſily can we act the tyrant to others, while we are fighting for liberty for ourſelves!

On the next morning, the delinquent was again ſeized; and the natives began to aſſemble. The citizens were immediately called to arms; and, in one ſtreet only, where ſome of the moſt violent of the party had furniſhed themſelves with arms, a ſcuffle enſued, in which three of the natives loſt their lives. Thus ended this inſurrection. The ſenate, that they might revenge their inſulted authority, by adding injuſtice to cruelty, determined to puniſh the natives without the cuſtomary forms of law; and the citizens, that they might ſtrengthen the tyranny which was afterward to oppreſs themſelves, had the infamy to decree the puniſhment in the general aſſembly.

From this period, Geneva remained, for a time, in peace: but peace could not long be expected in a republic thus conſtituted. The ariſtocratic party were daily ſeeking means to increaſe their power; and the *citizens* began to be convinced of the impolicy of their behaviour toward the *natives*. Among other cauſes of complaint, was the want of a regular code of laws, and of a rigid and impartial obſervance of them. This had been decreed by the mediation of 1738; but had been neglected till 1774, when a partial reviſion of the old laws was undertaken by the ſenate. The citizens, finding their remonſtrances on this ſubject to be in vain, had recourſe to their right of re-election, and excluded from the ſenate four of its members. This happened on the 26th of January 1777, when the four ſenators were excluded by 950 votes againſt 550. A reſiſtance ſo determined, gained the citizens their ends; the ſenate liſtened to their propoſals; and a committee, formed equally from the two parties, was entruſted with the important buſineſs of regulating and publiſhing their laws. This committee, however, was of ſhort duration. The ariſtocratic party accuſed their opponents of aiming at the ſubverſion of all law, under the pretence of reviſing the old laws; and the council of two hundred paſſed a decree, by which the committee was diſſolved, and a new one created. The account of theſe diſputes was induſtriouſly magnified at the court of France; where the comte de Vergennes, who had ſucceeded to the duc de Choiſeul, ſeemed determined to ſhew the Geneveſe, that his maſter was reſolved, *in one way or other*, to ſilence their debates. With this view, he applied to the cantons of Berne and Zurich, who had the magnanimity to refuſe their interference in a diſpute which the Geneveſe themſelves were ſufficiently able to ſettle. The ariſtocracy had now again recourſe to the natives; who, irritated by their paſt injuries, and encouraged with hopes of redreſs, entered into their ſchemes. On the night of the 5th of February 1781, the accidental quarrel of two natives collected together a number of ſpectators, who ſoon became actors in the affray. At the ſame time, the arſenal was forced by a party of natives, headed by ſome young men of the ariſtocratic party. This was a ſignal to the citizens to arm themſelves. Their opponents were few, and they ſoon became maſters of the town without bloodſhed.

The citizens had before found the impolicy of ſeparating their intereſts from thoſe of the natives. Inſtead, therefore, of preparing puniſhments for them, they cauſed a decree to be paſſed in their favour: the votes in the council-general, on this occaſion, were one thouſand and ſeven, againſt twenty-nine. Every thing now ſeemed to take a peaceable turn; and a reconciliation was ſpeedily to be effected from the good offices of the cantons of Berne and Zurich: but peace, on ſuch terms, was not the wiſh of the ariſtocracy; and the comte de Vergennes, on their perſuaſion, again came to deſtroy the repoſe of a town, whoſe happineſs he had engaged to promote. The Swiſs deputies had the mortification to find their negociation broken off, and their meetings removed to a diſtance from Geneva. Nor was this all: the French would enter on no terms, unleſs the treaty of 1768 was previouſly ſuſpended. The objection to this treaty was, that it gave to the council-general, the right of electing one half of the council of two hundred; which council, in its preſent ſtate, included all the chiefs of the ariſtocracy. This election was to take place whenever fifty places were vacant in that body; and, at this time, only two were wanting to complete that number. It was of material conſequence, then, to ſuſpend an edict, which enabled the citizens to introduce their

own

own chiefs into this council, which, in fact, conſtituted the ſtrength of their adverſaries: but to this ſuſpenſion, the Swiſs cantons poſitively refuſed to agree; and the French miniſter, experiencing nothing but oppoſition from them, withdrew the name of his maſter from the terms of the guaranteeſhip which he had entered into in 1738. If, however, the *name* of France was withdrawn, its *influence* remained; and the citizens found themſelves threatened with the ſevereſt retaliation, if, according to the edict of 1768, they proceeded to fill up the vacancies in the grand council. His moſt chriſtian majeſty, they were told, was determined to *ſave* them; and, to preſerve them from all miſchief, he had already marched a body of troops into their neighbourhood.

Together with theſe *friendly* proofs of the diſpoſition of France, the citizens had another evil preſſing on them. The edict, which had been paſſed in favour of the natives, had been ſuſpended ſince the interference of the French; and it was well known that, on any attempt to carry it into execution, it would receive an abſolute negative from the ſenate. The natives already began to charge the citizens with having deceived them with promiſes, which, they knew, would never be fulfilled; and called on them to claim, from the ſenate, the performance of an engagement, which, it was evident, would be denied when aſked. The claim was, however, made by a thouſand and ninety-ſix citizens, accompanied by a thouſand and ſeven hundred natives; that is, by more than four-fifths of the heads of families in the republic. The ſenate returned for anſwer, that the law in queſtion could ſubſiſt no longer than the times of anarchy which gave it birth; and that being free, they could not carry it into execution without deſerting the intereſts of their country. The rage of the natives was now ungovernable; nor were the citizens heard in their attempts to calm them: they ran to arms, and while ſome ſeized a part of the garriſon, which oppoſed them with an uſeleſs reſiſtance, others ſurrounded the habitations of the ſenators, againſt whom they vowed immediate vengeance. Thus circumſtanced, the citizens ſaw no method of quelling the tumult, but by joining with the natives, and aſſuring them of the ſucceſs of their demands; and to ſecure this, they determined to compel ſuch a number of the magiſtrates to reſign, as might gain their party a majority in the two councils, and thus enable them to eſtabliſh the treaties of 1768, and of 1781. This was accompliſhed: but the citizens were not contented to ſtop here. Knowing that their actions would call down the vengeance of France, they detained twelve of their magiſtrates as hoſtages for their own ſafety. It was this proceeding which irritated the canton of Berne, and induced it to enter into a league with the courts of Verſailles and Turin; the purpoſe of which was to reduce the Geneveſe by force. To this end, twenty-two companies of grenadiers from Turin, with as many from Berne, and ſix thouſand French troops, began their march to Geneva: while the citizens and natives, being determined to ſtand a ſiege, made ſuch preparations as they could, and named a committee of eleven perſons to conduct their defence. To reſiſt was, however, madneſs;—and, on the evening before the attack was to be made, they entered into the terms of capitulation which were offered to them, and opened their gates.

What were the views of the ariſtocratic party, and how unfavourable their diſpoſitions were toward liberty, became now evident in the precautions which they took to prevent any diſcuſſion in their meaſures. The liberty of the preſs was taken away: all public meetings or aſſemblies were forbidden; and not only their military exerciſes were ſuppreſſed, but the citizens were commanded to keep no fire-arms in their houſes, under pain of baniſhment. The garriſon, too, was newly modelled; a power of increaſing it was given to the grand council; and its officers, which, before, were always Geneveſe, were now *allowed* to be ſtrangers, and the colonel and major even *obliged* to be ſo. It was ordained, too, that every Geneveſe ſhould take an oath of fidelity and ſubmiſſion to the new law. In addition, the people ſaw their defenders forced into exile, for ſupporting their rights: ſome for the ſpace of ten years, and others for life. In return for theſe ſacrifices, they were recompenſed by a magnificent theatre, and a company of comedians, with all the indulgences of luxury and vice. It was in this ſituation, that the citizens entertained ſerious thoughts of emigrating; and turned their views towards Ireland, as affording them a ſituation where they might exert their induſtry, and enjoy that liberty which they had loſt at home. The plan was intereſting: it was the ſtruggle of a manly people almoſt weighed down with their misfortunes; and it was liſtened to with that eagerneſs, with which a free and generous nation gives way to its firſt feelings in favour of the oppreſſed. The obſtacles which prevented its execution, are known to have ariſen from the changes of adminiſtration in Ireland, and from the delay which neceſſarily attended ſuch a ſcheme. Fortunate it was, perhaps, that ſuch obſtacles did exiſt to prevent an emigration, which would have been an act rather of deſpair than of reaſon; and which, however flattering in its appearances, would, as muſt now be evident, have been pernicious in its effects to Ireland, if not to England.

From this ſtate of dejection, the Geneveſe were partly roufed by the death of the comte de Vergennes, and by the ſubſequent elevation of their friend and countryman, M. Necker. The impolicy of the magiſtrates ſerved to diſſipate totally their fears. In the ſevere winter of 1789, the lower claſſes underwent much hardſhip for want of proviſions; and at the time when the diſtreſs was greateſt, the magiſtrates raiſed the price of bread; the profits on the ſale of which conſtitute a part of the revenue. Immediately the ſhops of the bakers were ſtripped; and, the next morning, ſome bread, though eſcorted by ſoldiers, was ſeized. In this tumult, it happened that one of the populace was killed, and the dead body was carried through the ſtreets as a ſignal for inſurrection. The government now prepared to repreſs the diſturbances, by military force; and, accordingly, ſome troops were marched into a part of the city: but, far from being diſperſed, the inhabitants not only attacked them with ſtones from the tops of houſes, but, by means of fire-engines filled with hot water mixed with vinegar and ſoap, totally defeated them. The citizens had hitherto remained inactive, and it was only on the application of the ſenate, that they agreed to interpoſe; not, however, by means of arms, which were unneceſſary; they had only to ſhew the natives that an accommodation was really intended, and the tumults immediately ſubſided. So anxious, indeed, were all parties for peace, that the terms of agreement were ſettled in ſix days. In theſe terms, both parties made great conceſſions. With regard to the natives, particularly, the law which provided for their gradual incorporation with the citizens, was allowed; ſo that from this time, natives of the fourth generation became citizens: the citizens alſo, who had been baniſhed by the edict of 1782, were recalled, and fully reinſtated in their employments.

In 1791, the magiſtrates, anxious to maintain the good underſtanding which had thus prevailed, made further conceſſions in favour of the popular party, and extended their privileges, allowing to every native the freedom of the city at the ſmall price of ſix guineas. This conduct, which it was hoped would have removed all diſcontent, had, however, an oppoſite effect, and ſeemed only to raiſe the tone of the popular party, from the idea it gave them of their own power, which could extort ſuch terms, and emboldened them to demand other privileges with an air of authority. A private application was alſo unfortunately made to the Briſſotin

party, then in power at Paris, requeſting the aſſiſtance of the French in the eſtabliſhment of what they termed *the juſt principles of liberty*. In conſequence of their ſolicitation, general Monteſquieu advanced towards Geneva. On his approach, deputies from the council were immediately diſpatched to enquire into the reaſons of his conduct. The anſwer of the general was, that the French republic had been inſulted by the Geneveſe calling in the troops of Swiſſerland as ſoon as the French forces had entered Sardinia; which circumſtance, he added, plainly evinced that the ariſtocratic party at Geneva were inclined to favour the enemies of France. After ſome time ſpent in fruitleſs negociation, the magiſtrates, perceiving themſelves incapable of defending the ancient conſtitution, paſſed a decree in favour of equal rights, with only ſome ſlight reſtrictions. The popular party, however, would not accept that as a favour which they demanded as a right; and therefore, on the 30th of November, 1792, they appeared in arms, and inſiſted that every department of the government ſhould be filled by individuals of their own party. The ſyndic of the guard, Micheli Ducreſt, being ordered by the magiſtrates to beat to arms, not only refuſed to obey their orders, but delivered the keys of the park of artillery into the hands of the inſurgents. On the 1ſt of December they made themſelves maſters of Geneva, aſſumed the red cap, and adopted the manners of the French revolutioniſts. The members of the former government voluntarily reſigned their functions, and liberty and equality was proclaimed. Proviſional committees, called the committees of ſafety and adminiſtration, were formed, which were confirmed by an aſſembly compoſed of the old and newly-admitted citizens. On the 25th of February, 1793, a convention ſimilar to that of France was formed, conſiſting of 120 members. The firſt acts of this convention were to aboliſh the great council, and to transfer nearly all the power of the little council to the general aſſembly. This conſtitution, with all its faults, was accepted by the people at large, and was even acknowledged by the Swiſs cantons. Order and harmony were in appearance reſtored, when the public tranquillity was again diſturbed by the viſionary doctrines propagated by the circle of equality, which ſtill held its meetings, and perſevered in its deluſive metaphyſical ſcheme of the general equality of rights. The principal members of this club were now citizens Geſnet and the abbé Soulavie, who had acted as their deputies with the Briſſotin party at Paris, and an advocate, of the name of Bouſquet. An aſſeſſment upon property being in agitation by the magiſtrates, the circle of equality ſeized this opportunity of ſpreading the report, that the propoſed aſſeſſment was to be laid principally upon the poor, while the rich were to be almoſt wholly exempted; and at the ſame time ſuggeſted the neceſſity of the people taking the government into their own hands.

In the night of the 18th of July, Bouſquet and Geſnet announced to the aſſembly that a conſpiracy was planned againſt the people by the ariſtocrats. Upon this denunciation the moſt furious of the patriots ran to arms, to puniſh the traitors; while the more moderate contended, that the ſovereign aſſembly ſhould not be diſturbed by ſuch alarms. While, however, the preſident was putting the queſtion, about twenty of the moſt violent of the members, headed by Bouſquet, ran out of the hall, calling upon the people to take up arms. Being joined by vaſt numbers of the loweſt of the people, they ſeized the artillery, plundered the houſes of the citizens, and diſarmed ſuch as they thought hoſtile to their views.

From this moment all the miſeries and horrors of a revolutionary ſtate commenced. The rich were torn from their houſes and thrown into dungeons, where upwards of ſix hundred of the principal inhabitants of the city were crowded together, among whom were moſt of the magiſtrates who had been depoſed in 1792. A revolutionary tribunal was erected, of which Bouſquet was elected preſident, and which held its ſittings in one of the halls of the Hotel de Ville. The firſt ſeven priſoners who were brought before this tribunal were, M. Decombres, lieutenant-colonel of the regiment of Geneva; M. Cayla, the ex-ſyndic; the worthy and patriotic M. Prevoſt, procurator-general; M. Derochment, counſellor; and three others. M. Decombres and the other three were condemned by the tribunal, and the reſt were acquitted; but as they were members of patrician families, and held the firſt places in the ſtate, the aſſembly of the revolutioniſts, intoxicated by the wine that had been plentifully diſtributed on the occaſion, imagined that their acquittal was a ſufficient proof of a plot to ſave the ariſtocrats, who, in the opinion of theſe deluded wretches, all merited the puniſhment of death. While the moderate among the aſſembly were endeavouring to prove the contrary, the enraged part of the mob ran from the aſſembly to the priſon, and, ſeizing the ſeven unfortunate perſons, brought them to the fatal ground. A ſquare battalion was formed, and theſe ſeven victims of the worſt of tyrannies were inſtantly ſhot!—Their next ſtep was to lower the rate of intereſt of money, and to annul all leaſes. In addition to theſe atrocities, the moſt ſacred rites of religion were converted into ridicule, and the moſt horrible blaſphemies were publicly countenanced.

The revolutionary tribunal, not ſatisfied with the innocent blood which had already flowed, ordered three more priſoners to be brought before them; Fatio, ex-ſyndic; Naville, ex-procurator; and Andead, a banker. M. Naville, who was a man of diſtinguiſhed talents, defended himſelf ſo ably, and appealed ſo forcibly to the paſſions and conſciences of the revolutionary tribunal, that one of his judges, on paſſing ſentence, ſaid to him, "I have two conſciences; one of them acquits you, and the other condemns you, in order to ſave the republic." "The republic will loſe then in me a *great citizen*," coolly replied Naville; and this ſingular and bold expreſſion, ſo deſcriptive of his character, was ſtrictly true. When the judgment of the court was paſſed on him, "I will now, (ſaid he,) in my turn, pronounce that ſentence which awaits you and all your accomplices. When enriched by plunder, and become abſolute maſters of the ſtate, expect not to enjoy in peace the fruit of your crimes. All the barriers that you have broken down to arrive at deſpotiſm, will be alſo broken down for you. New factions will ſpring up in the midſt of your faction; you will be engaged in a conſtant ſtruggle with each other for power. Like tigers you united to catch your prey; and like them you will ſpill one another's blood in diſputing which ſhall devour it. You will thus become yourſelves the avengers of the ſhades of your victims: but there will be this difference between you and them—that your victims will have ended their days with the conſolation of having a pure conſcience, which raiſes the ſoul to its Creator; and you will die with hearts burſting with rage; your execution will be preceded by the moſt galling ideas; deſpair will rend your feelings for having imbrued your hands in innocent blood, and torture you with the dread of falling into the abyſs dug with your own hands.—*You will die without daring to raiſe your eyes toward heaven.*"

The judges of this horrid court ſat fourteen days, during which time five hundred and three perſons were tried, of which number thirty-ſeven were condemned; but only eleven ſuffered death, the other twenty-ſix having found means to eſcape. One hundred were ſentenced to be baniſhed; three hundred to be impriſoned, ſome for life and others for various periods; and the remainder obtained their liberty. The ſanguinary ſpirit of Bouſquet and his aſſociates, was happily ſucceeded by a milder ſyſtem. The friends of the revolution of 1792 were too much the friends of their country to conſent

to its incorporation with France; they therefore joined the new revolutioniſts, and at length obtained an aſcendancy. Their firſt attempt was to deprive the French agent of his influence; and the overthrow of Robeſpierre, whoſe creature he was, favoured their deſign. See the article FRANCE, vol. vii. p. 803. After the death of that execrable tyrant, the French government recalled this agent, and accompanied his recal with unequivocal marks of their diſapprobation. The ſucceſſors of Robeſpierre entirely diſavowed his conduct at Geneva; and the convention gave a full and ſolemn acknowledgment of the independence of Geneva, and granted to its miniſter the ſame honours that had been granted to other independent ſtates. And on the 7th of September, the French convention ſolemnly declared that they would take no ſtep which could in the leaſt affect the independence of Geneva. The moderate party, therefore, who had obtained the government of that republic, turned their thoughts to the beſt practicable methods of healing thoſe wounds which the late enormities had occaſioned; and juſtice ſucceeded for a time to the reign of oppreſſion and terror.

In 1795, the government of Geneva enjoined M. Reybaz, their ambaſſador at Paris, to requeſt the guarantee of the independence of their republic, in caſe of any peace between the French and the king of Sardinia, or the German empire. But the conduct of the French directory now clearly evinced their determination to annex Geneva to the republic, as a department; and the remonſtrances of the government of Geneva, breathing a ſpirit of freedom, declared the reſolution of the Geneveſe to emigrate from their native ſoil, rather than ſubmit to an incorporation of their country with that of France.

For a time again the idea of annexing Geneva to France ſeemed to be abandoned by the French; it was however only deferred to a more favourable opportunity, and ſuch a conjuncture occurred in the invaſion of Swiſſerland. The intercourſe which had taken place between France and Geneva from the date of the conqueſt of Savoy, had given a conſiderable aſcendancy to French principles of government. Though the maſs of the Geneveſe remained attached to the idea of territorial independence, a conſiderable number of them began to look with indifference on the forms by which they held their liberties; whether as part of the ſovereign people of Geneva, or as a portion of the ſovereign and powerful people of the French republic. The agents of the French government had ſtudiouſly foſtered this fraterniſing ſpirit, and had made conſiderable progreſs in proſelytiſm, by repreſenting the benefits which would accrue from a more intimate alliance between the two nations. Whatever influence theſe repreſentations might have had, the partiſans of territorial independence remained ſtrenuous in rejecting the proffered fraternity. The partiſans for the incorporation, however, formed a vaſt majority. Of 3197 votes, 2204 gave their ſuffrage for the union; and Geneva was accordingly declared by the ſupreme council to be incorporated with the French republic on the 27th of April, 1798. The treaty of union was ratified on the 17th of May by the French government. The city of Geneva was ſoon after formed into the capital of a department, under the name of "The Department of the Lake of Lemarnus."

Geneva is an irregularly built town, whoſe fortifications are tolerably ſtrong; the houſes are lofty and large, conſtructed like the inns of court at London, and the colleges at Cambridge, where one common ſtaircaſe leads to ſeveral apartments, which are here inhabited by different families. The ſtreets are in general wide; and the loftineſs of the free-ſtone houſes would produce a very ſtately effect, if it were not for the odious deformity produced by the arcades, which are erected before moſt of the houſes, and throw a gloom over the whole ſtreet. Theſe arcades are conſtructed of wood, and ſometimes riſe to a level with the roofs of the houſes: they project very conſiderably, and thus reduce a ſpacious and noble ſtreet into a narrow and mean-looking lane! Their object is to give foot-paſſengers ſhelter from the rain, and ſhade from the ſun, and, at the ſame time, to afford a convenience for drying linen, &c.

The population of Geneva is about 24,000, beſides the new eſtabliſhment of French troops; and notwithſtanding their preſent humiliated condition, Freedom is ſtill the goddeſs they worſhip; and had there been any poſſibility of ſecuring her from violation, they would gladly have bled before her altars. However various has been their ſucceſs, in the different revolutions which have agitated this ſecluded ſtate, the Geneveſe have uniformly evinced a courage which awed their enemies, and a determined bravery in defence of their rights, which, in ſhewing that they prized them highly, gave proof that they were worthy to enjoy them.

The territory of Geneva is now comprehended in the *Departement du Leman*, which contains about ſixteen ſquare leagues of land: its population is eſtimated at 609,000 perſons. It is divided into three cantons or hundreds, the largeſt of which has Geneva for its capital, and contains about 75,000 ſouls, of which 10,000 only are Geneveſe, 20,000 are French, and the remainder are Savoyards. The prefect, as in all the other departments, is appointed *durante bene-placito*. All military appointments are given to Frenchmen: one general commands the town, and another the country. At the firſt moment of the revolution, all the old magiſtrates were diſplaced, and ſince that time the civil officers have been elected by the citizens at large, conſequently ſome are Frenchmen, and ſome Geneveſe.

The revenue of Geneva, ſince it has been annexed to France, ariſes chiefly from the following ſources:—An exciſe duty is laid on all proviſions (wheat excepted); on wine and merchandiſe of every deſcription which is brought into Geneva; the annual produce of this tax is about 120,000 French livres; a land tax; a tax on doors and windows; a tax on the ſale of eſtates; a heavy tax on the collateral inheritance of an eſtate—where the inheritance is lineal and immediate, the tax is moderate. To theſe taxes, or *contributions* as they are called, muſt be added *la contribution mobilière*, which is a ſmall tax on perſonal property, and produces annually about 75,000 livres.

In the republic of letters, Geneva has obtained an honourable eminence. The works of Bonnet, Sauſſure, Mallet, De Luc, &c. have imparted celebrity to the place which gave them birth. Here is a public library of very ancient eſtabliſhment, a Critical Catalogue of which was publiſhed a few years ſince by M. Sennebier, who was then librarian. It has been frequently remarked, not only that Geneva has produced a large proportion of men of letters, but that the bulk of its inhabitants have a more than ordinary ſhare of underſtanding and information. This is perhaps to be accounted for by the eſtabliſhments which abound here of public ſchools. Of theſe there are, in every pariſh, at leaſt two, one for the education of boys, and another for girls: the number of ſchools is proportioned to the ſize and population of the pariſh. Theſe ſchools are ſupported by a private ſociety, nothing more being required from the parents of the children, than that they ſhould ſend them to ſchool clean. The academy, which, together with the college, owes its eſtabliſhment to Calvin, is a ſort of univerſity; it has twelve profeſſors, who give gratuitous lectures to ſtudents, on the following twelve ſubjects:—the belles-lettres, philoſophy, medicine, mathematics, law, education, oriental languages, theology, ſacred hiſtory, natural hiſtory, chemiſtry, and political economy. The expences attached to all theſe inſtitutions are defrayed by a ſociety, denominated *La Societé Economique*, compoſed of many of the old clergy, magiſtrates, and citizens of Geneva, who ſtill

ſtill retain in their hands ſome eſtates and funds which they held under the old government, although a conſiderable portion of thoſe eſtates and other funds has been plundered from them by the French. This ſociety alſo ſupports a ſchool, where ſtudents are gratuitouſly inſtructed in muſic and drawing.

The Geneveſe are celebrated watch-makers, and linen-printers: the few emigrants who had perſeverance enough to ſettle in Bruſſels and Conſtance, after the revolution of 1782, introduced the arts of printing linens and of watch-making into thoſe places. It was, probably, in conſequence of their ſkill in theſe reſpects, that the Iriſh parliament liſtened to the propoſal of eſtabliſhing a colony of Geneveſe emigrants in that country, and voted fifty thouſand pounds towards defraying the expences of their journey, and of their ſettlement in the iſland. Here is alſo a large chocolate manufactory. The police is ſtrictly regulated here: the bridges are drawn up, and all the gates are ſhut, at eight o'clock at night in winter, and at nine in ſummer: after ten, no one is permitted to walk in the town without a light; any one, man, woman, or child, diſregarding this prohibition, is conducted to the guard-room, and takes a lodging there for the night!

Geneva is ſituated ſeventy-two poſts and a quarter ſouth-eaſt from Paris, by Bourg-en-Breſſe and Maçon; and fifty-eight by Dijon and Mount Jura. Lat. 46. 11. N. lon. 5. 55. W. Greenwich.

GENE'VA (Lake of), a large lake, ſituated between Swiſſerland and Savoy, in a valley which ſeparates the Alps from Mount Jura. It is in the ſhape of a creſcent; of which Swiſſerland forms the hollow, and Savoy the convex part; its greateſt breadth is about twelve miles. The country on the ſide of Savoy is full of high and craggy mountains; but from Geneva to the environs of Lauſanne it ſlopes to the margin of the lake, and is both rich and fertile. The banks riſe conſiderably in the neighbourhood of Lauſanne, and form a moſt beautiful terrace, with a rapid deſcent a few miles beyond the town. A plain begins in the neighbourhood of Vevay, which continues for a conſiderable diſtance beyond the end of the lake, but contracts towards the water by the approach of the mountains. The lake at a diſtance appears of a beautiful blue colour, and the water is very clear and tranſparent. Near Geneva the coaſt of the lake abounds with pebbles; between that city and Lauſanne it is ſandy; from thence to Chillon it is bounded by hard calcareous rocks; and the extremity of the ſhore is a marſh formed by mud collected from the Rhone. The greateſt depth of this lake found by M. de Luc, is 160 fathoms. Here the birds called *tippet grebes* make their appearance in multitudes in December, and retire in February to other places where they breed. The lake of Geneva, like all others ſituated between mountains, is ſubject to ſudden ſtorms; but it abounds in fiſh remarkable as well for their excellence as ſize.

GENE'VA, a lake in Upper Canada, which forms the weſtern extremity of lake Ontario; to which it is joined by a ſhort and narrow ſtrait.

GENE'VA, a poſt-town of the American States, in Onondago county, New York, on the great road from Albany to Niagara, ſituated on the bank of the north-weſt corner of Seneca lake, about ſeventy-four miles weſt of Oneida caſtle, and ninety-two weſt of Whiteſtown.

GENEVIE'VE, or MISSIRE, a village in Louiſiana, on the weſtern bank of the Miſſiſſippi, nearly oppoſite to the village of Kaſkaſkias, twelve miles ſoutherly of Fort Chartres.

GENEVIE'VE (religious of), a congregation of regular canons of the order of St. Auguſtine, eſtabliſhed in France; and is a reform of the Auguſtine canons. It was begun by St. Charles Faure, in the abbey of St. Vincent de Senlis, of which he was a member in the year 1618. In 1634, the abbey was made elective. The congregation takes its name from the abbey of St. Genevieve, which is the chief of the order, and whoſe abbot is the general of the whole fraternity. The abbey itſelf took its name from St. Genevieve, the patroneſs of the city of Paris, who died in 512. Five years after her death, Clovis erected the church of St. Genevieve, under the name and invocation of St. Peter, where her relics are ſtill preſerved.

GENEVIL'LIERS, a town of France, in the department of Paris: three quarters of a league weſt of St. Denis.

GENEVOI'S, or DUCHY OF GENEVA, a province of Savoy, bounded on the north by the Swiſs territories, on the eaſt by Faucigny, on the ſouth by Savoy Proper, and on the weſt by France, from which it is ſeparated by the Rhone: Geneva and its territory formerly made a part of it. Annecy is the capital. It is now incorporated with the empire of France.

GENEU'RO, a mountain which divided Piedmont from the ancient Dauphiny, in the road from Briançon to Suſa.

GEN'GENBACH, an imperial town of Germany, in Swabia, ſituated on the Kinzig, in the Ortenau: twenty-two miles north of Friburg, and fifteen ſouth-eaſt of Straſburg. Lat. 48. 24. N. lon. 25. 41. E. Ferro.

GENGISKHAN', JENGHIZ-KHAN, or ZINGIS, a renowned emperor of the Moguls, who, after conquering ſouthern Aſia, and awing China to peace by the terror of his frown, being ſeized with a fever in conſequence of extreme grief for the loſs of his favourite ſon Tuſhi Khan, expired on his march into the latter country, towards the end of the 623d year of the hegira, or A. D. 1226, in the ſeventy-third year of his age, and twenty-fifth of his reign. Thus he, who, without pity or remorſe, had ſlaughtered above two millions of the human race,—had made ſo many children fatherleſs, and ſo many fathers childleſs,—could not ſurvive the loſs of one beloved ſon, though he had three ſons left to cheriſh his declining age!—Aſtoniſhing proof of exquiſite ſenſibility and the moſt ſavage ferocity dwelling in the ſame boſom. For his great exploits, ſee the article HINDOOSTAN.

GE'NIAL, *adj.* [*genialis*, Lat.] That which contributes to propagation:

Creator Venus, *genial* pow'r of love,
The bliſs of men below and gods above! *Dryden.*

That gives cheerfulneſs, or ſupports life:

Nor will the light of life continue long,
But yields to double darkneſs nigh at hand;
So much I feel my *genial* ſpirits droop. *Milton.*

Natural; native.—It chiefly proceedeth from natural incapacity, and *genial* indiſpoſition. *Brown.*

GE'NIALLY, *adv.* By genius; naturally.—Some men are *genially* diſpoſed to ſome opinions, and naturally averſe to others. *Glanville.*—Gaily; cheerfully.

To GENI'CULATE, *v. n.* [*geniculatum*, Lat.] To grow into joints.

GENIC'ULATED, *adj.* [*geniculatus*, Lat.] Knotted; jointed.—A piece of ſome *geniculated* plant ſeeming to be part of a ſugarcane. *Woodward.*

GENICULA'TION, *ſ.* [*geniculatio*, Lat.] Knottineſs; the quality in plants of having knots or joints.

GE'NII, *ſ.* ſpirits or dæmons, which, in fabulous hiſtory, are ſaid to preſide over the affairs of men. See the articles DÆMON, DÆMONIAC, and DEMONOLOGY, in our fifth volume.

GENILLE', a town of France, in the department of the Indre and Loire: one league north of Loches.

GE'NIO, *ſ.* [Italian; *genius*, Lat.] A man of a particular turn of mind.—Some *genios* are not capable of pure affection; and a man is born with talents for it as much as for poetry, or any other ſcience. *Tatler.*

GENIOGLOS'SUS, *ſ.* [from γενειον, the chin, and γλωσσα, Gr. the tongue.] A muſcle ſo named from its origin

origin in the chin and its inſertion in the tongue. See the article ANATOMY.

GENIOHYOIDÆ'US, *ſ.* [from γενειον, the chin, and υοειδης, Gr. the os hyoides.] A muſcle ſo called from its origin in the chin and its inſertion in the os hyoides.

GENIOPHARYNGÆ'US, *ſ.* [from γενειον, the chin, and φαρυγξ, Gr. the pharynx.] A muſcle ſo called from having its origin in the chin and its inſertion in the pharynx. See ANATOMY, vol. i.

GENIOS'TOMA, *ſ.* [from γενειον, a beard, and στομα, Gr. a mouth; the mouth of the corolla being villoſe or bearded.] In botany, a genus of the claſs pentandria, order monogynia. The generic characters are—Calyx: perianthium inferior, turbinate, five-cleft, permanent: diviſions ſhort, ſharp. Corolla: one-petalled, funnel-form; tube widened, longer than the calyx; throat villoſe-bearded; border five-parted, ſpreading; diviſions ovate, ſharpiſh, the length of the tube. Stamina: filaments five, ſhort, in the throat of the corolla; antheræ oblong, ſtanding out. Piſtillum: germ ovate; ſtyle filiform, longer than the tube; ſtigma cylindric, blunt, grooved. Pericarpium: capſule? oblong, two-celled. Seeds: very many, ſubangular, placed on a filiform receptacle.—*Eſſential Character.* Calyx turbinate, five-cleft; corolla one-petalled, with a villoſe throat, and a five-parted border; capſule oblong, two-celled, many-ſeeded.

Genioſtoma rupeſtris, a ſingle ſpecies; native of the iſle of Tanna in the South Seas.

GENI'PA, *ſ.* in botany. See GARDENIA.

GENIS'TA, *ſ.* [from *genu*, Lat. the knee; either becauſe it is flexible, like that joint, or becauſe it is ſuppoſed to be good for pains there.] In botany, a genus of the claſs diadelphia, order decandria, natural order papilionaceæ or leguminoſæ. The generic characters are—Calyx: perianthium one-leafed, ſmall, tubular, two-lipped; upper lip two-toothed, more deeply divided; lower three-toothed, nearly equal. Corolla: papilionaceous; banner oblong, remote from the keel, the whole reflex; wings oblong, looſe, ſhorter than the others; keel ſtraight, emarginate, longer than the banner. Stamina: filaments ten, connate, emerging from the keel; antheræ ſimple. Piſtillum: germ oblong; ſtyle ſimple, riſing; ſtigma ſharp, rolled in. Pericarpium: legume roundiſh, turgid, one-celled, two-valved. Seeds: ſolitary, uſually kidney-form.—*Eſſential Character.* Calyx two-lipped, two and three-toothed; banner oblong, reflex downwards from the piſtil and ſtamens.

Species. I. Unarmed, or without thorns. 1. Geniſta Canarienſis, Canary geniſta or cytiſus: leaves ternate, pubeſcent on both ſides; branches angular. Leaves obovate, ſomewhat mucronate; but the floral leaves ſubſeſſile, minute; flowers in corymbs, five or ſix together, ſweet. Native of Spain and the Canaries. Cultivated in 1656, by John Tradeſcant, jun. It flowers from May to September.

2. Geniſta candicans, hoary geniſta, or Montpelier cytiſus: leaves ternate, villoſe underneath; peduncles lateral, leafed, ſuſtaining about five flowers; legumes hirſute. Riſes to the height of ſeven or eight feet, ſending out many ſlender branches, the upper parts of which, for more than a foot in length, ſend out ſmall flowering-branches on their ſides, ſupporting five yellow flowers, which appear in June and July: the ſeeds ripen in autumn. This reſembles the foregoing ſpecies, but the leaflets are larger, oval, pubeſcent underneath only, ſharp at both ends; the lateral ſhoots are ſhort; flowers without ſcent; floral leaves petioled, ſcarcely ſmaller than the others; ſeeds four or ſix, ſomewhat kidney-ſhaped, black, ſmooth, ſublucid, with a glandular, prominent, permanent rim, ſhaped like a creſcent, and of a white or yellow colour, round the umbilicus. Native of Spain, Italy, and France. Cultivated in 1748, by Mr. Miller.

3. Geniſta linifolia, flax-leaved geniſta, or broom: leaves ternate, ſeſſile, linear, ſilky underneath. This is a ſmall ſhrub, with branches that are knotty from indentations left by the fallen leaves; the branchlets or ſhoots are leafy, angular, upright, ſilky; leaves crowded, alternate; leaflets nearly equal, ſharp, rolled back at the edge; flowers in racemes at the ends of the branches. Native of the Levant and Spain.

4. Geniſta triquetra, triangular geniſta or broom: leaves ternate, the upper ones ſimple; branches three-ſided procumbent. Native of Spain, Italy, and France; flowers from April to June. It is a hardy evergreen trailing ſhrub, producing a vaſt profuſion of bloom, which renders it eminently conſpicuous in May and June: it rarely produces ſeed. When tied up properly, and trained to a ſtake, it may vie with moſt of our ornamental ſhrubs.

5. Geniſta ſagittalis, jointed geniſta or broom; branches ancipital, membranaceous, jointed; leaves ovate-lanceolate. This ſends out ſeveral ſtalks, which ſpread flat on the ground, and divide into many flat branches, which are jointed, and their two ſides are edged like a broad-ſword; they are herbaceous, but perennial. At each of the joints is placed one ſmall ſeſſile ſpear-ſhaped leaf, ending in a point, of a deep-green colour, and ſmooth; the ſtalks above the leaves have three wings, under them two. Native of France, Germany, Switzerland, Savoy, Auſtria, Carniola, Italy, and Spain. It flowers in June, ſometimes in May, and ripens the ſeeds in September.

6. Geniſta tridentata, or three-toothed geniſta: branches three-ſided, membranaceous, ſomewhat jointed; leaves three-cuſped. Very nearly allied to the foregoing, but all the parts are larger. Native of Portugal. Neither Miller's No. 6, nor that which he has figured in Pl. 138, can be this ſort.

7. Geniſta tinctoria, common dyer's geniſta, or broom: leaves lanceolate, ſmooth; branches ſtreaked round, upright. The roots creep far and wide; ſtems many, angular, tough, from a foot to eighteen inches or two feet in height, ſometimes more; branches ſubdivided, ending in ſhort ſpikes of yellow flowers, with ſtipules between them. Native of moſt parts of Europe, in paſtures and the borders of fields, particularly in dry gravelly or ſandy ſoils; flowering in July. In the old writers it is called baſe broom, green weed, or green wood, dyer's-weed, and wood-waxen. When cows feed on it, their milk, and the butter or cheeſe made from it, are ſaid to be very bitter. A bright yellow colour may be prepared from the flowers; and for wool that is to be dyed green with woad, the dyers prefer it to all others. A dram and half of the powdered ſeeds operates as a mild purgative. A decoction of the plant is ſometimes diuretic, and therefore has proved ſerviceable in dropſical caſes. A ſalt prepared from the aſhes is recommended in the ſame diſorder.

8. Geniſta Sibirica, or Siberian geniſta: leaves lanceolate, ſmooth; branches equal, round, upright. This reſembles the foregoing, but the ſtalks are neither ſtreaked nor angular; and the leaves are ſomething narrower. Native of Siberia.

9. Geniſta florida, Spaniſh dyer's geniſta, or broom: leaves lanceolate, ſilky; branches ſtreaked round; flowers in bundles, directed one way. This riſes with woody ſtalks two or three feet high, ſending out many taper channelled branches, which grow erect; leaves ſmall, alternate; ſpikes of flowers terminating, ſucceeded by ſhort pods, which turn black when ripe, and contain four or five kidney-ſhaped ſeeds; the calyxes as well as the leaves are ſilky and ſhining. Native of Spain; Mr. Ray found it near Naples, by the Camaldules. It flowers in June and July, and the ſeeds ripen in autumn.

10. Geniſta piloſa, hairy geniſta or broom: leaves ſolitary, lanceolate, obtuſe, ſomewhat hairy; peduncles the length of the calyx; ſtandard hairy on the outſide;

branches diffuſed. This differs from the common dyer's weed, No. 7, in having the branches depreſſed on every ſide and procumbent; whereas that is upright. Native of Sweden, Germany, Auſtria, Carniola, Hungary, Swiſſerland, France, Italy, and Spain; not known to grow wild in England till it was diſcovered about Lachford, four or five miles from St. Edmund's Bury in Suffolk, by the late ſir John Cullum, bart. and Mr. Dickſon. Mr. Woodward obſerves that Cavenham and other heaths near Bury appear yellow with the great plenty of theſe flowers; the flowering branches ſtanding up: at other times it is difficult to find this ſhrub, the ſtem and branches being ſo cloſely procumbent, that they are often found even beneath the moſs. It flowers in May.

11. Geniſta humifuſa: leaves lanceolate, ciliate; branches proſtrate, ſtreaked, villoſe. Native of the Levant.

II. Thorny. 12. Geniſta Anglica, Engliſh geniſta, petty whin, or needle furze: thorns ſimple, awl-ſhaped; flowering-branches abbreviated, unarmed; leaves lanceolate, acute; legumes ſtraightiſh. Stem much branched; branches tough, without leaves, furniſhed with extremely ſharp ſlender thorns, from a quarter to half an inch in length; the ſhoots of the year grow in bundles on the ſummits of the old ones, and ſparingly from the ſides, bearing numerous, ſmall, bright green, (glaucous on the young ſhoots, *Ray*,) oval or lanceolate, (narrower and ſharper on the older branches, *Ray*,) ſmooth, entire leaves, intermixed with ſoft ſpines, (ſcattered; but ſometimes there are none, *Relh.*) flowers ſmall, pale, yellow, few; legumes ſhort and broad. Native of Dauphiné, Denmark, and Britain, on heaths, uſually in moiſt ſpongy ground. It flowers from the end of May to July.

13. Geniſta Germanica, German geniſta or broom: thorns compound; flowering-branches elongated, unarmed; leaves lanceolate, hairy; legumes oblong, ſtraightiſh. Stems about a foot and half in height, very much branched; the old branches have no leaves, but ſtrong branched thorns; the younger ones are full of green hairy leaves, of an ovate-lanceolate form, the lower ones broader and rather ovate; they come out either in threes, or ſingly alternate: theſe alſo frequently have ſoft, tender, ſimple, thorns. Native of Germany; Swiſſerland, as about Lauſanne, Baſil, &c. Savoy, on Mont Saleve, near Geneva, obſerved by Ray; Dauphiné, Piedmont, Carniola, and Arragon, in dry woody places. It flowers the end of May or the beginning of June, and ripens its ſeeds in September. Introduced in 1773, by the earl of Bute.

14. Geniſta Hiſpanica, dwarf prickly geniſta or broom: ſpines decompound; flowering branches unarmed; leaves linear-lanceolate, hairy; legumes ovate, ſtraight. This riſes with woody ſtalks, two or three feet high, ſending out many taper-channelled branches, which grow erect; flowers yellow, in terminating ſpikes, ſucceeded by ſhort pods, which turn black when ripe, and contain four or five kidney-ſhaped ſeeds. Native of Spain, South of France, and Carniola; flowers in June and July, and the ſeeds ripen in autumn.

15. Geniſta Luſitanica, Portugal geniſta or broom: ſtem leafleſs; thorns decuſſated. The woody ſtems are leafleſs; the younger ſtems leafy, and covered with decuſſated ſpines. Native of Portugal. Introduced in 1771, by Mrs. Primmet. It flowers from March to May.

16. Geniſta ſcandens, climbing geniſta or broom: ſpines ſimple; ſtem climbing; leaves bipinnate. This is a large ſhrub, with a very long, round, climbing, branched, ſtem, having many ſhort recurved ſpines ſcattered over it. Native of Cochin-china, near rivers, mounting to the top of large trees, and covering them with its golden flowers.

17. Geniſta hirſuta, or hirſute geniſta: ſpines ternate, decuſſated; leaves ſimple, lanceolate; ſpikes terminating, hirſute. This is a very thorny rigid ſhrub, with round branches, leafleſs below, extremely hirſute at the top. Native of Old Caſtile.

Propagation and Culture. All theſe ſhrubs are propagated by ſeeds, which, if ſown in the autumn, will ſucceed much better than if ſown in the ſpring, and a year will be thereby ſaved; as theſe plants ſend out long, ſtringy, tough, roots, which run deep into the ground, they do not bear tranſplanting well, eſpecially if they are not removed young; therefore the beſt way is to ſow a few ſeeds in thoſe places where the plants are deſigned to remain, and to pull up all except the moſt promiſing plants as ſoon as they are paſt danger; after this the plants will require no other culture, but to keep them clean from weeds: but where this cannot be practiſed, the ſeeds may be ſown thin upon a bed of light earth, and when the plants come up, they muſt be kept clean from weeds till the following autumn, when the plants ſhould be carefully taken up and tranſplanted where they are deſigned to remain. Some of the ſorts are very hardy, and will grow in almoſt any ſoil or ſituation; but moſt of them (1, 2, 3, 4, 6, 9, 11, 14, 15, 17,) muſt have a ſheltered ſituation and dry ſoil, to carry them through our winters. The firſt, third, and ſixteenth, require the protection of a green-houſe. The ſorts which do not produce ſeeds here may be increaſed by layers. See Aspalathus, Crotalaria, Hedysarum, Indigofera, Sophora, and Spartium.

GENIS'TA AFRICANA. See Aspalathus, Borbonia, Liparia, Sophora, and Spartium.

GENIS'TA SPARTIUM. See Anthyllis, Genista, Hedysarum, Psoralea, and Ulex.

GENIS'TA SPINOSA. See Hedysarum and Ulex.

GENIS'TÆ AFFINIS. See Psoralea.

GENISTEL'LA. See Aspalathus and Genista.

GEN'ITAL, *adj.* [*genitalis*, Lat.] Generative; ſerving to generation.

GEN'ITAL, *ſ.* the organ of procreation. See Anatomy, vol. i. p. 618–621.

GEN'ITALS, *ſ.* [*genitalis*, Lat. from *geno*, or *gigno*, to beget.] Parts belonging to generation.—Ham is conceived to be Jupiter, who was the youngeſt ſon who is ſaid to have cut off the *genitals* of his father. *Brown.*

GENI'TE, a town of France, in the department of the Correze: eighteen miles weſt of Brive.

GE'NITES, *ſ.* among the Hebrews, thoſe deſcended from Abraham, without any mixture of foreign blood. The Greeks diſtinguiſhed by the name of *genites* ſuch of the Jews as were iſſued from parents, who, during the Babyloniſh captivity, had not allied with any gentile family.

GEN'ITING, *ſ.* [A corruption of *Janeton*, French, ſignifying *Jane* or *Janet*, having been ſo called in honour of ſome lady of that name; and the Scottiſh dialect calls them *Janet*-apples, which is the ſame with *Janeton*; otherwiſe ſuppoſed to be corrupted from *Juneting*.] An early apple gathered in June.—In July come early pears, and plumbs in fruit, *genitings* and codlins. *Bacon.*

GEN'ITIVE, *ſ.* & *adj.* [*genitivus*, Lat.] In grammar, the name of a caſe, which, among other relations, ſignifies one begotten, as, the father *of a ſon*; or one begetting, as, ſon *of a father*.—See the article Grammar.

GE'NIUS, *ſ.* [Latin; *genie*, Fr.] The protecting or ruling power of men, places, or things:

The *genius* and the mortal inſtruments
Are then in council; and the ſtate of man,
Like to a little kingdom, ſuffers then. *Shakeſpeare.*

And as I awake, ſweet muſic breathe,
Sent by ſome ſpirit to mortals good,
Or th' unſeen *genius* of the wood. *Milton.*

A man endowed with ſuperior faculties.—There is no little writer of Pindaric who is not mentioned as a prodigious *genius*. *Addiſon.*—Mental power or faculties:

The ſtate and order does proclaim
The *genius* of that royal dame. *Waller.*

Diſpoſition

Diſpoſition of nature by which any one is qualified for ſome peculiar employment.—A happy *genius* is the gift of nature. *Dryden.*

One ſcience only will one *genius* fit;
So vaſt is art, ſo narrow human wit. *Pope.*

Nature; diſpoſition.—Another *genius* and diſpoſition improper for philoſophical contemplations, is not ſo much from the narrowneſs of their underſtanding, as becauſe they will not take time to extend them. *Burnet.*

Studious to pleaſe the *genius* of the times,
With periods, points, and tropes, he ſtuns his crimes.
Dryden.

The two great ornaments of the human character, *taſte* and *genius*, are correctly drawn, and happily contraſted, by Dr. Blair, in his "Lectures on Rhetoric and the Belles Lettres." His remarks are as follow: "Taſte and genius are two words frequently joined together; and therefore, by inaccurate thinkers, confounded. They ſignify however two quite different things. The difference between them can be clearly pointed out; and it is of importance to remember it. *Taſte* conſiſts in the power of judging: *genius*, in the power of executing. One may have a conſiderable degree of taſte in poetry, eloquence, or any of the fine arts, who has little or hardly any genius for compoſition or execution in any of theſe arts; but genius cannot be found without including taſte alſo. Genius, therefore, deſerves to be conſidered as a higher power of the mind than taſte. Genius always imports ſomething inventive or creative; which does not reſt in mere ſenſibility to beauty where it is perceived, but which can, moreover, produce new beauties, and exhibit them in ſuch a manner as ſtrongly to impreſs the minds of others. Refined taſte forms a good critic; but genius is farther neceſſary to form the poet, or the orator.

"It is proper alſo to obſerve, that genius is a word, which, in common acceptation, extends much farther than to the objects of taſte. It is uſed to ſignify that talent or aptitude which we receive from nature, for excelling in any one thing whatever. Thus we ſpeak of a genius for mathematics, as well as a genius for poetry; of a genius for war, for politics, or for any mechanical employment. This talent or aptitude for excelling in ſome one particular, is, what we receive from nature. By art and ſtudy, no doubt, it may be greatly improved; but by them alone it can never be acquired. As genius is a higher faculty than taſte, it is, according to the frugality of nature, more limited in the ſphere of its operations. It is not uncommon to meet with perſons who have an excellent taſte in ſeveral of the polite arts, ſuch as muſic, poetry, painting, and eloquence, all together: but, to find one who is an excellent performer in *all* theſe arts, is much more rare; or rather, indeed, ſuch an one is not to be looked for. A ſort of univerſal genius, or one who is equally and indifferently turned towards ſeveral different profeſſions and arts, is not likely to excel in any. Although there may be ſome few exceptions, yet in general it holds, that when the bent of the mind is wholly directed towards ſome one object, excluſive, in a manner, of others, there is the faireſt proſpect of eminence in that, whatever it be. The rays muſt converge to a point, in order to glow intenſely. This remark is of great importance to young people; in leading them to examine with care, and to purſue with ardour, the current and pointing of nature towards thoſe exertions of genius in which they are moſt likely to excel.

"A genius for any of the fine arts, always infers or ſuppoſes taſte; and it is clear, that the improvement of taſte will ſerve both to forward and to correct the operations of genius. In proportion as the taſte of a poet, or orator, becomes more refined with reſpect to the beauties of compoſition, it will certainly aſſiſt him to produce the more finiſhed beauties in his work. Genius, however, in a poet or orator, may ſometimes exiſt in a higher degree than taſte; that is, genius may be bold and ſtrong, when taſte is neither very delicate nor very correct. This is often the caſe in the infancy of arts; a period when genius frequently exerts itſelf with great vigour, and executes with much warmth; while taſte, which requires experience, and improves by ſlower degrees, hath not yet attained to its full growth. Homer and Shakeſpeare are proofs of this fact, in whoſe admirable writings are found inſtances of rudeneſs and indelicacy, which the more refined taſte of later writers, who had far inferior genius to them, would have taught them to avoid. As all human perfection is limited, this may very probably be the law of our nature, that it is not given to one man to execute with vigour and fire, and, at the ſame time, to attend to all the refined graces that belong to the exact perfection of his work: while, on the other hand, a thorough taſte for thoſe inferior graces, is, for the moſt part, accompanied with a diminution of ſublimity and mental power."

The manners and literary character of thoſe who are uſually termed *men of genius*, cannot be more forcibly depicted than in the "Eſſays" recently publiſhed by J. D'Iſraeli. He juſtly obſerves that 'the modes of life of a man of *genius* are often tinctured with eccentricity and enthuſiaſm. Theſe are in an eternal conflict with the uſages of common life. His occupations, his amuſements, and his ardour, are diſcordant to daily purſuits, and prudential habits. It is the characteriſtic of genius to diſplay no talent to ordinary men; and it is unjuſt to cenſure the latter when they conſider him as born for no human purpoſe. Their pleaſures and their ſorrows are not his pleaſures and his ſorrows. He often appears to ſlumber in diſhonourable eaſe, while his days are paſſed in labours, more conſtant and more painful than thoſe of the manufacturer. The world is not always aware that to meditate, to compoſe, and even to converſe with ſome, are great labours: and as Hawkeſworth obſerves, "that wearineſs may be contracted in an arm chair."

'Such men are alſo often cenſured for an irritability of diſpoſition. Many reaſons might apologize for theſe unhappy variations of humour. The occupation of making a great name, is, perhaps, more anxious and precarious than that of making a great fortune. We ſympathiſe with the merchant when he communicates melancholy to the ſocial circle in conſequence of a bankruptcy, or when he feels the elation of proſperity at the ſucceſs of a vaſt ſpeculation. The author, how great ſoever his genius, is not leſs immerſed in cares, or agitated by ſucceſs; for literature has its bankruptcies and its ſpeculations. The anxieties and diſappointments of an author, even of the moſt ſucceſsful, are incalculable. If he is learned, learning is the torment of unquenchable thirſt, and his elaborate work is expoſed to the accidental recollection of an inferior mind, as well as the fatal omiſſions of wearied vigilance. If he excels in the magic of diction, and the graces of fancy, his path is ſtrewed with roſes, but his feet bleed on inviſible yet piercing thorns. Rouſſeau has given a glowing deſcription of the ceaſeleſs inquietudes by which he acquired ſkill in the arts of compoſition; and has ſaid, that with whatever talent a man may be born, the art of writing is not eaſily obtained.'—

'It is obſerved by M. La Harpe, that as it has been proved there are ſome maladies peculiar to artiſts, there are alſo ſorrows which are peculiar to them; and which the world can neither pity nor ſoften, becauſe it cannot have their conceptions. We read not without a melancholy emotion, the querulous expreſſions of men of genius. We have a little catalogue *de calamitate litteratorum*; we might add a volume by the addition of moſt of our own authors.—The votaries of the arts and ſciences are called by Cicero, Heroes of Peace; their labours, their dangers, and their intrepidity, make them heroes;

heroes; but peace is rarely the ornament of their feverish exiſtence.'

'Men of genius are often reverenced only where they are known by their writings. In the romance of life they are divinities, in its hiſtory they are men. From errors of the mind, and derelictions of the heart, they may not be exempt; theſe are perceived by their acquaintance, who can often diſcern only theſe qualities. The defects of great men are often the conſolation of dunces. For their foibles it appears more difficult to account than for their vices; for a violent paſſion depends on its direction to become either excellence or depravity; but why their exalted mind ſhould not preſerve them from the imbecilities of fools, appears a mere caprice of nature. A curious liſt may be formed of

"Fears of the brave and follies of the wiſe." *Johnſon.*

'But it is alſo neceſſary to acknowledge, that men of genius are often unjuſtly reproached with foibles. The ſports of a vacant mind are miſunderſtood as follies. The ſimplicity of truth may appear vanity, and the conſciouſneſs of ſuperiority, envy. Nothing is more uſual than our ſurpriſe at ſome great writer or artiſt contemning the labours of another, whom the public cheriſh with equal approbation. We place it to the account of his envy; but perhaps this opinion is erroneous, and claims a conciſe inveſtigation. Every ſuperior writer has a manner of his own, with which he has been long converſant, and too often inclines to judge of the merit of a performance by the degree it attains of his favourite manner. He errs, becauſe impartial men of taſte are addicted to no manner, but love whatever is exquiſite. We often ſee readers draw their degree of comparative merit from the manner of their favourite author; an author does the ſame; that is, he draws it from himſelf. Such a partial ſtandard of taſte is erroneous; but it is more excuſable in the author than in the reader.

'This obſervation will ſerve to explain ſeveral curious phenomena in literature. The witty Cowley deſpiſed the natural Chaucer; the claſſical Boileau, the rough ſublimity of Crebillon; the forcible Corneille, the tender Racine; the affected Marivaux, the familiar Moliere; the artificial Gray, the ſimple Shenſtone. Each judged alike of the genius of his competitor by that peculiar manner he had long formed for himſelf. In a free converſation they might have contemned each other; and a dunce, who had liſtened without taſte or underſtanding, if he had been a haberdaſher in anecdotes, would have haſtened to repoſit in his warehouſe of literary falſities, a long declamation on the vanity and envy of theſe great men.'—

'It has long been acknowledged that every work of merit, the more it is examined, the greater the merit will appear. The moſt maſterly touches, and the reſerved graces, which form the pride of the artiſt, are not obſervable till after a familiar and conſtant meditation. What is moſt refined is leaſt obvious; and to ſome muſt remain unperceived for ever.—But aſcending from theſe elaborate ſtrokes in compoſition, to the views and deſigns of an author, the more profound and extenſive theſe are, the more they elude the reader's apprehenſion. The happieſt writers are compelled to ſee ſome of their moſt magnificent ideas float along the immenſity of mind, beyond the feeble graſp of expreſſion. Compare the genius of the author with that of the reader; how copious and overflowing is the mind of the one to the other; how more ſenſibly alive to a variety of exquiſite ſtrokes which the other has not yet perceived; the author is familiar with every part, and the reader has but a vague notion of the whole. How many noble conceptions of Rouſſeau are not yet maſtered! How many profound reflections of Monteſquieu are not yet underſtood! How many ſubtile leſſons are yet in Locke, which no preceptor can teach!

'Conſciouſneſs of merit characteriſes men of genius; but it is to be lamented that the illuſions of ſelf-love are not diſtinguiſhable from the realities of conſciouſneſs. If we were to take from ſome men their pride of exultation, we annihilate the germ of their excellence. The perſuaſion of a juſt poſterity ſmoothed the ſleepleſs pillow, and ſpread a ſunſhine in the ſolitude, of Bacon, Monteſquieu, and Newton; of Cervantes, Gray, and Milton. Men of genius anticipate their contemporaries, and know they are ſuch, long before the tardy conſent of the public.'—Yet, after all, we muſt conclude with Hermogenes, that "genius is like a comet; neither its periods nor its effects are known."

GEN'LIS, a town of France, in the department of the Aiſne, and chief place of a canton, in the diſtrict of Chauny: three miles north of Chauny, and twelve ſouth of St. Quintin.

GENNA'DIUS, patriarch of Conſtantinople in the fifth century. He was firſt ordained a preſbyter of the Conſtantinopolitan church, from which ſituation he was elected to the patriarchal dignity in 458, on the death of Anatolius. He employed himſelf with great zeal and diſintereſtedneſs in correcting the relaxed ſtate of diſcipline which prevailed in his dioceſe. In a council of ſeventy-three biſhops which he held in the year 459, he procured the paſſing of a canon againſt ſimoniacal ordinations; and by means of Marcian, whom he appointed ſteward of his dioceſe, eſtabliſhed the diſintereſted regulation, that the oblations made in the reſpective churches, which it had been cuſtomary to claim for the patriarch's treaſury, ſhould thenceforward belong to the officiating clergy. He died in 471. Gennadius, the prieſt of Marſeilles, places him among the celebrated eccleſiaſtical writers, and paſſes encomiums on the quickneſs of his parts, the extent of his learning, and the elegance of his ſtyle. He was the author of A Commentary upon the Book of Daniel; and of ſeveral Homilies, and other works. Theſe writings, however, are no longer extant; and no remains of them have reached modern times, excepting A Synodal Epiſtle againſt Simony, inſerted in the fourth volume of the Collect. Concil. and two fragments, one from a letter or treatiſe againſt the anathemas of Cyril of Alexandria, quoted by Facundus biſhop of Hermiana, lib. ii. cap. 4. and the other from a treatiſe addreſſed to Parthenius, and quoted by Leontius in his common-places concerning the origin of the ſoul.

GENNA'DIUS, patriarch of Conſtantinople in the fifteenth century, whoſe original name was George Scolarius, which he changed upon embracing the eccleſiaſtical life. His abilities recommended him to employment at court, where he roſe to the office of ſecretary to the emperor John Palæologus, and was afterwards appointed chief judge of the Greeks. In 1438 he accompanied the emperor into Italy, to meet the council of Florence, for the purpoſe of bringing about an union between the Greek and Latin churches. After the return of Scholarius to Conſtantinople, he united with Mark of Epheſus in ſtrongly oppoſing the reception of thoſe terms of union to which the emperor had acceded, both by his perſonal influence and by his writings. He died about the year 1460; and was the author of An Explanation of the Chriſtian Faith, delivered before the Turkiſh Emperor Mahomet, inſerted in Greek, Latin, and Turkiſh, in Cruſius's *Turco-Græcia*, lib. ii. and in Greek and Latin in David Chytræus's *De Statu Eccleſiarum in Græcia*. A book containing Articles of Faith, addreſſed to the ſame emperor, in the form of a dialogue between a Turk and the patriarch, which is inſerted in the Hæreſiologia, publiſhed at Baſil 1556, and ſeparately edited at Helmſtadt, 1611, 8vo. A Treatiſe concerning Predeſtination, firſt edited in Greek by David Hæchelius, 1593, 4to. and afterwards in Greek and Latin by Frederic Morell, and ſubjoined to the Appendix to the Works of St. Baſil, Paris, 1618, &c. A Treatiſe on the Doctrine of the Trinity, publiſhed in Greek and Latin by Aldus Manutius, 1501, 4to. and a vaſt number of letters,

letters, orations, homilies, theological diſſertations, controverſial tracts, &c. which ſtill remain in manuſcript in different public libraries.

GENNA'DIUS, an eccleſiaſtical writer who flouriſhed towards the cloſe of the fifth century, was a native of Gaul, and became a prieſt of Marſeilles, and not biſhop of that city as ſome writers have maintained. Both ancients and moderns have differed widely in their judgments concerning his doctrines. This, at leaſt, is certain, that he controverted the opinions of St. Auguſtine on the ſubjects of grace and predeſtination, in which he concurred with the learned Fauſtus biſhop of Riez. From a catalogue given of his works, it appears, that he had written eight books againſt all the hereſies, ſix books againſt Neſtorius, three books againſt Pelagius, and a treatiſe concerning the Millennium and the book of Revelation, which are no longer extant. The only remains of this author which have reached our times are, a treatiſe *De Viris illuſtribus*, which is a continuation of St. Jerome's Catalogue of Eccleſiaſtical Writers, from 392 to 395, and has been printed with it at different times; and a treatiſe *De Fide, ſeu de Dogmatibus Eccleſiaſticis Liber ad Gelaſium Papam miſſus*. The laſt-mentioned work was for a long time attributed to St. Auguſtine, and was generally inſerted in the editions of his works. It was ſeparately printed with the learned notes of Elmonhorſtius at Hamburgh, in 1614, 4to. Of the time of the author's death nothing is known with any certainty, excepting that it did not take place before the year 395. His learning appears to have been very reſpectable, and the ſtyle of his writings is ſimple, perſpicuous, and elegant. There is a Life of St. Jerome, in the fourth volume of Mabillon's *Vetera Analecta*, which that father aſcribes to this author.

GEN'NE, a town of France, in the department of the Mayne and Loire, and chief place of a canton, in the diſtrict of Saumur, near the Loire: three leagues north-weſt of Saumur.

GEN'NEP, a town of Germany, in the circle of Weſtphalia, and duchy of Cleves, ſituated on the Niers, near the Meuſe. It contains a church for Roman Catholics, and another for Proteſtants: nine miles ſouth-ſouth-weſt of Cleves. Lat. 51. 43. N. lon. 23. 28. E. Ferro.

GEN'NEPER-HUYS, a town of Germany, in the circle of Weſtphalia, and duchy of Cleves: nine miles ſouth-ſouth-weſt of Cleves.

GEN'NES, a town of France, in the department of the Ille and Vilaine, and chief place of a canton, in the diſtrict of La Guerche: five miles north-eaſt of La Guerche.

GENNES'ARET, land of. See GADARENES.

GENNES'ARETH, lake of, or GENASSAR water. See GALILEE, ſea of.

GEN'OA, an ancient and reſpectable ſtate or province of Italy; bounded on the north by Piedmont, the Mileneſe, and the Parmeſan, on the eaſt by Tuſcany, on the ſouth by the Mediterranean ſea, and on the weſt by the county of Nice; about 120 miles in length, but ſcarcely in any part more than twenty in breadth. The country is mountainous, and part of it covered with barren rocks, which ſerve for its defence. Some of the mountains are covered with wood, and ſome yield good paſture. There is not an adequate portion of arable land, ſo that the inhabitants are obliged to purchaſe great part of their corn from Naples, Sicily, and other places; however, they carefully cultivate every place they can, and throughout the year they are ſupplied with excellent legumes and vegetables for the table. They make a conſiderable quantity of wine, and have abundance of excellent fruit, eſpecially citrons, oranges, pomegranates, almonds, and figs. A great number of mulberry trees are raiſed to feed ſilk-worms, and olives grow in great plenty, eſpecially round the Gulf of Spezzia. Salt is produced ſufficient for exportation. A great number of ſmall rivers run from the mountains, but none worthy of any other name than brooks. The inhabitants are Roman catholics, and ſubmit to the tribunal of inquiſition. The proteſtants, who dwell in the towns, are not beloved, but are ſuffered by the magiſtrates to live in peace. The manufactures are not ſo flouriſhing as they formerly were; the moſt conſiderable are velvet, pluſh, damaſk, different kinds of ſilk, for which they purchaſe a great deal of raw ſilk from Meſſina and other places; gold and ſilver ſtuffs, lace, gloves, ſtockings, ribbons, ſoap, paper to imitate the Indian, &c. Other articles of commerce are oil, fruit, macaroni, confectionary, Parmeſan cheeſe, anchovies, &c. The manufactures of the Genoeſe are greatly reduced: too great a price being paid for the articles which they manufacture, and the inſecurity of their ports, contribute greatly to enfeeble their commerce. Genoa has been for ages paſt declared a free port; but then Leghorn is likewiſe a free port with ſtill greater liberty. The banking buſineſs in Genoa is very conſiderable, and the bankers are eſteemed the richeſt in Europe.

The city of Genoa was formerly the capital of Liguria; whence its ſubſequent temporary title of *Ligurian Republic*. It was deſtroyed by the Carthaginians, and rebuilt by the Romans, whoſe ally it became, and whoſe fortune it followed. It fell under the power of the Oſtrogoths, from whom it was taken by Beliſarius. In 670, it was ſacked by the Lombards, under whoſe power it remained till they were expelled from Italy by Charlemagne. It was for ſome time under the German empire, but by degrees erected itſelf into an independent ſtate: Its power ſoon after ſo increaſed by its flouriſhing trade, that, in 806, it reduced the iſland of Corſica, and, in the 11th and 12th centuries, diſtinguiſhed itſelf in the cruſades.

The Genoeſe, in the 12th century, ſubjected the half of Sardinia and the city of Syracuſe, with its dependencies, to their dominion, and even made themſelves maſters of the Black Sea and all its ports, and ſettled themſelves in the Crimea. In the 13th century, they added to their conqueſts the towns of Albengo, Savona, Vintimiglia, and others in their neighbourhood; and for the ſuperiority of the ſea, engaged in a long and troubleſome war with Venice, which laſted till the year 1381. By it they were extremely weakened, and rendered unable to maintain their poſſeſſion of the Crimea, from which they were entirely driven in 1471. In the ſixteenth century, their republic and liberty ſuffered many rude ſhocks; and the inteſtine diſſenſions about the form of government ſo debilitated the ſtate, that they were obliged to put themſelves ſometimes under the protection of the dukes of Milan, and ſometimes under the kings of France: but the latter treating them with intolerable haughtineſs and rigour, they ſtruggled hard, but unſucceſsfully, for liberty, till that naval hero, Andrew Doria, in 1528, reſcued his country out of the hands of their tyrannical maſters, ſettled it in perfect freedom, and eſtabliſhed its independent conſtitution. See the biographical account of DORIA, vol. vi. p. 25. —After that period Genoa generally ſided with Spain, which frequently involved it in quarrels with France: and it alſo had a dangerous neighbour in the dukes of Savoy. In 1684, it was cruelly bombarded by the French, and to ſave itſelf from total deſtruction, was obliged to ſubmit to very hard terms; two of which were, that the doge or duke, with four of the counſellors, ſhould appear in perſon at Verſailles, and aſk pardon; and that the ſtate ſhould diſarm all their gallies to ſix, with a promiſe not to fit out more without the knowledge and conſent of the French king.

In the year 1713, Charles VI. ſold the marquiſate of Finale to the republic of Genoa for a conſiderable ſum of money. In 1743, the queen of Hungary having, at the treaty of Worms, ceded to the king of Sardinia all her rights to the town and marquiſate of Finale, and

demanding that the Genoeſe ſhould deliver up the marquiſate, they entered into a defenſive alliance with France, Spain, and Naples; and, in 1745, declared war againſt the king of Sardinia. The king of Sardinia made himſelf maſter of great part of the ſtate; ſeveral Genoeſe ports were bombarded by an Engliſh fleet; and, by their aſſiſtance, the imperialiſts became maſters of Genoa.—After the city had been thus conquered by the Auſtrians, Botta, the general of the empreſs queen's forces, had, by his inſolent menaces, ſo terrified the ſenate and nobles, that theſe daſtardly grandees reſolved to reſign the whole republic into his hands, and to throw themſelves on his mercy. Adorno alone, who commanded the Genoeſe troops in Savona, behaved with becoming ſpirit: he declared that he was determined to defend the place to the laſt extremity; and that he had made a will, by which he had deſtined all his fortune to the relief of the widows and children of thoſe of his countrymen who might be ſlain during the ſiege. To the meſſengers ſent by the affrighted ſenate to command him to reſign the town to the Auſtrians, he anſwered, "that he had been entruſted with the defence of it by a *free* republic, and would not obey the orders of an *enſlaved* republic to reſign it." Accordingly he ſuſtained a ſiege and blockade of three months. The rapacity of the Auſtrians in the mean time was inſatiable, and they added the moſt intolerable cruelty to their exceſſive extortions. There were, however, in Genoa forty thouſand men, who were neither nobles nor ſenators: but whoſe conduct deſerved a more honourable title than any which kings and ſenates can excluſively beſtow. The Auſtrians were about to carry off the cannon, in order to employ them againſt the allies of the republic; which excited the utmoſt indignation:—during this operation, an officer happened to ſtrike a Genoeſe, who did not obey his orders with ſufficient alacrity; the Genoeſe inſtantly ſtabbed him to the heart: this was the ſignal for a general onſet; the people attacked the Auſtrians with ſtones, which were the only weapons they then had: but they ſoon procured other arms, notwithſtanding the attempt of the doge and ſenate to prevent them. Botta, the imperial general, was mad with rage: "Shall the Auſtrians, (he cried,) who drove the French out of Italy, tremble before a Genoeſe mob?" Yet this Genoeſe mob in 1747, defeated them repeatedly, ſlew ſeveral thouſands of them, made four thouſand priſoners, and at length drove them entirely out of the city. Its tranquillity, after this warfare, was permanently reſtored by the treaty of Aix-la-Chapelle, in 1748.

The ancient nobility conſiſted of twenty-eight families, and were thoſe whom Andrew Doria, in 1528, ſeparated from all the reſt, and declared only capable of holding the chief offices and dignity of doge or duke; all the other inhabitants of Genoa being reduced by him to the claſs of commoners. After that time it was found neceſſary to create other nobility. The nobility of Genoa as a commercial republic, were always allowed to keep manufactures of velvet, ſilk, and cloth; to farm the duties, and to have ſhares in merchant veſſels; but all other buſineſs and handy-crafts were forbidden. The form of government in this republic has always been ariſtocratic. The chief was called doge, or duke, to which dignity no perſon was promoted till he was fifty years of age, and had for fifteen years left off all trade or occupation not conſiſtent with nobility. Every two years a new doge was choſen; and the former incapacitated during five years to hold again the ſame poſt. However, he had a procurator's office aſſigned him, and a penſion of five hundred ſcudi for life. The fleet of this republic, anciently ſo celebrated for its victories over the Saracens, Piſaneſe, Venetians, Spaniards, and Turks, and for continuing a conſiderable time maſters of Sardinia, Malta, Majorca, Minorca, Candia, Cyprus, and many other places in and near the Mediterranean and Archipelago, and even of the Black ſea, the Crimea, and other parts, has for a number of years paſt been reduced to only ſix gallies.

In the ſubſequent hiſtory of this republic, nothing particular occurs till the commencement of the French revolution, and the invaſion of Italy by the armies of that republic. Upon this occaſion, the French made the ſtricteſt promiſes to obſerve the reſpect due to the ſovereignty of Genoa, on its own territory; and they were kept, accordingly, on this occaſion, to the particular ſatisfaction of the Genoeſe, who were exceedingly ſolicitous to preſerve their neutrality in the midſt of hoſtilities which it was not in their power to remove from their neighbourhood. The maſs of the inhabitants of Genoa, however, was, in 1794, inclined to the French ſyſtem, but the nobles continued inveterate to democratical principles. In the diſtricts ſituated along the mountainous country, bordering upon the territories of Genoa, numbers of banditti infeſted the roads; and were privately encouraged by the Auſtrian emiſſaries at Genoa, whoſe reſidence in that city was ſtrongly ſuſpected to be connived at by ſome leading men in the Genoeſe government. Theſe ſuſpicions, and the repugnance of the nobles to favour popular notions, prevented a cordial correſpondence from ſubſiſting between this ſtate and the French republic.

As the nobility of Genoa exerciſed the ſupreme ſway, they were juſtly apprehenſive that the French, if ſucceſsful, would deſtroy the ariſtocracy, and erect a government entirely democratical. From that motive, they oppoſed the projects of the French, by every impediment they could poſſibly throw in their way; but the torrent of that irreſiſtible fortune, which attended the triumphant arms of France, overwhelmed Genoa in common with the reſt of Italy. The majority of the people were deſirous of a popular government. Feuds had, of courſe, ariſen amongſt them and the dependents of the nobility. A deſperate fray took place betwixt both parties, ſhortly after the ſigning of the preliminaries of peace between the emperor and the French. Elated by that event, the republican party raiſed a violent commotion in the city, and proceeded to open force, in ſupport of their pretenſions: but many of them were killed, and the inſurrection was ſuppreſſed. As their principal leaders had fallen, their projects were conſidered as at an end, and they were treated with exceſſive ſeverity. Determined, however, not to yield, they applied to Bonaparte for protection. This was readily granted, and the French having taken poſſeſſion of the city, the enemies to the ariſtocracy could no longer, with ſafety, be oppoſed. Their opponents yielded, and, in 1797, agreed to the eſtabliſhment of a commonwealth, under the name of the *Ligurian republic*, on the principle of a perfect equality of rank and privileges among all the claſſes of ſociety. The French ſyſtem of legiſlation took place in every reſpect; and the territory of Genoa was divided into communes and municipalities, in imitation of France.

Owing to the ſucceſſes of the Auſtro-Ruſſians, Genoa and its ſmall territory were the only poſſeſſions remaining to France, in Italy, at the cloſe of the year 1799. In the following year, Genoa was the head quarters of the French, commanded by Maſſena, who, on the 5th of April, was ſuddenly ſurpriſed by the appearance of an Engliſh fleet, under lord Keith, in the gulf, off the city, which was ſoon blockaded in form; while, on the other hand, the army of the imperial general Melas, approached cloſely to it by land. The Auſtrians immediately made a general attack on the French army. The French were driven as far back as Ruha, which they entered in the evening.

Though forced to retire, the French, with much bravery, defended the city till the 15th of May, when the Engliſh fleet began to bombard Genoa every night. The populace, particularly the women, ran about the ſtreets,

ſtreets, ſetting up frightful cries for peace; and a general inſurrection againſt the French would have enſued, if the efforts of the French ſoldiers to reſtrain it had not been ſeconded by a number of individuals among the inhabitants. But the illuſions of hope, at laſt, vaniſhed. Proviſions were entirely exhauſted, even the laſt horſes and dogs were conſumed, when Maſſena received a letter from general Melas, inviting him to an interview with lord Keith, and the generals Otto and St. Julian, who offered him a capitulation on the moſt honourable terms. To this firſt overture, he replied, that he would conſider of it; though, in reality, he had nothing to conſider. The day after, he received another meſſage with the ſame terms. He then ſent the adjutant-general Andreaux, under pretence of ſome buſineſs relating to the priſoners, to Rivolo, in order that he might receive the propoſals of the allies, and enter, without any further delay, into a negociation for peace.

The firſt article of capitulation propoſed by the allies, was, that the army ſhould return to France, but that the general ſhould remain a priſoner of war. "You, ſir, (ſaid lord Keith to Maſſena,) are worth twenty thouſand men." But Maſſena ſaid, "that no negociation would be gone into, if the word capitulation was to be made uſe of." On the 4th of June, the allied generals, having given up their firſt propoſal, reſumed the negociation. In the mean time, the city of Genoa, containing a population of one hundred and ſixty thouſand ſouls, though a prey to all the horrors of famine, remained quiet. A great number of old people, women, and children, reduced to the neceſſity of attempting to ſuſtain nature by herbs, roots, and impure animals, died of diſeaſes or inanition. This melancholy picture was daily exhibited to view by the riſing ſun. Mothers were found dead with hunger, and children, at the breaſt, alſo dead, or dying.

On the 4th of June, 1800, the principal articles for the evacuation of Genoa were agreed upon between the French adjutant-general Andreaux, on the one part, and major-general Reſt, a ſtaff officer in the imperial ſervice, with the Engliſh captain Rivers, on the other. On the 5th, lord Keith, commander of the combined naval forces in the Mediterranean, general Otto, commander of the blockade of Genoa, with general St. Julian, who was charged with the political part of the negociation, were met by general Maſſena, commander in chief of the French army in Italy. Each of theſe parties was accompanied by only two or three gentlemen. In this conference, Maſſena diſplayed much French fineſſe under the cloak of an apparent gaiety, which formed a complete contraſt with the gravity of the other contracting party, and was attended with this advantage, that it did not look as if he was greatly alarmed for the ſituation of his army. And it was, perhaps, owing to that eaſe and gaiety of manner that he obtained, in the end, all that he had demanded. In the whole of the conference, lord Keith treated Maſſena, as the general himſelf acknowledged, in a very civil and liberal manner. His lordſhip diſclaimed all hard conditions, and ſaid, "General, the defence you have made has been ſo heroic, that it is impoſſible to refuſe you any thing you aſk." At length, Maſſena ſigned the treaty for the evacuation of Genoa, and the contracting parties mutually gave hoſtages. The Auſtrians took poſſeſſion of the gates of the city, and the Engliſh of the entrance into the harbour. The battle of Marengo, however, ſoon after, changed the fate of Genoa; it was again ſurrendered by general Melas to the French, and again the *Ligurian republic* was for a ſhort period eſtabliſhed. Bonaparte was crowned king of Italy on the 26th of May, 1805; and it was expected that Genoa would ſoon be made an appendage to that newly-created kingdom. He however thought fit to unite it, not to his kingdom of Italy, which was to paſs into the hands of another perſon, but to the *French empire*. This took place on the 2d of June following. The reaſon aſſigned for incorporating this territory with France, was the refuſal of Great Britain to acknowledge the Ligurian republic. The ancient Liguria is now divided into three department, of which Genoa, Savona, and Chiavari, are the chief cities.

The city of Genoa is about ten miles in circumference, and defended towards the land by a double wall. Several baſtions are erected along the ſea-ſhore, on rocks which riſe above the water. The ſtreets are in general narrow, but clean and well-paved; two, called the *Strada Nuova* and *Strada Balbi*, are filled with magnificent palaces, built with marble. It is the ſee of an archbiſhop. The cathedral is built in the Gothic ſtyle, and paved with black and white marble, in the treaſury of which is preſerved a curious hexagon diſh, ſaid to be of a ſingle emerald, found at Ceſarea in the time of the cruſades, which the Genoeſe received as their ſhare of the plunder. This precious mineral is now diſcovered to be nothing more than coloured glaſs, as noticed under the article GEM, p. 301 of this volume. Beſides the cathedral, it contains thirty-two pariſh churches, many of which are magnificent, and adorned with ſculptures and pictures by the beſt maſters. The doge's palace is large, without decoration, except two ſtatues of John Andrew Doria and Andrew Doria, larger than the life, at the entrance. The arſenal contains curious arms and military machines, models for bridges, the armour worn by a number of Genoeſe women in the cruſades, a ſhield containing 120 piſtols, made by Julius Ceſar Vecche, for the purpoſe of aſſaſſinating the doge and ſenate at one time. Other public buildings, entirely of marble, are the Albergo, which ſerves as a poor houſe and houſe of correction, where is a beautiful relievo, the Virgin ſupporting a dead Chriſt, by Michael Angelo; and the Aſſumption of the Virgin, in white marble, by Puget, an inimitable piece of ſculpture; a large hoſpital for the ſick of all nations and religions; the Conſervatory, for educating and portioning 300 poor girls; and a great number of palaces belonging to the nobility. They reckon at Genoa ſixty-nine convents of men and women. The buildings are in general of marble. Yet it is not extravagance, but neceſſity, which compels the uſe of this material; the ſurrounding mountains abounding with nothing elſe but quarries of that beautiful ſtone. The number of inhabitants is eſtimated at 160,000: ſixty-three miles ſouth of Milan. Lat. 44. 25. N. lon. 26. 35. E. Ferro.

GEN'OLHAC, or GENOUILLAC, a town of France, in the department of the Gard, and chief place of a canton, in the diſtrict of Alais: five leagues north-weſt of Alais, and ten weſt of Pont St. Eſprit.

GENO'SA, a town of Italy, in the kingdom of Naples, and province of Otranto: ten miles ſouth-eaſt of Otranto.

GENOVE'SI (Anthony), a celebrated Neapolitan philoſopher, born in 1712, at Caſtiglione, in the diſtrict of Salerno. His father deſtined him from his earlieſt years to the church; and with this view had him inſtructed in the Latin language and the peripatetic philoſophy, which was then prevalent in all the ſchools. In his ſixteenth year he poſſeſſed ſo much readineſs in diſputation, that he was able to reduce to a dilemma the moſt experienced monks in the convents of the place, though he could not form a clear idea either of the ſubject of the diſpute, or of the common terms of the art by which he bewildered his antagoniſt. His penetration and boldneſs in doubting every thing that appeared not founded on reaſon, excited, at an early period, his ſuſpicion of a philoſophy which preſented nothing but obſcurity, and an ardent deſire to obtain a ray of light which might conduct him to the paths of truth. His progreſs in theology and juriſprudence, and particularly the ſciences, civil and canon law, excited general aſtoniſhment, inſomuch that the archbiſhop of Conza, conceiving

ceiving a high opinion of his talents, admitted him as teacher of rhetoric into his ſeminary. After the death of his patron, who conſecrated him a prieſt in 1736, he left the ſeminary of Salerno, and repaired to Naples to follow the practice of the law. But his turn for ſolitary meditation being ill ſuited to the declamation of a court of juſtice, he reſolved to devote himſelf to philoſophy. After preparing himſelf at Naples by reading and ſtudying the ancient and modern philoſophers, he obtained the place of extraordinary-profeſſor of metaphyſics. He commenced a courſe of lectures in November 1741, and the boldneſs of his manner, and the clearneſs with which he explained and illuſtrated the principles of his ſyſtem, brought him an uncommon concourſe of ſcholars. The general principles on which he founded his philoſophy were as follows:—Every thing that has no relation to the well-being of man, and for which reaſon can aſſign no grounds, ought to be entirely baniſhed from philoſophy. The greater part of the peripatetic ontology he conſidered as uſeleſs. In regard to the doctrine of the exiſtence of matter, extenſion, the nature of ſpace, motion, eternity, and the like, he candidly acknowledged his ignorance, and aſſerted that no philoſopher had ever yet comprehended it. A ſyſtem of metaphyſics which conducted back the mind to the ſtraight road to truth, could not fail to ſtir up againſt the author the ſlaves of the old empire of darkneſs and ignorance, who confounded reaſon and infidelity. Scarcely had the firſt part of his Metaphyſics made its appearance in 1743, when a hoſt of foes ſtarted up againſt him from all quarters. In every page they found traces or proofs of ſcepticiſm and unbelief; and he was even accuſed of opening a door to freethinking in Italy, becauſe he recommended the works of Galileo, Grotius, and Newton. But Galiani, the director of the Neapolitan univerſities, ſincerely rejoiced to ſee ſuch a light kindled up in his native country; and he had nothing ſo much at heart as to give the exalted genius of Genoveſi every poſſible opportunity to ſpread inſtruction among the people. He therefore perſuaded the king to beſtow on him the vacant place of profeſſor of ethics, and thus opened to him a new field for combating the ignorance and prejudice of the ſchools. Genoveſi taught this ſcience according to a plan which was totally unknown in the ſeminaries of Naples. He interwove in his lectures the hiſtory of the human paſſions; and enlivened them by a boldneſs and ſpirit which were peculiarly his own. At this time there were a great many works on logic uſed in the ſchools of Italy, but none of them gave rules for thinking and judging of objects in a rational manner. To remedy this deficiency, Genoveſi compoſed a new ſyſtem of logic, which he dictated in his private lectures, and which was publiſhed in 1745, under the title of *Elementorum Artis Logico-criticæ, Libri quinque.* Such a ſyſtem of logic, in a public ſchool of Italy, was a phenomenon of the happieſt influence. It put into the hands of young perſons the key of truth, and enabled the author to bring out, with more advantage, the ſecond and third part of his Metaphyſics, in which he treated on the doctrine of the ſoul and on natural theology. This he did in the years 1747 and 1751. The ſame ſpirit of love, truth, and forbearance, prevails in his Chriſtian theology, which he taught in private lectures, under the title of *Omnigenæ Theologiæ Elementa, Hiſtorico-critico-dogmatica.* He alſo publiſhed Eſſays on Agriculture, with Conſiderations on the true Object of the Sciences, printed in 1753. In 1754, Genoveſi opened, in the univerſity of Naples, his new profeſſorſhip in domeſtic economy, with an introductory lecture. His chief object was, while he taught the principles of political economy, to inſpire the Neapolitan youth with the ſocial and civil virtues, and above all a public ſpirit of patriotiſm, without which no nation can attain to that height of proſperity of which it is ſuſceptible. With this view, he cauſed Carey's Hiſtory of the Engliſh Trade to be tranſlated into Italian, under his own inſpection, and publiſhed at Naples in 1757, with many uſeful notes. He alſo cauſed to be republiſhed at Naples the excellent Treatiſe on Agriculture by Coſino Trinci of Piſtoia, accompanied with an eſſay, in which he explained the cauſes of the decline and neglect of agriculture in the kingdom of Naples. In 1765, he publiſhed another no leſs important treatiſe, in which he examined the queſtion, Why countries, the moſt fruitful by nature, are often expoſed to the miſeries of ſcarcity and famine? While employed in publicly teaching political economy, he had the pleaſure of ſeeing his Logic and Metaphyſics introduced, not only into different univerſities, but alſo into various convents and monaſteries. This encouraged him to turn his attention, during his leiſure hours, to the other departments of philoſophy, the object of which is to improve the underſtanding; and in 1758 he publiſhed, with general approbation, *Meditazioni filoſophiche ſulla Religione e ſulla Morale,* in which he ſhews the connection between natural religion and morality. His humorous letters, which appeared in 1759, under the title of *Lettere all Amico Provinciale,* in oppoſition to the *Diſſertazini Filoſophiche* of Paſquale Magli, were read with much pleaſure. In 1764, he gave to the public a treatiſe *De Jure & Officiis,* which he had dictated to his pupils at private hours, and in which he deduced the duties and rights of man from nature. His *Lettere Academiche,* in which he examined the celebrated queſtion, Whether the ſciences have been of more hurt than benefit to mankind? appeared alſo in 1764. He was induced to undertake this work in conſequence of the writings of Rouſſeau, who at that time made a great noiſe in the world, and by the inſtigation of his literary friends. Some dialogues, added at the end, are a concealed ſatire on the Neapolitan laws. The *Conſiderazioni ſulle Scienze,* added to his Logic, abounds with new and ingenious ideas. In the Italian metaphyſics he diſpenſes with the dark ſubject of ontology, and begins with coſmology. But his maſter-piece was the Italian Syſtem of Morality, the firſt part of which appeared in 1767, under the title of *Dicoſyna*: the total derangement of his health, however, prevented him from completing his labour. The ſeeds of a mortal diſeaſe had been long lurking in the conſtitution of this eminent man. In 1768 his complaints increaſed ſo much, that he was incapable of continuing his lectures. That he might not have to ſtruggle at the ſame time with poverty, the king made an addition to his ſalary; but he died on the 22d of September, 1769, of the dropſy in the breaſt, in the fifty-ſeventh year of his age, lamented by all thoſe who had at heart the improvement of their country, and particularly by the Neapolitan youth, for the ſake of whoſe inſtruction he had renounced all ſocial enjoyment, and even ſacrificed his life. His principal works were reprinted in 1764, in 5 vols. 4to.

GENOUILLA'T, a town of France, in the department of the Creuſe, and chief place of a canton, in the diſtrict of Bouſſac; three leagues weſt of Bouſſac.

GENOUILLE', a town of France, in the department of the Charente: ten miles weſt of St. Jean d'Angely.

GENOUILLE', a town of France, in the department of the Vienne: one league ſouth of Civray.

GEN'SAC, a town of France, in the department of Gironde, and chief place of a canton, in the diſtrict of Libourne: three leagues ſouth-eaſt of Libourne, and three north of Caſtelmoron d'Albert.

GEN'SERIC, or GIZERIC, a renowned king of the Goths or Vandals. See the article GOTHS, in this volume.

GENT, *adj.* [old French.] Elegant; ſoft; gentle; polite. *A word now diſuſed:*

She, that was noble, wiſe, as fair and *gent,*
Caſt how ſhe might their harmleſs lives preſerve. *Fairfax.*

GENTEEL', *adj.* [*gentil,* Fr.] Polite; elegant in behaviour;

behaviour; civil.—He had a *genteeler* manner of binding the chains of this kingdom than moſt of his predeceſſors. *Swift.*—Graceful in mien.—So ſpruce that he can never be *genteel*. *Tatler.*—Elegantly dreſſed.—Several ladies that have twice her fortune, are not able to be always ſo *genteel*, and ſo conſtant at all places of pleaſure and expence. *Law.*

GENTEEL'NESS, *ſ.* Elegance; gracefulneſs; politeneſs.—Parmegiano has dignified the *genteelneſs* of modern effeminacy, by uniting it with the ſimplicity of the ancients, and the grandeur and ſeverity of Michael Angelo. *Reynolds.*—Qualities befitting a man of rank.

GENTEEL'Y, *adv.* Elegantly; politely.—After a long fatigue of eating and drinking, and babbling, he concludes the great work of dining *genteelly*. *South.*—Gracefully; handſomely.

GEN'TIAH, a town of Aſia, in the country of Aſſam: 370 miles eaſt of Patna. Lat. 25. 10. N. lon. 92. 10. E. Greenwich.

GEN'SING, *ſ.* [Chineſe.] A reſtorative root brought from China. See the article PANAX.

GENTIA'NA, *ſ.* [from Gentius, king of Illyria.] GENTIAN; in botany, a genus of the claſs pentandria, order digynia, natural order rotaceæ, (Gentianæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-parted, ſharp; diviſions oblong, permanent. Corolla: petal one, tubular at the bottom, imperforate, at the top five-cleft, flat, withering, various in form. Stamina: filaments five, ſubulate, ſhorter than the corolla; anther ſimple. Piſtillum: germ oblong, cylindric, length of the ſtamens; ſtyles none; ſtigmas two, ovate; (germ ſuperior; ſtyle ſimple, or two ſeſſile ſtigmas, *Gærtner.*) Pericarpium: capſule oblong, columnar, acuminate; ſlightly bifid at the tip, one-celled, two-valved. Seeds: numerous, ſmall, (fixed all round to the walls of the capſule, *G.*) receptacles two, each faſtened longitudinally to a valve.—*Eſſential Character.* Corolla monopetalous; capſule ſuperior, two-valved, one-celled; with two longitudinal receptacles.

Deſcription. The numerous ſpecies of this genus have very few characters in common; ſome of them indeed differ ſo much from others, that they have been ranged under ſeparate genera, and ſome are yet of opinion that the genus ſhould be divided. They are all herbaceous plants; the gentians properly ſo called are perennial; moſt of the gentianellas and the centauries are annual; the leaves are ſimple, ovate, lanceolate, or linear, or between theſe figures, oppoſite on the ſtem, and entire; commonly marked with five or three ſtrong nerves; flowers either axillary or terminating, ſolitary or elſe in bunches or whorls; antheræ coaleſcing in ſeveral of the ſpecies, as in ſyngeneſia monogamia. The figure of the fruit is conſtant: but both that and the number in the flower varies much in the different ſpecies. Some ſpecies exclude a fifth part of the number in the flower. One adds three parts of the number in the flower. One ſpecies has the neck of the corolla ſpreading: a ſecond has the neck cloſed with hairs: a third has the ſegments of the corolla ciliate: a fourth has a bell-ſhaped, upright, plaited border: in a fifth it is ſtarred, with ſmall ſegments interpoſed between the larger ones: ſome have a bell-ſhaped, and others have a funnel-ſhaped corolla, &c.

Species. I. Corollas five-cleft or thereabouts, and ſomewhat bell-ſhaped. 1. Gentiana viſcoſa, or clammy gentian: corollas five-cleft, one-ſtyled; panicles trichotomous; bractes perfoliate; leaves oblong, three-nerved. See EXACUM *viſcoſum*, vol. vii. p. 92.

2. Gentiana lutea, or yellow gentian: corollas uſually five-cleft, wheel-ſhaped in whorls; calyxes ſpathaceous. Root thick, of a yellowiſh brown colour, and very bitter taſte; lower leaves petioled, oblong-ovate, a little pointed, ſtiff, yellowiſh green, having five large veins on the back, and plaited; ſtem three or four feet high and more, with a pair of leaves at each joint, ſeſſile or almoſt embracing, of the ſame form with the lower ones, but diminiſhing gradually to the top; flowers in whorls at the upper joints; when the flower opens the calyx burſts on the ſide; fruit ſhort, ſwelling in the middle; ſeeds often barren. Native of Lapland, Sweden, Germany, Swiſſerland, France, Italy, and North America. Haller obſerves that it occupies large tracts of country, untouched by any cattle. It flowers in June and July.

Our old authors call it *felwort* and *bitterwort*. Before hops had eſtabliſhed their reputation, this with many other bitter herbs was occaſionally uſed in brewing. Mr. Houghton (at the end of the 17th century) affirms, that he has divers times ſold it for that purpoſe. The root of this ſpecies of gentian, imported from Swiſſerland, Germany, &c. is the principal bitter now employed in medicine, though the roots of ſeveral other ſorts are ſaid to be equally efficacious, and are even preferred by ſome. As the intenſe bitters are generally admitted to be not only tonic and ſtomachic, but alſo anthelmintic, antiſeptic, emmenagogue, antiarthritic, and febrifuge, this root has a better claim to the poſſeſſion of theſe powers than moſt of the kind. Many dyſpeptic complaints, though ariſing from the debility of the ſtomach, are more effectually relieved by theſe bitters than by Peruvian bark: and gentian, joined with equal parts of tormentil or galls, has conſtantly ſucceeded, as we are told by Dr. Cullen, in curing intermittents, if given in ſufficient quantity. As a ſimple bitter, gentian is rendered more grateful to the ſtomach by the addition of an aromatic, and for this purpoſe orange-peel is commonly uſed. Gerarde informs us, that "maſter Iſaac de Laune, a learned phiſition, ſent him plants of this for the encreaſe of his garden from Burgundie: and that it is named in Engliſh *felwoort gentian*, *bitterwoort*, *baldmoyne*, and *baldmoney*."

3. Gentiana purpurea, or purple gentian: corollas uſually five-cleft, bell-ſhaped in whorls; calyxes truncate. Root as thick as a man's arm, and two feet long, white within and ſtriated on the outſide, extremely bitter, and uſed medicinally in ſome countries, inſtead of G. lutea, with equal ſucceſs; ſtem ſmaller, a foot or eighteen inches in height; leaves ſomewhat broader. Haller is of opinion that it can ſcarcely be ſeparated from the ſixth ſpecies. Native of Denmark, Swiſſerland, and Sileſia.

4. Gentiana macrophylla, or long-leaved gentian: flowers five-cleft, ſeſſile, in whorls; root-leaves equal to the ſtem, which is almoſt naked. Root creeping, with a tranſverſe ſtock, and abundance of whitiſh fibres; root-leaves often a ſpan in length, ſtanding up above the ſtem, broad-lanceolate, five-nerved, ſheathing at the baſe; flowering-ſtem coming out on the ſide of theſe, procumbent at the bottom but gradually riſing, having only one or two pairs of leaves, beſides the floral ones on the top. In its habit this is between the purpurea and cruciata, as decumbens and algida are between this and pneumonanthe. The herbaceous part is hardly bitter. Native of all Siberia, eſpecially the eaſtern part, where the cruciata is not found; flowering in July and Auguſt.

5. Gentiana campanulata, or bell-ſhaped gentian: corollas bell-ſhaped, ſeven-cleft, ſtreaked, unſpotted; calyxes ſeven-cleft. Root yellow on the outſide, very bitter, fuſiform, branched. Native of Carinthia, on Mount Garten in Reichenau; flowering in July. Diſcovered originally by Burſer.

6. Gentiana punctata, or ſpotted-flowered gentian: corollas bell-ſhaped, five-cleft or thereabouts, dotted; calyxes five-toothed. This agrees in many reſpects with G. pannonica, but the leaves are more ovate, leſs elongated, and more ſtrict. Native of Auſtria, Sileſia, Italy, &c.

7. Gentiana pannonica, or rough gentian: corollas bell-ſhaped, ſix or ſeven-cleft, dotted; calyxes uſually ſix-cleft; ſtem-leaves lanceolate, acuminate. Root yel-

lowiſh on the outſide, whitiſh within, intenſely bitter: the whole plant is ſmooth and ſhining; ſtem from half a foot to two feet in height, round or ſlightly angular, erect, a finger thick at the baſe, which is covered with ſheathing ſcales, having a bifid or trifid mouth; leaves oppoſite, broad ovate or lanceolate, acute, quite entire, bright green, ſomewhat plaited, having five prominent pale nerves on the back, attenuated into connate petioles; the upper ones more ſeſſile. Although this reſembles G. purpurea, yet it has a much ſmaller flower, of a different colour from that; the ſtem-leaves alſo are ovate and ſharpiſh, but never produced into a point. Native of Swiſſerland, the Tyrol, Sileſia, and the Carpathian mountains.

8. Gentiana ſeptemfida, or ſeven-cleft gentian: corollas ſeven and five cleft, with ciliate ſegments interpoſed; leaves ovate-acuminate, ſomewhat ſtem-claſping. Stem a foot or eighteen inches in height, having the air of G. aſclepiadea, round, ſmooth, quite ſimple; the whole plant is ſmooth; both root and herb are very bitter. Native of the mountains of Perſia near the Caſpian ſea, and of the Cherſoneſus Taurica.

9. Gentiana aſclepiadea, or ſwallow-wort leaved gentian: corollas five-cleft, bell-ſhaped, oppoſite, ſeſſile; leaves ſtem-claſping. Stem upright, near a foot high; leaves ſmooth, about two inches long, and three quarters of an inch broad at the baſe, embracing there, and ending in an acute point; they are of a fine green, have five longitudinal veins, joining at both ends, but diverging in the middle, and reſembling thoſe of aſclepias, whence it has the trivial name. This is the moſt taſteleſs and leaſt bitter of the genus. Ray ſays that the root is very bitter. Native of Swiſſerland, Hungary, Stiria, Auſtria, Sileſia, Piedmont, Barbary, mount Caucaſus, &c. It flowers with us in July and Auguſt. Cultivated in 1629, as appears from Parkinſon.

10. Gentiana triflora, or three-flowered gentian: corollas bell-ſhaped, five-cleft, aggregate-ſeſſile; leaves linear; floral leaves four, two longer and two ſhorter. Root fibrous; root-leaves none; ſtem upright, very ſtraight, a ſpan high, round, furniſhed with very ſmall leaves at the bottom, becoming gradually longer higher up, decuſſately oppoſite; they are ſtiff and ſomewhat rigid, blunt at the end, and turned back at the edge; the largeſt are near three inches in length. It is really different from G. pneumonanthe, with which it may eaſily be confounded, from having a flower of the ſame colour, by its being ſo ſtiffly upright, and bitter. It flowers in July and Auguſt. Native of Eaſtern Siberia.

11. Gentiana pneumonanthe, marſh gentian, or calathian violet: corollas five-cleft, bell-ſhaped; flowers peduncled; leaves linear. Stem upright, about a foot high; leaves ſmooth, an inch and half long, and leſs than a quarter of an inch broad; flowers on the top of the ſtalk, three or four in number, on peduncles alternately above each other; they are large, and, being of a deep blue colour, make a fine appearance. The flowers, according to Haller, are ſolitary and almoſt ſeſſile in the axils or boſoms of the leaves. Pollich ſays, that one terminates the ſtem, and the reſt are axillary, ſolitary, and ſubſeſſile; Scopoli, that the lower corollas are peduncled and from the axils. Krocker deſcribes them as terminating and axillary, peduncled, ſolitary or in pairs, ſix, eight, or ten, in the whole, with two or four ſtipules under the peduncles. Theſe variations occur in different ſoils and ſituations: with us certainly the plant ſeldom bears more than one or two flowers; but after a wet ſpring it is found much more luxuriant, bearing five, ſix, or ſeven, flowers.

Pallas diſtinguiſhes this from his triflora, by its having a more ſlender ſtalk, and the leaves more lanceolate and acute; one flower at the end, the reſt axillary, all peduncled when there are ſeveral; for ſometimes there is no more than one; calyx deeply five-cleft, the ſegments linear, two alternate ones larger than the reſt; corolla larger, more dilated at the throat, plaited, the ſegments ſharper and ſubſerrate, with a tooth of the plait between each. The ſtructure of the flower therefore is very different from the foregoing.

Native of Sweden, Denmark, England, Swiſſerland, Carniola, the Palatinate, Sileſia, Piedmont, in the temperate parts of Ruſſia and all Siberia, in moiſt meadows and marſhes; Ray found it near Lindau in Germany. It flowers in Auguſt and September; or, as Linnæus obſerves, with the colchicum. With us it is not very common in the ſouth, but in the north much more ſo; in Lincolnſhire and Yorkſhire abundant, in the boggy parts of heaths, as in Tatterſhal park; found by Mr. Newton between Clapham and Engleton; near Doncaſter by Mr. Tofield; near Milthorp in Weſtmoreland, and in Lancaſhire common; near Tunbridge in Kent, by Dr. Wilmer; on Longfield downs near Graveſend, near Greenhithe, Cobham, &c. in Kent, and near Bath, by Gerarde; at Lellingſtone, and near Dartford in Kent, and in the weſt country in divers places, by Parkinſon. Johnſon (Ger. emac.) is of opinion that Gerarde did not know the plant, and ſays that he never found it but once, and that was on a wet mooriſh ground in Lincolnſhire, called Netleton moor, two or three miles on this ſide Caſter. Johnſon was ſo well acquainted with Kent, that he cannot well be deceived. On Stratton Strawleſs heath, near Norwich, by Stillingfleet.

12. Gentiana ſaponaria, or ſoapwort-leaved gentian: corollas five-cleft, bell-ſhaped, ventricoſe in whorls; leaves three-nerved. This riſes uſually ſixteen inches high, with upright ſtraight ſtems, having long ſharp-pointed oppoſite leaves, ſpreading horizontally; from the axils of theſe come out four or five blue flowers. Native of North America. Introduced in 1776, by Mr. William Young; it flowers in Auguſt and September.

13. Gentiana villoſa, or hairy gentian: corollas five-cleft, bell-ſhaped, ventricoſe; leaves villoſe. Native of Virginia.

14. Gentiana acaulis, dwarf gentiana, or gentianella: corolla five-cleft, bell-ſhaped, higher than the ſtalk. Root large, woody, branched; ſtem from only one to three inches in height, with one or two pairs of leaves on it, and terminated by one very large, upright, handſome flower; in a garden, when the plants are ſtrong, there are ſometimes more. This plant, in its natural alpine ſituation, has little or no ſtem, whence its trivial name; but it acquires one in a ſtate of cultivation. Native of Swiſſerland, Auſtria, Carniola, and Sileſia; Ray remarked it on the higheſt parts of mount Jura; it flowers in our gardens in April and May, and ſometimes a ſecond time in the autumn; in the Alps the time of flowering is June, July, and Auguſt; it was cultivated in 1629, according to Parkinſon; and in 1636, it was to be found in moſt of our choice gardens, as with Mr. Parkinſon, Tradeſcant, Tuggye, &c.

15. Gentiana nana, or tufted dwarf gentian: corolla five-cleft, bell-ſhaped, bearded on the throat, ſtem-leaves ovate. Root ſmall, annual, very ſlender, bitteriſh; ſtems in tufts, from an inch to a ſpan in height, ſeldom branched, decumbent at bottom, then upright, jointed, leafy, terminated by one flower; it flowers at the end of Auguſt. Native of Dauphiné, Savoy, Piedmont, Sileſia; diſtinguiſhed from G. nivalis, to which it is very nearly allied, by its tender ovate leaves without veins, its ſlender ſtalks bearing uſually one flower only, the ſegments of the flower nearly erect, and the calyx by no means long, and tubular.

16. Gentiana exaltata, or crowned gentian: corollas five-cleft, crowned notched, peduncle very long, dichotomous, terminating. This riſes with an upright branching ſtalk, near two feet high; the upper part divides into ſeveral forks, between which are ſix or ſeven long naked peduncles, each ſuſtaining one large blue flower. Native of the Weſt Indies, diſcovered by Plumier; and found afterwards by Houſtoun plentifully at

Vera

Vera Cruz, in low moiſt places, where the water ſtagnates, remote from the coaſt.

17. Gentiana decumbens, or creeping gentian: corollas five-cleft, bell-ſhaped, root-leaves lanceolate, very long; ſtalk decumbent. Root perennial; ſtems one or two, coming out on the ſide of the bunch of leaves, decumbent at bottom, then riſing, a ſpan or a foot in height, naked at bottom, a pair of leaves in the middle, bearing leaves and flowers at the end. Native of the farther Siberia, flowering from July till ſtopped by the froſt; it is gently bitter and aromatic, hence it is uſed medicinally in Thibet.

18. Gentiana algida, or cold gentian: corollas five-toothed, bell-ſhaped, ſeſſile dotted, root-leaves in bunches. Root perennial; ſtem very ſtraight, round, from a finger's length to a ſpan in height, with two or three pairs of broad-lanceolate three-nerved leaves on it, ſlightly ſheathing it at the baſe; it reſembles the foregoing ſpecies, and is very nearly allied to it, but differs in ſome eſſential characters; Gmelin therefore makes it a variety of G. pneumonanthe, and Linnæus of G. punctata, without reaſon. Found on the ſnowy alpine tops of eaſtern Siberia, and other parts of the Ruſſian empire; flowering in Auguſt; intenſely bitter, and proper to be uſed medicinally.

19. Gentiana ſaxoſa, or ſtony gentian: corollas five-cleft, bell-ſhaped, leaves ſpatulate. Stem herbaceous, ſingle, ſlender, round, grooved, erect, ſmooth and even, a hand or a ſpan in height; leaves yelloviſh green, two inches long; root-leaves approximating, on ſubimbricate channelled petioles. Flowers white, upright. Native of New Zealand; found in Duſky-bay, March 7, 1773.

20. Gentiana montana, or mountain gentian: corollas five-cleft, bell-ſhaped, leaves heart-ſhaped ſeſſile. Native of New Zealand; found alſo in Duſky-bay.

21. Gentiana glauca, or blue gentian: corolla five-cleft, bell-ſhaped; flowers ſeſſile; leaves ovate-rounded. Stem ſimple, round, upright, from two to four inches in height, having three or four pairs of ſeſſile leaves on it, which are ſomewhat fleſhy, and ſmaller than the root-leaves; flowers uſually three, ſeldom one only at the end, together with an acceſſory pair from the uppermoſt axils. Native of the higheſt mountains of Kamtſchatka; flowering from June to Auguſt, and ripening its ſeeds in September. There is a variety, in high, expoſed, rocky ſituations, with two or three flowers ſitting cloſe to the root-leaves, without any ſtalk.

II. Corollas five-cleft, or thereabouts, and funnel-ſhaped. 22. Gentiana verna, or green gentian: corolla five-cleft, longer than the ſtalk; root-leaves crowded, larger than the others. This is a little plant, hardly two inches high; a perennial yellow branched root puts up ſeveral ſimple ſtalks, each ſupporting one flower; it differs from G. pumila, in the leaves being channelled, more rigid, and half-ſtem-claſping; the plaits of the calyx, terminating it in ſo many teeth, elevated; the little ears or proceſſes emarginate; the ſtigmas finely ſerrate, and reſembling a little drinking glaſs. Native of Swiſſerland, Savoy, Piedmont, Auſtria, Carniola, Sileſia; flowering early in the ſpring; both in moiſt meadows and in alpine ſituations: on the high Alps it flowers later; it varies with a white flower; a beautiful blue colour may be extracted from the flowers as they are more commonly found.

23. Gentiana pyrenaica, or pyrenean gentian: corolla ten cleft, equal, the outer diviſions ruder than the others. This is very like the foregoing, but the corolla is regularly ten-cleft, the ſegments blunt, the alternate or outer ones green on the outſide, within all are blue; leaves linear or linear-lanceolate; ſtalk perennial, procumbent, with upright branches, bearing one flower the length of the branch. Native of the Pyrenees.

24. Gentiana altaica, or altaic gentian: corolla ten-cleft, the clefts alternately ſmaller and ſerrulate; ſtalk ſhorter than the flowers. Root ſlender, two or three inches long; both root-leaves and ſtem-leaves cloſely imbricate, ſubulate-linear, ſharp; ſtem uſually ſingle, but ſometimes two or three, about an inch in length, ſomewhat naked under the flower, with one pair of leaves near it: it is very nearly allied to G. pyrenaica, and like that is almoſt void of bitterneſs; it may therefore only be a variety ariſing from ſituation; the principal difference conſiſts in the ſuperior ſize of the flower, the ſtrength of the whole plant, and the ſhortneſs of the ſtalk; G. pumila of Linnæus and Jacquin, ſeems to be the ſame plant with the pyrenaica. Native of the ſnowy cliffs of the Altaic Alps.

25. Gentiana pumila, or ſmall gentian: corolla five-cleft, ſubſerrate, leaves lanceolate-linear. Stem one-flowered, about an inch in height, with two pairs of leaves, one near the calyx, which is cloven half-way down, and is angular with five raiſed lines. Haller is of opinion that this does not differ from G. verna: and Pallas cannot ſee any difference between the ſpecimens which he received of this from Jacquin, and the pyrenaica. Native of the mountains of Dauphiné, Auſtria, and Carniola.

26. Gentiana Bavarica, or Bavarian gentian: corolla five-cleft, ſerrate, leaves ovate, obtuſe. Leaves blunt, not ſharp, as in G. verna; ſtem often proſtrate, three inches or more in height, with eight or ten pairs of ovate leaves on many; flower ſolitary, large, blue; but it varies with a white flower, like moſt of the others. Native of Swiſſerland and Germany; about the lake Baikal, and on the Carpathian mountains in the Ruſſian empire, flowering early in the ſpring; the Siberian plant is taller, and larger in all the parts, than the German.

27. Gentiana aurea, or golden gentian: corollas five-cleft, extremely acuminate; throat beardleſs and awnleſs, branches oppoſite. Root, annual; ſtem, erect, a ſpan high. Native of the mountains about Bourdeaux, and of Norwegian Lapland.

28. Gentiana nivalis, or winter gentian: corollas five-cleft, branches one-flowered alternate. Stem ſometimes one-flowered, but frequently branched, having one flower coming out from each axil regularly one above another, often alternately, but ſometimes in pairs: found in the mountains of Lapland; in the Alps of Swiſſerland, where as Haller obſerves it is a genuine alpine plant; and between Savoy and Piedmont, as Mont Cenis, &c. and on the Pyrenees, adorning them, as Linnæus ſpeaks, with the ſplendour of its deep vivid blue flowers; it has alſo been found by Mr. Dickſon on Ben Lawers in Scotland. It varies, like moſt of the others, with a white corolla; the fading from blue to white is indeed very common in flowers.

29. Gentiana aquatica, or water gentian: corollas five-cleft, terminating ſeſſile, leaves membranaceous at the edge. Stems from two to twenty, uſually ſimple, but ſometimes branched dichotomouſly, in the flowering plant very ſhort, but in the fruiting plant lengthened out, the leaves becoming more remote and produced into an oblong form; flowers ſmall, blue, varying to green and white; it approaches very near to G. nivalis; and is larger in cold ſituations, than in more ſouthern ones; being very bitter, it is uſed medicinally in Dauria. It flowers in the middle of May, and is found from the river Jeniſea, to the eaſtern ocean, in ſandy wet meadows, and eſpecially by lakes and rivers; it is found alſo in China and Japan.

30. Gentiana utriculoſa, or bottle gentian: corollas five-cleft, ſalver-ſhaped, calyxes plaited and keeled. Root ſlender, fuſiform, fibrous, yellow, annual, (perennial, *Allioni*;) ſtem upright, a finger's length or a hand in height, ſometimes higher, ſlightly angular, ſmooth; branches oppoſite, each with the ſtem terminated by one flower. Ray remarks, that this ſpecies differs from all the gentianellas which he has obſerved, in having the

tube of the corolla no longer than the calyx, but the ſegments of the former ſpreading immediately over the top of the latter, as in the pink. Mr. Miller obſerves, that after the top flower decays, there are frequently two ſmaller flowers come out from the ſide of the ſtalk, at the two upper joints; theſe flowering after each other, there is a ſucceſſion of flowers till autumn. Native of the mountains of Swiſſerland, Germany, Auſtria, Idria, and Italy; flowering in June. Ray relates that he found it abundantly in going from Munich to Augſbourg.—This alſo varies with a white flower.

31. Gentiana exacoides, or healing gentian: corollas five-cleft, ſalver-ſhaped, calyxes membranaceous and keeled, ſtalk dichotomous, leaves cordate. The whole plant is only about a finger's length. Native of the Cape of Good Hope. It ſeems to belong to a different genus.

32. Gentiana centaurium, centaury gentian, or ſmaller centaury: corollas five-cleft, ſtem dichotomous, piſtil ſimple. Smooth and glaucous; ſtalk from four inches to a foot in height, upright, hexangular, or quadrangular, generally ſimple, but frequently putting out upright ſimple branches ſome way above the root, and ſometimes branching all the way to the top; ſeeds roundiſh, yellow. Our Gerarde, remarked (1597), that "the flowers, (which he deſcribes as growing at the top of the ſtalk in a ſpokie buſh or rundell, of a red colour tending to purple,) in the day time, and after the ſun is up, do open themſelves, and towards evening do ſhut up again." Native of moſt parts of Europe from Sweden and Denmark, ſouthwards to Italy; and in all the temperate parts of Ruſſia, in dry paſtures; flowering from June to Auguſt.

This ſpecies is extremely bitter, with a diſagreeable flavour, whence Haller obſerves that it was called *fel terræ*, or gall of the earth, by the ancients; he alſo determines it to be the *graveolentia centaurea* of Virgil, to which Lucretius gives a more ſignificant epithet of *triſtia*, expreſſive of its extreme bitterneſs. It is the baſis of the famous Portland powder, which prevents fits of the gout, when taken in a large quantity, and a long time together; but is ſaid to bring on hardneſs of the liver, palſy, and apoplexy; a tincture of the leaves, and the upper part of the root, is a good medicine to weak ſtomachs and cachectic habits; a decoction of the whole plant deſtroys lice, and cures the itch. It is not uncommon with a white corolla; this alſo is ſometimes only four-cleft; in boggy places it is found with a very ſhort ſtem, remarkably branched. Although good reaſons be given by Mr. Curtis and Dr. Stokes, why this ſpecies ſhould be removed into the genus Chironia, yet averſe from change we have left it where Linnæus placed it, and other botaniſts ſtill continue it.

33. Gentiana pulchella, or neat gentian: corolla five-cleft, tube elongated, ſtyle ſimple, ſtalk quite ſo. Stem ſcarcely an inch high. Native of Sweden.

34. Gentiana verticillata, or whorled gentian: corollas quinquefid, in whorls eight together. Stem about a hand high, round, and ſomewhat woody. Native of the Eaſt Indies. Linnæus ſuppoſes the South American plant to be the ſame with this; it has however a more tender branched ſtalk than the American; the leaves are ſhorter snd narrower; the corollas narrower, with a longer tube, and ſharp but not mucronate ſegments; the calyxes ovate-acute, with ſegments ſhorter than the capſule; in the American plant the ſtem is more ſtiff and robuſt, with the angles ſomewhat rugged, not ſmooth and even; the ſegments of the calyx narrower and reflex. See No. 37.

35. Gentiana maritima, or procumbent ſea gentian: corollas five-cleft, ſtyles twin, ſtem dichotomous few-flowered. This reſembles G. centaurium, but the flowers are peduncled and yellow; the leaves have not three nerves, but one only. Gerard adds, that the tube of the corolla is longer, the flowers fewer in number, and the ſtyle double. And Pallas, that the ſegments of the calyx are almoſt capillary; the tube of the corolla very narrow, dilated at the throat, the ſegments of the border nearly linear; ſtem ſeldom more than a hand high, ſharply four-cornered, dichotomous at top; leaves uſually oval, not ovate-lanceolate as in G. centaurium. Native of the ſea coaſts in the ſouth of France, and Italy; about Naples, &c. alſo about Tiflis, and every where on the ſhore of the Euxine, where it has uſually white corollas; likewiſe in the Azores; it is annual, and flowers in May; with us in July and Auguſt.

36. Gentiana ſpicata, or ſpiked gentian: flowers alternate, ſeſſile, corollas five-cleft. This is an annual plant, with an upright ſtalk, about a foot high, ſending out ſeveral branches towards the top; the flowers are produced from the ſide and at the top of the ſtalk, in looſe irregular umbels; they are white, and about the ſize of thoſe of common centaury. Native of the ſouth of France and Italy.—This has frequently purple corollas.

37. Gentiana verticillaris, or rounded gentian: flowers in whorls, corollas five-cleft, ſtalk extremely ſimple. Native of America.—The Eaſt-Indian plant, No. 34, is ſcarcely different. Koenig ſent two plants from the Eaſt Indies, both agreeing with the Linnæan character, but very diſtinct from each other; with the ſtalk angular at the baſe, but the upper part round, branched and ſtreaked; the leaves lanceolate and three-nerved, the flowers in whorls from the upper axils; this is the ſame with that which is deſcribed above. With the ſtalk regularly four-cornered, and perfectly ſimple; the leaves linear-lanceolate, fleſhy, and nerveleſs; flowers from every axil, of the ſame form and ſize as the others; this is the plant which is figured by Burman.

38. Gentiana quinqueflora, or five-flowered gentian: corollas five-cleft, ſtalk acute-angled, leaves ovate, ſtem-claſping. Size and ſtature of G. amarella; ſtem undivided, four-cornered with the corners membranaceous. Found in Pennſylvania by Kalm.

39. Gentiana ſcilloides, or ſquill-like gentian: corollas five-cleft, bractes in pairs, ſtalk one-flowered, proſtrate branched, leaves obovate obtuſe, three-nerved. A foot in height, tender and very ſmooth, with but few branches. Found in the Azores by Maſſon. See No. 35.

40. Gentiana aphylla, or leafleſs gentian: corolla five-cleft, ſalver-ſhaped, ſtalk leafleſs. A very ſmall, filiform, annual plant, ſcarcely branched, native of the mountainous woods of Martinico; in the hollows of trees, ſcarcely previous to the light; ſtem upright, ſimple, four inches high, tender, ſhining, ſtraw-coloured, with oppoſite, very ſhort, remote, ſtipules, at the joints; flower terminating, ſolitary, erect, yellowiſh, inodorous.

41. Gentiana amarella, or autumnal gentian: corolla ſalver-ſhaped, five-cleft (ſometimes four or even three), bearded at the throat, ſegments of the calyx five, equal. So nearly allied, ſays Linnæus, to G. campeſtris, as to be ſcarcely diſtinguiſhable, except by the calyx; ſtem ſomewhat angular, branched, erect, bearing ſeveral pairs of ſeſſile, ovate, three-nerved, dark-green leaves, and clothed from top to bottom with flowers, on ſhort, axillary, forked, ſide-branches, one being terminal. Found in dry paſtures, through moſt parts of Europe, with us not uncommon, eſpecially in calcareous ſoils; flowering from July to September; Linnæus ſays, in the autumn, with Colchicum or meadow ſaffron, later than Campeſtris; according to Ray, at the end of Auguſt, or ſomewhat earlier. A variety under the name of "the taller autumnal gentian, with centaury-like leaves," is ſaid, in Ray's Synopſis, to have been found near Welwyn in Hertfordſhire, and Belchamp St. Paul in Eſſex; but it does not differ in any thing eſſential from the other. Another variety is mentioned

mentioned by Ray under the name of G. fugax verna ſ. præcox, differing in no reſpect from amarella except in the time of flowering; this earlineſs may perhaps be owing to the plants having ſprung up in autumn, and ſtood the winter.

42. Gentiana auriculata, or eared gentian: corollas four and five cleft, bell-ſhaped, villoſe within, the alternate ſegments cordate. Upright, almoſt ſimple, a foot or leſs in height; found throughout all Kamtſchatka, the iſlands towards Japan and America, and on the ſhore of America itſelf; the herb, both freſh and dry, is uſed by the natives as a ſtomachic and antiſcorbutic, and againſt vernal diarrhœas cauſed by feeding on fiſh; it is not however ſo bitter as ſome of the other ſpecies; it flowers the beginning of Auguſt, and perfects its ſeeds in September.

III. Corollas not five-cleft. 43. Gentiana campeſtris, or field gentian: corollas four-cleft, bearded at the throat; calyx four-leaved, the two outer ſegments very large. Linnæus can hardly be perſuaded that this is diſtinct from amarella, No. 41. He thinks it may be a variety, or perhaps a hybridous or mule plant! Scopoli boldly makes them one, becauſe the flowers cloſe at the approach of wet, in both; the ears of the corolla are finely jagged and upright; the edges of the calycine teeth are reflex; the baſe of the corolla adheres ſo cloſe to the calyx, that when torn away it carries off the inner ſkin along with it; and the ſtigmas are alike in form and poſition. Others have no doubt of their being perfectly diſtinct. The calyx in this conſiſts of four ſeparate leaflets; the two outer oval-lanceolate, very large; the inner lanceolate, ſomething membranaceous, but one-fourth the breadth of the outer; ſtem more angular, approaching to ſquare, and branched; the branches longer than the leaves, with the flowers more ſcattered; leaves ſhorter, and not ſo ſharply pointed; the flowers alſo are larger than thoſe of amarella, though the plant is uſually ſmaller. Haller deſcribes it as extremely branched, and there are ſpecimens in England branched from the root to near the top; the branches long, with leaves and flowers ſcattered the whole length; but amarella has the branches ſhort, even the lower ones not exceeding the length of the leaves from which they ſprang; the upper ones in general much ſhorter. Native of moſt part of Europe from Lapland to Italy; frequent in Ruſſia and Siberia to the lake Baikal; whereas Pallas has not obſerved amarella in Siberia, nor in Ruſſia, except on mount Caucaſus. With us it is not ſo common as amarella: but it has been obſerved about Kendal and other places in the north, in Wales, Cheſhire, Cornwall, Stratton-heath in Norfolk, Bury in Suffolk, &c. In Engliſh Botany it is obſerved, that it grows in paſtures, more particulary towards the ſea; and that it is not ſo much confined to a calcareous ſoil as the amarella: Linnæus ſays that it flowers in ſummer, after the ſolſtice; with us in September and October; various months are ſet down by others, as April to June, and Auguſt; Dr. Withering ſays that he has ſeen it flowering in a garden in October. This, as well as the two former, is annual. According to Linnæus, poor people uſe it inſtead of hops in beer; and according to Pallas, as a medicine, in common with many other ſpecies.

44. Gentiana ciliata, or fringed-flowered gentian: corollas four-cleft, ciliate at the edge. Root ſmall, round, ſtraight, not annual; (biennial, *Pallas.*) Stalk from two to eight inches long, (a foot, *Haller,*) reddiſh, angular, ſmooth, leafy; ſometimes ſimple and one flowered, ſometimes with oppoſite branches, terminated by upright, ſeſſile, ſolitary flowers; the corolla varies in different countries; in America it is much ciliated; in Italy but little; in Iceland and Norway it is only ſerrate. Pallas remarks, that this ſpecies is the connecting link between this genus and the Swertias; that it is very upright, with ſtiff branches, ſometimes exceedingly branched, much higher in Siberia and mount Caucaſus than the European plant, but with ſmaller flowers; Pallas has figured them both. Native of Swiſſerland, Norway, Denmark, Germany, Auſtria, Carniola, Italy, Siberia, Caucaſus, Canada; flowering in Auguſt and September; in Italy in October, and even till winter: it is uſed officinally, by the natives; and deſerves a place in gardens from the beauty of the flowers.

45. Gentiana cruciata, or croſſwort gentian: corollas four-cleft, beardleſs, flowers in whorls ſeſſile. The root is perennial; and it puts up ſeveral ſtalks, from a ſpan to a foot high and more. The leaves being in pairs, and each pair croſſing the next at right angles, has given occaſion to the trivial name *cruciata*, and the Engliſh name *croſſwort gentian.* Native of Switzerland, Germany, Auſtria, Carniola, Hungary, the Apennines, Ruſſia, and Siberia; flowering in July and Auguſt: in our gardens it flowers in June, and ſometimes in May. Cultivated in 1596, by Gerarde.

46. Gentiana ſeſſilis, or ſeſſile gentian: corollas four-cleft, flowers ſtemleſs, leaves ovate. Native of Chili.

47. Gentiana filiformis; leaſt gentian, or marſh centaury: corollas four-cleft beardleſs, ſtalk dichotomous filiform. Root white, woody, ſimple or with large fibres; root-leaves ſmall, narrow, oblong; ſtalk about three inches high, ſimple or branched, at each joint a pair of ſmall, narrow, ſharp leaves; flowers at the ends of the branches on long pedicels, yellow, ſmall, almoſt always cloſed, ſeeming as far as could be diſcerned, to have five petals. Every part of the herb is ſmooth; the flowers expanding only in bright ſunſhine. Annual, growing in bogs, in Denmark, France, and England; Mr. Ray firſt remarked it towards the end of Cornwall (near St. Ives) in rotten marſhy ground; Dr. Pulteney ſent it out of Dorſetſhire; it is alſo found in Hampſhire and Devonſhire. The time of flowering is July.

48. Gentiana heteroclita, or irregular gentian: flowers four-cleft, irregular; ſtalk brachiate. Root annual, fibrous; the plant has the appearance of G. centaurium; ſtalk erect, a ſpan high, dichotomous, quadrangular; Flowers ſeſſile, ſolitary in the diviſions of the ſtem, of a purple colour. Native of Malabar, in cultivated fields; diſcovered by Koenig.

49. Gentiana ſcandens, or climbing gentian: ſtem ſhrubby climbing, corollas bell-ſhaped five-cleft, in elongated pendulous panicles. Stem large, woody, round, with many very long climbing branches, without ſpines or tendrils. Native both of China and Cochin-china, climbing trees and hedges; it has an unpleaſant fetid ſmell, which is loſt in drying; and a very bitter flavour. In the Chineſe plant the leaves are often cordate, ſlightly emarginate at the baſe. It is tonic and ſtomachic.

50. Gentiana fimbriata, or fringed gentian: corollas bell-ſhaped, ten-cleft, alternate ſegments fringed and ſmaller, leaves lanceolate. Stem round, erect, ſimple. Native of Virginia.

51. Gentiana diffuſa, or branched gentian: ſtem branched dichotomous divaricate, leaves ovate-oblong, peduncles capillary one or two-flowered. Native of the Eaſt Indies.

52. Gentiana albens, or white gentian: leaves ovate ſtem-claſping, calyxes ovate, ſtem trichotomous. 53. Gentiana dubia, or doubtful gentian: corollas four-cleft, calyx lanceolate, panicle terminating trichotomous ſuperdecompound. Natives of the Cape of Good Hope; obſerved by Thunberg.

Propagation and Culture. Of this numerous genus not above ſixteen are cultivated in our gardens; and five only are wild in this country. The greater part are natives of the European Alps. Several of theſe have been lately introduced from thence by Drs. Pitcairn and Fothergill, but it is difficult to preſerve ſome of them long in a ſituation ſo different from their proper one. Cluſius affirms, that he could not by any art make the ſecond or third ſpecies continue, or bear flowers in a garden; the perennial ſorts in general may be propagated both from ſeed, and by offsets, taken off in autumn,

which is the beſt ſeaſon for removing all theſe plants; but they ſhould not be removed or parted oftener than every third year, if they are expected to produce ſtrong flowers.

The 1ſt, 34th, and 35th, with a few others not in cultivation at preſent, require the protection of the greenhouſe: the 16th and two or three others, little known, muſt be raiſed in a hot-bed, and kept in a ſtove; the reſt are hardy, and, were they not difficult to preſerve, many of them would be very acceptable in borders of flowers. The ſecond delights in a light loamy ſoil and a ſhady ſituation, where it will thrive much better than in a light dry ſoil, or an open expoſure; it is propagated by ſeed, which ſhould be ſown in pots ſoon after it is ripe, for if it is kept till the ſpring, it will not ſucceed; theſe pots ſhould be placed in a ſhady ſituation, and kept clean from weeds; in the ſpring the plants will appear, when they muſt be duly watered in dry weather, and kept clean from weeds till the following autumn; then they ſhould be carefully ſhaken out of the pots, ſo as not to break or injure their roots; and a ſhady border of loamy earth ſhould be well dug and prepared to receive them, into which the plants ſhould be put at about ſix inches diſtance each way, obſerving to let the top of the roots be a little below the ſurface of the ground, then preſs the earth cloſe to the roots; after this they will require no farther care, but to keep them conſtantly clean from weeds; and if the following ſpring ſhould prove dry, they ſhould be duly watered, which will greatly forward their growth. In this border the plants may ſtand two years, by which time they will be fit to tranſplant where they are deſigned to remain; therefore in autumn, ſo ſoon as their leaves decay, they may be removed; but as the roots of theſe plants run deep into the ground, like carrots, there muſt be great care taken in digging them up, not to cut or break their roots, for that will greatly weaken, if it does not kill them. After the plants are well fixed in their places, they require no other culture, but to dig the ground about them early in the ſpring before they begin to ſhoot, and in the ſummer to keep them clean from weeds; the roots of theſe plants will continue many years, but the ſtalks decay every autumn; the ſame roots do not flower two years together, nor ſeldom oftener than every third year; but when they flower ſtrong, they make a fine appearance; and as theſe delight in ſhady moiſt ground, where but few ornamental plants will thrive, they ſhould not be wanting in good gardens. 3 to 13. may be propagated and cultivated in the ſame manner. Pallas ſays, that the 4th is eaſily raiſed from ſeed in the Ruſſian gardens.

The 9th and ſome of the others muſt have a moiſt loamy ſoil, otherwiſe they will not thrive. Cluſius relates, that he made the 9th flower in a garden, but that it drooped, and loſt much of its native vigour and elegance. The 11th, not ſtriking its root ſo deep into the ground as the officinal yellow gentian, may be tranſplanted with leſs hazard, eſpecially if it be removed with a good ball of earth to the roots; in a ſtrong moiſt ſoil this will flower annually. The fourteenth is commonly propagated by parting the roots, but it muſt not be often tranſplanted or parted, in order to have it flower ſtrong; it ſhould have a loamy ſoil and a ſhady ſituation; it may alſo be increaſed by ſeeds ſown in autumn; in a good ſoil the plants will be ſtrong enough to flower the ſecond year, and theſe ſeedling plants will flower much ſtronger than thoſe which are propagated from offsets. This is one of the ſpecies beſt known, and much eſteemed for the brilliant azure of its flower, ſo large in proportion to the ſize of the plant. Ray obſerves, that although it be a native of the higheſt Alps, yet it readily admits cultivation; and that it was much ſought after in his time by gardeners and floriſts for the beauty of the flower. 44 and 45 may be increaſed and treated as 14.

The other alpine gentianellas may be alſo increaſed and treated in the ſame manner: in common with other alpine plants, theſe love a pure air, an elevated ſituation, and a loamy ſoil, moderately moiſt; they do not proſper therefore very near London. Cluſius affirms, in particular, that G. verna, No. 22, rejects all culture.

Several ſpecies, as 28, 29, 30, growing on ſpongy ground, it is difficult to cultivate them in gardens; the ſeeds muſt be ſown in pots, or upon a moiſt boggy ground in autumn, in the ſhade; when the plants come up, the ſurface of the ground ſhould be covered with moſs, which ſhould be conſtantly kept moiſt. See OROBANCHE, SAPONARIA, SAROTHRA, and SWERTIA.

GENTIA'NA PERFOLIATA. See CHLORA.

GENTIANEL'LA. See GENTIANA and RUELLIA.

GENTIANOI'DES. See GENTIANA.

GEN'TILE, *ſ.* [*gentilis*, Lat.] One of an uncovenanted nation; one who knows not the true God.—Tribulation and anguiſh upon every ſoul that doeth evil, of the Jew firſt, and alſo of the *Gentile*. *Rom.* ii. 9.—A perſon of rank. *Obſolete:*

Fine baſil deſireth it may be her lot
To grow, as a gilliflower, trim in her pot;
That ladies and *gentiles*, for whom we do ſerve,
May help him as needeth, poor life to preſerve. *Tuſſer.*

The origin of the *Gentiles* is deduced from the Jews, who called all thoſe who were not of their name גוים *goijm*, i. e. *gentes*, which in the Greek tranſlations of the Old Teſtament is rendered τα εθνη; in which ſenſe it frequently occurs in the New Teſtament; as in Matthew vi. 32. "All theſe things the nations or Gentiles ſeek." Whence the Latin church alſo uſed *gentes* in the ſame ſenſe as *Gentiles*, eſpecially in the New Teſtament. But the word *gentes* ſoon obtained another ſignification, and no longer meant all ſuch as were not Jews; but thoſe only who were neither Jews nor Chriſtians, but followed the ſuperſtitions of the Greeks and Romans, &c. In this ſenſe it continued among the chriſtians writers, till their manner of ſpeech, together with their religion, was publicly and by authority received in the empire; when *gentiles*, from *gentes*, came into uſe: and then both words had two ſignifications, viz. in treatiſes or laws concerning religion, they ſignified Pagans, neither Jews nor Chriſtians; and in civil affairs, they were uſed for all ſuch as were not Romans.

Mr. Bryant ſays, that all the myſteries of the *gentile* world appear to have been memorials of the deluge, and of the events which immediately ſucceeded. They conſiſted for the moſt part of a melancholy proceſs; and were celebrated by night with torches, in commemoration of the ſtate of darkneſs in which Noah and his family had been involved. The firſt thing at theſe awful meetings was to offer an oath of ſecreſy to all who were to be initiated; after which they proceeded to the ceremonies. Theſe began with a deſcription of *Chaos*; by which was ſignified ſome memorial of the deluge. Chaos was certainly the ſame as Βυθος, the great abyſs. Of the rites above-mentioned we have an account in the Orphic Argonautica. V. 11, &c.

————Μετα δ' ορκια Μυσταις
Αρχαιου μεν πρωτα Χαους αμεγαρτον αναγκην,
Και Κρονον, ος ελοχευσεν απειρεσιοισιν υφ' ολκοις
Αιθερα, και διφυη περιωπεα κυδρον Ερωτα.

The poet adds afterwards, that Eros had the name of Phanes, becauſe he was the firſt remarkable object which appeared to the eye of man, in conſequence of this great event. Noah is ſpoken of as a man of juſtice; and this part of his character is continually alluded to by the mythologiſts, whenever they treat of his hiſtory. The author of the above-mentioned poem, among many ſacred rites to which he had been witneſs, mentions the orgies of Juſtice, or the *juſt* perſon; and thoſe of Arkite Athene, which were celebrated by night:

Οργια Πραξιδικης και Αρειης νυκλος Αθηνης. v. 31.

By

By Αρειην Αθηνη was meant arkite providence; in other words, *divine wiſdom*, by which the world was preſerved. In theſe myſteries, after the people had for a long time bewailed the loſs of a particular perſon, he was at laſt ſuppoſed to be reſtored to life. Upon this the prieſt uſed to addreſs the people in theſe memorable terms: "Comfort yourſelves, all ye who have been partakers of the myſteries of the deity thus preſerved: for we ſhall now enjoy ſome reſpite from our labours." To theſe were added the following remarkable words: "I have eſcaped a ſad calamity; and my lot is greatly mended." At ſuch times there ſeems to have been an invocation made by the people to the Dove, Ionah; which was probably introduced to their view; Ιω Μακαιρα, Λαμπαδηφορος; "Hail to the dove, the reſtorer of light."

GENTILES'CHI (Horatio), an Italian painter, born at Piſa in 1563. After having made himſelf famous at Florence, Rome, Genoa, and other parts of Italy, he removed to Savoy; from whence he went to France, and upon the invitation of Charles I. came over to England. He was well received by that king, who employed him in his palace at Greenwich, and other public places. The moſt remarkable of his performances in England, were the ceilings of Greenwich and York-houſe. He painted alſo a Madona, a Magdalen, and Lot with his two daughters, for king Charles; which he performed admirably well. His moſt eſteemed piece abroad was the portico of cardinal Bentivoglio's palace at Rome. He was much in favour with the duke of Buckingham, and many others of the nobility. After twelve years continuance in England, he died here at 84 years of age, and was buried in the queen's chapel at Somerſet-houſe. His portrait is among the heads of Vandyke, he having been drawn by that great maſter.—He left behind him a daughter, *Artemiſia Gentileſchi*, who was but little inferior to her father in hiſtory-painting, and excelled him in portraits.

GEN'TILESSE, *ſ.* [French.] Complaiſance; civility. *Not uſed.*

She with her wedding-cloaths undreſſes
Her complaiſance and *gentileſſes*. *Hudibras.*

GEN'TILI (Alberico), an eminent juriſt, born in 1550, at Caſtel St. Geneſio in the marche of Ancona, where his father Matteo practiſed as a phyſician. He graduated in law at the univerſity of Perugia, and was prætor or judge at Aſcoli, when his father, becoming a convert to the reformed religion, reſolved to leave Italy, and take with him his eldeſt ſon Alberico, and his youngeſt, Scipio. Alberico came to England, and in 1582 obtained the chair of juriſprudence in the univerſity of Oxford, which he held with reputation till his death, in 1608. He was a man of vaſt and comprehenſive erudition, and publiſhed various works, moſt of them in his own profeſſion. From his Six Dialogues on the Interpreters of Law, dedicated to his patron the earl of Leiceſter, it might be ſuppoſed that he was the idolater of the juriſts of the preceding ages, and their barbariſm, which he defends againſt the politer and more liberal method of Alciatus, but in a ſtyle and manner obviouſly imitating that of Alciatus himſelf; ſo that ſome have ſuppoſed that the dialogues were meant as an ironical ſatire upon the ignorance and vulgarity of the juriſts of his time. He was the firſt who carried his reſearches into the law of nature and of nations; and his three books *De Jure Belli* are much praiſed by Grotius, who confeſſes his obligations to them in the larger work which he compoſed on the ſame ſubject. His political doctrines were well ſuited to the reigns of Elizabeth and James, as appears from his diſputation, *De Vi Civium in Regem ſemper injuſta*, and other pieces. He wrote three books *De Legationibus*, and ſeveral tracts relative to antiquities. He alſo cultivated polite literature; of which he gave an eſſay in his *Lectiones Virgilianæ*.

GEN'TILI (Scipio), brother of the preceding, born in 1563, and ſent to ſtudy at Tubingen. He there greatly diſtinguiſhed himſelf in Latin poetry, and alſo purſued the ſtudy of Greek and of juriſprudence, which he afterwards cultivated with increaſing ſucceſs at the univerſities of Wittemberg and Leyden. He received the degree of doctor at Baſil in 1589, and then went to Heidelberg as a public expounder of law. After a ſhort abode in that city, he removed to Altdorf, where he was firſt colleague to Donellus in the profeſſorſhip, and afterwards principal profeſſor of law. He was made a counſellor to the city of Nuremberg; and ſuch was his reputation that he was invited to ſeveral univerſities, and even is ſaid to have received liberal offers from pope Clement VIII. to ſettle at Bologna, all which he declined. He died at Altdorf in 1616. He wrote ſeveral works, of which the principal are, 1. *De Jure publico Populi Romani*; 2. *De Conjurationibus*; 3. *De Donationibus inter Virum & Uxorem*; 4. *De Bonis maternis & ſecundis Nuptiis*; 5. *In Apulei Apologiam Comment*; 6. *De Juriſdictione*; 7. *De Erroribus Teſtamentorum*; 8. *Comment in Pauli Epiſt. ad Philemonem.* He alſo wrote ſeveral elegant Latin poems, among which were Paraphraſes of various Pſalms, and a Tranſlation of the two firſt cantos of Taſſo's Jeruſalem. All his works have been lately reprinted at Naples, in 8 vols. 4to.

GEN'TILISM, *ſ.* [*gentiliſme*, Fr. from *gentile.*] Heatheniſm; paganiſm.—If invocation of ſaints had been produced in the apoſtolical times, it would have looked like the introducing of *gentiliſm* again. *Stillingfleet.*

GENTILI'TIOUS, *adj.* [*gentilitius*, Lat.] Endemial; peculiar to a nation.—That an unſavory odour is *gentilitious*, or national, unto the Jews, reaſon or ſenſe will not induce. *Brown.*—Hereditary; entailed on a family.—The common cauſe of this diſtemper is a particular and perhaps a *gentilitious* diſpoſition of body. *Arbuthnot.*

GENTIL'ITY, *ſ.* [*gentilité*, Fr. from *gentil*, Fr. *gentilis*, Lat.] Good extraction; dignity of birth. Elegance of behaviour; gracefulneſs of mien; nicety of taſte. Gentry; the claſs of perſons well born.—Gavelkind muſt needs, in the end, make a poor *gentility*. *Davies.*—Paganiſm; heatheniſm.—When people began to eſpy the falſhood of oracles, whereupon all *gentility* was built, their hearts were utterly averted from it. *Hooker.*

GEN'TILLET (Valentine), a learned French writer in defence of the proteſtant cauſe, a native of Vienne in Dauphiné, who flouriſhed in the ſixteenth century; but we are ignorant when he was born, or died. He was a civilian by profeſſion, and according to ſome writers was at firſt an advocate in the parliament of Toulouſe, and afterwards ſyndic of the republic of Geneva. He diſtinguiſhed himſelf by his writings, which rendered him a favourite author with the proteſtants, for the zeal which they diſplayed againſt popery, and the learning and abilities with which they maintained the principles of the reformation. By the edicts that were publiſhed in France againſt thoſe of the reformed religion, he was driven into exile. In 1578 he publiſhed An Apology for the Proteſtants, which paſſed through ſeveral editions, and appeared ten years afterwards in an enlarged form, in French, and alſo in Latin, under the title of *Apologia pro Chriſtianis Gallis Religionis Evangelicæ ſeu Reformatæ, qua docetur hujus Religionis Fundamenta in Sacra Scriptura jacta eſſe*, &c. 8vo. In 1586 he publiſhed a work entitled *Le Bureau du Concile de Trente*, &c. and in the ſame year a Latin edition of the ſame, entitled *Examen Concilii Tridentini*, &c. of which there afterwards appeared ſeveral impreſſions at different places. He was alſo the author of the Anti-Machiavel, or Diſcourſes on the Means of well governing a Kingdom, 1547, 12mo. and the Anti-Socinus, 1612, 4to.

GEN'TILLY, a town of France, in the department of Paris; the reſidence of the kings of France of the firſt and ſecond race: three quarters of a league ſouth of Paris.

GEN'TIOUX, a town of France, in the department

of the Creuſe, and chief place of a canton, in the diſtrict of Felletin: three leagues ſouth-weſt of Felletin.

GEN'TLE, *adj.* [*gentilis*, Lat.] Well born; well deſcended; ancient, though not noble.—Theſe are the ſtudies wherein our noble and *gentle* youth ought to beſtow their time. *Milton.*

Of *gentle* blood, part ſhed in honour's cauſe,
Each parent ſprung. *Pope.*

Soft; bland; mild; tame; meek; peaceable.—A virtuous and a good man, reverend in converſation, and *gentle* in condition. 2 *Mac.* xv. 12.

Her voice was ever ſoft,
Gentle and low; an excellent thing in woman. *Shakeſ.*

Soothing; pacific:

And though this ſenſe firſt *gentle* muſic found,
Her proper object is the ſpeech of men. *Davies.*

GEN'TLE, *ſ.* a gentleman; a man of birth. *Now out of uſe:*

Gentles, do not reprehend;
If you pardon, we will mend. *Shakeſpeare.*

A particular kind of earth-worm. See the article FISHING, vol. vii. p. 420.—He will in three hot months bite at a flagworm, or at a green *gentle*. *Walton.*

To GEN'TLE, *v. a.* To make gentle; to raiſe from the vulgar. *Obſolete:*

He to-day that ſheds his blood with me,
Shall be my brother: be he ne'er ſo vile,
This day ſhall *gentle* his condition. *Shakeſ. Henry V.*

GEN'TLEFOLK, *ſ.* Perſons diſtinguiſhed by their birth from the vulgar.—The queen's kindred are made *gentlefolk*. *Shakeſpeare.*—Sometimes with a plural.—*Gentlefolks* will not care for the remainder of a bottle of wine; therefore ſet a freſh one before them. *Swift.*

GEN'TLEMAN, *ſ.* [*gentilhomme*, Fr. *gentilhuomo*, Ital. that is, *homo gentilis*, a man of anceſtry. All other derivations ſeem to be whimſical.] A man of birth; a man of extraction, though not noble:

I freely told you all the wealth I had
Ran in my veins: I was a *gentleman*. *Shakeſpeare.*

A man raiſed above the vulgar by his character or poſt.—He is ſo far from deſiring to be uſed as a *gentleman*, that he deſires to be uſed as the ſervant of all. *Law.*

Inquire me out ſome mean-born *gentleman*,
Whom I will marry ſtrait to Clarence' daughter. *Shakeſ.*

A term of complaiſance; ſometimes ironical.—The ſame *gentlemen* who have fixed this piece of morality on the three naked ſiſters dancing hand in hand, would have found out as good a one had there been four of them ſitting at a diſtance, and covered from head to foot. *Addiſon.*—The ſervant that waits about the perſon of a man of rank.—Sir Thomas More, the Sunday after he gave up his chancellorſhip, came to his wife's pew, and uſed the uſual words of his *gentleman* uſher, Madam, my lord is gone. *Camden.*—It is uſed of any man however high.—The king is a noble *gentleman*, and my familiar. *Shakeſpeare.*

Under the denomination of *gentlemen*, in the Engliſh precedence and juriſprudence, are compriſed all perſons above yeomen: whereby noblemen are truly called gentlemen. *Smith de Rep. Ang. lib.* 1. *cc.* 20, 21. A gentleman, in heraldry, is defined to be one, who, without any title, bears a *coat of arms*, and whoſe anceſtors have been freemen; and by the armorial bearings, that a gentleman retains, he is known to be, or not to be, deſcended from thoſe of his name, that perhaps lived many centuries before him: thus a family coat of arms is ever conſidered as the criterion of an honourable anceſtry, and is a mark of diſtinction or warranty of a gentleman over and above the yeomen and commonalty. There is ſaid to be a gentleman by virtue of office, and in reputation, as well as thoſe that are born ſuch. 2 *Inſt.* 668. And we read that J. Kingſton was *made* a gentleman by *Rich.* II. *Pat.* 13. *Rich.* II. *par.* 1. *Gentilis homo* for a gentleman, was adjudged a good addition. *Hil.* 27. *Edw.* III. But the addition of eſquire, or gentleman, was rare before 1 Hen. V. though that of knight is very ancient. 2 *Inſt.* 595, 667.

For the gratification of the curious reader, we ſhall add the narrative "*of the origin of gentlemen*," from Leyden's "Complaynt of Scotland," republiſhed in 1801, from an original in the Britiſh Muſeum, and of which only four copies are in exiſtence, written in the year 1548.

"And nou ſen this purpos hes occurrit to ſpeik of gentreis ande nobilnes, i vil fyrſt diſcriue the origine of gentil men, be the quhilk ze may knau, quha is ane vilaine. Bot fyrſt i man reherſe the ſtait of the pepil that var in the gude anciant dais, quhilk ſum men callit the goldin varld. there vas na defferens of ſtaitis at that tyme amang men, nothir in preeminens, dignite, ſuperiorite, nor honour, for at that tyme al men var egal, & nocht partial nor deuidit, for the pepil lyuit al to gydthir in ane tranquil & louabil cōmunite, ande thai left no thing to there poſterite bot regrettis for the alteratione of that gude varld. in thai dais, the pepil eit nor drank nocht bot quhen hungir conſtrenzet them, & than there maiſt delegat refectiōe vas acquorns, vyild berreis, green futis, rutis & eirbis, ande thai drank the freſche vattir. at ſum tyme thay paſt in the forreſtis to the courſe and hunting, and ſleu vyild beyſtis, ſyne dryit the flaſche at the ſune or thai eit it. and thai that var of maiſt tendir complexione couurit thē vith the ſkynnis of tha vyild beyſtis to keip them fra cald. At that tyme ther vas no ceremonial reuerens nor ſtait, quha ſuld pas befor or behynd, furtht or in at the dur, nor zit quha ſuld haue the dignite to vaſche ther hādis fyrſt in the baſſine, nor zit quha ſuld ſit doune fyrſt at the tabil. at that tyme the pepil var as reddy to drynk vattir in ther bonet, or in the palmis of ther handis, as in ane glas, or in ane taſſe of ſiluyr. At that tyme thai lay al to gydthir in ane cauerne, as dois preſently the ſophiſtic egiptiens. thai purgit ther belleis, ande exercit the verkis of nature, ilk ane in vthirs preſents vithout ſchame, reproche, or offens. than ane lang tyme there eftir, nature prouokit thē to begyn ſum little police. for ſum of them began to plant treis, ſum to dāt beyſtis, ſum gadthird the frutis, ande kepit them quhil on to the tyme of neceſſite, ande ſum neuriſt there childis. at that tyme the pepil drank nothir vyne nor beir, nor na vthir confekkit drynkis. at that tyme ſtraynge cūtries var nocht focht to get ſpicis, eirbs, drogis, gūmis, & ſuccur for to mak exquiſit electuars to prouoke the pepil til ane diſordinat appetit. At that tyme, there vas no ſumpteous clethyng of fine claytht and of gold & ſilk of diuerſe faſſons. at that tyme i the begynnyng of ther police, coppir, bras, and yrn and vthir mettellis, var meltit to mak vtēſel veſchel neceſſair to ſerue ane houſhald, and var nocht meltit to be gunnis ande cannons to ſla doune the pepil. Ande nou ſen that goldin varld is paſt, ther hes ſuccedit ane yrn varld, quhilk hes altrit euerye gude thing in infelicite and myſcheif, for meikens is changit i maleis, trauail in ydilnes, reſt in exceſſe, pace in veyr, eyſe in pane, loue in hatrent, cherite in cruelte, iuſtice in extorſions, almis in thyft, kyndnes in perſecutione, ſupporting of ignorance in detractione, pitie in rigor, ande faytht in ypocryſie, and ſa euyrie thing is altrit fra ane gude ſtait in ane abhominabil qualite. The cauſe of this alteratione hes procedit fra the euyl cōditiōs of men that began tyl oppreſſe there nychtbours. ande til eſchaip ſic oppreſſione, the pepil chēſit ane certain of gouuernours of the maiſt robuſt & maiſt prudent to be there deffendours, ande alſe thai randrit thē tributaris ande ſubiectis to there ſaid gouuernours, ande there gouuernours gat for their panis and laubyr, the butin and ſpulzé that thai cōqueiſt fra the tirran oppreſſours. Thai gouuernours

var

var ſa nobil in there auen curage, that thai diſtribut the maiſt part of the butine ande ſpulze amāg the pepil that hed vſit them maiſt vailzeantly contrar there enemeis, ande thai that var laſche couuardis gat nothing. Of this ſort began the fyrſt nobilnes ande gentreis in the varld, for thai that var vailzeant, thai var reput for nobilis, ande gentil men, ande thai that var vicius & couuardis, var reput for vilainis and carlis."

"When Adam dug and Eve ſpan,
Where was then the GENTLEMAN?"

Lat. *Primus majorum quis quis fuit ille tuorum,*
Aut paſtor fuit, aut illud quod dicere nolo.

This proverb inculcates that merit, and not birth, makes the gentleman; and that though our fathers might have inherited that claim from a noble anceſtry, yet if we degenerate, we can have no real right or pretenſion to it, whatever law or cuſtom may determine in our favour.

"Jack will never make a GENTLEMAN."—This proverb is intended to ſhew that every one will not make a gentleman, though commonly called ſo; ſince from the preceding proverb, it is apparent that there is ſomething more required of a gentle and philanthropic quality or diſpoſition, than is always found either in high or low life, in noble anceſtry, or mean original:—"You cannot make a ſilken purſe of a ſow's ear." *Ex quovis ligno Mercurius non fit,* ſay the Latins.

GENTLEMAN-USH'ER, *ſ.* One who holds a poſt at court to uſher others to the preſence.—His tongue goes always before his wit, like *gentleman-uſher,* but ſomewhat faſter. *Overbury.*

GEN'TLEMANLIKE, or GEN'TLEMANLY, *adj.* Becoming a man of birth.—He holdeth himſelf a gentleman, and ſcorneth to work, which, he ſaith, is the life of a peaſant or churl; but enureth himſelf to his weapon, and to the *gentlemanly* trade of ſtealing. *Spenſer.*—You have trained me up like a peaſant, hiding from me all *gentlemanlike* qualities. *Shakeſpeare.*

GEN'TLEMANSHIP, *ſ.* Elegance of manners.—His fine *gentlemanſhip* did him no good. *Marquis of Halifax.*

GEN'TLENESS, *ſ.* Dignity of birth; goodneſs of extraction. Softneſs of manners, ſweetneſs of diſpoſition; meekneſs; tenderneſs.—Maſters muſt correct their ſervants with *gentleneſs,* prudence, and mercy. *Rogers.*—Women ought not to think *gentleneſs* of heart deſpicable in a man. *Clariſſa.*

Still ſhe retains
Her maiden *gentleneſs,* and oft at eve
Viſits the herds. *Milton.*

Kindneſs; benevolence. *Obſolete.*—The *gentleneſs* of all the gods go with thee. *Shakeſpeare.*

The moral quality of *gentleneſs* is forcibly inculcated in the following paſſage from Holland's Diſcourſes:—"Gentleneſs is the expreſſion of humility and meekneſs in our converſe with mankind. This virtue is viſible in the diſcourſe of thoſe who poſſeſs it. It preſerves them from all harſh and ſevere expreſſions, and from every degree of cenſoriouſneſs and uncharitableneſs. A man of gentle ſpirit will always ſpeak to his neighbour, and of him, with the utmoſt candour. He will never mention the faults of any one but when it is neceſſary. Even then, whether the perſon in fault be preſent or abſent, he will treat him with ſuch tenderneſs, as to give no real cauſe of offence. He is always deſirous to pleaſe, when he can do it conſiſtently with integrity, and with the general good of mankind. He is always willing to be pleaſed, and to put the beſt conſtruction upon the endeavours which are uſed for this purpoſe. Hence, thoſe who wiſh to ſerve him, however unſucceſsful their endeavours may be, or however unhappily they be expreſſed, in his opinion, confer an obligation upon him. Thoſe, alſo, who deſire and deſign to hurt or diſoblige him, will find that even his anger, or reſentment, is tempered with *gentleneſs,* and that he will proceed to no greater extremities than reaſon and benevolence will juſtify. In ſome, this gentleneſs appears to be a kind of natural gift, ſo as to render them almoſt incapable of any behaviour, or any language, inconſiſtent with it. In others, it is acquired by reflection and exerciſe. The former is generally more graceful and amiable, the latter is, at leaſt, equally meritorious; the former will find a ſurer way to the hearts of men, the latter will bring the underſtanding and judgment over to its ſide, and cauſe them to applaud the victory which a man has gained over himſelf. The ſincere expreſſions of it, whether from nature or habit, deſerve approbation and love; but the counterfeit is not of the leaſt value. There is no condition of life, in which this amiable diſpoſition may not be exerciſed. Where is the man who has it not in his power to hurt any of his fellow-men? He may, therefore, expreſs the gentleneſs of his heart, by ſteadily and uniformly abſtaining from that conduct which will have this effect. But he may diſcover the goodneſs of his heart towards thoſe, alſo, whom he is not capable of hurting, by his care not to diſpleaſe or grieve them unneceſſarily, and by his conſtant attention to that line of behaviour by which he may pleaſe and gratify them. In this way, may a child, a ſervant, or a ſubject, ſhow himſelf gentle towards a father, a maſter, or a governor; and, in like manner, any other inferior towards his ſuperior.

"But the higher ſituations of life afford the moſt ample field for the cultivation and exerciſe of this branch of benevolence. It is one of the offices of charity which appears with the greateſt beauty in thoſe who have it moſt in their power to act contrary to it. The father of a family, whoſe heart is poſſeſſed with this virtue, will exerciſe his authority ſteadily, but with tenderneſs. He will not fail to notice the faults of his children, and will take every method, which his prudence can ſuggeſt, to prevent the repetition of them; but he will very carefully obſerve the apoſtolic injunction, not to provoke his children to wrath, or to diſcover any bitterneſs to them. If he ever treat them with any ſeverity, as ſoon as they ſhall appear to be humbled by it, he will encourage them by his returning kindneſs, and convince them that he does a violence to his own heart, when he uſes any other language, or adopts any other behaviour, to them, than what is moſt kind and affectionate. The gentleneſs of a maſter to his ſervants will, in like manner, direct to that behaviour which will make a ſtate of ſubjection the eaſieſt to them, and the remembrance of their dependance the leaſt irkſome to their minds. To make them a juſt return for their ſervices, according to mutual agreement, and to add a proper acknowledgment for any extraordinary labour, is no more than common equity. Nor will a gentle nature fail to pay a certain attention which, particularly in ſickneſs, domeſtics have a right to require. Their faults ſhould be blamed in a manner fitted to encourage their return to their duty, and to make their ſubjection ſit as eaſy upon their minds as is conſiſtent with the nature and deſign of the relation between maſters and ſervants. The effect of gentleneſs in higher governors is eaſily conceived, and, after what has been obſerved, needs not to be deſcribed. Its influence on the intercourſe between equals and friends, and the pleaſing direction which it will give to all their endeavours to ſerve and pleaſe one another, are ſufficiently obvious."

GEN'TLESHIP, *ſ.* Carriage of a gentleman. *Obſolete.*—Some in France, which will needs be gentlemen, have more *gentleſhip* in their hat than in their head. *Aſcham.*

GEN'TLEWOMAN, *ſ.* A woman of birth above the vulgar; a woman well deſcended.—The *gentlewomen* of Rome did not ſuffer their infants to be ſo long ſwathed as poorer people. *Abbot.*—A woman who waits about the perſon of one of high rank:

The late queen's *gentlewoman,* a knight's daughter,
To be her miſtreſs' miſtreſs! *Shakeſpeare.*

A word of civility or irony.—Now, *gentlewoman*, you are confeſſing your enormities; I know it by that hypocritical down-caſt look. *Dryden.*

GENT'LESSE, *ſ.* Courteſy:

The ſalvage man, that never till this houre
Did taſte of pittie, neither *gentleſſe* knew,
Seeing his ſharp aſſault, and cruel ſtoure,
Was much emmoved at his peril's vew. *Spenſer.*

GENT'LIN, a town of Germany, in the circle of Lower Saxony, and duchy of Magdeburg: thirty miles north-eaſt of Magdeburg.

GENT'LY, *adv.* Softly; meekly; tenderly; inoffenſively; kindly.—The miſchiefs that come by inadvertency, or ignorance, are but very *gently* to be taken notice of. *Locke.*—Softly; without violence.—A ſort of great bat, as men lay aſleep with their legs naked, will ſuck their blood at a wound ſo *gently* made as not to awake them. *Crew.*

Fortune's blows,
When moſt ſtruck home, being *gently* warded, craves
A noble cunning. *Shakeſpeare.*

GENTOO'S, a name given to the profeſſors of the religion of the bramins. See the article HINDOOSTAN.

GEN'TRY, *ſ.* [*gentlery*, *gentry*, from *gentle.*] Birth; condition; rank derived from inheritance:

You are certainly a gentleman,
Clerk-like experienc'd, which no leſs adorns
Our *gentry* than our parent's noble name,
In whoſe ſucceſs we are gentle. *Shakeſpeare.*

Claſs of people above the vulgar; thoſe between the vulgar and the nobility.—Let ſtates, that aim at greatneſs, take heed how their nobility and *gentry* multiply too faſt. *Bacon.*

How cheerfully the hawkers cry
A ſatyr, and the *gentry* buy. *Swift.*

A term of civility, real or ironical:

The many-coloured *gentry* there above,
By turns are rul'd by tumult and by love. *Prior.*

Civility; complaiſance. *Obſolete:*

Shew us ſo much *gentry* and good-will,
As to extend your time with us awhile. *Shakeſpeare.*

GE'NU, *ſ.* [from γονυ, Gr. παρα το εις γην νευειν, becauſe by it the body is bent towards the earth.] The knee.

GEN'UA, in ancient geography, a famous city of Liguria, deſtroyed by Hannibal, and rebuilt by the Romans: now *Genoa.*

GEN'UBATH, [Heb. ſignifying *theft.*] The name of a man.

GENUFLEX'ION, *ſ.* [*genuflection*, Fr. *genu*, knee, and *flecto*, Lat. to bend.] The act of bending the knee; adoration expreſſed by bending the knee.—Here uſe all the rites of adoration, *genuflexions*, wax-candles, incenſe, oblations, prayers only excepted. *Stillingfleet.*

The jeſuit Roſweyd, in his Onomaſticon, ſhows, that genuflexion, or kneeling, has been a very ancient rite in the church, and even under the Old Teſtament diſpenſation; and that this practice was obſerved throughout all the year, excepting on Sundays, and during the time from Eaſter to Whitſuntide, when kneeling was forbid by the council of Nice. Others have ſhown, that the cuſtom of *not* kneeling on Sundays had obtained from the time of the apoſtles, as appears from St. Irenæus, and Tertullian; and the Ethiopic church, ſcrupulouſly attached to the ancient ceremonies, ſtill retains that of not kneeling at divine ſervice. The Ruſſians deem it an indecent poſture to worſhip God on the knees. The Jews alſo uſually pray ſtanding. Roſweyd gives the reaſons of the prohibition of genuflexion on Sundays, &c. from St. Baſil, Anaſtaſius, St. Juſtin, &c. Baronius is however of opinion, that genuflexion was not eſtabliſhed in the year of Chriſt 58, from that paſſage in Acts xx. 36, where St. Paul is expreſsly mentioned to kneel down at prayer; but Saurin ſhows, that nothing can be thence ſatisfactorily concluded. The ſame author remarks, alſo, that the primitive Chriſtians carried the practice of genuflexion ſo far, that ſome of them had worn cavities in the floor where they prayed: and St. Jerome relates of St. James, that he had contracted a hardneſs on his knees equal to that of camels.

GENU'GRA, *ſ.* [from γονυ, the knee, and αγρα, Gr. a ſeizure.] The diſeaſe commonly called the gout in the knee.

GEN'UINE, *adj.* [*genuinus*, Lat.] Not ſpurious; not counterfeit; real; natural; true.—The belief and remembrance, and love and fear, of God, have ſo great influence to make men religious, that where any of theſe is, the reſt, together with the true and *genuine* effects of them, are ſuppoſed to be. *Tillotſon.*

A ſudden darkneſs covers all;
True *genuine* night: night added to the groves. *Dryden.*

GEN'UINELY, *adv.* Without adulteration, without foreign admixtures; naturally.—There is another agent able to analize compound bodies leſs violently, more *genuinely*, and more univerſally, than the fire. *Boyle.*

GEN'UINENESS, *ſ.* Freedom from any thing counterfeit; freedom from adulteration; purity; natural ſtate.—It is not eſſential to the *genuineneſs* of colours to be durable. *Boyle.*

GE'NUS, *ſ.* [Latin.] Kindred, ſtock, or lineage. Manner, ſort, faſhion. With grammarians, it ſignifies the kind of noun, maſculine, feminine, or neuter. Among logicians, it is the firſt of the univerſal ideas; and is when the idea is ſo common, that it extends to other ideas, which are alſo univerſal; as, the quadrilater is *genus* with reſpect to the parallelogram and trapezia; ſubſtance is *genus* with reſpect to body and mind. So *genus ſummum* is that which holds the uppermoſt claſs in in its predicament; or it is that which may be divided into ſeveral ſpecies, each whereof is a genus in reſpect to other ſpecies placed below. *Genus ſubaltern*, is that, which being a medium between the higheſt genus and the loweſt ſpecies, is ſometimes conſidered as a genus and ſometimes as a ſpecies. *Genus remotum*, is where there is another genus between it and its ſpecies. In logic, *genus proximum* is the next or neareſt genus where the ſpecies is immediately under it; as man under animal. In botany, and natural hiſtory, a ſyſtem or aſſemblage of plants, or animals, or minerals, agreeing in ſome one common character, in reſpect to the ſtructure of certain parts, whereby they are diſtinguiſhed from all other claſſes. In muſic, a certain manner of ſub-dividing the principles of melody, *i. e.* the conſonant intervals into their concinnous parts. With rhetoricians, *genus* is diſtributed into demonſtrative, deliberative, and judiciary. Algebra, by the ancients, was diſtributed into two genera, logiſtic and ſpecious. With anatomiſts, an aſſemblage or ſyſtem of ſimilar parts, diſtributed throughout the body; as, the *genus nervoſum*, the nerves ſo conſidered.

GENU'SUS, in ancient geography, a river of Macedonia, falling into the Adriatic, above Apollonia: now the *Semno.*

GENZA'NO, a town of Italy, in the kingdom of Naples, and province of Baſilicata: twelve miles eaſt-ſouth-eaſt of Venoſa.

GEOCEN'TRIC, *adj.* [of γη, the earth, and κεντρον, Gr. a centre.] In aſtronomy, is ſaid of a planet or its orbit, to denote its having the earth for its centre. The moon alone is properly geocentric. And yet the motions of all the planets may be conſidered in reſpect of the earth, or as they appear from the earth, and thence called their *geocentric motions.* Hence the *geocentric place* of a planet, is the place where it appears to us, from the earth; or it is a point in the ecliptic, to which a planet,

ſeen from the earth, is referred. The *geocentric latitude* of a planet, is its latitude as ſeen from the earth; or the inclination of a line, connecting the planet and the earth, to the plane of the earth's ecliptic. Orbit is the angle which the line (connecting the planet and the earth) makes with a line drawn to meet a perpendicular let fall from the planet to the plane of the ecliptic. The *geocentric longitude* of a planet, is the diſtance meaſured on the ecliptic, in the order of the ſigns, between the geocentric place and the firſt point of Aries.

GEOCEN'TRICALLY, *adv.* In a geocentric manner, in a manner which ſuppoſes the earth to be the centre.

GEODÆ'SIA, *ſ.* [of γη, and δαιω, Gr. to divide or diſtribute.] That part of geometry which contains the doctrine or art of meaſuring ſurfaces, and finding the contents of all plane figures.

GEODÆT'ICAL, *adj.* [from *geodæſia.*] Relating to the art of meaſuring ſurfaces; comprehending or ſhowing the art of meaſuring land.

GEODÆT'ICALLY, *adv.* According to the manner in which ſurfaces are meaſured.

GEOF'FREY of MONMOUTH, a writer of early Britiſh hiſtory, flouriſhed under king Stephen, about the year 1150, and was firſt archdeacon of Monmouth, and then biſhop of St. Aſaph. On account of ſome tumults in Wales, he quitted his dioceſe, and appealed to king Henry II. who gave him the abbacy of Abingdon in commendam. Upon an application from the clergy of St. Aſaph to return to his ſee, he refuſed it, thinking to keep his abbacy; but this was beſtowed upon another perſon, ſo that he was left without a title. He wrote various works, of which the moſt noted was his *Chronicon ſive Hiſtoria Britonum*, ſuppoſed to be tranſlated from an ancient hiſtory in the Welſh language, brought from Brittany. It contains a pretended genealogy of the kings of Britain from the time of the fabled Brutus the Trojan, and enumerates above ſeventy illuſtrious monarchs before the invaſion of Julius Cæſar. The marvellous relations concerning prince Arthur are chiefly taken from this author. Notwithſtanding the manifeſtly fabulous nature of Geoffrey's work, nationality, and the love of wonder, have given it popularity, ſo that it has paſſed through ſeveral impreſſions, and has been epitomiſed by Ponticus Virunnius, an Italian. It is the opinion of judicious critics that a foundation of truth in it is buried under a ſuperſtructure of monkiſh forgeries.

GEOFFROY' (Stephen-Francis), a phyſician eminent for chemical and botanical knowledge, born in 1672, at Paris, where his father was an apothecary, and had paſſed through the principal offices of magiſtracy. At the age of twenty, Geoffroy was ſent to an eminent ſurgeon at Montpellier, and there attended upon the lectures of the celebrated profeſſors of that ſchool of medicine. He then travelled into the ſouthern provinces of France, and viewed every object worthy of curioſity. In 1698 he accompanied the count de Tallard in his embaſſy to England, where he became known to the principal men of ſcience, and obtained admiſſion into the royal ſociety. Thence he paſſed into Holland; and in 1700 he attended the abbé de Louvois in a tour in Italy. Upon his return he quitted his original deſtination, which was that of pharmacy, and entered upon the higher order of the profeſſion, for which his education had ſo well qualified him. He was created bachelor of phyſic in 1702, and doctor in 1704. The ſubjects of his theſes were all curious: one of them, *An Hominis Primordia Vermis?* was thought ſo intereſting by ſome ladies of high rank, that it was neceſſary to tranſlate it into French. In this, he aſſerts the ſexes of plants, and ſuppoſes the ſtamina to be the male organs.

Geoffroy was in no haſte to commence practice. He continued his ſtudies in retirement for ſome years, and ſeems never to have puſhed himſelf forwards, though his merit cauſed him to be conſulted by his brethren in important caſes. His extreme anxiety for his patients gave him a melancholy air, which at firſt alarmed them, till they were able to make due allowances for temper. In 1709 the king nominated him to the poſt of profeſſor of phyſic in the college royal, vacant by the death of the celebrated Tournefort. He began his functions by a courſe of Materia Medica, for which he had long been collecting materials. M. Fagon, in 1712, reſigned to him his office of profeſſor of chemiſtry in the royal garden, which he had for ſome time filled as his ſubſtitute. The faculty of Paris choſe him twice to the office of dean, which was at that time particularly laborious on account of their diſputes with the company of ſurgeons. He alſo occupied a place in the royal academy of ſciences from 1699, and was aſſiduous in his attendance upon their meetings. His health at length gave way under his toils, and he died in January 1721. As a chemiſt, Geoffroy is known by the Table of Affinities which in 1718 he gave to the public, and which was the firſt of the kind. His principal work in medicine was a Hiſtory of the Materia Medica, publiſhed after his death in three volumes 8vo. 1741, in Latin, and ſince tranſlated into French, Engliſh, and German. Though an unfiniſhed work, it was the moſt complete, as far as it went, that had hitherto appeared. The firſt volume contains all the mineral part; the ſecond, the exotic vegetables; the third, the indigenous. He alſo wrote ſeveral papers, chemical and botanical, in the Memoirs of the Academy of Sciences.

GEOFFROY'A, *ſ.* [ſo named by Jacquin, in honour of Monſ. *Geoffroy*, the ſubject of the preceding article.] In botany, a genus of the claſs diadelphia, order decandria, natural order of papilionaceæ or leguminoſæ. The generic characters are—Calyx: perianthium one-leafed, bell-ſhaped, half five-cleft; the upper diviſions diverging, ſpreading. Corolla: papilionaceous; banner roundiſh, emarginate, flat, reflex; wings the ſame length with the banner, blunt, concave; keel compreſſed, the ſame length and figure with the wings. Stamina: filaments diadelphous (ſimple and nine-cleft), the length of the keel; antheræ roundiſh. Piſtillum: germ roundiſh; ſtyle ſubulate; ſtigma obtuſe. Pericarpium: drupe ovate, large, with a longitudinal groove on each ſide. Seed: nut ſubovate, woody, rather flatted, with a longitudinal groove on each ſide, acute, two-valved.—*Eſſential Character.* Calyx five-cleft; drupe ovate; nut flatted.

Species. 1. Geoffroya ſpinoſa, or thorny Geoffroya: thorny; leaflets oblong. This is a thorny tree, ſays Linnæus, with pinnate leaves, and a drupaceous fruit, reſembling the peach. It is deſcribed by Jacquin, as an inelegant tree, twelve feet high, upright, branched. Thorns few, awl-ſhaped, frequently an inch long, thick on the trunk and branches. Flowers on very ſhort peduncles, with corollas of a dirty fulvous colour, diffuſing widely a moſt fetid odour; the drupe does not ill repreſent the freſh fruit of an almond, the rind is very ſlightly tomentoſe, and of a greeniſh yellow colour; the pulp is ſoft, ſweet, yellowiſh, has a nauſeous ſmell, and ſtains the hands with ruſt-colour not eaſily waſhed out; the nut or ſtone is whitiſh, adheres cloſe to the pulp, and contains a white kernel, that has a farinaceous aſtringent taſte. A plant with papilionaceous flowers, and a drupe for a fruit, is a great ſingularity. Native of Carthagena in New Spain.

2. Geoffroya inermis, or ſmooth Geoffroya: without thorns; leaflets lanceolate. This tree riſes to a conſiderable height, and towards the top ſends off ſeveral branches; the wood is hard enough to admit of being poliſhed; the external bark is ſmooth and grey; internally it is black and furrowed. The fruit is a large ſubovate drupe, incloſing a woody nut. Native of Jamaica. Introduced in 1778, by Meſſrs. Kennedy and Lee. In Jamaica it has the name of *cabbage-bark*, or *worm-bark-tree.* The bark, which has a mucilaginous ſweetiſh taſte, and a diſagreeable ſmell, was firſt noticed

as

as a vermifuge by Mr. Peter Duguid; but Dr. Wright, who reſided a long time at Jamaica, has communicated the fulleſt information concerning this tree: according to him, the bark is powerfully medicinal, and its anthelmintic effects have been eſtabliſhed at Jamaica by long experience. It may be given in decoction, ſyrup, powder, or extract; but muſt be uſed with caution, in ſmall doſes, at firſt.

GEOG'RAPHER, *ſ.* [γη and γραφω, Gr. *geographe*, Fr.] One who deſcribes the earth according to the poſition of its different parts.—A greater part of the earth hath ever been peopled than hath been known or deſcribed by *geographers*. *Brown.*

From ſea to ſea, from realm to realm, I rove,
And grow a mere *geographer* by love. *Tickel.*

GEOGRAPH'ICAL, *adj.* [*geographique*, Fr. from *geography*.] Relating to geography; belonging to geography.—I ſend you an hiſtorical, chronological, and *geographical*, dictionary. As *geographical*, it deſcribes the ſituation of countries and cities. *Cheſterfield.*

GEOGRAPH'ICAL MILE, the ſea-mile or minute, being the 60th part of a degree of a great circle.

GEOGRAPH'ICALLY, *adv.* In a geographical manner; according to the rules of geography.—Minerva lets Ulyſſes into the knowledge of his country; ſhe *geographically* deſcribes it to him. *Broome.*

GEOG'RAPHY, *ſ.* [*geographie*, Fr. *geografia*, Ital. *geographia*, Span. Port. and Lat. γεωγραφια, of γη, the earth, and γραφω, Gr. to deſcribe.] The ſcience which teaches and explains the nature and properties of the earth, as to its figure, place, magnitude, motions, celeſtial appearances, &c. with the various lines, real or imaginary, on its ſurface. Golnitz conſiders geography as either exterior or interior; but Varenius more juſtly divides it into general and ſpecial; or univerſal and particular. *General* or *univerſal geography*, is that which conſiders the whole earth, without any regard to particular countries; while *ſpecial* or *particular geography*, contemplates the conſtitution of the ſeveral particular regions, or countries. What is called *general* geography, embraces a wide view of the ſubject, regarding the earth aſtronomically as a planet, the grand diviſions of land and water, &c. and extends to what is called practical or mathematical geography, being that which defines the ſpherical ſtructure of the earth, and demonſtrates the artificial conſtruction of globes, maps, charts, &c.

Among the ſubordinate diviſions of this ſcience, may be named *phyſical* geography, which inveſtigates the materials of which the earth is formed, with the changes or revolutions it has undergone; and which the reader will find moſt amply diſcuſſed under the article EARTH, vol. vi. p. 177–206; and EARTHQUAKE, p. 207–216. But the moſt common acceptation now given to this ſcience, is that of *hiſtorical* geography, not only from its profeſſed ſubſervience to hiſtory, but becauſe it is in fact a narrative ſo nearly approaching the hiſtorical, that Herodotus, and many other ancient hiſtorians, and even the immortal Homer, have enriched their works with it; and the celebrated deſcription of Germany, by Tacitus, contains moſt of the materials adopted in treatiſes of geography. In this popular point of view, therefore, hiſtorical geography may be divided into *civil*, which treats of the cuſtoms, manners, religion, laws, &c. of different communities; and *chorographical*, which points out the diverſified regions of the earth, its various diſtricts, and diviſions into land and water, iſlands, continents, ſeas, lakes, gulphs, &c. and hence we trace hiſtorical geography into its two grand diviſions of ANCIENT and MODERN. From ancient geography, the moſt important facts in the phyſical hiſtory of the globe are to be defined, with the modern appearance of that which is now moſt ſtriking on its ſurface. Dates of remote period cannot be underſtood, unleſs they be connected with thoſe of place, which it is the object of geography to aſcertain; and hence aſtronomy, natural hiſtory, natural philoſophy, geometry, navigation, and all the principal arts of civil life, are, in truth, intimately related to the ſcience of geography, either as ſupplying its facts and principles, or as deriving their beſt lights from it. A well-grounded knowledge of the ſcenes of ancient hiſtory may ſeem, to a perſpicacious mind, to annihilate the lapſe of ages, and to give us the privilege of being contemporaries of thoſe earlier races of men, whoſe progreſs in civility we delight to contemplate; and but for a knowledge of their geography, more than half the information which we find in the writings of the ancients, would be loſt to us. Yet there is nothing more difficult in erudition or ſcientific reſearch, than to acquire a thorough knowledge of the facts of *ancient*, in clear ſatisfactory compariſon with thoſe of *modern*, geography. The notions of the ancients reſpecting the figure of the earth, and its relations to the heavenly bodies, were not ſuch as to afford that accuracy in the diviſions of the world, without which local diſtances can never be diſtinctly recorded. The names which they have given to places, vary or agree in different writings, with a very troubleſome irregularity; and the changes which have taken place on the face of the globe ſince the ancients wrote, have been ſo very conſiderable, that theſe, above every thing elſe, render all the parts of ancient geography in the utmoſt degree difficult and obſcure. Yet we ſhall endeavour to open this reſearch from the records of the moſt diſtinguiſhed writers, whoſe valuable diſcoveries ſeem wholly their own, undertaken without a beacon to conduct, or a fenfire to miſlead.

ORIGIN AND PROGRESS OF GEOGRAPHY.

The origin or firſt principles of geography, muſt have been nearly primeval with the early population of the world, which it is its province to deſcribe. It muſt however be obvious to every obſerver, that arts and ſciences, when repreſented only in their higheſt ſtate of improvement, can never communicate full information, unleſs at the ſame time the ruder ſtages through which they paſſed before they arrived at ſuch perfection, are minutely traced and appreciated. Geography, in this reſpect, is like every other ſcience, whoſe imperfect beginnings ought to be defined, and the time and manner pointed out, by which it received its gradual improvements. Its early twilight rays may in ſome meaſure be collected from Moſes, Job, and Homer; which were afterwards concentrated by the Egyptians, Chaldeans, and Babylonians. From them it appears, that the early geographers, being deſtitute of mathematical inſtruments, and of aſtronomical obſervations, firſt began to determine the ſituation of places according to *climates*; and they were led to fix upon thoſe climates from the form and colour of certain animals which were to be found in thoſe different countries. The appearance of Negroes, or what they called *Ethiopians*, and of the larger animals, ſuch as the rhinoceros and elephant, ſuggeſted to them the line of diviſion where the limits of the torrid zone began towards the north, and ended towards the ſouth. For reaſon, ſaid they, points out to us, that ſimilar things appear in the ſame temperature of the elements; and that whether they were animals or plants, they are produced according to the ſimilar ſtate of the air or climate under the ſame parallels, or a like ſituation equally diſtant from either pole.

This ſimple manner of dividing their climates, muſt be conſidered as the firſt ſcientific outline of geography in the more early ages of the world. But another method was ſoon adopted by the Egyptians and Babylonians, which was the determining the ſituation of places, or their diſtance from the equator, by obſerving the length of their longeſt and ſhorteſt days. And that this obſervation might be performed with ſome accuracy, they made uſe of a kind of perpendicular ſun-dial, having a

ſtilus

ſtilus or gnomon erected upon a horizontal plane, by which they were enabled to meaſure the length or ſhortneſs of the ſhadow, in proportion to the height of the ſtilus. It is difficult to ſay which of theſe two nations are beſt entitled to the credit of the invention. Herodotus, whoſe geographical notices are the firſt that aſſumed a connected and conſiſtent form, tells us, that the Greeks firſt learned the pole, the gnomon, and the twelve diviſions of the day, from the Babylonians. But in anſwer to this aſſertion it may be obſerved, that the merit of this invention of the gnomon in Greece, is aſcribed by Pliny and Diogenes Laertius, to the aſtronomical ſchool of Miletus, and particularly to Anaximander and Anaximenes, the diſciples of Thales; and there is reaſon to believe that this method of obſervation was well known to Thales himſelf. For though the actual erection of a gnomon was an honour reſerved for one of his immediate ſucceſſors, who placed at Lacedæmon the firſt ſun-dial upon that conſtruction that was ſeen in Greece; yet it may be preſumed at the ſame time, that Thales, who had travelled into Egypt, where he learned both his geometry and aſtronomy, might bring from thence the idea alſo and principle of this inſtrument of obſervation; for Diogenes Laertius particularly mentions, that he was the firſt who found out the paſſage of the ſun from tropic to tropic. By what inſtrument, then, could this be determined, unleſs by the gnomon? For the aſtrolab and the armillary circles are generally believed to have been invented by ſome of the later Greek aſtronomers who flouriſhed under the Ptolemies, ſuch as Timocharis, Ariſtillus, or Eratoſthenes.

Thales is likewiſe ſaid to have been the author of two books, one on the tropic, and one on the equinox, the exact times of which he probably determined by the ſhadows of the gnomon; and by this he was naturally led to another of his diſcoveries, which was the diviſion of the year into its four ſeaſons, which was a conſequence of his finding the particular days when the ſun appeared to be in the tropics and in the equinox. His diviſion of the year into 365 days, was undoubtedly brought by him from Egypt, as it is univerſally allowed to have been an Egyptian diſcovery prior to his time, being aſcribed to the ſecond Mercury, ſir-named Triſmegiſtus, who is ſuppoſed to have lived about fifty years after the Exodus, according to Euſebius. And Pliny tells us expreſsly, that the diſcovery of this length of the year by the addition of the five days and a quarter to the 360, was made by obſerving when the ſhadow returned to its marks; which is a clear proof that it was done by the uſe of a gnomon. And that the taking the lengths of the ſhadow, by way of calculation, was an idea familiar to Thales, appears from his firſt inventing the method of determining the height of the pyramids by their ſhadow at that exact inſtant of time in the day when the ſhadow of a man is found to be equal to his height.

It does not therefore ſeem to be an improbable ſuppoſition, that this method of obſerving by the gnomon was originally imported from Egypt, where it was known long before any dawn of the Greek learning; for it has been the opinion of ſeveral eminent writers, that their pyramids and obeliſks, which to common travellers appeared to be buildings merely of ornament and magnificence, were really ſun-dials upon an immenſe ſcale, by which the variation of the length of the ſhadow in proportion to its height could be taken with a greater degree of accuracy. And to confirm this opinion, it was found upon examination by M. de Chazelles in 1694, that the two ſides, both of the larger and ſmaller pyramids, were placed exactly north and ſouth, ſo as to be true meridian lines even at this day, and the other two ſides ſtood eaſt and weſt; which is a clear proof, that even in thoſe remote ages in which they were built, they were ſo contrived by the Egyptians to ſtand in the direction of the four cardinal points of the heavens, for the purpoſes of their aſtronomical obſervations.—See the article EGYPT, vol. vi. p. 360-361.

From the days of Thales and his immediate ſucceſſors, who flouriſhed in the ſixth century before Chriſt, there ſeems to have been little done towards the ſolid improvement of geography for two hundred years, till the eſtabliſhment of the famous aſtronomical ſchool of Alexandria. For we have ſcarcely any fragments remaining of the ſchool of Pythagoras; though at the ſame time it muſt be owned, that their having known the true ſyſtem of the world, by placing the ſun in the centre, and giving the earth both the diurnal and annual revolutions, are proofs that their knowledge of this muſt have been eſtabliſhed by clear and accurate obſervations. There is however an aſtronomical obſervation mentioned during this period, and it is indeed the firſt Greek one that ſtands on record, and is preſerved to us by Ptolemy, which is that of Meton and Euctemon, who obſerved the ſummer ſolſtice at Athens, during the archonſhip of Apſeudes, upon the 21ſt of the Egyptian month Phamenoth, in the morning, being the 27th of June, 432 years before Chriſt. This obſervation was made with a view of determining the beginning of their cycle of XIX years, which commenced upon the new moon of the 15th of July immediately ſucceeding (being exactly eighteen days after the ſolſtice), and fell, according to Diodorus, upon the 13th of the Athenian month Sciropharion.

This ſolſtitial obſervation muſt have given Meton and Euctemon an opportunity of determining the latitude of Athens at the ſame time, had they but known the ſimple manner of drawing the concluſion; for as the length of the ſhadow of the gnomon was narrowly watched at the criſis of the ſolſtice, the proportion of that to the height of the gnomon was eaſily known, by which the angle of the ſun's altitude was given. And though the ſun's greateſt declination was then very inaccurately known, being by ſome ſuppoſed to be 24°, and by others 23° 51′, which is only found at preſent to be 23° 28′ 10″, yet ſtill the latitude of Athens might have been deduced within the limitations of this error; making at the ſame time allowances for the groſs manner in which altitudes were determined without proper inſtruments, and without the ſolutions of trigonometry, which appears to have been unknown till the age of Hipparchus, by whom it was firſt introduced.

It would ſeem that Timocharis and Ariſtillus, who began to obſerve 295 years before Chriſt, were the firſt who introduced the manner of determining the poſitions of the ſtars according to their longitudes and latitudes taken with reſpect to the equator. This we know from Ptolemy, who has preſerved many of their obſervations in his Almageſt; one in particular is well known, and it gave riſe to the diſcovery of the preceſſion of the equinoxes; it was that of the Spica in Virgo, which Timocharis found to be 8° weſt from the autumnal equinoctial point, and likewiſe that it was one degree and two fifths to the north of the equator; both of which were found to be different by Hipparchus; ſo that this bright ſtar had ſhifted its place with regard to theſe two particulars in that interval of time elapſed betwixt theſe two obſervations; for in one caſe he only found it to be 6° weſt from the autumnal equinoctial point; and in the other, that it was three-fifths of a degree, or 36′, to the north of the equator; but it was found both by Timocharis and Hipparchus to have remained nearly at the diſtance of two degrees to the ſouth of the middle of the zodiac or ecliptic. From which it naturally appeared reaſonable for Hipparchus to ſuppoſe that the fixed ſtars had a ſlow motion round the poles of the zodiac: "But, as Ptolemy tells us, that though inclined to this opinion, yet Hipparchus ſays of himſelf, that he heſitated in his own mind upon the deciſion of the queſtion, becauſe the obſervations of Timocharis were not to be confidently depended upon, as being made in a rough

manner; and that the interval of time (though of one hundred and fifty years and upwards) was not ſufficient for a clear and certain comprehenſion of that matter."

There was likewiſe an additional reaſon for this ſuſpenſion of judgment in Hipparchus, which Ptolemy has preſerved in another paſſage of his Almageſt. For he tells us, that Hipparchus had found the greateſt diſtance of the Spica of Virgo from the autumnal equinox to be 6° 30′ in the thirty-ſecond year of the third Calippic period (viz. 146 before Chriſt,) and that he found it to be only 5° 15′ in the forty-third year of the ſaid period (viz. 135 before Chriſt); and as he could not apprehend that this ſtar ſhould make a motion of 1° 15′ in eleven years, he concluded that this difference aroſe from ſome inequality in the apparent motion of the ſun: for though this variation puzzled him, yet, ſays Ptolemy, "he was prompted from his love of truth to conceal nothing which could tend in the leaſt degree to carry any perſons to a ſuſpicion upon his obſervations." But by way of accounting for this, he was induced at one time to ſuppoſe, that this motion of the fixed ſtars, in varying their diſtance from the equinoctial point, was confined to ſuch of them as were near the zodiac, as if this irregularity was occaſioned by the ſun, moon, and planets which moved in this path; and this Ptolemy calls *the firſt hypotheſis of Hipparchus*. But this he afterwards relinquiſhed, when he found that the ſtars in the Great Bear, and others which were at a conſiderable diſtance from the zodiac, ſhifted their places equally with thoſe in the zodiac, both with regard to the equator and the equinoctial colures.

From theſe particulars, however, it ſufficiently appears, that Timocharis and Ariſtillus are intitled to a ſhare of the merit of Hipparchus, who is ſo much celebrated for the boldneſs of his attempt in numbering the ſtars, and ranging them all according to their ſituations in the heavens. And it is likewiſe evident, that the longitudes and latitudes of the ſtars were reckoned from the equator both by Timocharis and Hipparchus; for it was only after the preceſſion of the equinoxes was fully eſtabliſhed by Ptolemy, that the longitudes and latitudes of the ſtars were uniformly referred to the ecliptic. It was then but an eaſy tranſition of thought in Hipparchus to aſſort and diſpoſe the different parts of the earth according to latitude and longitude, being only a new application or tranſpoſition of that artifice which was already ſo happily introduced in the arrangement of the conſtellations, and therefore equally proper to be adopted in tracing the meridians and parallels of the earth.

Strabo has preſerved the very words of Hipparchus, in which he explains his ideas upon this ſubject, being a Fragment extracted from a Treatiſe of his, written againſt Eratoſthenes. "It is impoſſible, ſays he, either for an illiterate perſon, or a man of learning, to acquire the neceſſary knowledge of geography without an attention to the heavens, and to the obſervations of eclipſes. For whether Alexandria in Egypt is more northerly than Babylon, or more ſoutherly, or to what diſtance this amounts, cannot be determined without conſidering them by their climates. In like manner, what places lie towards the eaſt, or towards the weſt, and whether more or leſs, no perſon can know accurately, without comparing the eclipſes of the ſun and moon." As the two diſtinctions here pointed out give us the clear ideas of latitude and longitude, it is with great juſtice that Hipparchus is univerſally allowed to have fixed the firſt ſolid foundation of geography, by uniting it to aſtronomy, and ſo rendering its principles ſelf-evident and invariable.

Pliny likewiſe confirms this, when after mentioning Thales and Sulpicius Gallus, who had both predicted eclipſes, he adds "that Hipparchus had foretold the revolution (of the eclipſes) of the ſun and moon for ſix hundred years, comprehending the months, days, and hours, of different nations, and the ſituation of places." By which it would ſeem, that the latitudes and longitudes of theſe places were particularly given. But the ſtrongeſt authority for appropriating this invention to Hipparchus, is that of Ptolemy in his geography, lib. 1. cap. 4. who ſays, "that Hipparchus was the only author who had given the elevations of the north pole of a few cities, in proportion to the great number that were to be delineated, and ſuch too as lay under the ſame parallels. Some that came after Hipparchus had given thoſe of other places that lay upon the ſame meridian, becauſe their moſt favourable voyages were commonly from north to ſouth; but that moſt of the diſtances, and principally thoſe towards the eaſt and weſt, were laid down in a ſtill more unſatisfactory manner; not from any negligence of thoſe who recorded them, but becauſe they had no ready method of bringing them to a mathematical exactneſs; and likewiſe, becauſe there were not many eclipſes of the moon which had been obſerved at different places at the ſame inſtant of time: for it is upon record, that an eclipſe, which was obſerved at Arbela at five o'clock, was ſeen at Carthage only at two o'clock; from which it clearly appeared what was the diſtance of theſe two places towards the eaſt and weſt given in equinoctial time."—It is however a little remarkable, that though latitudes and longitudes were in this manner introduced and pointed out by Hipparchus, yet ſo little were they attended to till the days of Ptolemy, that none of the intermediate authors, ſuch as Strabo, Vitruvius, and Pliny, who all of them entered into a minute deſcription of the geographical ſituation of places according to the length and ſhadows of the gnomon, have ever given us the leaſt hint of the latitude or longitude of any one place whatever in the language of degrees and minutes.

When the true principles of geography came to be thus pointed out by the invention of latitude and longitude, it was no wonder that maps were from thence made to aſſume a new form of projection, eſſentially different from thoſe in uſe prior to this period. It was for this purpoſe that the planiſphere, or the delineation of the ſphere in plano, is ſaid by Syneſius to have been introduced by Hipparchus, in order to preſerve the fameneſs of the proportions in the diverſity of the figure. It muſt be owned, however, that the previous ſteps to this new projection of the ſphere had been in a great meaſure made eaſy by Archimedes, when he invented, at leaſt fifty years before Hipparchus lived, thoſe noble theorems of his for meaſuring the ſurface of a ſphere and its different ſegments; which were none of the leaſt important diſcoveries of that great geometrician.—See the article GEOMETRY.

We find in Strabo an alluſion to a ſpherical projection in plano, where the meridians bended towards each other, ſo as to make the figure of a cone. Hence we aſcertain that the maps which were projected before the time of Hipparchus, were little more than rude outlines and topographical ſketches of different countries; excepting the ſingle map invented by Eratoſthenes. The earlieſt were thoſe of Seſoſtris, mentioned by Euſtathius in his epiſtle prefixed to his Commentary on Dionyſius's Περιηγησις, who ſays "that this Egyptian king, having traverſed great part of the earth, recorded his march in maps, and gave copies of his maps not only to the Egyptians, but to the Scythians, to their great aſtoniſhment."

The ancient Jews appear alſo to have had ſurveyors among them; and ſome have imagined from this that they actually made a map of the Holy Land, when they gave the different portions to the nine tribes at Shiloh, as mentioned in Joſhua, chap. xviii. ver. 4, 8, and 9. For they are there ſent to walk through the land, and to deſcribe it; and they are afterwards ſaid to have *deſcribed it in ſeven parts, in a book*. And Joſephus tells us, that

that when Joſhua ſent out people from the different tribes to meaſure the land, he gave them as companions perſons well inſtructed in geometry, who could not be miſtaken in the truth from their ſkill. He afterwards mentions, that the men who were ſent, being ten in number, περιοδευσα τες τε και τιμησαμενοι την γην, "going round and eſtimating the land," returned in the ſeventh month to Joſhua at Shiloh. From this therefore we may reaſonably conclude, that a geometrical ſurvey was then made of the Holy Land; though it does not fully determine whether their menſuration was only taken down in numbers, or regularly projected and digeſted into a map.

The firſt Grecian map on record was that of Anaximander, mentioned by Strabo, lib. i. p. 7. It has been conjectured, that this was a general map of the then known world, and is imagined to be the one referred to by Hipparchus under the deſignation of "the ancient map," which he in a few particulars preferred to that of Eratoſthenes; and ſome have conjectured, that Anaximander, "by inventing a ſphere and introducing a map, and a meaſure of the circumference of the ſea and land," according to Diogenes Laertius, may be ſuppoſed to be one of the mathematicians alluded to by Ariſtotle at the end of his ſecond book *de Cælo*, who made the circumference of the earth to be four hundred thouſand ſtadia, being the firſt groſs calculation attempted to be given of that great problem in geography.

The map of Ariſtagoras, tyrant of Miletus, is likewiſe particularly worthy of our attention, becauſe it is minutely deſcribed by Herodotus, and furniſhes a curious idea of the nature of maps in thoſe early ages. He tells us, that Ariſtagoras ſhewed it to Cleomenes king of Sparta, with a view of inducing him to attack the king of Perſia even in his palace at Suſa, in order to reſtore the Ionians to their ancient freedom. It was traced upon tables of braſs or copper, and contained the intermediate countries which were to be traverſed in that march. The words of Herodotus muſt not however be interpreted too literally, as if it contained "the whole circumference of the earth, the whole ſea or ocean, and all the rivers." For notwithſtanding the pompouſneſs of the expreſſion, it may fairly be concluded from the ſtate of geography at that time, that the ſea meant only the Mediterranean, and therefore the earth or land the coaſts of that ſea, and more particularly the Leſſer Aſia extended towards the middle of Perſia, and the rivers were the Halys, the Euphrates, and the Tigris, which Herodotus mentions as neceſſary to be croſſed in that expedition. It contained one ſtraight line called the "Royal Highway," οδος η Βασιληιη, taking in all the ſtations or places of encampment, which were called σταθμοι, from Sardis to Suſa; ſo that it was an itinerary, or what the Greeks diſtinguiſhed by the title of απογραφη σταθμων. There were one hundred and eleven of theſe ſtations in the whole extent of this line or road, containing 13500 ſtadia, or 450 paraſangæ, which being reduced to the Roman mile, allowing eight ſtadia to each mile, amounts to 1687½ Roman miles; and as it was a march of ninety days, Herodotus tells us, that 150 ſtadia were allowed for a day's march, which brings it to eighteen and three-quarters Roman miles for each day. If we would accommodate this to the Engliſh ſtatute mile, which contains 5280 feet, whereas the Roman mile conſiſted only of 5000 feet, it will reduce a day's march to eighteen Engliſh ſtatute miles and one-ſixth of a mile nearly, as the Roman itinerary foot differed very little from the preſent Engliſh foot, as appears from two itinerary diſtances which have been meaſured; one is the twenty-five miles from Bologna to Modena, taken by Ricciolus, and the other the twenty-one miles betwixt London and Verulam, found by ſome ſurveyors quoted by Bernard to contain 20·37 miles, of 5000 Engliſh feet to a mile.

Theſe itinerary maps of the roads and places of encampment, were indiſpenſably neceſſary in all armies. We find Athenæus, in his Deipnoſoph. lib. x. p. 442, quotes Bœton as author of a work intitled Σταθμοι της Αλεξανδρε πορειας, the Encampments of Alexander's March; and he likewiſe cites Amyntas, εν τοις σαθμοις. And Pliny, lib. vi. cap. 17. tells us, that Diognetus and Bœton were the ſurveyors of his marches; he then quotes the exact number of miles according to their menſuration, and afterwards confirms it by referring to the letters of Alexander himſelf. It likewiſe appears from Strabo, that Alexander was very careful in perſonally examining the meaſures of his ſurveyors, having his deſcriptions always from the moſt ſkilful in every country. And the ſame author acquaints us, that a copy of this great monarch's ſurvey was given by Xenocles his treaſurer to Patrocles the geographer, who, as Pliny informs us, was admiral of the fleets of Seleucus and Antiochus. His book on geography is often quoted both by Strabo and Pliny; and it appears that this author furniſhed Eratoſthenes with the principal materials and authorities for conſtructing the oriental part of his map of the then known world. For the voyages of Patrocles under Seleucus upon the Caſpian ſea, and elſewhere, were a kind of ſupplement to thoſe meaſurements given by Bœton and Diognetus already mentioned, and by Nearchus and Oneſicritus, the two admirals who were employed under Alexander, and therefore Pliny quotes them immediately after. It appears likewiſe from the ſame paſſage, that Megaſthenes and Dionyſius were two ſurveyors ſent into India by Ptolemy Philadelphus for the purpoſes of geography, and their authority was ſometimes ſet in oppoſition to Patrocles by Hipparchus in his Criticiſm upon Eratoſthenes's Geography.

We have dwelt the longer upon theſe different ſurveys which took their riſe from Alexander's expedition and conqueſts, and thoſe of his immediate ſucceſſors, becauſe geography began to aſſume a new face and form from this memorable era. For Eratoſthenes, who is deſervedly conſidered as the great father of chronology, employed his eminent abilities and learning with equal ſucceſs to reduce geography into a regular ſyſtem, and laid its foundation upon clear and ſolid principles. We muſt do him the juſtice to allow, that it was he who firſt introduced into his map a regular parallel of latitude. It was a geographical outline traced over certain places whoſe longeſt day was obſerved to be exactly of the ſame length. He began it from the Straits of Gibraltar, and it thence paſſed through the Sicilian ſea, and near the ſouthern extremities of Peloponneſus, and was continued through the iſland of Rhodes and the bay of Iſſus, and there entering Cilicia, and ſo croſſing the Euphrates and Tigris, was extended to the mountains of India. By means of this parallel line he endeavoured to rectify the errors in the ancient geographical map, ſuppoſed to be that of Anaximander. In drawing this parallel, he was regulated by obſerving where the longeſt day conſiſted of fourteen hours and a half, which Hipparchus afterwards determined to be the latitude of 36°, making by this a ſort of tranſlation of it into his own aſtronomical language.

This firſt parallel through Rhodes, was ever afterwards conſidered with a degree of preference, like the foundation ſtone of all the ancient maps; for it was traced through the middle of the Mediterranean, whoſe coaſts were in the centre of the principal nations of antiquity, and the longitude of the then known world was often attempted to be meaſured in ſtadia and miles, according to the extent of that line, by many ſucceeding geographers. The running of this parallel was ſo happy a thought in Eratoſthenes, that it not only encouraged him to trace upon his map other parallels at certain intervals from his firſt, ſuch as one through Alexandria, another through Syene, and another through Meroe, but he undertook to trace at right angles to theſe a meridian

ridian paſſing through Rhodes and Alexandria down to Syene and Meroe. And as the progreſs he thus made tended naturally to enlarge his ideas upon this ſcience, he attempted a ſtill more arduous taſk, which was to determine the circumference of the globe by an actual meaſurement of a ſegment of one of its great circles, making his computation upon the whole by uniting certain accurate obſervations made in the heavens with a correſponding diſtance carefully ſurveyed and taken upon a meridian of the earth.

The ſegment of the meridian which he fixed upon for this purpoſe, was that between Alexandria and Syene, the diſtance of which was meaſured, and found to be 5000 ſtadia, and the angle of the ſhadow upon the ſcaphia or ſun-dial which was obſerved at Alexandria, was equal to the 50th part of the circle; for at Syene there was no ſhadow from the gnomon at the mid-day of the ſummer ſolſtice; and that this might be more accurately taken, they dug a deep well, which being perpendicular, was completely illuminated at the bottom when the ſun was vertical. Though this even was not fully ſufficient to give the exact line of the tropic, becauſe the ſun was found to be vertical, or to caſt no ſhadow at all, for a circular ſpace of 300 ſtadia, becauſe the ſun's diameter, being equal to 32 minutes, would therefore appear perpendicular at the ſame inſtant of time to an extent of ground correſponding to that number of minutes; and therefore Ricciolus concludes, that this vertical obſervation muſt have extended 150 ſtadia on each ſide of Syene.

The ſubſtance of this account is taken from Cleomedes, who ſeems to have extracted it literally from Eratoſthenes's original work, intitled Μετρησεις, and it is publiſhed as ſuch at the end of the Oxford edition of Aratus, in 1672, though under the title of Μετρου της γης περιφερειας. By this account Eratoſthenes made the circumference of the earth amount only to 250,000 ſtadia, whereas a cloud of original authors have uniformly given the numbers to be 252,000. And to reconcile theſe two calculations, Dr. Murdoch has ingeniouſly ſuppoſed, that inſtead of 7° 12′, the difference of latitude was 7° 8′½, which was the $\frac{1}{50}\frac{2}{5}$ of the circumference, which would bring the calculation to 250,000 ſtadia, and that Cleomedes neglected the ſmall fractional part of the denominator; but that the principal miſtake was in meaſuring the diſtance, and finding it to be 5000 ſtadia. Indeed nothing is more common than to find a confuſion of numbers in the diſtances given us by ancient authors; for though theſe 5000 ſtadia are mentioned as the diſtance betwixt Alexandria and Syene by ſo many authors, yet we know that Marinus and Ptolemy did not allow above 3600 ſtadia to that diſtance, as the 7° 12′ amounted exactly to that number upon the proportion of 500 ſtadia to a degree, which Ptolemy tells us, was agreeable to menſurations that were allowed and acknowledged. The ſame number of 5000 ſtadia is ſaid to have been the diſtance ſuppoſed by Poſidonius betwixt Rhodes and Alexandria, where he had concluded that the ſegment of the meridian was the 48th part of a great circle from an obſervation of the ſtar Canopus; whereas Strabo tells us, that the ſeamen only allowed it to be a diſtance of 4000 ſtadia, and that Eratoſthenes, by his gnomonical obſervations, concluded it to be only 3750. In like manner Pliny tells us, that it was 5000 ſtadia betwixt Syene and Meroe; but in another paſſage, after mentioning the various meaſures of Eratoſthenes, Artemidorus, and Sebofus, who differed from each other, he adds, that the diſputes upon that head had been lately determined by ſurveyors ſent thither by Nero, who found it to meaſure 862 miles; though from the intermediate diſtance there ſpecified, it appears that the collected numbers give 874, and by multiplying each of theſe by 8 to increaſe them to ſtadia, will give in the firſt 6896 ſtadia, and in the ſecond 6992, both of which differ very materially from 5000 ſtadia.

The inveſtigation of this problem of the circumference of the earth, was eſſentially neceſſary for determining the radical principles of all maps, and therefore the moſt eminent of the ancient aſtronomical geographers made repeated endeavours to obtain an accuracy in this calculation. Eratoſthenes, by making the circumference to be 252,000 ſtadia, allowed therefore 700 ſtadia to a degree; which by the reduction of 8 ſtadia to a Roman mile of 5000 feet, amounted to 87½ Roman miles to each degree. Hipparchus added 25,000 ſtadia to this meaſure of Eratoſthenes, according to Pliny, lib. ii. cap. 108, though the obſervation is not mentioned from which this concluſion is drawn, which it were to be wiſhed Pliny had done, as it increaſes the error of Eratoſthenes. This addition however makes the circumference to conſiſt of 277,000 ſtadia, which was an allowance of 769 ſtadia, or 96 Roman miles, to each degree.

Poſſidonius, in like manner, computed the circumference of the earth to be 240,000 ſtadia, by multiplying 5000 (the ſuppoſed diſtance betwixt Rhodes and Alexandria) by 48, the ſegment of the meridian according to his obſervation betwixt theſe two places; but Cleomenes, when he mentions this concluſion, adds, "if the diſtance is 5000, but if not, in proportion to the diſtance." And as Eratoſthenes had made the diſtance to be only 3750 ſtadia, and Poſſidonius reſting his concluſion upon the deduction from his aſtronomical obſervation of the arch of the meridian, it was natural for him to infer, that if he admitted the diſtance given by Eratoſthenes to be true, being taken upwards of 170 years before his time, upon that hypotheſis, the circumference of the earth would be only 180,000 ſtadia, as 3750 multiplied by 48 will produce that number; and indeed Strabo tells us, that this very calculation was approved of by Poſſidonius. It is for this reaſon that he is quoted as having had two opinions upon the quantity of the circumference of the earth, and that he was therefore the firſt geographer who advanced the opinion of allowing only 500 ſtadia to a degree, which was afterwards adopted by Marinus and Ptolemy. By the firſt hypotheſis, therefore, there would be 666 ſtadia, or 83 Roman miles to a degree; and by the ſecond, 500 ſtadia, or 62½ Roman miles.

The diſcoveries and improvements of Eratoſthenes, as a geographer, naturally led to an explanation of theſe various menſurations and calculations of the circumference of the earth, which indeed materially affected the dimenſions of all the ancient maps. It is proper, however, to obſerve, that his map appears to have contained little more than the ſtates of Greece, and the dominions of the ſucceſſors of Alexander, digeſted from thoſe ſurveys already mentioned. He had ſeen indeed, and has quoted, the voyages of Pytheas into the great Atlantic Ocean, which gave him ſome faint idea of the weſtern parts of Europe; but withal ſo imperfect, that they could not be realiſed into the outline of a chart. Strabo tells us, that he was extremely ignorant of Spain, Gaul, Germany, and Britain, as well as of the Geti and Baſtarni; he was equally ignorant of Italy, the coaſts of the Adriatic, of Pontus, and of all the countries towards the north. And he mentions in another paſſage, that Eratoſthenes had made the diſtance from Epidamnus, or Dyrrachium, on the Adriatic, to the bay of Thermæ on the Ægean Sea, quite acroſs Epirus, to be only 900 ſtadia, when it was really above 2000 ſtadia; and in another inſtance he had enlarged the diſtance from Carthage to Alexandria to be 15,000 ſtadia, whereas it amounted to no more than 9000 ſtadia. Major Rennell, in his "Geographical Syſtem of Herodotus," aſcertains the Grecian ſtadium, or that employed by Herodotus in his ſtatements of diſtance, to have been the $\frac{1}{732}$ part of a geographical degree; that of Xenophon, $\frac{1}{750}$; that of Eratoſthenes, $\frac{1}{700}$; that of Strabo, the ſame; that of Pliny, $\frac{1}{727}$; that of Nearchus, $\frac{1}{729}$ and $\frac{1}{3}$; the mean ſtadium of the ancients, $\frac{1}{718}$, or 505½ Engliſh feet. The

pace,

pace, in the measurements of the ancients, he justly states it at five feet.

Such was the imperfect state of geography, and the inaccuracy of maps, prior to the discoveries of Hipparchus; who, like an abler architect, introduced a new plan of building, more certain in its principles, and more simple in its construction, and where they might employ without waste all the better parts of the ancient materials. His additions tended to make a new and closer union betwixt astronomy and geography, from which they derived mutual advantages, and widened their bottom for the accession of new improvements.

It appears that war has generally given rise to the most accurate maps of different countries; and therefore geography, about this era, began to make considerable advances from the progress of the Roman arms. For that warlike people, as they were the conquerors, so they became the surveyors, of the world. In all the provinces they occupied, we find that camps were every where constructed at proper intervals, and roads were raised with substantial materials for an easy communication between these different places of encampment; so that civilization and surveying were carried on according to system, through the whole extent of that large domain. Every new war produced a new survey and itinerary of the countries where the scenes of action passed; so that the materials of geography were accumulated by every additional conquest. Polybius, when he tells us, that at the beginning of the second Punic war, Hannibal was preparing his expedition against Rome, by crossing from Africa into Spain, and through Gaul into Italy, says, that all these places were measured or surveyed with the utmost care by the Romans.

Without entering into the minuter execution of the surveys of particular provinces with which every Roman general was regularly furnished before his march, and which Vegetius has well described, we shall only add a remarkable fact preserved to us by Æthicus in the Preface to his *Cosmographia*. We are there informed, that Julius Cæsar ordered a general survey to be made of the whole Roman empire by a decree of the senate; the surveyors are said to have been men of great wisdom, and instructed in every branch of philosophy. The three surveyors were Zenodoxus, Theodotus, and Polyclitus, and were each of them appointed to survey a different division of the empire. It began in the consulship of Julius Cæsar and Marc Antony, B. C. 44, and continued for twenty-five years one month and ten days, to the consulship of Sentius Saturninus and Lucretius Cinna, B. C. 19. The eastern part of the empire was assigned to Zenodoxus, who finished it in fourteen years five months and nine days, being in the consulship of Augustus IV. and Crassus, B. C. 30. The northern part was completed by Theodotus, in twenty years eight months and ten days, in the consulship of Augustus X. and Flaccus, B. C. 24. And the southern part was finished by Polyclitus, in twenty-five years one month and ten days.

The Roman Itineraries that are still extant, show evidently with what accuracy their surveys were made in every province: and Pliny has filled the third, fourth, and fifth, books of his Natural History, with the geographical distances that were thus measured. We have likewise one ancient set of maps still preserved to us, known by the name of the *Peutingerian Tables*, published by Welser and Bertius, which give a sufficient specimen of what Vegetius calls the *Itinera Picta*, for the clearer direction of the march of their armies.

The Roman empire had been enlarged to its greatest extent, and all its provinces well known and surveyed, when Ptolemy, in the days of Antoninus Pius, about 150 years after Christ, composed his System of Geography, which has been happily preserved to us amidst the general wreck that consumed so many other books of science. The materials then extant, and in his possession, for the completing of that great work, consisted of various particulars, some of greater and others of a less degree of authenticity. The principal were the proportions of the gnomon to its shadow, taken by different astronomers at the times of the equinoxes and solstices; calculations founded upon the length of the longest days; the measures or computed distances of the principal roads contained in their surveys and itineraries, and the various reports of travellers and navigators, who often determined the intervals of places by hear-say and guess-work. All of these were to be compared together, and digested into one uniform body or system, and after this were converted and translated by him into a new mathematical language, expressing their different degrees and minutes of latitude and longitude, according to the invention of Hipparchus, but which Ptolemy had the merit of carrying into full practice and execution, after it had been neglected for upwards of 250 years.

No author has ever supposed that Ptolemy had in his possession real astronomical observations sufficient to determine all the longitudes and latitudes he has laid down; so that we must always remember that their degree of accuracy depended upon the veracity of the fact or suggestion communicated to him, from which they were afterwards deduced. Agreeable to this idea, we find that Regiomontanus, in his Commentary upon Ptolemy's Geography, quoted by Gesner, though never published, endeavoured to explain an instrument called *meteoroscopium*, by which he supposes Ptolemy reduced and brought forth the numbers of his geography. We must not therefore be surprised at the multitude of errors to be found, when his original materials were so imperfect for executing so large a work as the fixing the longitudes and latitudes of all the places, coasts, bays, and rivers, of the then known world; an undertaking which even in our days has not yet been brought to sufficient accuracy.

It was almost impossible for him not to have committed many mistakes in the places beyond the extremities of the Roman empire, which were indeed out of the range both of astronomers and surveyors. So that those learned writers who have so severely criticised some of his errors, have not treated him with that candour and liberality which a work of this nature deserved. His mistakes arose from the ignorance of the age in which he lived, which could give him no better information, and were not properly the personal ignorance of the author. And this remark ought to have its due weight in restraining the wantonness of criticism in a thousand instances. Ricciolus, Cellarius, Paul Merula, and Salmasius, have all of them committed this mistake in their censures of his geography, as if they were disappointed in not finding this science in its full maturity in the writings of Ptolemy, at a time when it was evidently but just beginning to emerge from its infantine state.

If the observations from which Ptolemy compiled his geography, had been as accurate as the principles upon which it was digested were well founded, then this science would have advanced much sooner towards maturity. But when premises are admitted to be true, which are either doubtful or false, then the conclusions drawn from them must also be erroneous. Now the principal mistakes in Ptolemy took their rise from certain astronomical observations and surveys, which were supposed to have been made with accuracy in an age prior even to Ptolemy himself; and as that great author received and adopted them as genuine, having none more authentic by which their accuracy might have been tried, and having otherwise no reason to suspect them; so succeeding geographers, for want of better information, were induced to copy and insert them in their maps, as being, in their opinion, of acknowledged and undoubted authority. And thus error, when it has once assumed the counterfeit stamp of truth by the unguarded concession of some eminent writer, often preserves its currency during a great length of time. For these mistakes kept

their place in all maps whatever, by a ſort of unqueſtioned preſcription, down even to the beginning of the eighteenth century.

Neither were theſe errors ſuch as were introduced in the more diſtant regions of his maps, which are generally leſs viſited and more uncertain; but they were in the very centre of that part of the world which was the beſt known to the ancient Greeks and Romans. For whoever is the leaſt converſant in their hiſtory, muſt know that the coaſts of the Mediterranean were the claſſic ground of all antiquity; war and commerce occaſioned its being inceſſantly traverſed by the ſhips of all the contiguous nations; ſeveral great empires had their capitals upon its ſhores, or at a few miles diſtance; and almoſt all the ancient practical aſtronomers made their obſervations in its neighbourhood. Yet it appears, from major Rennell's Analyſis of the Geography of Herodotus, that though the Mediterranean ſea, and its European coaſts, were evidently well known to that hiſtorian; it is nevertheleſs certain that he knew but little of its weſtern ſhores and boundaries. With the extent and ſubdiviſions of the ſouthern countries on the Danube, however, he appears to have been well acquainted. His Scythia is the Weſtern Sarmatia of ſome later writers among the ancients, and the Ukraine of modern geography. But his notion of the form of this country was incorrect, as he ſuppoſed it to be one-half leſs than it really is. This ingenious author alſo purſues his examination through the countries which Herodotus has deſcribed as bordering on Weſtern Scythia; remarks, after Gibbon, that the Genoeſe conſtructed thoſe fortifications of the Crimea, whoſe origin has been by ſome referred to earlier times; traces the courſe of the famous expedition of Darius into Weſtern Scythia; attends Herodotus into the countries beyond the Euxine ſea; deſcribes the Hyperboreans of the Romans as being the ſame with the Gog and Magog of the Scriptures, or the Juje Majuje of the preſent Orientals.

The Aſia of Herodotus he next defines. Its weſt and ſouth-weſt boundaries were the ſhores of the Arabian gulph, and of the Mediterranean and Euxine ſeas: its eaſtern limits were the country of the Oigurs, the deſert of Robi, and India taken incluſively: on the ſouth its only boundary known to Herodotus was the Erythrean ſea. The north of Aſia was to him unknown; and he had but little knowledge of India. The length of Aſia eaſtward was leſs known to Herodotus, than to ſome later geographers among the ancients. With the bounds and extent of the Caſpian ſea, he was better acquainted than the followers of Alexander. He knew it to be a lake; they ſuppoſed it to communicate with the great northern ocean. China, Chineſe and Weſtern Tartary, Thibet, the peninſula beyond the Ganges, and the greater part of Siberia, were entirely unknown to Herodotus. To him and the other Greeks of his time Eaſtern Scythia was alſo little known. The Maſſagetæ, the Sacæ, and the Dahæ, were the great Scythian tribes. He has deſcribed the geography of the Perſian empire as divided into twenty governments. The maritime ſtrength of the Phœnicians under the Perſian power, is well marked by the fact which Mr. Rennell here notices, that they furniſhed to the fleet of Xerxes 450 triremes, of which 150 were derived from their eſtabliſhment in the iſland of Cyprus. Of the Ganges it appears that Herodotus had never even heard.

Africa was beſt known to Herodotus where it is adjacent to the middle and eaſtern limits of the Mediterranean ſea. Of its great rivers, he knew only the Niger and the Nile, as recently traced to their ſources by Bruce and Park. He knew thoſe *oaſes*, or inſulated ſpots in the ſandy deſert, which have been lately re-diſcovered by Brown. He knew that Africa had been circumnavigated. The voyage was performed at the rate of thirty-two geographical miles a day, and finiſhed in the ſpace of two years. The whole tract of the earth known to Herodotus might be meaſured by a radius of one thouſand Britiſh miles, moving from the centre of Halicarnaſſus. The Seewa of Brown, the traveller in Africa, is the Oaſis of Ammon of Herodotus.

It appears that little was done in geography from the days of Ptolemy, above-mentioned, to the reſtoration of learning in Europe; during which time the Arabian geographers copied and retailed all his principal errors. They obſerved indeed under their caliph Almamon, in the beginning of the ninth century, a degree of latitude on the plains of Sinjair, or Shinar, near Babylon, and found it to meaſure 56⅔ Arabian miles, each of which conſiſted of 4000 cubits, or 6000 feet, from which they determined the circumference of the earth.

When ſcience began to be revived in Europe, it was ſome time before the aſtronomers of that age were able to obtain copies of Ptolemy's Geography; and even then it was with difficulty they could read and clear the manuſcripts of ſome of their groſſeſt errors: for wherever numbers were inſerted in any author, and made the bulk of the compoſition, the miſtakes were generally multiplied more abundantly in the tranſcribing; becauſe the ſenſe did not there, as in moſt other books, by a kind of ſelf-evidence, aſſiſt the copier in preſerving the authenticity of the original. It required likewiſe ſome longer ſpace of time before the aſtronomers conſtructed proper inſtruments in order to try whether theſe latitudes ſo recorded, correſponded with the ſituations as they really ſtood in nature. But when they came actually to obſerve them, they diſcovered the latitude of many places materially different from what had been ſet down by Ptolemy; and finding this variation in ſome of them to be nearly of the ſame quantity, inſtead of accounting for this difference from the imperfection of inſtruments, the inaccuracy of obſervers, and the method of Ptolemy's Converſions, they haſtily concluded that the axis of the earth had ſhifted its poſition, by which the latitudes of all the places in Europe had been increaſed. This was the idea of Dominicus Maria of Ferrara, about the year 1489, who fancied that the variation was at the rate of one degree in 1050 years; ſo that after a long revolution of ages, it would happen that the countries now under the frigid zone ſhould be found under the torrid; and that in like manner thoſe regions which ſuffer from the violence of the heat ſhould gradually paſs into the temperate and frigid zones. Men of warm imaginations might eaſily work up this dream of geographers into a beautiful and an equitable diſpoſition of nature.

This fanciful hypotheſis was again adopted by Maginus of Bologna, about a hundred years after, towards the cloſe of the ſixteenth century, in which he had the concurrence of ſeveral of the Italian aſtronomers. And their authority made ſuch an impreſſion upon Tycho Brahe, that being deſirous of clearing up a doubt which he thought had ſome foundation, he applied to the republic of Venice to ſend ſome good obſervers into Egypt, to verify whether the height of the pole was ſtill the ſame at Alexandria as it had been found by Ptolemy. For as that city had been formerly as it were the metropolis of aſtronomy, there could be no doubt but that the height of the pole there muſt have been accurately obſerved for a long ſeries of years by their ableſt aſtronomers, and that Ptolemy muſt have examined it himſelf with his utmoſt attention before he had made uſe of it in his aſtronomical calculations. But Tycho's requeſt was not then complied with. However, when the obſervation was made, it did not ſufficiently ſupport their hypotheſis; for Ptolemy having found Alexandria to be 30° 58′ according to his Almageſt, or 31° according to his Geography; the obſervations made ſince by Mr. Greaves in 1638, made it amount to 31° 10′, and thoſe by M. Chazelles in 1694, and by M. Condamine in 1731, fix it at 31° 11′; which though a variation of eleven or thirteen minutes, may be charged, as in many other ſimilar caſes, upon the errors of inſtruments and obſervers.

Peter

Peter Petit, a mathematician of ſome eminence in France, endeavoured to revive this opinion in a diſſertation publiſhed in 1660, from the apparent variations in the latitude of Paris, as taken by the ableſt aſtronomers, ſome of whom had made it 48° 39′, others 48° 45′, ſometimes 48° 50′, and at other times 48° 55′. All of which only confirms an obſervation made by an eminent French aſtronomer, that they had no good quadrant fit for taking an obſervation of the latitude, even in the whole kingdom of France, in the year 1664. For M. Auzot, in a letter which he addreſſed to Louis XIV. in this very year, made uſe of the following words: *Mais, ſire, c'eſt un malheur, qu'il n'y a pas un inſtrument à Paris, ni, que je ſçache, dans tout votre royaume, auquel je vouluſſe m'aſſurer pour prendre preciſement la hauteur du pole.*

The latitude of London was known much ſooner than that of Paris, and brought to a greater degree of accuracy; for it was determined by Edward Wright, who is otherwiſe diſtinguiſhed as the original inventor of what is called *Mercator's Chart*, by obſervations made in 1593 and 1594, from the greateſt and leaſt height of the pole ſtar, and found to be 51° 32′, taken by a braſs quadrant of ſix feet radius; before that time the latitude of London was ſuppoſed to be 51° 45′ in all the maps of that age. And though this obſervation was made at a time when the error from refraction had been juſt diſcovered by Tycho, and not fully known, yet it is allowed to be juſt and exact even now, when the inſtruments which are conſtructed at preſent enable obſervers to come to the utmoſt preciſion of ſeconds.

There is another particular hitherto unnoticed, which has greatly contributed to the ſolid advancement both of aſtronomy and geography, and this is the more accurate method now practiſed for the meaſuring of time, which though in appearance of a different nature, is equally capable of being applied to the menſuration of ſpace. For in the tables of longitude it is well known that time and ſpace are uſed like two different languages, where the ſame truth is expreſſed with equal clearneſs in both, though in characters that are eſſentially different from each other; as one hour in time is allowed to be equal to fifteen degrees in ſpace upon the ſurface of the earth, and of courſe all the aliquot parts of each are in the ſame proportion. Sun-dials, and clepſydræ, or water-clocks, were the principal meaſurers of time among the ancients. It was only about the year of Chriſt 1300, that clocks with indented wheels are ſaid to have been firſt in uſe; and it was not till two hundred years after this that they ſeem to have been employed for the purpoſes of aſtronomy. For Waltherus, the diſciple of Regiomontanus, is ſaid to have had one about the year 1500; which Schoner, who publiſhed his obſervations in 1544, ſays, was ſo regular, that from mid-day to mid-day it perfectly agreed with the ſun, and was almoſt as exact in the times given, as in thoſe drawn from calculation. Tycho Brahe is ſaid to have had four clocks which marked minutes and ſeconds, the largeſt of which had only three wheels; the diameter of one of them was three feet, and it had 1200 teeth. But all of thoſe were exceedingly imperfect, till M. Huyghens improved them in 1656, by his invention and application of the pendulum, whoſe vibrations were regular and iſochronical. The improvements that have been ſince made in time-pieces, and the manner in which they have been applied to the determination of longitude, is a branch of knowledge of the utmoſt importance to geography and navigation.

Theſe advantages, however, and many other acquiſitions derived from mathematical geography, were not ſo completely underſtood, till the voyages of Magellan, Drake, and Cook, round the world, and the great extenſion of commerce, impelled the learned to call forth their ableſt exertions. The authors moſt diſtinguiſhed for their works in this department are, Cluverius, Heidmann, Janſon, Cellarius, Schwartz, Mannert, Bochart, and Michaelis; the two Bienewitz, Munſter, Gemma, Mercator, and others, of the ſixteenth century, have alſo in this reſpect conſiderable merit. In the eighteenth century, by the meaſurement of a degree at the polar circle, and on the equator, the French were enabled to aſcertain the real form of the earth; and ſimilar meaſurements have ſince been made by the Engliſh and Germans. The principal mathematical geographers of this period were Picard, Sturm, Caſſini, Kraft, Maupertuis, Clairaut, Le Monnier, Bouguer, Condamine, Boſcowich, Friſi, Maſon, De la Lande, De la Place, Klugel, Bode, Kloſtermann, and Zach. Beſides theſe, we have others more remote, ſuch as Edreſi, a learned Mohammedan of Cordua; the beſt tranſlation of whoſe work was publiſhed by Hartmann at Gottingen, in 1796; Abdollatif Ibn-Juſuph of Bagdad, whoſe Compendium, &c. was publiſhed by Dr. White in Arabic, with a preface by Paulus, in 1789, and tranſlated into German by Wahl in 1790; Abulfeda, whoſe works have been at different times, and in parts, edited by Reiſke, Grævius, Koehler, Michaelis, and Eichhorn; Benjamin of Tudela, a travelling Jew, whoſe itinerary was firſt publiſhed by l'Empereur, in 1633, and has ſince been tranſlated into French by Barratier, and into Engliſh by Gewans. Mercator's ſyſtem of projection now became the grand foundation for the improvement of modern maps and charts. He was followed, in the ſeventeenth century, by Hond, Munſter, Sanſon, and others. The ampleſt ſtrides, however, towards perfection, have been made in the eighteenth century by De l'Iſle, d'Anville, Goſſelin, and others, of the French; by Jefferys, Faden, Rennell, Arrowſmith, and others, of the Engliſh; by Schmidt, Gliſſeman, &c. of the Germans; and by various others. In the department of phyſical geography we are much indebted to the labours of Suſſmilch, Lulof, Bergman, Wallerius, Haidinger, Forſter, De Luc, Pallas, Dolomieu, Zimmermann, Meierſtto, Otto, and other ingenious philoſophers.

Among the miſcellaneous authors who have contributed to the illuſtration of geography, are Johannes de Sacroboſco, or John Hallifax, who wrote a treatiſe on the ſphere; Clavius, on the ſphere of Sacroboſco; Piccioli's *Geographia & Hydrographia Reformata*; Weigelius's *Speculum Terræ*; De Chales's Geography, in his *Mundus Mathematicus*; Leibnecht's *Elementa Geographiæ generalis*; Stevenius's *Compendium Geographicum*; Wolfius's *Geographia*, in his *Elementa Matheſeos*; Buſching's New Syſtem of Geography; Gordon's, Salmon's, and Guthrie's, Grammars; Varennius's *Geographia generalis*, with Jurin's additions; and Pinkerton's Modern Geography, the moſt ſyſtematic and perfect of this claſs.

Of PRACTICAL GEOGRAPHY.

The fundamental principles of geography are only to be acquired by an intimate knowledge of that department of the ſcience, which is termed *mathematical* or *coſmographical* geography; becauſe it teaches the mechanical conſtruction of the univerſe, connects the aſtronomical with the geographical circles of the ſphere, exhibits the ſeveral diviſions of the earth and heavens on a plane, and furniſhes to the mind's eye a comprehenſive view of the world, without the labour of travel; whence is derived the artificial conſtruction of globes, the projection of charts and maps, with all the inſtruments that are ſubſervient to our reſearches in aſtronomical and geographical ſcience.

The principal terreſtrial phenomena, with which it is neceſſary for the young ſtudent to be acquainted, ariſe chiefly from the ſpherical figure of the earth conſidered as a planet, and the poſition of its axis with relation to the ſun; particularly the riſing and ſetting of the celeſtial luminaries, the length of the days and nights, the variation of climates, the ſeaſons of the year, &c. all of which are amply explained under the article ASTRONOMY, vol. ii. p. 361–374; yet ſtill it belongs

to geography to take notice of the difference betwixt the ſame phenomena in different parts of the earth. Thus, though the ſun riſes and ſets all over the world, the circumſtances of his doing ſo are very different in different countries. The moſt remarkable of theſe circumſtances is the duration of the light not only of the ſun himſelf, but of the twilight before he riſes, and after he ſets. In the equatorial regions, for example, darkneſs comes on very ſoon after ſunſet; becauſe the convexity of the earth comes quickly in between the eye of the obſerver and the luminary, the motion of the earth being much more rapid there than in any other part. In our climate, the twilight always continues two hours, or thereabouts; and during the ſummer-ſeaſon it continues in a conſiderable degree the whole night. In countries farther to the northward or ſouthward, the twilight becomes brighter and ſtronger as we approach the poles, until at laſt the ſun does not appear to touch the horizon, but goes in a circle at ſome diſtance above it for many days ſucceſſively. In like manner, during the winter, the ſame luminary ſinks lower and lower, until at laſt he does not appear at all; and there is only a dim twinkling of twilight for an hour or two in the middle of what is called the day. By reaſon of the refraction of the atmoſphere, however, the time of darkneſs, even in the moſt inhoſpitable regions, is always leſs than that of light; and ſo remarkable is the effect of this property, that in 1682, when ſome Dutch navigators wintered in Nova Zembla, the ſun was viſible to them ſixteen days before he could have been ſeen above the horizon had there been no atmoſphere, or had it not been endowed with any ſuch power. The reaſon of this is, that in the northern and ſouthern latitudes only a ſmall part of the convexity of the globe is interpoſed betwixt us and the ſun for many days, and in the higher latitudes none at all. In the warmer climates the ſun has often a beautiful appearance at riſing and ſetting, by reaſon of the refraction of his light through the vapours which are copiouſly generated in thoſe parts. In the colder regions, halos, parhelia, aurora borealis, and other meteors, are frequent; the two former owing to the great quantity of vapour continually flying from the warm regions of the equator to the colder parts of the poles. In the high northern latitudes, thunder and lightning are unknown, or but ſeldom heard of; but the more terrible phenomena of earthquakes, volcanos, &c. are there not unfrequent. Theſe, however, ſeem chiefly to affect iſlands, and the maritime parts of the continent. See the articles EARTHQUAKE, and VOLCANO.

Notwithſtanding this ſeeming inequality in the general diſtribution of light and darkneſs, it is nevertheleſs certain that throughout the whole world, there is nearly an equal proportion of light diffuſed on every part, abſtracting from what is abſorbed by clouds, vapours, and the atmoſphere itſelf. The equatorial regions have indeed the moſt intenſe light during the day, but the nights are impenetrably dark; while, on the other hand, in the northerly and ſoutherly parts, though the ſun ſhines leſs powerfully, yet the length of time that he appears above the horizon, with the greater duration of the twilight, fully compenſates for every other deficiency.

Were the earth a perfect plane, the ſun would appear to be vertical in every part of it: for in compariſon with the immenſe magnitude of that luminary, the diameter of this globe is comparatively ſmall: and as the ſun, were he near to us, would do much more than cover the whole earth; ſo, though he were removed to any diſtance, the whole diameter of the latter would make no difference in the apparent angle of his altitude. By means of the globular figure of the earth alſo, and the great diſparity between the diameters of the two bodies, ſome advantage is given to the day over the night: for thus the ſun, being immenſely the larger of the two, ſhines upon more than one half of the earth; whence the unenlightened part has a ſhorter way to go before it again receives the benefit of his rays. In fact, on the globular figure of the earth depends the whole phenomena of nature which ſurround us; and were the ſhape of the planet we inhabit to be altered to any other, beſides the *real* differences which would of conſequence take place, the *apparent* ones would be ſo incalculable, that we cannot form any idea of the face which nature would then put on.

In geography, the circles and lines which the ſun apparently deſcribes in the heavens, are ſuppoſed to be extended to the earth, and marked on its ſurface; and in like manner we may imagine as many circles and lines as we pleaſe to be deſcribed on the earth, and their planes to be extended to the celeſtial ſphere, till they mark concentric ones on the heavens. The connection of theſe circles and lines may be imagined to take place from the axis or poles of the earth, as well as by the interſections which they reſpectively make with each other at their angles of meeting, as repreſented by the armillary ſphere, and the celeſtial and terreſtrial globes. It is from this connection of circles and lines that the ſciences of aſtronomy and geography are ſo cloſely interwoven; to elucidate which we muſt diſtinctly illuſtrate them by name, and trace their utility and deſignation, both as they regard the heavens and the earth, and the ſituation of places on the earth's ſurface; referring, for correſpondent particulars, to the article ASTRONOMY, in our ſecond volume.

PRINCIPLES AND DEFINITIONS.—1. The *axis* of the earth is an imaginary line paſſing through its centre, about which its diurnal revolution is performed.—The *poles* of the earth are the extremities of its axis, north and ſouth.

2. The *equator* is the circumference of an imaginary *great* circle paſſing through the centre of the earth, perpendicular to the axis, and at equal diſtances from the poles.—If the axis of the earth be produced both ways, as far as the concave ſurface of the heavens, in which all the heavenly bodies appear to be placed, it is then called the *axis of the heavens*; its extremities are called the *poles of the heavens*; and the circumference produced by extending the plane of the equator to the ſame concave ſurface, is called the *equator in the heavens*.—Circles drawn through the poles of the earth or heavens perpendicular to the plane of the equator, are called *ſecondarius* of the equator.

3. The *horizon*, properly ſpeaking, is a double circle; one of which is called the *ſenſible*, the other the *rational*.—The *ſenſible horizon* is that imaginary circle, which, touching the ſurface of the earth, ſeparates the viſible part of the heavens from the inviſible. The *rational horizon* is a circle parallel to the former, the plane of which paſſes through the centre of the earth.—The *poles of the horizon* are two points, the one of which, over the head of the ſpectator, is called the *zenith*; the other, which is under his feet, is called the *nadir*.—Circles drawn through the zenith and nadir of any place, cutting the horizon at right angles, are called *vertical circles*.

4. A vertical circle paſſing through the poles of the heavens, is a *meridian*, and is ſaid to be the meridian of any place through which it paſſes.—The meridian of any place paſſing through the poles, and falling perpendicularly upon the horizon, cuts it in two oppoſite cardinal points, called *north* and *ſouth*.

5. A *meridian line*, is the common interſection of the plane of the meridian and the plane of the horizon. Hence any line which lies due north and ſouth in an horizontal plane, may be conſidered as part of the meridian line.—To draw a meridian line, perpendicular to an horizontal plane, erect a wire, or ſtile, ſeven or eight inches long; and, as it is not eaſy to determine preciſely the extremity of the ſhadow, it will be beſt to make the ſtile flat at top, and to drill a ſmall hole through it, noting the lucid point projected by it; mark, at ſeveral different

rent times before noon, these lucid points, and through them draw concentric circles about the middle point of the wire's station; observe in the afternoon when the lucid points again touch these circles; and find the middle point of each arc between the points already taken: a line, drawn through these middle points and the common centre, will be the meridian line; for, since at equal distances from noon the sun is at the same height, or in verticals equally distant from the meridian, the circle drawn through the zenith at equal distances from these verticals, is the meridian. This should be done about the summer solstice, between the hours of 9 and 11 in the morning, and 1 and 3 in the afternoon.

To observe the transit of any heavenly body over the plane of the meridian; place, in this plane, a telescope, having two cross hairs before its object-glass, one vertical, the other horizontal, and observe when the vertical hair passes through the centre of the heavenly body: or, hanging two plumb-lines exactly over the meridian line, place your eye close to one of the threads in such manner, as that it shall cover the other thread, and observe when the body transits, or is behind the threads. —See the article ASTRONOMY, vol. ii. p. 456.

6. The *altitude* or *depression* of any heavenly body above or below the horizon, is the arc of a vertical circle intercepted between the body and the horizon, or the angle at the centre measured by that arc.—The altitude of any heavenly body is found by the help of a quadrant, thus: bring the quadrant into such a situation that the star may be seen through the sights; then the angle, contained between the string of the plummet and the side of the quadrant on which the sights are not placed, is the altitude of the star.—The *prime vertical*, is that which crosses the meridian at right angles in the zenith and nadir, cutting the horizon in the cardinal points *east* and *west*.

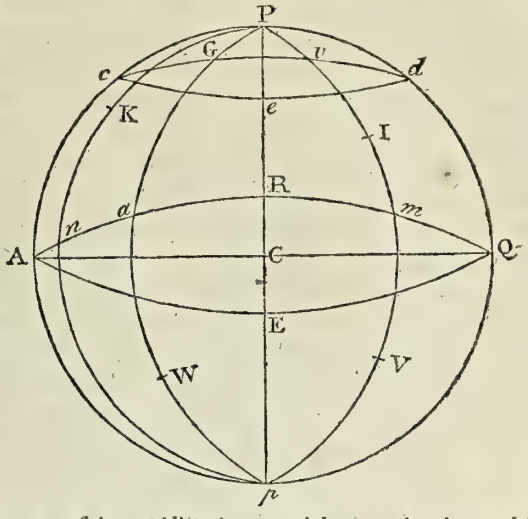
7. The *azimuth* of a heavenly body, is the arc of the horizon intercepted between the meridian and the vertical circle passing through that body; it is eastern or western, as the body is east or west of the meridian.

8. The *amplitude* of a heavenly body at its rising, is the arc of the horizon intercepted between the point where the body rises, and the east; its amplitude at setting, is the arc of the horizon intercepted between the point where the body sets, and the west: it is northern, or southern, as the body rises, or sets, to the north or south of east or west.—If a heavenly body rises, or sets, when the sun rises, it is said to rise or set *cosmically*; if it rises, or sets, when the sun sets, it is said to rise or set *achronically*; it is said to set or rise *heliacally*, when it approaches so near the sun as to become invisible, or recedes so far from him as to become visible.

9. The *latitude* of a place upon the surface of the earth, is its distance from *the earth's equator*; it is measured by the arc of the geographical meridian of the place intercepted between the place and the equator: latitude is either northern or southern.—*Parallels of latitude*, are circles on the surface of the earth drawn parallel to the equator; and a degree in the equator is to a degree in any parallel of latitude, as radius to the cosine of latitude.

10. The *longitude* of a place, is the distance between the meridian of that place, and the meridian of some other place, taken at pleasure, and called *the first meridian*; it is measured by the arc in the equator intercepted between these two meridians. Longitude is either eastern or western, and is measured 180 degrees each way.

Or, as illustrated by professor Vince, let PA*p*Q in the annexed diagram, represent the earth, P C *p* its axis, P the north pole, *p* the south pole; and let A E Q R be a circle passing through the centre C, perpendicular to the axis P*p*, then that circle is called the *equator*. This circle divides the earth into two equal parts, A P Q called the *northern*, and A *p* Q called the *southern*, *hemisphere*. Let K, G, I, be the situations of three places upon the surface, and through them draw the great circles P K *p*, P G *p*, P I *p*, called *meridians*, intersecting the equator in *n*, *a*, *m*, respectively. Now as every circle is supposed to be divided into 360 degrees, the distance from the pole to the equator must be 90 degrees. The *latitude* of a place,



is *an arc of its meridian intercepted between the place and the equator, measured in degrees*. Hence, the latitude of K is measured by the degrees of the arc *n* K; and the latitudes of G and I are measured by the degrees of the arcs *a* G, *m* I, respectively, and these are called *north* latitudes, the places lying in the northern hemisphere; and the latitude of W is measured by the degrees of the arc *a* W, and is called *south* latitude, the place lying in the southern hemisphere. Let the small circle *c* G *v d e* be parallel to the equator, then this circle is called a *parallel of latitude*, because every point of it has the same latitude, all the arcs *m v*, *a* G, intercepted between it and the equator, being equal, on account of the circles being parallel. The *longitude* of a place is measured upon the equator, and is the arc intercepted between the point from which you begin to reckon, and the point where the meridian of the place cuts the equator, estimated in degrees. Hence, all places in the *same* meridian have the *same* longitude; the longitude of G is the same as the longitude of W. Geographers of different countries begin to reckon from different points, each beginning from that point where the meridian of its capital city cuts the equator; and if the city have a national observatory in or very near to it, that meridian is taken which passes through the observatory. This is called the *first meridian*. We therefore define the *longitude* of a place to be *an arc of the equator intercepted between the first meridian and the meridian passing through the place*. In England, therefore, we begin from that meridian which passes through the observatory at Greenwich; in France, they begin from that meridian which passes through the observatory at Paris. Let therefore G represent the royal observatory at Greenwich, and *a* is the point of the equator from which we begin to reckon the longitude. Hence, the degrees of the arc *a m* is the longitude of the place I; and the longitude of the place K is measured by the degrees of the arc *a n*. Now the direction *a m* from *a* is east, and the direction *a n* is west; it is therefore usual to call *a m*, east longitude, and *a n*, west longitude, each till you come to the point opposite to *a*, or till the longitude each way becomes 180 degrees. But sometimes the longitude is reckoned all the way round in the same direction; that is, the point *m*, wherever it may be, is called east longitude from *a*.

If the latitude and longitude of a place be given, the place itself may be found; for if the longitude be known, set off the arc *a m* equal to it, if it be east longitude, and draw the meridian P *m p*; then if the latitude

be north, ſet off *m* I equal to it, and I is the place required; but if the latitude be ſouth, ſet off *m* V equal to it, and V is the place. If the longitude be weſt, ſet off *a n* equal to it, and take *a* G, or *a* W, equal to the latitude, according as it is north or ſouth, and G, or W, will be the place. Thus, all the places upon the ſurface of the earth, whoſe latitudes and longitudes are known, may be laid down accurately upon a globe or map; and the boundaries of the different countries may be traced out, and each exhibited in its proper ſituation and figure. By means of a globe, therefore, we may get a perfect idea of the relative magnitudes, figures, and ſituations, of all the countries of the earth, and of the ſituations of all the principal places in them; but a map, being a plane ſurface, cannot ſo correctly repreſent the proportions, boundaries, and poſitions, of places. The determination of the latitude and longitude is therefore eſſential to geography, and conſequently to navigation.

The arc G *v* contains the ſame number of degrees as the arc *a m*; the degrees of longitude therefore between any two places, when meaſured upon a ſmall circle parallel to the equator, diminiſh as that circle approaches the pole. The arc *a m* contains the ſame number of degrees as the angle *a* P *m*; hence, the angle formed by the meridians paſſing through any two places, is the meaſure of the difference of the longitudes of thoſe places.

11. The *altitude* of one pole, and the *depreſſion* of the other, at any place on the earth's ſurface, is equal to the latitude of that place.—For let R, in the Geographical Plate II. fig. 1, be a place upon the earth's ſurface; Z N, its zenith and nadir; P S, the poles of the heavens, and F *s*, the poles of the earth; E E, the celeſtial equator, *e e*, the terreſtrial equator, and H O, the horizon. The latitude of the place is *e* R, or the equal arc E Z; P O, is the elevation of one pole; and H S, the depreſſion of the other. Becauſe Z O, being the diſtance of the zenith from the horizon, is an arc of 90 degrees; and becauſe E P, being the diſtance of the pole from the equator, is alſo an arc of 90 degrees: Z O, and E P, are therefore equal. Take from each of theſe the common arc Z P, and the remainders, E Z and P O, are equal. But H S and P O are alſo equal, becauſe they ſubtend the equal angles H T S, P T O: therefore the elevation of one pole P O, and the depreſſion of the other H S, are equal to the latitude of the place E Z.—Hence the circumference of the earth may be meaſured, by meaſuring the length on the ſurface of the earth paſſed over in a line which lies north and ſouth, while the pole gains one degree of elevation, and multiplying this length by 360. A degree of latitude contains 69¼ Engliſh miles, whence 24930 miles is the meaſure of the circumference of the earth, and the radius 3985; the earth being a ſpheroid, whoſe polar diameter is to the equatorial as 229 to 230.

12. The elevation of the equator, at any place, is equal to the complement of its latitude.—Becauſe Z O, fig. 1, is equal to E P, (each being an arc of 90 degrees) E Z is equal to P O; that is, to the latitude of the place. But E H, the elevation of the equator, is the complement of E Z; it is therefore equal to the complement of the latitude of the place.

13. The earth revolving daily round its axis from weſt to eaſt, the heavenly bodies will appear to a ſpectator on the earth to revolve in the ſame time from eaſt to weſt. Let R C B F, fig. 1, repreſent the earth, T its center, H T O, the rational horizon to a ſpectator at R, whoſe zenith is Z; let a ſtar appear in the horizon at H. The earth revolving from weſt to eaſt, that is, in the order of the letters R, C, B, F, in a fourth part of one revolution, the ſpectator will be carried from R to C: conſequently, his horizon will become Z N, and the ſtar which appeared in his horizon at H, when he was at R, will now appear nearly in the zenith. When another fourth part of the revolution is completed, the ſpectator will be at B, and N being now his zenith, and H O, his horizon, the ſtar will be ſet with reſpect to him, and will not riſe till he is again in the ſtation R, that is, till the earth has completed one revolution. Thus whilſt the earth has turned once round upon its axis from weſt to eaſt, all the heavenly bodies in the concave ſphere of the heavens will *appear* to have turned round from eaſt to weſt.

14. The alternate ſucceſſion of day and night is the effect of the revolution of the earth round its axis. For, all the heavenly bodies appearing to move from eaſt to weſt, while the earth revolves from weſt to eaſt, the ſun will appear, in each revolution, to riſe above the horizon in the eaſt, and after deſcribing a portion of a circle, to ſet in the weſt, and will continue below the horizon, till by the revolution of the earth it again appears in the eaſt: and thus day and night will be alternately produced. The time of noon may be conſtantly found, by obſerving the inſtant when the center of the ſun is cut by the perpendicular hair in a meridian teleſcope, or by a correct ſun-dial.

15. The earth revolving round the ſun in 365 days, 6 hours, 56 minutes, 4 ſeconds, the ſun appears to revolve round the earth in the ſame time, but in the contrary direction.—It is manifeſt that the circle in which the ſun thus appears to move, is the ſame in which the earth would appear to move to a ſpectator in the ſun. Hence the apparent place of the ſun being found, the true place of the earth in its orbit is known. But the orbit in which the earth revolves round the ſun is not a circle, but an ellipſe, having the ſun in one of its foci. This circle, which the ſun appears to deſcribe annually in its progreſs through the concave ſphere of the heavens, is called the *ecliptic*.

16. A portion of the heavens, about ſixteen degrees in breadth, through the middle of which paſſes the ecliptic, is called the *zodiac*; in which lie the orbits of all the planets.—The ſtars in the zodiac, or ecliptic, are divided into twelve *ſigns*, Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius, Piſces. The figures, repreſenting theſe ſigns, are drawn upon the celeſtial globe, in that portion of its ſpherical ſurface, which correſponds to the portion of the concave ſphere of the heavens, in which the ſtars belonging to each ſign are reſpectively placed.—See the article ASTRONOMY, vol. ii. p. 326, and 414.

17. The axis of the earth in every part of the earth's revolution about the ſun, makes, with the plane of its orbit, that is, of the ecliptic, an angle of 66½ degrees. This is illuſtrated in the Geography Plate II. fig. 2: Let B A repreſent the plane of the ecliptic or earth's orbit, ſeen edgeways; S, the ſun; and P *p* produced, the axis of the equator. If the earth be at S, its axis is not perpendicular to the plane of the ecliptic, but makes an angle with it, P S A, about 66° 30′. In any other part of its orbit, as at M, or X, the axis of the earth is ſtill inclined to the plane of the ecliptic in the ſame angle.—It muſt be noted that the planes of the equator and ecliptic, make with each other an angle of 23½ degrees nearly. The obliquity of the ecliptic is not permanent, but is continually diminiſhing, by the ecliptic approaching nearer to a parallelism with the equator, at the rate of about half a ſecond in a year, or from 50″ to 55″ in one hundred years. The inclination, at the commencement of the nineteenth century, was 23° 28′ 5″ nearly. The diminution of the obliquity of the ecliptic to the equator is owing to the action of the other planets upon the earth. The whole variation, it is ſaid, can never exceed one degree, when it will again increaſe.—The obliquity of the ecliptic may be thus found: Obſerve with a good inſtrument, very accurately divided, the meridian altitude of the ſun's centre on the days of the ſummer ſolſtice; then the difference of the two will be the diſtance between the tropics; the half of which will be the obliquity ſought.—By the ſame method, the

declination

declination of the ſun for every day in the year may be found, and a table conſtructed.

18. The ecliptic being divided into twelve equal parts, each of theſe parts is called a *ſign*; and the names of the ſigns in the ecliptic are the ſame with thoſe in the zodiac, as ſtated in article 16, but do not exactly correſpond with them.

19. The two points in which the ecliptic cuts the equator, are called the *equinoctial points*: the vernal equinox is at the firſt degree of Aries in the ecliptic; the autumnal, at the firſt of Libra.—The moment of time in which the ſun enters the equator, may be found by obſervation, the latitude of the place of the obſerver being known. For in the equinoctial day, or near it, with an inſtrument exactly divided into degrees, minutes, and parts of minutes, take the meridian altitude of the ſun: if it be equal to the altitude of the equator, or to the complement of the latitude, the ſun is then in the equator; but if it is not equal, mark the difference, which will be the declination of the ſun. The next day, again obſerve the meridian altitude of the ſun, and gather from thence his declination. If theſe two declinations be of different kinds, as the one ſouth and the other north, the equinox happens ſome time between the two obſervations; if they be both of the ſame ſort, the ſun has either not entered the equinoctial, or has paſſed it. And from theſe two obſervations of the ſun's declination, the moment of the equinox may be inveſtigated.—See ASTRONOMY, vol. ii. p. 370–373.

20. The points of the ecliptic which are at the greateſt diſtance from the equator, are called the *ſolſtices*; and the circles which paſs through theſe points parallel to the equator, are called the *tropics*: the ſummer ſolſtice is at the firſt of Cancer, the winter ſolſtice at the firſt of Capricorn: the northern tropic is called the tropic of Cancer, the ſouthern of Capricorn. The ſun is once in the year at each of the tropics, and twice at the equator.

21. Circles which paſs through the poles at right angles to the equator, or any other *great* circle, are called *ſecondaries* to that circle: the ſecondary which paſſes through the equinoctial points, is called the *equinoctial colure*.

22. That pole which is neareſt the tropic of Cancer is called the *north pole*; that which is neareſt the tropic of Capricorn, is called the *ſouth pole*.

23. An imaginary line paſſing through the centre of the ecliptic, and perpendicular to the plane of it, is the *axis of the ecliptic*: its extremities are the *poles of the ecliptic*, and all circles, paſſing through theſe poles, and perpendicular to the ecliptic, are its ſecondaries. The axis of the ecliptic makes an angle of 23½ degrees nearly with that of the equator.

24. The *polar circles* are deſcribed by the revolution of the poles of the ecliptic about the poles of the equator: that which is next to the north pole, is called the *arctic* circle; the oppoſite, the *antarctic* circle.

25. The *declination* of any *heavenly body*, is its diſtance from the equator; this is either northern, or ſouthern. The degrees of declination of any body are reckoned upon a ſecondary of the equator paſſing through that body.

26. The *right aſcenſion* of any *heavenly body*, is its diſtance from the firſt of Aries reckoned upon the equator; this is meaſured, by obſerving the arc which is intercepted between Aries and a ſecondary to the equator paſſing through the ſun or ſtar.

27. The *latitude* of any *heavenly body*, is its diſtance from the ecliptic; and the degrees of latitude are reckoned on a ſecondary of the ecliptic paſſing through the body.

28. The *longitude* of any *heavenly body* is its diſtance from the firſt of Aries; and is meaſured on the ecliptic by the arc intercepted between the firſt of Aries and the ſecondary of the ecliptic which paſſes through the body: the longitude increaſes, as the body recedes from Aries, through the whole revolution, till it reaches 360°, or comes again to Aries.

29. Two bodies are ſaid to be in *conjunction* with each other, when they have the ſame longitude, or are in the ſame ſecondary of the ecliptic on the ſame ſide of the heavens, though their latitude be different: they are ſaid to be in *oppoſition*, when their longitudes differ half a circle, or they are on oppoſite ſides of the heavens.

30. The axis of the heavens is perpendicular to the planes of all the circles which the heavenly bodies deſcribe in their apparent diurnal motions. For the heavenly bodies, from the revolution of the earth round its axis, appear to move from eaſt to weſt in circles perpendicular to the axis. The planes of all theſe circles are parallel to the equator; and the axis paſſes through the centres of the circles.

31. The celeſtial ſphere is called *right*, *oblique*, or *parallel*, as the celeſtial equator is at right angles, oblique, or parallel, to the horizon.

32. In all places on the equator, the poles lie in the horizon, and all the circles of daily motion make right angles with the horizon.—For theſe places having no latitude, the poles are neither elevated above, nor depreſſed below, the horizon; and ſince the equator is 90 degrees from the poles, it is at right angles to the horizon, and alſo all circles parallel to it.

33. Thoſe who live at the equator are in a right ſphere; and, conſequently, their days and nights are always equal. The great circle of the celeſtial equator and its parallels, make right angles with the horizons of all places in the earth's equator; therefore the inhabitants of thoſe places live in a right ſphere. Hence, becauſe the celeſtial axis P T S, Plate II. fig. 3, is in the plane of their horizon, and becauſe this axis is at right angles to the plane of the equator, and paſſes through its centre, and through that of all circles parallel to the equator, the plane of the horizon alſo paſſes through the centres of theſe circles; and conſequently divides the equator and its parallels into two equal parts. One half of theſe circles will therefore always be above the horizon, and the other half below it. But each of the heavenly bodies in their daily motion deſcribes ſome one of thoſe circles, and the diurnal motion of the earth is uniform; therefore any heavenly body will, in this ſituation, be juſt as long above the horizon as below it. And becauſe this will be the caſe with reſpect to the ſun, as well as any other body, in whatever part of the heavens he is ſeen, the days and nights at the equator will always be of equal length.—See ASTRONOMY, vol. ii. p. 369.

34. At the poles of the earth, one celeſtial pole is in the zenith, and the other in the nadir; the equator coincides with the horizon, and all the circles of daily motion are parallel to the horizon.—For the latitude of the poles is 90 degrees from the equator, and the circles of daily motion are parallel to the equator.

35. Thoſe who live at either pole are in a parallel ſphere; they ſee the heavenly bodies carried round them in circles parallel to the horizon; and their day and their night, continues each half a year. An inhabitant at P, Plate II. fig. 3, has the equator E Q in the horizon, and all its parallel circles are parallel to the horizon. Therefore each of the heavenly bodies, in its apparent daily motion, being in ſome one of theſe circles, muſt deſcribe a path parallel to the horizon: ſo that thoſe which are above the horizon will never ſet by this motion, and thoſe which are below it will never riſe. The ſun, therefore, in this place, will not riſe or ſet by the diurnal motion of the earth. But from the annual motion of the earth, the ſun daily changes its apparent place in the heavens, till it has deſcribed the circle of the ecliptic, C L; one half of which is above the horizon, and the other half below it, becauſe theſe circles have their common centre in T, the centre of the earth. Therefore, for one half of the year the ſun will be in ſome part of C T, that half of the ecliptic which

which is above the horizon, and will daily revolve in circles above the horizon; and for the other half, it will be in ſome part of T L, and will perform its daily revolutions in circles below the horizon.

36. In any place between the poles and the equator, one celeſtial pole will be elevated, and the other depreſſed, at an angle leſs than a right angle; and the celeſtial equator will make an angle leſs than a right angle with the horizon. For, ſince the place is not in the equator, it has ſome latitude; and ſince it is not at either of the poles, its latitude is leſs than 90 degrees: whence the poles are elevated, or depreſſed, in an angle leſs than a right angle; and conſequently the equator, which is perpendicular to the axis, makes an angle leſs than 90 degrees with the horizon.

37. Thoſe who live on any part of the ſurface of the earth between the equator and either pole, are in an oblique ſphere, and have all the circles of daily motion oblique to their horizon.—Let H O, Plate II. fig. 3, be the horizon of a place which lies between the earth's equator and either of its poles; the celeſtial equator E Q, and all its parallel circles, will be oblique to the horizon, and therefore each of the heavenly bodies, being in ſome one of theſe circles, will appear to move in a path oblique to the horizon.

38. When the ſun, in his annual apparent courſe, is in the points in which the ecliptic cuts the equator, the day and night will be of the ſame length at all places on the ſurface of the earth: but, when the ſun is in any other part of the ecliptic, the days will be longer as the ſun's declination towards the elevated pole increaſes, and ſhorter as its declination towards the depreſſed pole increaſes. The plane of the horizon H O, Plate II. fig. 3, of any place, paſſing through T, the centre of the ſphere, and alſo through the centre of the equator, divides the equator C L into two equal parts, one half above, and the other half below, the horizon. When therefore the ſun has no declination, or is in the equator, it will appear in its daily revolution to deſcribe the equator C L; and, therefore, during one half of the revolution, it will be above the horizon, and, during the other half, below it. But ſuppoſe the ſun to have its declination towards P, the elevated pole, equal to E *m*: its diurnal apparent revolution will be in the circle *m m*, the centre of which is in a part of the axis above the horizon; whence the plane of the horizon does not paſs through the centre, and conſequently the circle *m m* is divided into two unequal parts, the greater above the horizon, and the leſs below it. Therefore the ſun, deſcribing the circle *m m*, with an uniform velocity, in its apparent diurnal revolution, will be longer in deſcribing the part above the horizon, than the part below it. And this difference manifeſtly increaſes, as the circle of the ſun's apparent diurnal motion recedes from the equator, that is, as the ſun's declination towards P increaſes. In like manner, it may be ſhewn, that the days will be ſhorter, as the ſun's declination towards the depreſſed pole increaſes.

Or thus: Let A B, Plate II. fig. 2, repreſent the plane of the ecliptic ſeen edgeways; S, the ſun in the focus of the orbit; M O, K L, X Y, the earth in different parts of its orbit. If F I, the axis of the ecliptic B A, were alſo the axis of the earth, that is, if the planes of the equator and ecliptic were coincident, it is manifeſt that the ſun, the apparent annual motion of which is in the plane of the ecliptic, would at all times of the year appear to move in the circle of the equator, and to be equally diſtant from the poles, and conſequently could produce, by its apparent motion, no varieties in the length of days and nights. But the earth's axis being inclined to the plane of its orbit, as P *p*, when the earth is at M O, the pole P will be towards the ſun, and the pole *p* turned from it, and the reverſe when the earth is arrived at X Y. When the earth is in the middle ſtation between B and A, in either part of its orbit, both the poles will be in the circle illuminated, as at K L.—In the poſition M O, ſince the ſun muſt always illuminate one half of the globe, the light will paſs beyond the pole P as far as F, and will extend towards the pole *p* no farther than I. Conſequently, in the diurnal revolution of the earth round its axis, while the earth remains in this poſition, all the parts of the globe between F and G will be illuminated, and all the parts between I and H will be dark. Farther, in this poſition greater portions of thoſe parallels which lie between the equator and the circle F G, will at any inſtant be in the illuminated, than in the dark, hemiſphere; and, on the contrary, greater portions of thoſe which lie between the circle H I and the equator, will at any inſtant be in the dark, than in the enlightened, hemiſphere. Conſequently, any given place on the ſide of the equator towards P, will, in one diurnal revolution, be longer in the light than in the dark, and the reverſe on the ſide towards *p*. The difference between the length of day-light and night, will decreaſe on either ſide of the equator, as we approach towards it; and at the equator, the illuminated and dark portions of the circle being always equal, the days and nights will be of equal length. The contrary to all this will take place in the ſituation X Y. Continual variations will take place, while the earth paſſes from M O to K L, and from K L to X Y. But in the ſituation K L, the illumination extending exactly to both poles, all the parallel circles are half illuminated, and half dark: conſequently, any place upon the globe will, in a diurnal revolution, have equal portions of light and darkneſs; that is, day and night will be every where of equal length. This muſt happen twice in every annual revolution.

All bodies, which are on the ſame ſide of the equator with the ſpectator, continue longer above the horizon than below it, and vice verſa; and as the orbits of the moon and planets are inclined to the equator, a variation of the times of their continuance above and below the horizon will take place.—When the ſun is very near either of the tropics, the days do not appear of different lengths, for the circles of apparent diurnal motion are ſo near to each other, that they cannot be ſenſibly diſtinguiſhed.—The different degrees of heat at different ſeaſons of the year are owing partly to the different lengths of the days, and partly to the different degrees of obliquity with which the rays fall upon the atmoſphere at different altitudes of the ſun.—See ASTRONOMY, vol. ii. p. 368.

39. When the ſun, or any other heavenly body, is in the equator, it riſes in the eaſt, and ſets in the weſt. For it then riſes and ſets in the points in which the equator cuts the horizon; that is, becauſe the equator is at right angles to the meridian, which paſſes through the north and ſouth points, in the points of eaſt and weſt. In north latitude, thoſe bodies which have north declination, riſe between the eaſt and north; thoſe which have ſouth declination, riſe between the eaſt and ſouth.

40. When the declination of the ſun is towards the elevated pole, its meridian altitude is equal to its declination added to the elevation of the celeſtial equator: when its declination is towards the depreſſed pole, its meridian altitude is equal to its declination ſubtracted from the elevation of the equator.—Let H O, Plate II. fig. 3, be the horizon, T the earth, P and S the celeſtial poles, D the zenith, N the nadir, E Q the equator. If the ſun be at C, having its declination towards the elevated pole P, when it arrives at the meridian P S, its meridian altitude C H, is equal to the ſum of C E, its declination, and E H, the elevation of the equator. If the ſun be at I, having its declination towards the depreſſed pole S; when it arrives at the meridian, its altitude I H, is equal to the difference of E H, the elevation of the equator, and E I, the ſun's declination, as appears from the figure.—See ASTRONOMY, vol. ii. p. 432.

41. When the declination of a heavenly body towards the elevated pole, is equal to the latitude of any place, the body will paſs through the zenith of that place: and when its declination towards the depreſſed pole is equal

to

to the latitude, it will pass through the nadir.—For any star or planet which passes through D, Plate II. fig. 3, the zenith, in its apparent diurnal revolution, must describe the circle D O; whence its distance from the equator or declination will be E D. But E D is the distance of the zenith from the equator, which, because the elevation of the equator is equal to the complement of latitude, so it is equal to the latitude. In like manner the reverse may be shewn.

42. A heavenly body seen from any place, will never set, from the diurnal motion of the earth, if the complement of its declination towards the elevated pole be equal to, or less than, the latitude of the place: and it will never rise, if the complement of its declination towards the depressed pole be equal to, or less than, the latitude. Let P D, Plate II. fig. 3, which is the complement of declination of a body at D, and also the distance of the body at D from the pole, be equal to P O, the elevation of the pole, or the latitude; it is manifest, that the body at its lowest depression will be no farther from the pole than the horizon is, that is, will never be below it. In like manner the reverse may be shewn. Hence the latitude of a place may be found, by observing the greatest and least altitude of a fixed star that never sets.—Let A, in the abovementioned fig. 3, be a star near the north pole, which in its daily motion describes the circle A B, without setting. A quadrant being placed in the plane of the meridian, or along the meridian line, observe its altitude when it is at A, and afterwards when at B; the difference of these altitudes is A B. And, since the star, in its revolution about the pole, is always at equal distances from it, if A B be bisected in P, this point will be the pole, and consequently P O will be the elevation of the pole. But, since the lengths of the arcs A O, B O, have been found by observations, their difference A B, and the half of this difference, A P or B P, is known: and P O is equal to B P + B O, or to A O — P A. Whence the elevation of the pole, that is, the latitude, is equal to the sum of the least altitude added to half the difference of the greatest and least altitude, or it is equal to the remainder arising from subtracting half the difference of the greatest and least altitudes from the greatest altitude.

Or, the latitude may be found from the sun's meridian altitude and declination. If the sun's meridian altitude, found by a quadrant, be C H, this altitude is equal to the sun's declination C E, added to the elevation of the equator E H. Therefore, if C E, the declination towards the elevated pole, be taken from the meridian altitude, the remainder E H will be the elevation of the equator. But since the elevation of the equator is the complement of latitude, the latitude is the complement of the elevation of the equator. This elevation, therefore, being found, the latitude of the place is known.—Or, the latitude of a place is equal to the sun's meridian zenith distance, added to his declination, when he passes the meridian between the zenith and the equator.

Example 1. To find the latitude from an observation of the sun's altitude, August 7, 1776, at the observatory at Cambridge.

Apparent meridian altitude of the sun's lower limb	53°	46′	8″
Sun's apparent semi-diameter, from the Ephemeris	0	15	50
Apparent altitude of the sun's centre	54	1	58
Deduct for refraction	0	0	41
Altitude of the sun's centre	54	1	17
Zenith distance of the sun's centre is found by subtracting the last altitude from 90°	35	58	43
Add the sun's declination	16	13	57
Latitude of the place	52	12	40

Ex. 2. On the 1st of December, 1793, the observed meridian altitude of Sirius was 59° 50′; required the latitude.

Observed altitude	59°	50′	S.
Therefore, Zenith distance	30	10	N.
Declination of Sirius	16	27	S.
Consequently, the latitude required	13	13	N.

43. The two tropics, and two polar circles upon the surface of the earth, divide it into five parts called *zones*: the *torrid* zone lies between the two tropics; the *temperate* zones between the tropics and polar circles; and the *frigid* zones between the polar circles and the poles.

44. At any place in the torrid zone the sun is vertical twice every year.—The sun in passing from the equator to the tropic of Cancer, 23½ degrees from the equator, has every northern declination from 0 to 23½: and every place between the equator and the tropic of Cancer has some northern latitude between 0 and 23½: therefore, in some part of its course from the equator to the tropic of Cancer, the sun must have a declination equal to the latitude of every place between the equator and the tropic: whence it must be once in the zenith of every such place in its course towards the tropic of Cancer. For the same reason it must be once in the zenith of every such place in its course from the tropic to the equator. The like also happens on the southern side of the equator.

45. The sun is vertical once every year at the places which lie in the tropics.—For the sun's declination is then 23½ degrees, equal to the latitude of the tropics.

46. At the polar circles, the longest day, and the longest night, are twenty-four hours.—When the sun is in the tropic of Cancer, the complement of its declination towards the elevated pole is 66½ degrees, equal to the latitude of the arctic polar circle: on this day, therefore, the sun will not set. When the sun is in the tropic of Capricorn, the complement of its declination towards the depressed pole will be 66½ degrees, equal to the latitude of the arctic pole; whence the sun will not rise during that day. The same happens with respect to the antarctic circle.

47. The longest day, and the longest night, are each of them more than twenty-four hours, *within the frigid zone*.—For, while the sun's complement of declination towards the elevated pole is less than the latitude of the place, the sun will not set: while the complement of declination towards the depressed pole is less than the latitude of the place, it will not rise: but this must be the case with respect to every place within the frigid zones, in some part of the sun's course towards the tropics.

48. The sun is never vertical to any place in either of the temperate zones.—For the latitude of all places in the temperate zone, is greater than any declination of the sun.

49. The longest day, and the longest night, in any part of the temperate zones, are less than twenty-four hours; and the days and nights will be longer, the nearer the place is to the polar circles.—For the complement of the sun's declination can never be less than, or equal to, the latitude of any place in the temperate zones; whence the sun will rise and set every day within these zones. But the farther any place is removed from the equator, the nearer the latitude approaches to an equality with the complement of the sun's greatest declination, when the day is twenty-four hours; that is, at the polar circles.—See ASTRONOMY, vol. ii. p. 369.

50. At different places, the hour of the day differs in proportion to the difference of longitude; 15 degrees of longitude making the difference of one hour in time; 15′, one minute of time, 15″, one second of time: and it is seen at any given place *sooner* than at places which lie to the west of it, and *later* than at places which lie to the east of it.—The sun in its daily apparent motion, which is from east to west, must arrive at the meridian of any given place, as London, sooner than it will arrive

at the meridian of any place which lies to the weſt of London, and later than at the meridian of any place to the eaſt of London: that is, ſince it is noon at any place when the ſun is in its meridian, it will be noon at London ſooner than at places weſt, and later than at places eaſt, of it. For example, if any place lies 15 degrees eaſt of London, that is, has 15 degrees of eaſtern longitude from London taken as the firſt meridian, the ſun will be one hour ſooner at its meridian than at the meridian of London; for, ſince the ſun every day appears to make a complete revolution from any meridian to the ſame, in twenty-four hours, it will in every hour deſcribe a 24th part of the circle, that is, 15°. And ſince a minute of a circle is a 60th part of a degree, and a ſecond of a circle a 60th part of a minute, and 15′ the 60th part of 15°, and 15″ the 60th part of 15′, the ſun will move at the rate of 15′ in every 60th part of an hour, and 15″ in every 60th part of a minute, that is, in every minute or ſecond of time. Conſequently, it will be noon one minute or one ſecond ſooner at a place which is 15′ or 15″ eaſt of London, than at London.

51. The difference of longitude at two places may be found by obſerving, at the ſame time from both places, ſome inſtantaneous appearance in the heavens.—If the eclipſe of Jupiter's innermoſt ſatellite, on the inſtant of its immerſion into the ſhadow of Jupiter, be obſerved by two perſons at different places, it will be ſeen by both at the ſame inſtant. But if this inſtant be half an hour, for example, ſooner at one place than at the other, becauſe the places differ half an hour in their reckoning of time, their difference of longitude is 7° 30′.—From tables of eclipſes correctly calculated for any place, the longitude of any place may be found by one obſerver. But ſuch obſervations can only be made with certainty by land, on account of the motion of a ſhip at ſea. In order to determine accurately the longitude at ſea, it is neceſſary to have a clock which ſhall not be ſenſibly affected by difference of climate, difference of gravity at different places, or the motion of the ſhip. Such a clock ſet for the meridian of London would conſtantly ſhew the hour of the day at London, which it is eaſy to compare with the hour of the day where the ſhip is, found by obſervations on the ſun or ſtars.

52 Thoſe who live in oppoſite ſemicircles of the ſame meridian, but in the ſame circle of latitude, have oppoſite hours of the day, but the ſame ſeaſons.—Being both on the ſame ſide of the equator and at the ſame diſtance from it, when the ſun's declination makes it ſummer or winter in one of the places, it will be the ſame at the other: but becauſe they are diſtant from each, 180 degrees of longitude, when it is noon at one place it will be midnight at the other: theſe are called *periæci*.

53. Thoſe who live in oppoſite circles of latitude, but in the ſame ſemicircle of the meridian, have oppoſite ſeaſons of the year, but the ſame hour of the day.—When the ſun has declination towards the north pole, it will be ſummer to thoſe who live in the northern circle of latitude, and winter to thoſe who live in the ſouthern circle of latitude. But, having the ſame longitude, their hours of the day will be the ſame: theſe are called *antæci*.

54. Thoſe who live in oppoſite circles of latitude and oppoſite ſemicircles of the meridian, have both oppoſite ſeaſons of the year, and oppoſite hours of the day.—Becauſe they are in oppoſite latitudes, they will have oppoſite ſeaſons; and becauſe they are in oppoſite ſemicircles of the meridian, they will have noon when it is midnight at the other: theſe are called *antipodes*.

55. Twelve ſecondaries to the celeſtial equator being conceived to be drawn at equal diſtances from each other, that is, dividing the equator into twenty-four equal parts, and the meridian of any place being made one of theſe ſecondaries, they are called *hour-circles* of that place.

56. If the celeſtial ſphere had an opake axis, the ſhadow of the axis would always be oppoſite to the ſun; and when the ſun was on one ſide of any hour-circle, the ſhadow of the axis would fall upon the oppoſite ſide of the ſame hour-circle.—For all the hour-circles being ſecondaries to the equator, paſs through the poles, and the celeſtial axis is in the plane of every hour-circle. And the ſhadow of any opake body, being oppoſite to the ſun, is in the ſame plane with the ſun. Therefore in whatever hour-circle the ſun is, the ſhadow of the ſuppoſed opake axis would be in the plane of that circle and oppoſite to the ſun, that is, while the ſun is in one ſemicircle of any hour-circle, the ſhadow of the axis would fall upon the oppoſite ſemicircle.—Hence, as the ſun performs its apparent courſe from eaſt to weſt, the ſhadow of the ſuppoſed axis would move from weſt to eaſt.—The gnomon of a ſun-dial repreſents this ſuppoſed axis, and therefore its ſhadow is a meaſure of time.

In every ſun-dial the gnomon, when fixed, is parallel to the earth's axis. Now when the ſun is in the meridian of any place, the twelve o'clock hour-circle is perpendicular to the plane of the horizon, and the arc from the pole to this plane is equal to the latitude of the place; and the one o'clock hour-circle makes an angle at the pole with it of 15°, and forms the hypothenuſe of a right-angled triangle to the above perpendicular, and the baſe is the arc meaſuring the angle between twelve and one o'clock; therefore we have, by Spherical Trigonometry, Rad : Sin. L : : tan. 15° : tan. of the hour-angle between twelve and one o'clock. If inſtead of 15, we ſubſtitute 30, 45, &c. we get the angles between twelve and 2, 3, &c. o'clock; the ſame may be done for the half-hours or other diviſions.—The *rational* and *ſenſible* horizons are, in this caſe, ſuppoſed coincident, which, on account of the ſun's great diſtance, will not occaſion any ſenſible error.

In a vertical ſouth-dial, we muſt conceive a plane paſſing through the centre of the earth perpendicular both to the horizon and meridian; and on the ſouth ſide, lines are drawn from the centre to the points where the hour-circles cut that plane. In finding theſe points, we ſay, as Rad : co. ſ. Lat : : tan. 15° : tan. of the hour angle between twelve and one o'clock. For the arc of the meridian, from the pole to the plane, is equal to the complement of latitude. The other hour-angles, &c. muſt be obtained in the ſame way as in the laſt.—See HOROLOGY.

57. The orbit in which the earth revolves about the ſun, is elliptical. It is known from obſervation, that the apparent motion of the ſun, that is, the real motion of the earth, in the ecliptic, is not uniform. But by the univerſal law of bodies revolving about a centre, if its orbit were circular, its velocity muſt be uniform; ſince it muſt deſcribe equal areas in equal times. Whereas if its orbit be an ellipſe, and the ſun be placed in one of the *foci*, the ſame law will require that its velocity ſhould not be uniform, but that in paſſing through its greateſt diſtance, to its leaſt diſtance, it ſhould be accelerated, and in paſſing from the leaſt diſtance to the greateſt, it ſhould be retarded. Since then the motion of the earth is in fact thus retarded and accelerated in different parts of its orbit, it is manifeſt that its orbit is elliptical.

58. A part of the earth's ſurface, bounded by two leſſer circles parallel to the equator, and of ſuch a breadth as that the longeſt day in the parallel nearer the pole exceeds the longeſt day in that next the equator, by ſome certain ſpace, as half an hour, or an hour, or a month, is called a *climate*. The beginning of a climate, is a parallel circle in which the day is the ſhorteſt; and the end of the climate, is that in which the day is the longeſt. The climates therefore are reckoned from the equator to the pole; and are ſo many zones or bands, terminated by lines parallel to the equator: though, in ſtrictneſs,

ſtrictneſs, there are ſeveral climates, or different degrees of light or temperature, in the breadth of one zone. Each climate only differs from its contiguous ones, in that the longeſt day in ſummer is longer or ſhorter, by half an hour, for inſtance, in the one place than in the other.

As the climates commence at the equator, at the beginning of the firſt climate, that is at the equator, the day is juſt twelve hours long; but at the end of it, or at the beginning of the ſecond climate, the longeſt day is twelve hours and a half long; and at the end of the 2d or beginning of the third climate, the longeſt day is thirteen hours long; and ſo of the reſt, as far as the polar circles, where the hour climates terminate, and month climates commence. And as an hour climate is a ſpace compriſed between two parallels of the equator, in the firſt of which the longeſt day exceeds that in the latter by half an hour; ſo the month climate is a ſpace contained between two circles parallel to the polar circles, and having its longeſt day longer or ſhorter than that of its contiguous one, by a month, or thirty days. But many authors, as Ricciolus, &c. make the longeſt day of the contiguous climates to differ by *half* hours, to about the latitude of 45 degrees; then to differ by an hour, or ſometimes two hours, to the polar circle; and after that by a month each.

The ancients, who confined the climates to what they thought the habitable parts of the earth, reckoned only ſeven, the middles of which they made to paſs through ſome remarkable places; as the firſt through Meroe, the ſecond through Sienna, the third through Alexandria, the fourth through Rhodes, the fifth through Rome, the ſixth through Pontus, and the ſeventh through the mouth of the Boryſthenes. But the moderns, who have ſailed farther toward the poles, make thirty climates on each ſide. Commonly the term climate is beſtowed on any country or region differing from another either in reſpect of the ſeaſons, the quality of the ſoil, or even the manners of the inhabitants; without any regard to the length of the longeſt day. Abulfeda, an Arabic author, diſtinguiſhes the firſt kind of climates by the term *real climates*, and the latter by that of *apparent climates*.

59. The greateſt diſtance of the earth or any other planet from the ſun, is called its *aphelion*; its neareſt diſtance, its *perihelion*; the longer axis of the ellipſe is called the *linea apſidum*; the aphelion is alſo called the *ſumma apſis*, and perihelion the *ima apſis*.

60. The *excentricity* of the earth, or any planet, is the diſtance between the ſun and the centre of the elliptical orbit.

61. The ſun is eight days longer in performing its apparent courſe through the ſix northern ſigns, than through the ſix ſouthern ſigns.—While the ſun appears to paſs through the northern ſigns, the earth paſſes through more than half of its orbit; and while the ſun appears to paſs through the ſouthern ſigns, the earth paſſes through leſs than half of its orbit. Therefore, if the velocity of the motion of the earth were uniform, the ſun muſt appear to be longer in paſſing through the ſix northern than the ſix ſouthern ſigns. But whilſt the earth is paſſing through the greater part of its orbit, it is farther from the ſun, and conſequently moves ſlower than in the leſſer part. On both theſe accounts, the ſun's apparent motion is ſlower in the northern ſigns than the ſouthern: the difference is found by obſervation to be about eight days.

62. The apparent diameter of the ſun is greater in winter than ſummer.—It is found by obſervation, that the diameter of the ſun in winter is 32′ 47″; in ſummer, 31′ 40″. And his mean apparent diameter is 32′ 12″, according to ſir Iſaac Newton, in his Theory of the Moon. Hence it appears, that the earth, at the winter ſolſtice, or Capricorn, is in its perihelion. The difference between ſummer and winter in the degrees of heat, is owing chiefly to the different heights to which the ſun riſes above the horizon, and the different lengths of the days. When the ſun riſes higheſt, in ſummer, its rays fall leſs obliquely, and conſequently more of them fall on the earth's ſurface than in winter; and when the days are long, and the nights ſhort, the earth and air are more heated in the day than they are cooled in the night, and the reverſe.

To illuſtrate more obviouſly the principles of mathematical geography above laid down, it will here be neceſſary to call in the aid of the armillary ſphere, and of the terreſtrial and celeſtial globes, which are calculated to impreſs on the mind the nature and uſe of thoſe great circles which aſtronomers and geographers have ſuppoſed to exiſt in the concave ſphere of the heavens, and over the convex ſphere of the earth, for the purpoſe of inveſtigating with accuracy and preciſion the various phenomena applicable to both.

Of the ARMILLARY SPHERE.

This is an artificial inſtrument, calculated to repreſent, by its real circles, thoſe imaginary ones which we have above deſcribed as dividing the heavens and the earth into various diſtinct parts. So that if the eye could be placed in the centre of this ſphere, we ſhould ſee its circles upon or againſt thoſe very points of the heavens where the imaginary circles above-mentioned are ſuppoſed to be ſituated. It is called *armillary*, becauſe it conſiſts of a number of rings of braſs, called by the Latins *armillæ*, from their reſembling bracelets or rings for the arms. The ſix *great* circles of the ſphere require particular attention: viz. the horizon, the meridian, the equator, the ecliptic, the equinoctial colure, and the ſolſtitial colure. The ſphere is ſuſtained in a frame, on the top of which is a broad circle repreſenting the horizon. On the inſide of the horizon are two notches for receiving a ſtrong braſs circle, which repreſents the meridian. It is ſuſpended on two pins, at two oppoſite points of the meridian; theſe pins are a continuation of the axis of the ſphere both ways; and as the ſphere turns round upon them, they are conſidered as poles; one the *north*, the other the *ſouth*, pole.

The *equator* is that circle which goes round the ſphere exactly in the middle, between the two poles.—The *ecliptic* is that circle which croſſes the equator obliquely; it is divided into twelve equal parts, each of which conſiſts of thirty degrees.—The *equinoctial colure* is the great circle which paſſes through thoſe two points of the equator that are intercepted by the ecliptic.—The *ſolſtitial colure* is the other great circle at right angles to the equator.

There are alſo four leſſer circles in the ſphere, two tropics, and two polar circles; theſe are all parallel to the equator.—The *tropic of Cancer* is the parallel which is on the north ſide of the equator; and the *tropic of Capricorn* is ſituated on the ſouth ſide of the equator. The two *polar circles* are at the ſame diſtance from the two poles, as the tropics are from the equator; that towards the north pole is the *arctic circle*, that towards the ſouth pole the *antarctic circle*.

The armillary ſphere is correctly repreſented in the Geography Plate I. fig. 1. The broad circle, HO, is the *horizon*, becauſe it terminates the view of the ſpectator, dividing the ſphere into two equal parts; that called the viſible hemiſphere, and that below, the inviſible hemiſphere. When the ſun, moon, &c. deſcend below this circle, we ſay, *they are ſet*; when they appear above it, we ſay, *they have riſen*. On the broad circle, repreſenting the horizon, are marked the thirty-two points of the mariner's compaſs; in which the eaſt, weſt, north, and ſouth, points, are called *cardinal* points.

The large braſs circle, MR, repreſents the *general meridian*, becauſe it ſerves to repreſent any particular meridian; for as it is fixed, and the ſphere is moveable about its axis, we can, by turning the ſphere, bring

bring any part of its ſurface under this circle, which will then repreſent the meridian of any given place.—One ſide of this circle is divided into four quadrants, each conſiſting of ninety degrees. The numbers on two of theſe quadrants commence from the equator, and proceed each way to the north and ſouth pole; the numbers on the other two quadrants increaſe from the pole towards the equator. The numbers which proceed from the equator point out the diſtance of the zenith of any place from the equator, which is its *latitude*. And the latitude is *north* or *ſouth*, according as the places are on the north or ſouth ſide of the equator. The degrees which are numbered the contrary way from the pole, are to ſhew the height or elevation of the pole above the horizon. We have before ſhewn that the elevation of the pole is equal to the latitude of the place.—By this circle is alſo meaſured the diſtance of the ſun or ſtar from the equator, which is its *declination*; and thus, if we bring the higheſt or moſt northern part of the ecliptic to the meridian, it will cut the ſame in 23½ degrees; and ſo much is the declination of that point.

To rectify the ſphere, is to put it in that poſition in which it may repreſent exactly the apparent motion of the heavens. For different places that poſition muſt be different, according to the different elevation of the pole, or latitude of the place. Therefore to rectify the ſphere, elevate the pole till the ſame number of degrees are above the plane of the horizon, as the pole of the place you are conſidering is above its horizon; and then the circles on the ſphere will, with reſpect to the globe ſuſpended within it, correſpond with the imaginary circles in the heavens.

The *equator*, E Q, is the great circle which ſurrounds the ſphere exactly in the middle between the two poles of the world; and the ecliptic, which repreſents the ſun's path, cuts this circle in two oppoſite points, and therefore, as ſtated above, the ſun is twice a-year in this circle; and as one half of it is always above the horizon, and the other half below, when the ſun is in thoſe two points, the days and nights are equal. This circle is called the *equator*, becauſe it equates or divides the globe of the earth into two equal parts; it is often alſo called the *equinoctial*, becauſe that when the ſun is in this circle, *the days are equal to the nights*. It is divided into 360 degrees, beginning and ending in the equinoctial point, and numbered from weſt to eaſt; theſe degrees on the ſphere are called degrees of *right aſcenſion*, but the degrees on the equator, as laid down on a terreſtrial globe, are called degrees of *longitude*, explained above. Hence a meridian, paſſing through the ſun, planets, or ſtars, ſhews on the equator the degree of its right aſcenſion, or diſtance from the equinoctial point.

The *hour circle*, *a*, is a ſmall circle fixed about the north pole, with a hand on the axis of the ſphere, ſo that by turning the ſphere on its axis, the index will be carried round the circle. This is uſed to convert the degrees of the equator into time; it is divided into twenty-four equal parts, anſwering to twenty-four hours, or the time of an entire revolution of the heavens. The index, by pointing ſucceſſively to thoſe hours, ſhews in what ſpace of time any part of that revolution is performed. The twelve hours are twice engraved on this circle; the firſt twelve hours ſhew the time from noon to midnight, the other from midnight to noon the next day. And ſince all aſtronomers begin the day at noon, therefore the two hours of twelve ſtand directly upon the graduated edge of the meridian.

The *ecliptic*, C D, is ſo called, becauſe there can be no eclipſes of the ſun and moon, but when the moon is in or near this circle; for this repreſents the ſun's apparent annual path, and therefore whenever the moon obſcures the ſun, or is obſcured by him, ſhe muſt be in or near the ecliptic. It is generally graduated into twelve equal parts, conſiſting of thirty degrees each, the beginning of the part being marked with characters repreſenting the twelve ſigns. Aſtronomers divided the ecliptic in this manner in order to judge more eaſily, and expreſs more clearly, the places of the ſun, moon, and planets; for it is eaſier to obtain an idea of their ſituation by referring them to ſome part of a known figure, than it could poſſibly be by merely conſidering degrees in the circumference and expanſe of the heavens. The points where this circle cuts the equator, are called the equinoctial points. It is by the ecliptic that we eſtimate the latitude and longitude of the heavenly bodies.

The *zodiac*, H O, is the broad circle in the heavens, which contains the twelve ſigns; and is called the zodiac, becauſe, according to the Chaldean diviſion, it conſiſted only of animal figures; what is now called Libra, being by them reckoned a part of Scorpio, and making the claws of that animal. The diviſion of the zodiac into twelve parts correſponds with the diviſion of the year into twelve months, and anſwers to the apparent motion of the ſun, as deſcribed above.

The next circles of the ſphere are thoſe two called the *colures*, both of which paſs through the poles of the world, and cut the equator at right angles. One of theſe paſſes through the equinoctial points, and is called the *equinoctial colure*, N; the other paſſes through the ſolſtitial point, P, and is called the *ſolſtitial colure*.

The *two tropics*, S and T, are parallels, and diſtant 23½ degrees from the equator on each ſide of it, at which diſtance they touch the ecliptic in the ſolſtitial points. While the ſun is going from Aries to Cancer, he advances every day more northward, till he comes to Cancer, his moſt northward ſituation; after which he begins to deſcend to Libra, getting every day more ſouthward than before. Now, when he is in the beginning of Cancer, he changes his motion, and turns from going northward to go ſouthward; this turning back is meant by the word *tropic*, from whence the parallel paſſing through Cancer is called *the tropic of Cancer*; and for the ſame reaſon the other is called *the tropic of Capricorn*, becauſe there the ſun returns from the ſoutherly courſe to the northern one.

The *polar circles*, V and U, are the imaginary circles in the heavens, which correſpond to thoſe parts of the earth that were termed by the ancients the *frigid zones*; they include 23½ degrees on each ſide their reſpective poles. Theſe circles are by many authors called the *arctic and antarctic circles*, but improperly, as the ancients meant by the arctic circle the largeſt parallel that was always above the horizon of any particular place, containing all thoſe ſtars which never ſet at that place, but ſeem to be carried round above our horizon in circles parallel to the equator. The largeſt parallel, which is entirely hid below the horizon of any place, they called the antarctic circle, or circle of perpetual occultation. This includes all the ſtars which never riſe to an inhabitant of the northern hemiſphere, but are perpetually below the horizon. All arctic circles touch their horizons in the north point, and all antarctic circles touch their horizons in the ſouth point. Thoſe who live under either tropic have one of the polar circles for their arctic, and the other for their antarctic, circle; thus the names of *mutable circles* have been given to the immutable polar circles, which are only arctic and antarctic circles in one particular caſe.

Of the three ſituations of the celeſtial ſphere, deſcribed above, (article 31,) as applicable to the inhabitants of the earth, we may form a very clear conception by means of the armillary ſphere.

The right ſphere, or ſphere of thoſe inhabitants who live under the equator.—To ſhew the poſition of the circles of the ſphere with reſpect to theſe inhabitants, bring the equator into the zenith, and the poles of the world lie in the horizon. The equator, the tropics, and polar circles, all ſtand perpendicular to the horizon; the heavenly

venly bodies always riſe and ſet perpendicularly; and as the horizon cuts all the circles in half, the days and nights will be equal throughout the whole year. Hence this poſition is called a *right ſphere*: for under the equator the ſtars muſt every day appear to riſe out of the horizon, then to aſcend perpendicularly for ſix hours, and deſcend perpendicularly for the ſix following hours, ſet and remain below the horizon twelve hours ſucceſſively. The planets do the ſame, there being no difference between them and the fixed ſtars, but that the latter always deſcribe the ſame parallel; whereas the parallels deſcribed by the former differ every day, being greater or leſs, according to their diſtance from the equator.

The parallel ſphere.—This ſhews the ſituation of the heavens to an inhabitant who lives under the poles. Bring the pole of the armillary ſphere into the zenith, as ſhewn in fig. 1; in this poſition the axis is at right angles to the horizon, the equator and horizon coincide, and the tropic and polar circles are parallel thereto; here there will be but one day and night throughout the whole year: for the ſame reaſon, the moon, in half her monthly revolution, will never riſe, and in the other half will never ſet. The fixed ſtars will every day deſcribe circles parallel to the horizon, ſome never riſing, others never ſetting. Hence, alſo, an inhabitant of the north pole has the ſun above his horizon, and therefore perpetual all the time the ſun is on the north ſide of the equator, that is, for ſix months together. But the ſun is below his horizon, and it is night with him all the time the ſun is on the ſouth ſide of the equator, which is alſo for ſix months: or, in other words, the ſun will be ſeen for half a year, and then it will be day; and it will be hidden for half a year, and then it will be night.

The oblique ſphere.—We in England are ſituated in an oblique ſphere. This poſition agrees with all the inhabitants who live neither under the poles, nor under the equator; here the equator, and all the circles parallel to it, make oblique angles with the horizon. It is evident, that in this ſituation, all the parallels to the equator are divided by the horizon into two *unequal* parts, but the equator into two *equal* parts; conſequently, the day and night are never equal to an inhabitant in an oblique ſphere, but when the ſun is in the equator, that is, twice a-year, on the 20th of March, and the 22d of September. All the reſt of the year the days are either longer or ſhorter than the nights; and the ſun, which always appears to move in the ecliptic, deſcribes one of the parallels to the equator, which are all cut by the horizon into two unequal parts. On the northern ſide of the equator, the days are longer than the nights, as long as the ſun is on the north ſide of the equator; but the nights are longer than the days, when the ſun is to the ſouth of the equator.

The portion of the parallels above the horizon is greater in proportion as they are nearer the elevated pole; but when the diſtance of the parallel from the pole becomes leſs than the elevation of the pole, then that parallel, and all thoſe which are included within it, are wholly above the horizon, no part of them ſetting or paſſing under it. The contrary happens in the parallels that are ſituated towards the depreſſed pole, a ſmaller portion of theſe being above the horizon, and the greater part lying under it. Thoſe parallels which are nearer the depreſſed pole, than the elevation of the pole, or latitude of the place, remain perpetually, together with the ſtars included within them, under the horizon, and are never viſible to us.

The arc of the equator intercepted between the beginning of Aries, and a ſtar, &c. when on the meridian, is its *right aſcenſion*. It is ſo called, becauſe in a right ſphere, that point of the equator, which riſes with a ſtar, &c. comes alſo to the meridian with it. Hence we find the right aſcenſion of a ſtar, &c. by bringing it to the meridian; for that point of the equator which comes to the meridian with it, is its right aſcenſion. The right aſcenſion of a fixed ſtar is always the ſame, but that of a planet varies. The arc of the equator intercepted between the beginning of Aries and the point of the equator, riſing or ſetting along with any heavenly body, is the *oblique aſcenſion or deſcenſion*. The difference between the right and oblique deſcenſion, is the *aſcenſional difference*. Thus many problems, ſolved by the globes, may be performed equally correct with the armillary ſphere.

In the centre of the ſphere is placed a ſmall globe of the earth, ſupported by an axis, the ends of which go through the ſphere in the places of the celeſtial poles. It is ſo contrived, that we can either turn the globe round within the ſphere, or turn the ſphere round the globe; thus this inſtrument exhibits the real motion of the earth round its axis within the ſphere of the heaven, or the apparent motion of the heaven round the earth; and hence it ſhews the correſpondence between the terreſtrial and celeſtial ſpheres; and that the appearances of the heavenly bodies would be the ſame to us, whether they moved round the earth as they appear to do, and the earth ſtood ſtill; or they ſtand ſtill, and the earth is carried round the contrary way.

By the armillary ſphere it is alſo manifeſted, that the poles of the earth, when extended, reach the poles of the heavens. By placing a ſmall patch on the different circles of the ſphere to repreſent ſtars, we ſhall perceive, that thoſe which are furtheſt from the poles will deſcribe the greateſt circles; and thoſe will deſcribe the largeſt poſſible circles that are ſituated in the equator, which is equi-diſtant from both poles. We likewiſe perceive, that a ſtar has acquired its greateſt elevation when it comes to the upper ſemicircle of the meridian, and its greateſt depreſſion when it is at the lower circle of the meridian; and that the arc of its apparition is biſected at the meridian.

Of the GLOBES.

Though the celeſtial and terreſtrial globes are juſtly allowed to be the beſt artificial inſtruments for combining a general knowledge of aſtronomy and geography, yet there are imperfections in the common globes, which often tend to confuſe a learner; but which it has been recently propoſed to remedy by an improved ſtructure. It is our province to conſider the merits and demerits of both. A pair of globes, on the improved principle, are repreſented in the Geography Plate I. fig. 2 and 3; and their advantages might be eaſily pointed out, by comparing them with thoſe of the common conſtruction. To rectify the common globes to any particular latitude, the axis of the earth muſt be ſhifted from one falſe poſition to another, by which the mind of the pupil is liable to be confuſed, ſince he with difficulty conceives that the axis of the earth never varies its poſition, but always preſerves the ſame inclination to the plane of its orbit. Again, the broad circle of the common globes is deſigned to repreſent the ecliptic and the horizon; but on examination it repreſents neither the one nor the other correctly. The ecliptic is the *apparent* path of the ſun, to which the earth's axis always makes an angle of 66½ degrees; yet by ſhifting the axis of the globe to rectify it for the latitude, this circle can never be in its *true* poſition as ecliptic, except when the axis is at 66½ degrees, and, conſequently, can only then be uſed as the ecliptic. Next let us conſider it as the horizon. Now, as we have ſhewn above, every place is always in the zenith of the horizon, and the place and horizon always move together; but in the common globes, the broad circle is only the horizon in one particular ſituation, that is, when the place is in the zenith; for after having rectified the globe to the latitude, the moment you move the globe, the broad circle is no longer the horizon. Thus it is plain, that this circle, in many inſtances, cannot with propriety be conſidered either as an

horizon or ecliptic. A circle is alſo laid down on the common terreſtrial globe to repreſent the ecliptic, and to be uſed as ſuch in ſolving problems upon the common globes, though it involves numerous abſurdities: thus, having marked the ſun's place in the ecliptic, and rectified the globe to the latitude, then turn the globe, and the ſun and earth have a diurnal motion together; of courſe, if you have day when you begin, you will have the ſame during the whole twenty-four hours; or, *vice verſa*, twenty-four hours of night. Several other imperfections might eaſily be adduced; but theſe are ſufficient to ſhew the defect of their conſtruction.

The terreſtrial globe, repreſented in Plate I. fig. 2, does not hang in a frame like the common globes, but is mounted on a pedeſtal, ſupported by, and moveable on, an axis, which is inclined 66½ degrees to the ecliptic, and of courſe is always by this means parallel to the axis of the earth, ſuppoſing the path of the globe to be parallel to the ecliptic. On the pedeſtal, but under the globe, is a graduated circle C D, marked with the ſigns and degrees of the ecliptic; adjoining to which is a circle of months and days, anſwering to every degree of the ecliptic; within this circle is the ſun's declination for every day of the month. There is alſo a moveable arm A B, which, being ſet to the day of the month, immediately points out the ſun's place in the ecliptic, and his declination. On this moveable arm, but near the index, is added a pillar E; on the top of this pillar is fixed a ſmall ball, through which a ſteel wire paſſes, to repreſent a ray proceeding from the centre of the ſun.

Round the whole globe is a braſs circle F, to repreſent the horizon of any place; and at right angles to this horizon, is fixed a ſemicircle G, to anſwer for a general meridian. The middle point of this ſemicircle anſwers for the ſituation of any inhabitant on the earth, for which reaſon a ſteel pin is fixed over the middle point of this ſemicircle. One ſuppoſition only is neceſſary for performing every problem with this globe; namely, that a ſpherical luminous body will enlighten one half a ſpherical opake body, and, conſequently, that a circle at right angles to the central ſolar ray, and dividing the globe in half, will be a terminator, ſhewing the boundaries of light and darkneſs for any given day. For this purpoſe, at the end of the moveable arm oppoſite to the ſun, there is a pillar H, from the top of which projects a piece to carry a circle I, which alſo ſurrounds the globe, and always divides it into equal portions, ſeparating the enlightened from the dark parts. Eighteen degrees behind this circle, but parallel to it, is another circle, intended to repreſent the limits of twilight.

There are two braſs plates, K and L, placed under the globe, which are turned by the diurnal revolution thereof, as by the ſame revolution of the earth. Each of theſe is divided into twice twelve hours, and parts of an hour, to anſwer for the hours of the day; on the outſide are laid down the degrees of longitude for every hour; ſo that theſe circles give at ſight the hour of the day or night, at any two places on the globe, with the difference of longitude correſponding thereto. There is alſo a further improvement added to this conſtruction, which renders it a planetary globe; for, by ſetting the pillar, fig. 4, to the place of any planet in the ecliptic, and the ball to the latitude of the planet, it will ſolve all problems relative to that planet, or to the moon; as it does likewiſe for the ſun, by means of a central ſolar ray.

To rectify this globe, ſet the diviſion under the repreſentative inhabitant over the given place, ſet the ſolar index, L, to the day of the month; then turn the globe round on the axis till the meridian coincides with the central ſolar ray, and the hour index under the globe to XII; and this globe is then in the true poſition of the earth, with reſpect to the ſun and that given place. If the inhabitant be placed on the weſtern ſide of the terminator, he will ſee the ſun, or the central ſolar ray, riſing in the horizon; and this ray will mark thereon the ſun's amplitude, while the hour circle gives the hour and minute of the ſun's riſing on that day and place. Turn the globe gradually till the meridian coincides with the central ſolar ray, and the point will mark out the ſun's meridian altitude for that day. As the globe goes on, the altitude decreaſes, and when the inhabitant is arrived at the other ſide of the terminator, the ſolar ray is in the horizon, and points out the ſun's amplitude, with the time of his ſetting on the hour circle. If you proceed to turn the globe till the inhabitant is under that circle which is behind the terminator, the hour-circle gives the time that twilight finiſhes. The ſun's altitude for any given time of the day, is obtained by ſtopping the globe when the index points out that hour, and the quadrant of altitude over the inhabitant, and then bringing it to the central ray, which will point out thereon the altitude for that hour.

In this manner may be ſolved ſimilar queſtions for any other place, or any other day; always obſerving, 1. To fix the inhabitant over the given place. 2. To ſet the ſun's annual index to the given day of the month. 3. To bring the meridian to the central ſolar ray, and the hour index under the globe to XII. By placing the ſmall pillar, fig. 4, to the moon's place in the ecliptic, and the ball to her latitude, the ſame problems may be ſolved at the ſame time for the moon; and ſo reſpectively of any other planet. Hence, by this globe, a perſon entirely unacquainted with aſtronomy may, in a few days, acquire a competent and natural notion of the principal phenomena, and be enabled to ſolve the greateſt part of the moſt intereſting problems concerning the ſun, moon, and planets.

The celeſtial globe is repreſented at fig. 3, in the ſame engraving. As the terreſtrial globe is mounted to correſpond exactly with our earth, and every problem anſwered as they are really occaſioned by the annual and diurnal motion of the earth; ſo the celeſtial globe, to be conformable to nature, ſhould be as nearly as poſſible an exact imitation of the heavens, and their ſituation with reſpect to the earth; which is far from being the caſe with the common globes. To make the celeſtial globe thus conformable to nature, it ſhould have no motion; the appearance of motion in the firmament, ariſes entirely from the diurnal motion of the earth; it is plain, therefore, that whatſoever gives a true repreſentation of the heavens, will have no motion. This celeſtial globe is therefore fixed on an axis, making, like that of the terreſtrial globe, 66½ degrees with the plane of the ecliptic; and the ecliptic on this globe exactly coincides with the ſun's apparent path round the earth. All problems concerning the ſun, moon, and planets, are performed by the terreſtrial globe. This celeſtial globe needs only to be uſed for the ſtars; and one or two problems will give a ſufficient idea of the manner of ſolving all that relates to the ſtars.

To find the latitude and longitude of a given ſtar.—Firſt find the ſtar on the globe, and then place the index and clip, marked A, on the ecliptic plate, ſlide the ſiderial index till it is exactly over the ſtar, and the latitude is ſhewn on the arc, and the longitude, by the index, on the ecliptic.

To find the riſing, ſetting, amplitude, and meridian altitude, of the ſame ſtar.—Take the clip from the celeſtial globe, and put it to the ſame degree of longitude on the terreſtrial ecliptic plate; turn the globe on its axis, and the time of its riſing and ſetting is immediately pointed out by the hour index; its amplitude is ſhewn on the horizon; its meridian altitude, by the meridian; and its azimuth and altitude for any hour, by applying the quadrant of altitude under the ſiderial index for that hour.

With regard to the utility or difference between theſe improved

J. Pass fc.

1. Armillary Sphere. 2. Terrestrial Globe. 3. Celestial Globe.

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improved globes, and thoſe of the common conſtruction, candour impels us to remark as follows: In the improved terreſtrial globe, repreſented at fig. 2, the moveable horizon is ſhifted, as it would naturally ſhift, ſhould an inhabitant move from one latitude to another. In the common globe, we can elevate the pole to the ſame effect; but in London, ſhould we elevate the pole for the latitude of Jamaica, the axis at London would not point to the north pole, or polar ſtar; yet, ſuppoſing we were at Jamaica, it would then point juſtly. The axis of the earth, with reſpect to the horizon, may therefore be ſaid, relatively to the horizon, to be continually ſhifting, as an inhabitant changes his latitude. This may be eaſily underſtood by an attentive learner, without confuſing his ideas.

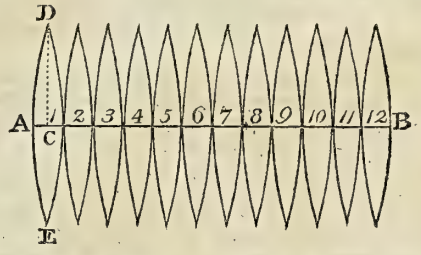
The horizon, on the broad circle upon the ſtand of the common globes, containing alſo the ecliptic, divided into ſigns and degrees, and a contiguous calendar, is not deſigned to repreſent more than the horizon of a place. The graduated circle of the ecliptic is uſeful for finding the place of the ſun for any day in a ready manner, without the trouble of referring to an ephemeris; the ſun's place being found, the ecliptic circle upon the globe is immediately uſed to have the requiſite mark ſet on it. The ſun's place being thus fixed on the globe, the performance of a problem, by turning the ſun and globe round together, is certainly not ſo ſtrictly agreeable to nature, but it is ſufficient for the reſult of a problem. Yet in the inſpecting of particular countries on the terreſtrial globe, it is proper to have it quite clear, and without being obliged to puſh away any contiguous appendages. For the performance of the problems on the planets, and tracing the paths of comets, &c. the celeſtial globe, mounted in the common way, will be found more convenient. Upon the whole, therefore, the following particulars appear to be the chief advantages in the improved mounted globes, and thoſe in the common manner.

In the improved globes, the axis always retains a natural and permanent poſition, directing to the north pole in the heavens, when duly ſet by the compaſs. The ſun, upon the ſtem E, fig. 2, or moon, or planets, being in a fixed poſition, and the globe turning about its axis before, is the natural and juſt repreſentation of the cauſe of all the various phenomena reſpecting their riſing, culminating, ſetting, lengths of days and nights, &c. reſulting from the diurnal motion of the earth, and the reſpective ſituations of the planets in their orbits.—The moveable horizon, meridian, &c. applied to this globe, can have their poſitions naturally changed, according to the motion or ſituation of any inhabitant of the earth.—This globe, being placed in a darkened room, and a candle or lamp being placed at a proper diſtance, in a line with the centre of the ſun; the globe will be divided, as in nature, into the enlightened and darkened hemiſpheres, and ſhew in what degree the various countries enjoy the preſence of the ſun or day, and the lengths at that time of the day and night.—By the wheel-work, contained on the plate C D, the relative poſition of the axis to the terminator of light and darkneſs is ſhewn, conſequently, the ſtate of the light and darkneſs of the earth at any ſeaſon of the year.

With reſpect to the globes, mounted in the common manner; their having no braſs circles or other appendages, contiguous to their ſurfaces, renders them more eaſy for inſpection, and in the performance of a variety of problems.—All great circles of the ſphere, being imaginary, and referred to in the heavens, the poſition of right, parallel, and oblique, to the inhabitants of the earth, can only be repreſented by the common mounted globe, where there is a contrivance of the horary circle being under the meridian, or to ſhift away occaſionally from the pole. Globes of large dimenſions, ſuch as eighteen inches in diameter and upwards, are much leſs expenſive and portable, mounted in the common way, than in the new way. Theſe obſervations will be ſufficient to give the reader a fair idea of the merits, and defects, of both mountings. In the performance of a variety of problems upon the common globe, he will find many others that are not neceſſary to be noticed here; as well as to convince him that a correct knowledge of the celeſtial and terreſtrial phenomena, can only be obtained by joining real obſervations of the heavenly bodies, and the true geographical phenomena of the earth, with the portions of his ſtudies on the globes.—See the common terreſtrial globe in the Geography Plate III. fig. 5.

PROJECTION OF GLOBES AND MAPS.

To project the countries, or conſtellations, on Globes.—From the given diameter of the intended globe, find a right line, as A B in the annexed figure, equal to the circumference of a great circle, and divide it into 12 equal



parts. Through the ſeveral points of diviſion, 1, 2, 3, 4, &c. with the interval of ten of them, deſcribe arches mutually interſecting each other in D and E; theſe figures, or conical pieces, duly joined together, will make the whole ſurface of the globe. Divide each part of the line A B into 30 equal parts, ſo that the whole line A B, repreſenting the periphery of the equator, may be divided into 360 degrees. In the Geography Plate II. fig. 4, one of theſe cones, projected for a celeſtial globe, is repreſented on a larger ſcale. Now from the poles marked D and E, in this cone, with the interval of 23½ degrees, deſcribe arches *a*, *b*; theſe will be twelfth-parts of the polar circles. After the like manner, from the ſame poles D and E, with the interval of 66½ degrees, reckoned from the equator, deſcribe arches *c*, *d*; theſe will be twelfth-parts of the tropics. Through the degree of the equator *e*, correſponding to the right aſcenſion of any given ſtar and the poles D and E, draw an arch of a circle, and, taking in the compaſſes the complement of the declination from the pole D, deſcribe an arch interſecting it in *i*; this point *i* will be the place of that ſtar. All the ſtars of a conſtellation being thus laid down, the figure of the conſtellation is to be drawn according to Bayer, Hevelius, or Flamſtead. In the ſame manner are the declinations and right aſcenſions of each degree of the ecliptic *dg* to be determined. The ſurface of the globe thus projected on a plane, is to be engraven on copper, to ſave the trouble of doing this over again for each globe. A ball in the mean time is to be prepared of plaſter, &c. of the intended diameter of the globe; on this, by means of a ſemicircle and ſtyle, is the equator to be drawn, and through every 30th degree a meridian. The ball thus divided into twelve parts, correſponding to the ſegments before projected, the latter are to be cut from the printed paper, and paſted on the ball. Nothing remains but to hang the globe in a brazen meridian and wooden horizon, to which may be added a quadrant of altitude made of braſs, and divided in the ſame manner as the ecliptic and equator.—See the article GLOBE.

If the declinations and right aſcenſions of the ſtars be not given, but the longitudes and latitudes in lieu thereof, the ſurface of the globe is to be projected after the ſame manner as before, except that in this caſe D and

E, fig. 2, are the poles of the ecliptic, and *f h* the ecliptic itself; and that the polar circles and tropics, with the equator *g d*, and the parallels thereof, are to be determined from their declinations.

M. de la Lande, in his *Aſtronomie*, tom. iii. p. 736, deſcribes the following methods. "To conſtruct celeſtial and terreſtrial globes, gores muſt be engraved, as ſhewn in the engraving, at fig. 5. The length P C, the axis of this curve, is equal to a quarter of the circumference of the globe; the intervals of the parallels on the axis P C, are all equal, the radii of the circles K D I, which repreſent the parallels, are equal to the co-tangents of the latitudes; and the arches of each, as D I, are nearly equal to the number of the degrees of the breadth of the gore (which is uſually 30°) multiplied by the ſine of the latitude: thus there will be found no intricacy in tracing them; but the difficulty proceeds from the variation found in the trial of the gores when paſting them on the globe, and of the quantity that muſt be taken from the paper, leſs on the ſides than in the middle (becauſe the ſides are longer), to apply it exactly to the ſpace that it ſhould cover.

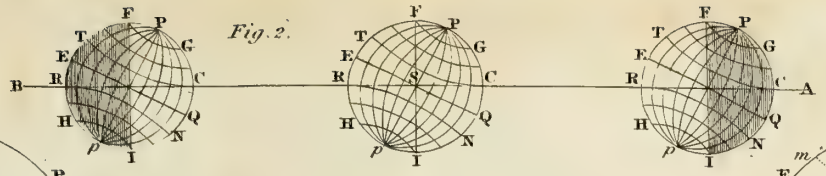
"The method uſed among workmen to delineate the gores, deſcribed in the 7th vol. of the *Encyclopédie*, is little geometrical, though ſufficient in practice. Draw on the paper, as at fig. 5, the line A C, equal to the chord of 15°, to make the half breadth of the gore; and a perpendicular P C, equal to three times the chord of 30°, to make the half length: for theſe papers, the dimenſions of which will be equal to the chords, become equal to the arcs themſelves when they are paſted on the globe. Divide the height C P into nine parts, if the parallels are to be drawn in every 10°; divide alſo the quadrant B E into nine equal parts through each diviſion point of the quadrant, as G; and through the correſponding point D of the right line C P draw the perpendiculars H G F and D F, the meeting of which in F gives one of the points of the curve B E P, which will terminate the circumference of the gore. When a ſufficient number of points are thus found, trace the outline P I B with a curved rule. By this conſtruction are given the gore-breadths which are on the globe, in the ratio of the coſines of the latitudes; ſuppoſing theſe breadths, taken perpendicular to C D, which is not very exact (but it is impoſſible to preſcribe a rigid operation), ſufficient to make a plane which ſhall cover a curved ſurface, and that on a right line A B ſhall make lines P A, P C, P B, equal among themſelves, as they ought to be on the globe. To deſcribe the circle K D I, which is at 30° from the equator, there muſt be taken above D a point, which ſhall be diſtant from it the value of the tangent of 60°, taken out either from the tables, or on a circle equal to the circumference of the globe to be traced; this point will ſerve as a centre for the parallel D I, which ſhould paſs through the point D, for it is ſuppoſed equal to that of a cone circumſcribing the globe, and which would touch at the point D. The meridians may be traced to every 10 degrees, by dividing each parallel, as K I, into three parts at the points L and M, and drawing from the pole P, through all theſe diviſion points, curves, which repreſent the intermediate meridians between P A and P B, (as B R and S T, in fig. 6.) The ecliptic may be deſcribed by means of the known declination from different points of the equator that may be found in a table; for 10°, it is 3° 58′; for 20°, 7° 50′ = B Q; for 30°, 11° 29′, &c."

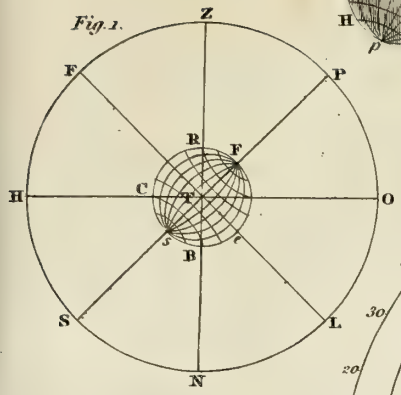
It is obſerved in general, that the paper on which charts are printed, ſuch as the *colombier*, ſhortens itſelf $\frac{1}{72}$ part or a line in ſix inches upon an average, when it is dried after printing; this inconvenience muſt therefore be corrected in the engraving of the gores: if, notwithſtanding that, the gores are found too ſhort, it muſt be remedied by taking from the ſurface of the ball a little of the white material with which it is covered, thereby making the dimenſions ſuitable to the gore as it was printed. But what is moſt ſingular is, that in drawing the gore, moiſtened with the paſte to apply on the globe, the axis G H, fig. 6, lengthens, and the ſide A K ſhortens, in ſuch a manner, that neither the length of the ſide A C K nor that of the axis G E H of the gore, are exactly equal to the quarter of the circumference of the globe, when compared to the figure on the copper, or to the numbered ſides ſhown in the engraving. Mr. Bonne having made ſeveral experiments on the dimenſions that gores take after they had been paſted ready to apply to the globe, and particularly with the paper he made uſe of for a globe of one foot in diameter, found that it was neceſſary to give to the gores on the copper the dimenſions ſet forth on the left hand ſide of fig. 6. Suppoſing that the radius of the globe contained 720 parts, the half breadth of the gore is A G = 188$\frac{5}{10}$, the diſtance A C for the parallel of 10 degrees taken on the right line L M is 128·1, the ſmall deviation from the parallel of 10 degrees in the middle of the gore E D is 4, the line A B N is right, the radius of the parallel of 10°, or of the circle C E F, is 4083; and ſo of the others as marked in the figure. The ſmall part under H, has its radius 253, inſtead of 274, which it would have if the ſine of 20° had been the radius of it.

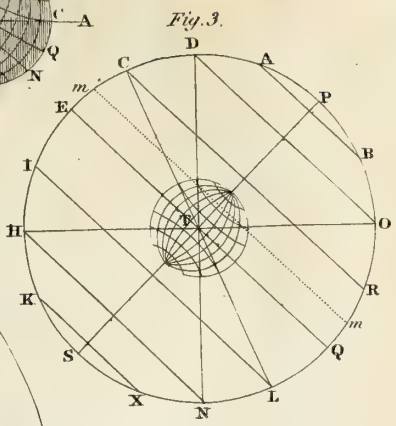
To project Maps and Charts.—A map is the repreſentation of the ſurface of the earth upon a plane; and theſe are either *general* or *particular*. A general map, is a map of the whole earth, and this is repreſented in two circles touching each other, repreſenting two hemiſpheres of the earth, the boundaries of which are meridians. A particular map, is a map of only a part of the ſurface of the earth, as of one of the quarters of the world, or of any particular country. The laying down of theſe maps is called *projection*, of which there are ſeveral kinds. In doing this, three principal things are required: viz. To ſhow the latitude and longitude of places; this is done by drawing a certain number of meridians, and parallels of latitude. The ſecond requiſite is, to exhibit, as nearly as poſſible, the ſhape of all the countries; for it cannot be done accurately by any projection, on account of its being made on a plane, when the earth is globular. The third is, to ſhow the bearings of places from each other, and their diſtances; the former can be done in one projection, but the latter cannot.

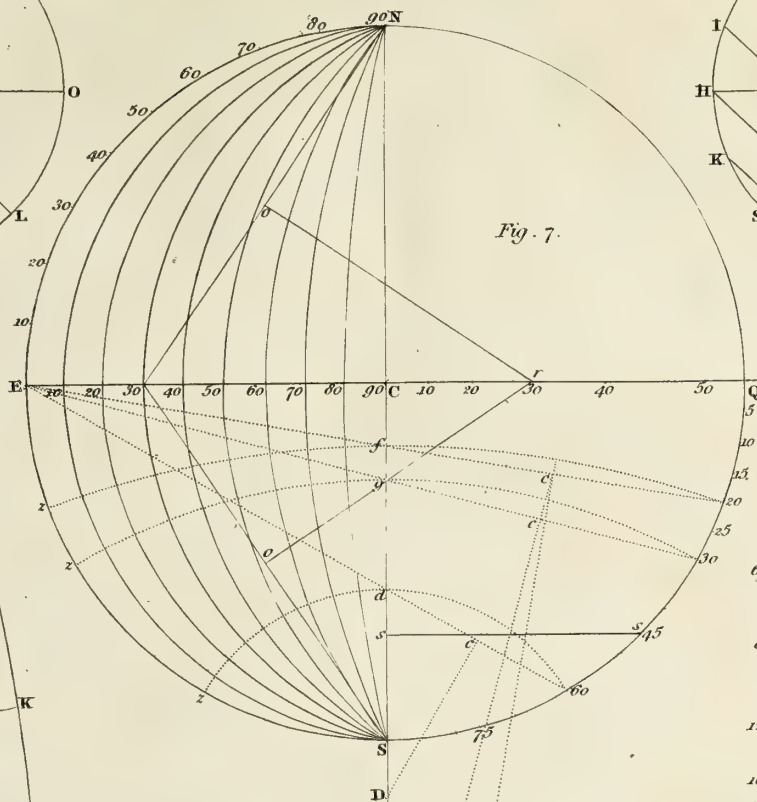
The projection of maps is made according to the rules of perſpective. If the eye be ſuppoſed to view the earth from an infinite diſtance, the appearance repreſented upon a plane is called an *orthographic* projection. In this caſe, the parts about the middle are very well repreſented, but the extreme parts are very much contracted. But the method generally made uſe of by geographers for maps, is the *ſtereographic*, where the eye is ſuppoſed to be on the ſurface of the earth, and looking at the oppoſite hemiſphere. There is alſo a very uſeful projection, called *globular*, in which meridians, equidiſtant upon the ſurface of the earth, are repreſented by equidiſtant circles in the map. There is alſo another projection, uſed by navigators, called *Mercator's*, in which, both the meridians and parallels of latitude are repreſented by ſtraight lines. Theſe are called *ſea charts*, wherein are exhibited ſome part of the ſea, with the ſhores that bound it: the inlands are generally omitted, as being of no uſe to the ſailor; but the parts near the ſhore are carefully laid down, with marks ſignifying rocks, ſands, or flats, and figures expreſſing the *ſoundings*, or depths of the water.

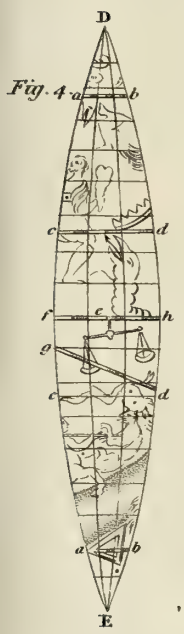
When we are to delineate a map of a *ſmall* part of the earth, if it be near the equator the meridians and parallels of latitude may be repreſented by equidiſtant ſtraight lines. If at ſome diſtance from the equator, the meridians muſt then be made to converge a little, and the more ſo, the further you recede from the equator. When a map is made of a *very ſmall diſtrict*, as of a county, on whatever

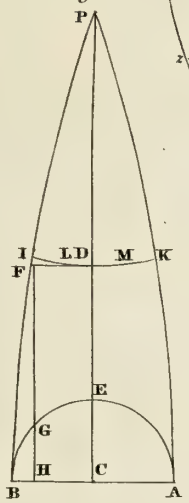












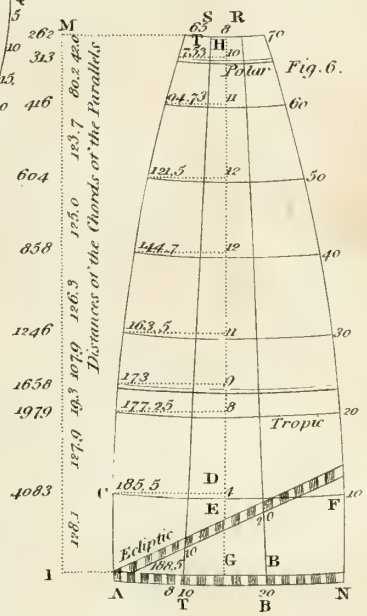
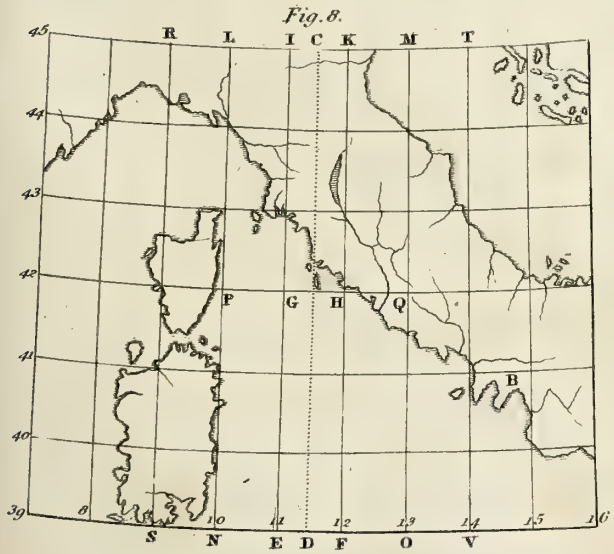
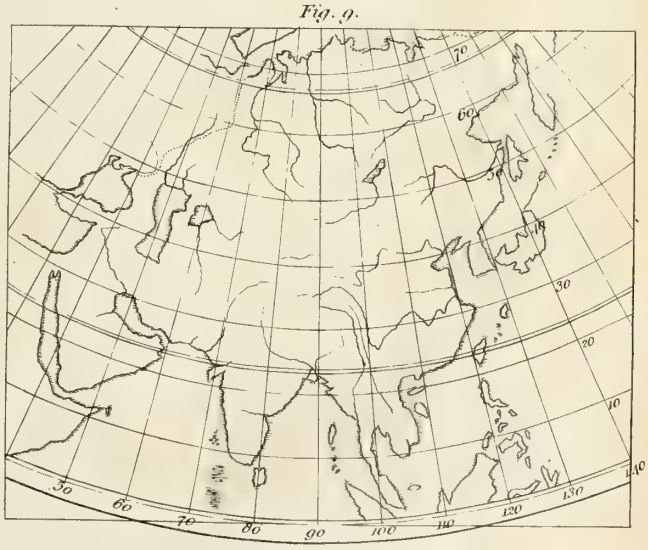


Fig.6.
S R T H Polar 24.73 121.5 144.7 163.5 177.3 185.5 188.5 Tropic Ecliptic
M 262 313 416 604 858 1246 1658 1979 4083
Distances of the Chords or the Parallels
A T B N





Projection of Globes and Maps.

Neele sc. Strand.

London Pub.d as the Act Directs February 21.st 1807 by J. Wilkes.

whatever part of the earth it is, the meridians and parallels of latitude may be repreſented by equidiſtant parallel lines.

A line which cuts all the meridians at the ſame angle, is called a *rhumb* line; as long therefore as a ſhip ſails upon the ſame rhumb, it ſails upon the ſame point of the compaſs. When the projection of the meridians is by circles, then the rhumb line is a curve; but when the meridians are repreſented by ſtraight and parallel lines, the rhumb becomes a ſtraight line, it being the property of a ſtraight line to cut parallel ſtraight lines in the ſame angle. Hence the great uſe of Mercator's chart, which is conſtructed upon this principle. Upon the earth's ſurface, the degrees of latitude are all equal, but the degrees of longitude decreaſe as you approach the poles. Now in this projection, the meridians being equidiſtant ſtraight lines, the degrees of longitude muſt be every where equal; in order therefore to preſerve the proper proportion between the degrees of longitude and latitude, the degrees of latitude are increaſed in a proper proportion; the degrees of latitude therefore increaſe as you go from the equator to the pole. In ſailing from one place to another, the ſhorteſt way is to ſail upon a great circle, but that is a thing which is impracticable, there being nothing to direct you in ſuch a courſe. Navigators, therefore, when they have to go from one place A, to another B, find upon what rhumb they muſt ſail, that is, upon what point of the compaſs they muſt go, ſo as to come to B, and by their ſteering compaſs they can tell when they ſail on the ſame point. On Mercator's projection, if you draw a ſtraight line from A to B, it gives you the rhumb required; for in theſe maps, there is a point aſſumed, and from it there are drawn 32 ſtraight lines to the 32 points of the compaſs; when therefore you draw the ſtraight line from A to B, you muſt obſerve to which of the 32 lines it is parallel, or to which it is neareſt ſo, and you thus get the rhumb, or the point of the compaſs you muſt continue to ſail upon, in order to go from A to B. For inſtance, if you find the line A B is parallel to the ſouth-weſt line of the compaſs, then if you continue to ſail on the ſouth-weſt point, you muſt come to B.

In all maps, the upper part is, or ſhould be, northern, the lower part ſouthern, the right hand ſide is eaſtern, and the left hand ſide is weſtern. On the right and left ſides, the degrees of *latitude* are marked; and on the top and bottom, the degrees of *longitude* are marked. When the maps are very large, the degrees may be ſubdivided into halves, quarters, &c.

When the meridians and parallels of latitude are *ſtraight and parallel lines*, the *latitude* of a place is found by ſtretching a thread over the place, ſo that it may cut the *ſame* degree of latitude on the right and left ſide of the map, and that degree is the latitude of the place. And to find the *longitude*, ſtretch a thread over the place, ſo that it may cut the *ſame* degree of longitude on the top and bottom of the map, and that degree is the longitude of the place. For inſtance, if we take the chart of the Eaſt-India iſlands, and ſtretch a ſtring over Siam, we ſhall find that it will cut each ſide at 14° N. lat. and the top and bottom at 100° 10′ E. lon. Theſe therefore are the latitude and longitude of that place. On the contrary, if the latitude and longitude of a place be given to find the place, ſtretch one thread over the given degree of latitude on each ſide, and another thread over the given degree of longitude at the top and bottom; and at the interſection of the threads is the place required. By this means you may put down in a map, any place whoſe latitude and longitude are known.

Now let the meridians and parallels of latitude be *curve lines*. Then to find the *latitude* of a place, a parallel of latitude muſt be drawn through it, by the ſame rules as the other parallels are drawn, and it cuts the ſides at the degree of latitude of the place. And to find the *longitude* of the place, draw a circle of longitude through it, by the ſame rules as the other circles are drawn, and it cuts the top and bottom at the degree of longitude of the place. But as it is troubleſome to draw theſe circles, the following method may generally be ſufficiently accurate. To find the *latitude*, find by a pair of compaſſes and a ſcale of equal parts, how far the place is from the two parallels between which it lies, and divide the diſtance of the parallels in that proportion, and you get very nearly the latitude. Suppoſe, for inſtance, the diſtance between the parallels to be 5°, and that one is a parallel of 45°, and the other of 50°; and ſuppoſe the place to be within 3 parts of the parallel of 45°, and 7 parts of the parallel of 50°; then 5° muſt be divided into 10 parts, and 3 of thoſe parts muſt be added to 45°, and it gives the latitude. This is done by proportion, thus, 3+7, or 10 : 3 :: 5° : $\frac{3\times 5^\circ}{10}=\frac{15^\circ}{10}=1\frac{1}{2}^\circ$; therefore the latitude is $46\frac{1}{2}^\circ$ nearly. In the very ſame manner you may find the *longitude* nearly. On the contrary, if the latitude and longitude of a place be given, to find the place, draw a circle of latitude through the given latitude on each ſide, and a circle of longitude through the given longitude at the top and bottom, and their interſection denotes the place.

To project a Map of the World on a plane ſurface, according to the improved globular projection.

To draw the circles of latitude.—Deſcribe the circle N Q S E, Plate II. fig. 7, of any convenient magnitude, repreſenting one hemiſphere, or half of the earth's ſurface; draw the diameters N S, and E Q, perpendicular to each other. The line E Q will repreſent the equator; N S the axis, or firſt meridian. Divide the quadrant Q S, into nine parts, as 10, 20, 30, &c. or into ſmaller parts if the circle be large enough to admit of it. From E to each of theſe diviſions draw right lines, as E, *f*, 20; E, *g*, 30; E, *d*, 60; &c. Divide into two equal parts the lines *f*, 20; *g*, 30; *d*, 60; &c. and from *c*, the point of diviſion, let fall the perpendiculars *c* F, *c* G, and *c* D, produced till they cut the polar diameter N S, extended indefinitely in *y*; then the points F, G, D, will be the centres from which the circles of latitude *z*, *f*, 20; *z*, *g*, 30; *z*, *d*, 60, are to be deſcribed, or ſtruck with the compaſſes, which will be the true repreſentations of the parallels of 20, 30, and 60, degrees of ſouth latitude. In the ſame manner draw the parallels for every *tenth* or *fifth* degree of latitude.—To obtain thoſe in the northern hemiſphere, ſet off on the line N S, produced in the oppoſite direction, the diſtances S D, S G, S F, &c. which will give centres on which the circles of latitude are to be deſcribed for every tenth or fifth degree in that hemiſphere.

To draw the circles of longitude.—Divide the quadrant E N, into equal parts, 10, 20, 30, &c. Divide the quadrant S Q, into two equal parts at *s*, of forty-five degrees each, and let fall a perpendicular *s s*, from the point *s*; ſet off on the line N S produced S *x*, equal to *s s*: then lines drawn from *x* to 10, 20, 30, &c. in the quadrant E N, will divide the radius in the points 10, 20, 30, &c. through which the circles of longitude are to be drawn.—Here the geometrician will recollect that a circle may be drawn through any three points, not ſituated in a right line: and the method of finding the centre is to join the three points, then biſect or divide in two equal parts the two lines ſo drawn, and from the points of biſection, let fall perpendiculars, which being produced, will cut each other, and the point of interſection is the centre.—See this demonſtrated at fig. 5, in the Geography Plate IV.

The next thing required, therefore, is to find the *centres* from which theſe circles may be drawn.—To find the centre of the circle S, 30, N; join the points S, 30, and N, 30; divide into two equal parts, the two lines in *o*, and let fall the perpendiculars *o*, 30; *o*, 30; and the point where they meet is the centre of a circle of 30 degrees of longitude. The other centres may be found exactly in the ſame manner.—Or, the centres may be

found mechanically, by the following table: let the radius of the circle E C, be divided into 100 equal parts, by a ſcale: then the circle of

10° will be equal to	12	of thoſe parts ſet off, from C towards Q added to the diſtance between C and the ſeveral points, 10, 20, 30, &c. in the radius E C.
20 - - - - -	25	
30 - - - - -	42	
40 - - - - -	61.5	
50 - - - - -	88	
60 - - - - -	133	
70 - - - - -	208	
80 - - - - -	464	

Thus the radius of the circle of 10 degrees of longitude is equal to the diſtance between 10 in the line E C, and 10 in the line Q C;—of that of 50 degrees between 50 and 50;—and that of 80 degrees, between 80 in the line E C, and a given point in E Q produced, which taken from C, will be equal to 342·2 parts, of which the radius is equal to 100.

By this method, equal ſpaces on the earth are repreſented by equal ſpaces on the map, as nearly as any projection will admit; for a ſpherical ſurface, as before noted, can by no poſſible method be repreſented exactly upon a plane. And now the ſeveral countries of the world, the ſeas, iſlands, towns, &c. are to be entered on the map, according to their known latitudes and longitudes.—Thus the map of the world, diſplaying the two hemiſpheres, as given in this treatiſe, is conſtructed upon the globular projection.

In completing maps of countries, all places repreſenting land are diſtinguiſhed with ſuch objects as the ſeveral countries contain, as mountains, foreſts, &c. but the ſeas are left white, edged with a green tint; the ſhores adjoining the ſea being ſhaded, more or leſs, as a flat, or a bold ſhore may occaſionally require. Rivers are marked by ſtrong lines, or by double lines, drawn winding in the form of the rivers they repreſent, and ſmaller rivers are expreſſed by ſmaller lines. Different countries are beſt diſtinguiſhed by different colours; foreſts by trees, and mountains ſhaded, to give them their lofty effect. Sands are denoted by ſmall points or ſpecks; and rocks under water by a ſmall croſs.

To draw a map of any given portion of the earth.—Suppoſe it be required to draw a map of a portion of the earth's ſurface containing ſix degrees of latitude, viz. from the 39th to the 45th degrees: draw the line E F, in the Geography Plate II. fig. 8; and in the middle raiſe the perpendicular D C, which divide into ſix equal parts, or degrees of latitude, and through C draw a line parallel to E F.—Next divide a degree into 10; or if large enough, into 60 equal parts; and in the annexed table find the number of miles which a degree of longitude contains, in the latitude of 39 degrees, viz. 46·62, and from any ſcale of equal parts, ſet off one half of the ſame, viz. 23·31, on each ſide of D.—Then find in the table the number of miles contained in a degree of longitude in the latitude of 45 degrees, viz. 42·43, and from the ſame ſcale ſet off 21·215 on each ſide of C. Draw the ſtraight lines from I to E, and from K to F; divide them into the ſame number of parts as the line C D contains, and through the points draw parallel lines. Thus I K E F is a projection for one degree of longitude, including ſix degrees of latitude.

Since the degrees muſt be ſo drawn that the two diagonal lines in each muſt be equal to each other, they are to be projected in the following manner: Firſt, take the diſtance from E to K, or from F to I, and ſetting one foot of the compaſſes firſt in E and then in F, deſcribe the arcs L and M. Then ſet one foot firſt in I, and afterwards in K, and with the ſame extent draw the arcs N and O. Secondly, take the diſtance between E and F, and ſet it off in the arcs deſcribed from E to N, and from F to O; then take the diſtance between I and K, and ſet it off from I to L, and from K to M. Thirdly, draw the lines between L and N, and M and O; divide them into degrees, and draw parallels from thoſe points to the correſponding ones in the meridians I E, and K F. The ſame method muſt be purſued in drawing all the other meridians and parallels, as the map is to contain degrees.

If the map be very large, ſo that the compaſſes will not extend to the fartheſt degree, or from F to I; then draw one or more diagonals at once, and afterwards proceed with the reſt.—Thus when the ſquares P G N E and H Q F O are deſcribed, L I P G and K M H Q may be done.

Number the degrees of latitude up both ſides of the map, and the degrees of longitude on the top and bottom, as before directed; then make the proper diviſions and ſubdiviſions of the country; and having the latitudes and longitudes of the principal places, it will be eaſy to ſet them down in the map, by the methods explained above; which ſhew that every town, &c. muſt be placed where the circles of longitude and latitude interſect. Thus, if the map contain that part of Europe that lies between 39 and 45 degrees of latitude, and between 7 and 16 degrees of eaſt longitude, then Florence muſt be placed at A, where the circles of 43° 46′ 30″ north latitude, and 11° 3′ 30″ eaſt longitude, cut each other: and Naples muſt be placed at B, on the ſea-ſhore, at 40° 50′ 15″ N. lat. and 14° 17′ 30″ E. lon.

In like manner the mouth of a river, as of the Tiber for inſtance, muſt be ſet down; but to deſcribe the whole river, the latitude and longitude of every turning ſhould be marked down, and the towns and bridges by which it paſſes. In the projection here deſcribed, the diagonals being all equal, the number of meridians cauſes no defect in the repreſentation, as equal ſpaces on the globe are repreſented by equal ſpaces on the map; conſequently places lying in the remoteſt degrees of longitude, are as truly exhibited as thoſe near the middle, and their diſtances will agree with a common meaſure; ſo that compaſſes extended between any two places, and applied to the ſcale, give the diſtance without farther trouble.—Indeed, there ſhould be a ſcale of miles, or of degrees, on every map, to ſerve for finding the diſtances of places on it. It is uſual alſo to draw the mariner's compaſs or a fleur de lys, to ſhew the points of the compaſs.

TABLE, ſhewing the number of miles contained in a degree of longitude, in each parallel of latitude, from the equator to the poles.

Degrees of Latitude.	Miles	100th parts of a mile.	Degrees of Latitude.	Miles.	100th parts of a mile.	Degrees of Latitude.	Miles	100th parts of a mile.
1	59	96	31	51	43	61	29	04
2	59	94	32	50	88	62	28	17
3	59	92	33	50	32	63	27	24
4	59	86	34	49	74	64	26	30
5	59	77	35	49	15	65	25	36
6	59	67	36	48	54	66	24	41
7	59	56	37	47	92	67	23	45
8	59	40	38	47	28	68	22	48
9	59	20	39	46	62	69	21	51
10	59	08	40	46	00	70	20	52
11	58	89	41	45	28	71	19	54
12	58	68	42	44	95	72	18	55
13	58	46	43	43	88	73	17	54
14	58	22	44	43	16	74	16	53
15	58	00	45	42	43	75	15	52
16	57	60	46	41	68	76	14	51
17	57	30	47	41	00	77	13	50
18	57	04	48	40	15	78	12	48
19	56	73	49	39	36	79	11	45
20	56	38	50	38	57	80	10	42
21	56	00	51	37	73	81	09	38
22	55	63	52	37	00	82	08	35
23	55	23	53	36	18	83	07	32
24	54	81	54	35	26	84	06	28
25	54	38	55	34	41	85	05	23
26	54	00	56	33	55	86	04	18
27	53	44	57	32	67	87	03	14
28	53	00	58	31	70	88	02	09
29	52	48	59	30	90	89	01	05
30	51	96	60	30	00	90	00	00

When

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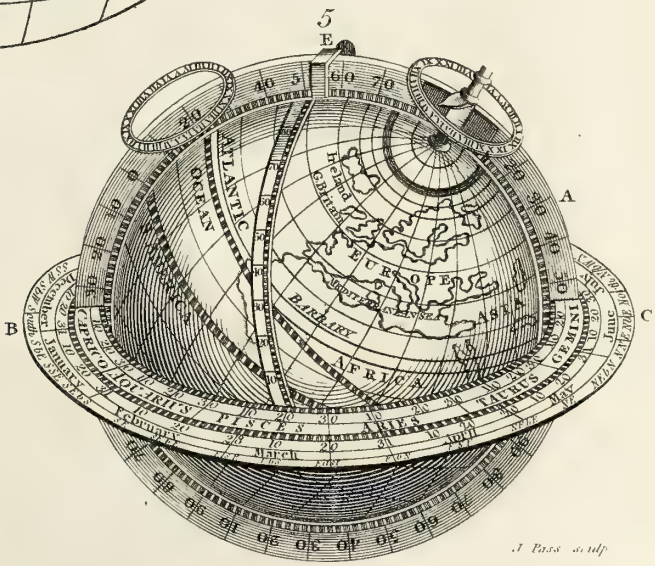


Projections of the Sphere, and common Terrestrial Globe.

Published as the Act directs, Jan.ʸ 1.st 1807, by J. Wilkes.

When the place is but ſmall of which a map is to be made, as of a county for inſtance, or of any portion of the earth of not more than one hundred miles in length and breadth, the meridians, as to ſenſe, are parallel to each other, and may be repreſented by ſtraight lines. But, the whole will differ ſo little from a plane, that it will be ſufficient to meaſure the diſtances of places in miles, and ſo lay them down in a plane right-lined map. In the projection of a quadrant of an hemiſphere, according to this method, the parallels of latitude are all concentric circles, and the only difficulty is to find the common centre.

In projecting a map for Aſia, Plate II. fig. 9, on the globular conſtruction, the centre of the parallel of 60 degrees of latitude is found to be 30 degrees beyond the north pole, or at the ſame diſtance north of the parallel of 60 degrees, as the equator is ſouth of it; and the centre for this parallel is therefore the centre for all the others: and it is evident that in this map, the two diagonals of each figure are equal to one another, ſo that all the parts are of their proper magnitude. In projecting the map of Europe, on this conſtruction, it is found that the common centre for all the parallels of latitude is at ſix degrees and ſeven tenths beyond the pole.

Suppoſe it be required to draw the meridians and parallels for a map of Great Britain. This iſland lies between 50 and 60 degrees north latitude, and between two degrees eaſt and ſix weſt longitude. Having, therefore, choſen the length of the degrees of latitude, the degrees of longitude muſt be proportioned to it. By the table it appears, that in latitude 50°, the length of a degree of longitude is to one of latitude, as 38·57 is to 60; that is, the length of a degree of longitude is ſomething more than half the length of a degree of latitude. The exact proportion may be had by a diagonal line: after which ſeven or eight of theſe degrees are to be marked out upon a right line for the length of the intended map. On the extremities of this line raiſe two perpendiculars, upon which mark out ten degrees of latitude for the height of it. Then having completed the parallelogram, conſult the table for the length of a degree of longitude, in latitude 60°, which is found to be very nearly one half of the length of a degree of latitude. It will always be neceſſary, however, to draw a vertical meridian exactly in the middle of the parallelogram, to which the meridians on each ſide may converge; and from this you are to ſet off the degrees of longitude on each ſide: then having divided the lines bounding the map into as many parts as can conveniently be done, to ſerve for a ſcale, the longitudes and latitudes may by their means be ſet off with much leſs trouble than where curve lines are uſed. This method may be always followed where a particular kingdom is to be delineated, and will repreſent the figure and ſituation of the places with tolerable exactneſs. Towns and other places, whoſe bearings and ſituation are known, may be accurately expreſſed by this means; and this is the only kind of maps to which a ſcale of miles can be truly adapted.

To project maps upon the other poſitions of the ſphere.—The circles upon which theſe projections are uſually made, are the equator, ſome of the meridians, or the rational horizon of ſome particular place. For maps of the world a meridian is generally choſen; and it has been moſt commonly that which paſſes through Ferro, one of the Canary iſlands; becauſe thus Europe, Aſia, and Africa, are conveniently delineated in one circle, and America in the other. To project, therefore, a map of the world *orthographically* on the plane of any meridian, we have only to conſider, that, as the eye is ſuppoſed to be at an infinite diſtance, all the rays which come from the diſk of the earth are parallel; and conſequently all lines drawn from the eye to the diſk muſt be perpendicular to the latter. Let A B C D, Geography Plate III. fig. 1, repreſent the plane of one of the meridians. The equator, which cuts all the meridians in the centre, muſt be repreſented by a number of points let fall upon the plane of projection, and dividing it exactly in the middle: that is, by the right line B D. The parallels of latitude, being alſo perpendicular to the plane of the meridian, will be marked out by a number of right lines let fall from their peripheries upon that plane, thus forming the right lines *a b*, *c d*, &c. The meridians will likewiſe be repreſented on the diſk by a number of right lines let fall perpendicularly from their peripheries upon the plane of projection, and thus will form the elliptic curves A 10 C, A 20 C, &c. From an inſpection of the figure, therefore, it appears, that in this projection both longitudes and latitudes are meaſured by a line of ſines, and both of them decreaſe prodigiouſly as we approach the edges of the diſk; and hence the countries which lie at a diſtance from the equator, or on the diſk, are exceedingly narrowed, ſo that it is impoſſible to draw them with any degree of accuracy. The orthographic projection on the plane of a meridian, therefore, is ſeldom uſed but for a map of the world.

On the plane of the equator, the orthographic projection repreſents the meridians as ſtraight lines diverging from a centre, and the parallels of latitude as concentric circles. This projection is repreſented in the ſame Plate at fig. 2. The latter, however, are by no means to be placed at equal diſtances from each other; for the meridians are to be divided by the line of ſines, as in the preceding; and thus the equatorial parts of the globe are as much narrowed and confuſed as the polar ones are in the foregoing. This projection, therefore, is ſeldom uſed for a map of the whole world, though it anſwers extremely well for delineating the countries near the polar regions.

On the horizon of any particular place, except either of the poles, or any point lying directly under the equator, the orthographic projection repreſents both parallels and meridians by ſegments of ellipſes. Fig. 3, in the engraving, repreſents a map executed on this principle, on the horizon of Ur of the Chaldees: it is obvious, however, that a conſiderable degree of inequality takes place here alſo, though leſs than in the former caſes. Projections of this kind, therefore, are now uſed only for the conſtruction of ſolar eclipſes.

The ſtereographic projection of the ſphere ſuppoſes the eye to be in the pole of the circle of projection. The laws of this projection are, 1. A right circle is projected into a line of half-tangents. 2. The repreſentation of a right circle, perpendicularly oppoſed to the eye, will be a circle in the plane of the projection. 3. The repreſentation of a circle placed oblique to the eye will be a circle in the plane of the projection. 4. If a great circle is to be projected upon the plane of another great circle, its centre will lie in the line of meaſures, diſtant from the centre of the primitive by the tangent of its elevation above the plane of the primitive. 5. If a leſſer circle, whoſe poles lie in the plane of the projection, were to be projected, the centre of its repreſentation would be in the line of meaſures, diſtant from the centre of the primitive, by the ſecant of the leſſer circle's diſtance from its pole, and its ſemidiameter or radius be equal to the tangent of that diſtance. 6. If a leſſer circle were to be projected, whoſe poles lie not in the plane of the projection, its diameter in the projection, if it falls on each ſide of the pole of the primitive, will be equal to the ſum of the half tangents of its greateſt and neareſt diſtance from the pole of the primitive, ſet each way from the centre of the primitive in the line of meaſures. 7. If the leſſer circle to be projected fall entirely on one ſide of the pole of the projection, and do not encompaſs it; then will its diameter be equal to the difference of the half-tangents of its greateſt and neareſt diſtance from the pole of the primitive, ſet off from the centre of the primitive one; and the ſame way in the line of meaſures. 8. In the ſtereographic projection, the angles made by the circles of the ſurface of the ſphere are equal to the angles made by their repreſentatives in the plane of their projection.—Theſe laws are demonſtrated as follows:

To draw the ſtereographic projection of the ſphere, or a map

of

of the world, on the plane of the meridian.—With the chord of 60 degrees in the compaſſes, deſcribe a circle, as A C B D, in fig. 1, Geography Plate IV. This circle may repreſent the meridian, or horizon, through which draw diameters at right angles, as A B, and C D; then A B will repreſent the equator, and C D will repreſent the poles, and alſo the zenith and nadir; and C D the equinoctial colure, and prime vertical circle; and thus the circle will appear in quarters. Divide now the degrees in a quadrant, viz. 90°, by the number of parts required, ſuppoſe 9, and the quotient ſhows the number of degrees equal to each diviſion, which in this caſe is 10°. Apply this diſtance taken from the firſt part of the line of chords, from D to A, as often as it will admit, and it will divide the arc A *b* D into the number of parts required.

It is neceſſary to obſerve, that, except the given circle is drawn with the chord of 60°, the above rule is not applicable; in ſuch caſes, proceed as follows: From the centre of the given circle, as *o*, with the chord of 60° deſcribe another circle, (either within, or without the given circle,) to which produce the diameters, and divide as above; tranſfer the diviſions, found on the circle deſcribed by the chord of 60°, and they will in like manner divide the given circle into the parts required. Circles, or any part thereof, may be more conveniently divided, by making the centre of the ſemicircle coincide with the centre of the given circle, and its flat ſide with one end of the arc, to be divided; then mark off the degrees that each diviſion contains, through which tranſfer lines from the centre, as above. But the inſtrument beſt calculated for inſcribing polygons of any number of ſides into circles, or for dividing a circle, or an arc thereof, into any number of equal parts, *is the ſector*, as it accommodates the diviſions at once to any radius. Rule. Open the ſector, until C—C, upon its ſcale, is equal to the radius of the given circle, then find the degrees anſwering to each diviſion on the ſame lines, in the former caſe 10—10, take the extent between them in the compaſſes, which apply to the arc, or circle, to be divided as often as it will admit, and it will point out the diviſions, as required.

To find the centres of the parallels of latitude.—Divide the arc A C, or A D, fig. 2, by either of the foregoing methods, into as many equal parts as the parallels of latitude, to be projected in each hemiſphere, require; the uſual number is nine.—Then draw lines from the centre of the circle *s*, through each diviſion on the divided arc of the horizon, and where theſe lines cut the horizon, raiſe perpendiculars towards the colure C D produced in *y*, which extend until they cut the colure produced, and their points of ſection will be the centres required.

For the tropics and polar circles: With 23½° in the compaſſes, from the line of chords, lay off that extent from the equator, both ways, for the tropics; and alſo from the poles for the polar circles, and find their centres as in the parallels of latitude; then *t* will be the centre for the polar circle; and *x* for parallels of latitude, &c.

For the ecliptic: Join the extremity of the equator with the point where the tropics interſect the equinoctial colure, as from *r* to B, biſect this line; and through the ſections extend a line, until it cut the colure produced in *u*, which will be its centre of projection required. And thus the centres to any parallel, &c. found on one ſide, will be the radius of the correſponding parallel on the oppoſite ſide.

Another method for deſcribing the tropics, parallels of latitude, &c. is by ſetting off the half-tangents of their reſpective diſtances, taken from the ſcale of the ſector, on the line marked S T on the ſector, from the centre of the circle *s*, both ways on the colure, which will give the diviſions through which the parallels, &c. are to paſs. Their centres are found by ſetting off the tangents of their reſpective complements, each way, from their points of ſection, in the colure, on the colure produced; or, by ſetting off their co-ſecants from the centre *s*, on the colure produced.

To find the centres of the meridians.—Find the points 15°, 30°, 45°, 60°, 75°, and 90°, which will be hour-lines in the equator, by ſetting off their half-tangents, taken from the line marked S T on the ſcale of the ſector, from the centre of the circle *o*, both ways.—The centres are found by ſetting off the co-ſecants, of the diſtances found in the equator, both ways, from their points of ſection with the equator, in the equator produced; or, with their co-tangents, ſet off both ways, from the centre of the circle on the equator produced, and the centre for the meridian will be *t*, as ſhewn in fig. 3.

The centres of the meridians, or hour-lines, may be found, after the points are found in the equator, by ſetting off the half-tangents, by the method uſed for finding the centres of the parallels of latitude; that is, join C or D with each diviſion, as 15 C, 30 C, &c. biſect theſe lines, and lines carried through the ſections, as *s r*, fig. 3, will cut the equator produced, in the centres required.

This method of finding the points through which the meridians are to paſs, by ſetting off the half-tangents from the plane ſcale, is only applicable when the radius of the ſphere is taken from the line of chords. To find the points of ſection for any given radius, open the ſector until the diſtance between C—C is equal to the given radius, then take the half tangents of their diſtance from the lines on the ſector marked T—T, which apply as before, and find their centres as directed above; that is, by joining the pole and each diviſion, &c.—On the ſtereographic projection, moſt of the maps in common uſe are drawn; the globular projection has been but recently introduced in England, by the ingenious Mr. Arrowſmith.

To find the breadth of a degree, in any latitude.—With any convenient opening of the compaſſes, deſcribe the ſemicircle A C B, as ſhewn in the Plate at fig. 4; which divide into 90 equal parts. Join A B, to repreſent a degree on the equator, and divide it into 60 equal parts, to repreſent the miles in a degree.

Application.—The extent from 90°, at B, to the propoſed parallel of latitude on the circular part, will reach from B to the number of miles, on the line A B, in a degree, in the propoſed parallel of latitude.

Example, for lat. 51° 30′.—The extent from 90°, at B, to 51° 30′ on A C B, will reach from B towards A to 37½ miles nearly, the breadth of a degree in the parallel of London.

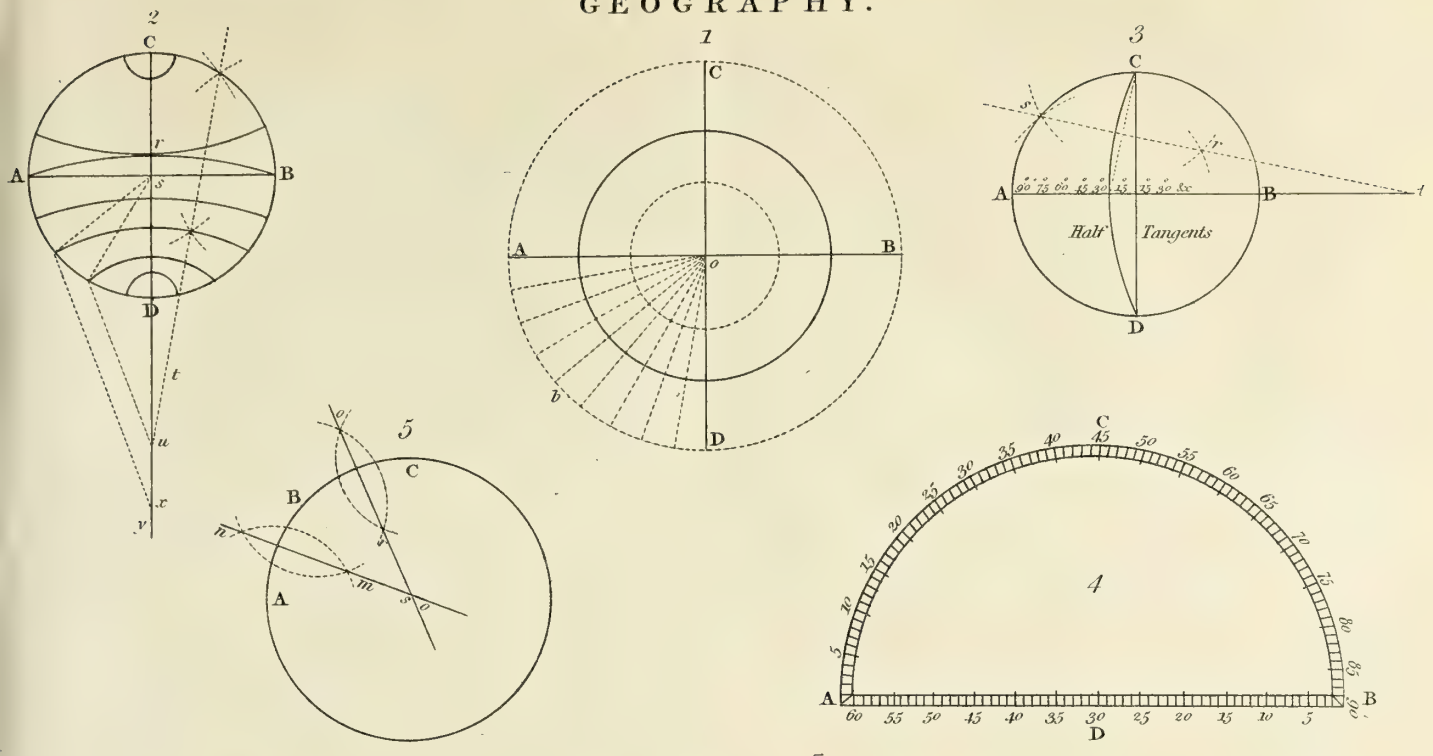
Example, for lat. 60°.—The extent from 90°, at B, to 60° on A C B, will reach from B to D, being 30 miles, the breadth of a degree in the latitude required.

For drawing circles of longitude, and in many other caſes where it is required to project a circle through any three points not ſituated in a right line, the method is as follows: with any convenient opening of the compaſſes, greater than half the diſtance between A B and B C, and one point in A, as ſhewn in the Plate at fig. 5, deſcribe an arc with the ſame opening and one point in B; croſs the former arc in *n* and *m*, with the point in B and C, deſcribe ſimilar arcs croſſing each other in *o r*. Through the ſections *n m*, and *o r*, draw lines which will croſs one another in *s*, the centre of the required circle. Then, with the diſtance *s* A, *s* B, or *s* C, as a radius, deſcribe a circle, and it will paſs through the points A B C, as required.

After all, though maps founded upon the ſtereographic projection, have for many years paſt been in general eſtimation, yet it muſt be confeſſed that by this conſtruction, the true outline of different countries cannot be correctly drawn; becauſe every part from the diſk to the centre is gradually contracted by the parallels of longitude, as ſhewn in Plate III. at fig. 4; and therefore thoſe diſtricts alone, which lie on the border of the

map,

GEOGRAPHY.



The Stereographic Projection, with Churchman's New Projection for Mountainous Countries.

London, Published as the Act directs, Jan.ry 10th 1807, by J. Wilkes.

map, are truly exhibited; and of courſe *equal* ſpaces on the earth, or on the globe, are repreſented by *unequal* ſpaces on the map; a defect propoſed to be remedied by the globular projection.

But if, inſtead of its globular figure, we ſuppoſe the earth to have a conical form, it is plain, that the meridians would be repreſented by ſtraight lines diverging from the apex of the cone, while the parallels are ſhown by concentric circles placed at equal diſtances. This kind of projection is not without its uſe. It hath this great advantage, that the longitudes and latitudes may be found with the greateſt eaſe by means of a moveable index placed on the centre. The whole earth may alſo be thus repreſented on a ſingle circle: but thus the countries towards the ſouth pole are prodigiouſly augmented in breadth in proportion to their length; for the degrees of longitude conſtantly increaſe the farther we are removed from the pole, while thoſe of latitude ſtill remain the ſame. This apparent error, however, doth not in the leaſt affect the real proportion of the map, or render it more difficult to find the longitudes, or latitudes upon it; as may be ſeen by an inſpection of fig. 2, Plate III.

Mercator's projection ſuppoſes the earth, inſtead of a globular, to have a cylindrical figure; in conſequence of which, the degrees of longitude become of an equal length throughout the whole ſurface, and are marked out on the map by parallel lines. The circles of latitude alſo are repreſented by lines croſſing the former at right angles, but at unequal diſtances. The farther we remove from the equator, the longer the degrees of latitude become in proportion to thoſe of longitude, and that in no leſs a degree than as the ſecant of an arch to the radius of the circle: that is, if we make one degree of longitude at the equator the radius of a circle; at one degree diſtant from the equator, a degree of latitude will be expreſſed by the ſecant of one degree; at ten degrees diſtance, by the ſecant of ten degrees; and ſo on. A map of the world, therefore, cannot be delineated upon this projection, without diſtorting the ſhape of the countries in an extraordinary manner. The projection itſelf, however, as above noticed, is moſt uſeful in navigation, ſince it ſhews the different bearings with perfect accuracy, which cannot be done upon any other projection. See Map of the World on Mercator's projection, Plate XI.

The *globular projection*, above recommended and defined, is an invention of M. de la Hire, and is more uſeful than any of the others for exhibiting the true ſhape of the countries. To this, therefore, we have given the preference, except for the purpoſes of navigation, wherein Mercator's projection is ever to be preferred.

In moſt of theſe projections, the firſt meridian is made to paſs through Ferro, which is 17° 45′ 50″ weſt of Greenwich. To reduce therefore the longitude from Ferro to that from Greenwich, *add* 17° 45′ 50″ if the place be *weſt* of Ferro, and it gives the longitude weſt from Greenwich; if the place be *eaſt* of Ferro, and in longitude *leſs* than 17° 45′ 50″, the difference of its longitude and 17° 45′ 50″ ſhews the longitude weſt from Greenwich; but if the longitude be *greater* than 17° 45′ 50″, the difference ſhews the longitude eaſt of Greenwich. Thus we may reduce the longitude from one place to that from any other.

For mapping elevated lands, or for laying down the heights of mountainous and hilly countries, an ingenious method of projection has been recently ſuggeſted by Mr. John Churchman, of John-ſtreet, Tottenham-court, London; and for which the London Society of Arts, in 1804, preſented him with their ſilver medal. We ſhall ſtate this improvement in his own words:

"It appears to be a matter of much importance to the people of any country, at all times, whether in war or peace, to poſſeſs a complete knowledge of its ſurface. In war, ſuch knowledge is abſolutely neceſſary for defence; in peace, for improving the country to the beſt advantage. Now, ſince geography may be improved, an eaſy and accurate method to lay down maps of mountainous countries and hilly eſtates, will perhaps prove uſeful, as it will ſhew at a ſingle view the true ſhape and comparative height of the ground without the art of painting.

"As mountains are apt to eclipſe each other, a perſpective view is ſeldom very extenſive, the rules of which fall ſhort of giving an accurate idea of any hilly country; becauſe ſuch a view, though ſtrictly true in one particular place, is not ſo in any other. The altitudes of mountains appear in proportion to the diſtance from the eye, and no rule in geometry has been found ſufficient to determine diſtances from any ſingle ſtation. Neither can a bird's-eye view of an eſtate aſcertain the depth of valleys, or the height of mountains. But the method here propoſed will be found equally capable of giving the true ſhape of any ground above or below water. It may be ſucceſsfully applied to ſea charts, and will prevent much confuſion, ariſing from the tedious method of diſtinguiſhing ſoundings by a multitude of figures.

"Suppoſe a full deſcription is required to be given of any iſland in the ocean. Firſt, let an accurate map be laid down in the common way; and let the perpendicular height between the higheſt point of land and the ocean be divided into any number of equal parts. Suppoſe theſe equal diviſions are 100, 200, 300, 400 feet above the low-water mark. From the different points of theſe ſeveral diviſions, let horizontal lines be run with a good theodolite, and ſpirit level annexed, all round the iſland. If the work is well done, each line will end where it began; and if the bearings and diſtances of theſe ſeveral lines are truly laid down on the map, the crooked courſes of them will clearly ſhew the ſhape of the ground over which they paſs. For example: if any horizontal line paſſes by the ſide of a ſteep hill, it will incline towards the ocean, or approach the next horizontal line below it. When the ſame line croſſes a ſtream of running water or a valley, it will naturally bend up the ſide of the ſaid ſtream, until it can croſs it without loſing the level; or, in other words, it will bend towards the centre of the iſland. Hence, by a little practice, the ſhape of the ſeveral horizontal lines on the map will give as clear an idea to the mind, of the ſhape of any country over which they paſs, as a ſight of the country itſelf can convey to the eye. But to obtain a mathematical and true knowledge of the altitude and declivity of any part of the country, we have the following propoſition:—

"As the perpendicular height of any one horizontal line above another is to the radius: ſo is the horizontal diſtance between the horizontal lines meaſured on the map at any particular place, to the co-tangent of declivity at that place.—If the horizontal diſtance between any two horizontal lines on the map is equal to the perpendicular height of any horizontal line above another, the angle of altitude, or declivity, of any hill, will be 45 degrees.

"The preſent improvement will be found to poſſeſs the following advantages:—1ſt. Military men are well acquainted with the many advantages always to be gained from the exact repreſentation of high grounds. By this method, we are able to give the angle of altitude, the angle of declivity, and perpendicular height, of every hill; likewiſe the comparative height of different hills, the beſt route by which the high grounds may be gradually aſcended, and where heavy burthens can be drawn up with moſt eaſe.—2dly. Experience has ſufficiently ſhewn, that the inhabitants of low grounds are ſubject to different kinds of ſickneſs, from which thoſe living at places elevated to a certain degree are exempt. A map on this improved plan will point out the moſt proper ſituation for building dwelling-houſes.

It will be useful in botany, in discovering or cultivating some kinds of plants which flourish best at particular distances above the level of the ocean. It will trace the line of vegetation on the sides of lofty mountains, whose tops are covered with eternal snow.—3dly. Some high lands are known to produce good grain, while low lands afford grass more abundantly; but most grounds produce good grass, over which a moderate quantity of running water is conveyed. A plan of any country in this way will shew all the ground that can be irrigated; where water-works may be erected; where navigable canals may be cut; and where high-ways and rail-roads may be laid out on the best and most level ground.—4thly. The subterraneous treasures of the mineral and fossil kingdoms are generally found in strata; and if they are not truly horizontal, they make a certain angle with the horizon. A map on this projection may enable the mineralogist to follow any one stratum, at places even far distant from each other.

"*To find the true declivity of any piece of ground, in any map laid down on the principles of the present plan.*—Example 1, to elucidate the ground at D, in the Geography Plate IV. fig. 6.—

As the perpendicular height, 4 feet -	60206
Is to radius, 90° - - - - -	10.00000
So is the horizontal distance, 4 feet -	60206
	10.60206
To the co-tangent of the declivity, 45°	10.00000

Example 2, for the elevated ground at B.

As the perpendicular height, 4 feet -	60206
Is to radius, 90° - - - - -	10.00000
So is the horizontal distance, 8 feet -	90309
	10.90309
To the co-tangent of the declivity, 26° 34′	10.30103

Example 3, for the sloping ground at C.

As the perpendicular height, 4 feet -	60206
Is to radius, 90° - - - - -	10.00000
So is the horizontal distance, 18 feet -	1.25527
	11.25527
To the co-tangent of the declivity, 12° 32′	10.65321

The various depths of the water in the river and lake, are shewn by the corresponding figures engraved on the surface.

Since the art of projecting maps, and the consequent facility of ascertaining particular districts and divisions on the surface of the earth, constitutes the most valuable part of practical geography; and as this acquisition cannot but be highly improved by uniting the principles of astronomy with those of geography, we shall, on that account, annex the following interesting problems on the common terrestrial and celestial globes, by way of familiarising the reader in this valuable department of the science. And further to illustrate the subject, a correct representation of the common terrestrial globe, whereby the geographical problems are solved, is given in Plate III. fig. 5. In this globe a groove is turned on the back part of the brass meridian A, and by unscrewing the nut of the hour-circle D, at the north pole, the circle is made to slide away to any other part of the meridian, as at G. The meridian is fixed, or moveable, at pleasure, by a screw passing into the groove through the side of the notch in which it moves, on the bottom or nadir point; by properly loosening this screw, the meridian is free to move, and the globe will turn with it, into any required position, either under or above the broad circle of the horizon and ecliptic, B C. This is the best construction of the common globe.

PROB. 1. *To find the latitude of any place.*—Bring the place to the graduated side of the fixed brass meridian; the degree under which it is found, is its latitude. See Plate III. fig. 5. All places under the same degree are in the same latitude. Thus the latitude of London is 51°½ north, that of the Cape of Good Hope 34° south.

2. *To find the longitude of any place.*—Bring the place to the fixed meridian; the distance of this meridian from the first meridian, measured on the equator, is the longitude of the place. The longitude of Boston in New England is 70°½ west, or 4 hours 42 minutes in time. That of Rome 12°½ east, or 50 minutes in time.

3. *To rectify either globe to the latitude of any place, the zenith, and the sun's place.*—If the place be in the northern hemisphere, raise the north pole above the horizon; but if the place be in the southern hemisphere, raise the south pole. Then move the brass meridian up and down in the notches, till the degree of the place's latitude, counted upon the meridian, below the pole, cuts the horizon; and then the globe is adjusted to the latitude of the place.—Having elevated the globe according to the latitude of the place, count the same number of degrees upon the meridian, from the equator towards the elevated pole, and that point will be the zenith or vertex of the place. To this point of the meridian screw the quadrant of altitude, so that its graduated edge may be joined to the said point; then is the globe rectified for the zenith.—Bring the sun's place in the ecliptic to the meridian, and set the hour-index to XII. at noon; and then the globe will be rectified for the sun's place.

4. *To determine the difference of time in different places.*—Find the longitude of each place, and reduce the difference into time, allowing an hour for every 15 degrees, and proportionally for smaller parts; the difference of time will be found: if the place lies westward of another, it has its noon later than that other; if eastward, sooner. The longitude of Rome is 12°½ east, that of Constantinople 29°, the difference is 17°½, consequently the difference of time between Rome and Constantinople is 1 hour 10 minutes.

5. *The latitude and longitude of any place being known, to find the place on the globe.*—Bring the degree of the equator which expresses the given longitude to the fixed meridian, then find the given latitude on the meridian; under this point is the place sought.

6. *To find the distance between any two places, and their bearing, or relative situation with respect to the points of the compass.*—Rectify the globe to the latitude of one of the places, and bring that place to the meridian: then fix the quadrant of altitude to the uppermost point of the meridian, and putting its lower end between the horizon and the globe, slide it along, till it passes through the other place; the number of degrees on the quadrant between the two places, will give their distance, allowing 69½ English miles for each degree; and the number of degrees upon the horizon between the meridian and the quadrant, will give the bearing of the second place with respect to the first. Thus the bearing of the Lizard point from the island of Bermudas is nearly E. N. E.

7. *To find the right ascension and declination of the sun, or any star.*—On the celestial globe find the day of the month under the ecliptic, against which is the sun's place, or find his place by an *ephemeris*; bring that point under the meridian, and the degree which is over the point is the sun's declination, and the degree of the equator then under the meridian will be the sun's right ascension. A star's declination and right ascension are found, by bringing the star on the globe to the meridian, and proceeding as with respect to the sun. The sun's declination, April 19, is 11° 14′ north, and his right ascension 27° 30′. The right ascension of Sirius is 99°, its declination 16° 25′ south.

8. *To find what stars pass over, or near, the zenith of any place.*—Having found the latitude of the place on the terrestrial globe, all those stars on the celestial globe, which pass under the same degree of the meridian with the given latitude, become vertical at that place.

9. *To find what ſtars never riſe, nor never ſet, in any given place.*—The globe being rectified for the given place, thoſe ſtars which do not paſs under the wooden horizon, never ſet; thoſe which do not come above it, never riſe.

10. *To repreſent the appearance of the heavens at any time.*—Rectify the globe to the latitude; bring the ſun's place in the ecliptic to the meridian, and ſet the horary index to the upper 12th hour: then turn the globe till the index points to the given hour. The north pole of the globe muſt be ſet to the north in the heavens, then will all the ſtars upon the globe correſpond to their places in the heavens, ſo that an eye at the centre of the globe would refer every ſtar upon its ſurface to the place of the ſtars in the heavens. By comparing, therefore, the ſtars in the heavens with their places on the globe, a perſon will eaſily get acquainted with all the ſtars.

EXAMPLE.—The ſituation of the ſtars at London on the 9th of February, at nine o'clock in the evening, is as follows; Sirius, or the dog-ſtar, is on the meridian, its altitude 22°: Procyon, the little dog-ſtar, 16° towards the eaſt, its altitude 43°: about 24° above this laſt, and a little more towards the eaſt, are Caſtor and Pollux: S. 65° E. and 35° in height, is Regulus, or Cor Leonis: exactly in the eaſt, and 22° high, is Deneb in the Lion's-tail: 30° from the eaſt towards the north, Arcturus is about 3° above the horizon: directly over Arcturus, and 31° above the horizon, is Cor Caroli: in the north-eaſt are the ſtars in the extremity of the Great Bear's tail.—Reckoning weſtward, we ſee the conſtellation Orion; the middle ſtar of the three in his belt is S. 20° W. its altitude 35°: nine degrees below the belt, and a little more to the weſt is Rigel, the bright ſtar in his heel: above his belt, in a ſtraight line drawn from Rigel, between the middle and moſt northward in his belt, and 9° above it, is the bright ſtar in his ſhoulder: S. 49° W. and 45°½ above the horizon, is Aldebaran, the ſouthern eye of the Bull: a little to the weſt of Aldebaran, are the Hyades: the ſame altitude, and about S. 70° W. are the Pleiades: in the W. by S. is Capella in Auriga, its altitude 73°: in the north-weſt, and 42° high, is the conſtellation Caſſiopeia: and almoſt in the north, near the horizon, is the conſtellation Cygnus.

11. *The latitude of a place being given, to find the time of the ſun's riſing and ſetting, on any given day, at that place.*—Having rectified the globe according to the latitude, bring the ſun's place in the ecliptic to the graduated edge of the meridian, and ſet the horary index to the upper XII. Then turn the globe to bring the ſun's place to the eaſtern part of the horizon, the index will point to the hour at which the ſun riſes; on the weſtern ſide, to the time of its ſetting. On the 5th of June, the ſun riſes at 3 h. 40 min. and ſets at 8 h. 20 min. The length of the day is 16 h. 40 min. that of the night 7 h. 20 min.

12. *To find all the places on the globe to which the ſun will be vertical on a given day.*—Bring the ſun's place to the fixed meridian, and obſerve the point of the ſun's declination; all the places which, in turning the globe round, paſs under that point, have the ſun vertical on the given day.—When the ſun's declination is equal to the latitude of any place, *then* the ſun will be vertical to the inhabitants of that place.

13. *To find the ſun's amplitude.*—The globe being rectified for the latitude of the place, bring the ſun's place to the eaſtern ſide of the horizon; the arc of the horizon intercepted between that point and the eaſtern point, is the ſun's amplitude at riſing. Thus on the 24th of May, the ſun's amplitude at riſing is 36° eaſt, and he ſets with 36° weſtern amplitude.—The amplitude increaſes with the latitude of the place.

14. *To find the ſun's meridian altitude.*—The globe being rectified for the latitude, zenith, and ſun's place, the number of degrees contained between the ſun's place and the zenith, is the diſtance of the ſun from the vertex at noon; the complement of which to 90°, is the ſun's altitude. The meridian altitude of the ſun on the 17th of May, at London, is 57° 55′.—The altitude being given, bring the quadrant of altitude to meet the ſun's place, and the interſection of the quadrant and horizon will ſhew the *azimuth*. Thus, on the 21ſt of Auguſt, at London, when the ſun's altitude is 36° in the forenoon, the azimuth is 60° from the ſouth.

15. *To find the place of any heavenly body upon the globe, its longitude and latitude being given.*—Place the firſt degree of the quadrant of altitude upon that degree of the ecliptic which expreſſes the given longitude, and the 90th degree on the pole of the ecliptic; the point of the globe which is under that degree of the quadrant which expreſſes the given latitude, is the place of the body: for the quadrant repreſents a ſecondary of the ecliptic, an arc of which between the body and the ecliptic is its latitude, and the arc of the ecliptic between the ſecondary and the firſt degree of Aries, its longitude.

16. *To find the place of any heavenly body upon the globe, its right aſcenſion and declination being given.*—Bring that point of the equator which expreſſes the given right aſcenſion to the meridian; the place ſought is under that degree in the meridian, north or ſouth, which expreſſes the given declination.

17. *To find all thoſe places where it is noon, at any given hour of the day, at any given place.*—Bring the given place to the braſs meridian, and ſet the index to the uppermoſt 12; then turn the globe till the index points to the given hour, and it will be noon at all the places under the meridian. When it is 4 h. 50 m. in the afternoon at Paris, it is noon at New Britain, St. Domingo, Terra Firma, Peru, Chili, and Terra del Fuego. As the diurnal motion of the earth is from *weſt to eaſt*, it is plain that all places which are to the eaſt of any meridian, muſt neceſſarily paſs by the ſun before a meridian which is to the weſt can arrive at it.

18. *The hour being given at any place, to tell what hour it is in any other part of the world.*—Bring the place where the time is given, under the meridian; ſet the hour index to the given time, and turn the globe till the other place comes under the meridian, and the horary index will point to the hour required. Thus, when it is nine in the morning at London, it is half paſt four in the afternoon at Canton, in China; when it is three in the afternoon at London, it is eighteen minutes paſt ten in the forenoon at Boſton in America.

19. *To find in what climate any given place, not in the frigid zones, is ſituated.*—Rectify the globe for the given latitude, bring the firſt degree of Cancer to the meridian, ſet the index to the upper 12, turn the globe until Cancer comes to the verge of the horizon, the index will point to the time of his riſing, the time between which and noon being doubled, gives the length of the longeſt day at that place, from which take twelve hours, and the half hours contained in the remainder will anſwer to the number of the climate that the given place lies in, viz. What climate is Gibraltar in? Anſwer, the 5th climate.—Required the climate that London is in. Anſwer, the 9th.—Given Peterhead, the eaſternmoſt town in Scotland, required the climate it is in. Anſwer, the 12th.

20. *To find in what climate any given place in the frigid zone is ſituated.*—Find the time that the ſun ſhines conſtant at the place given, which, if leſs than thirty days, the place is in the 25th climate; if between thirty and ſixty days, it is in the 26th climate; if between ſixty and ninety days, the 27th, &c. each ſucceeding another thirty days.—Given the North Cape, Lapland, required what climate it is in? Anſwer, the longeſt day being ſeventy-ſeven days, anſwers to the 27th climate.—In what climate is Nova Zembla, lat. 78° N.? Anſwer, the 28th.

What

What climate is Spitzbergen in, at lat. 80° N.? Anſwer, the 29th.—For an explanation of the climates, ſee article 58, in the preceding p. 354.

21. *To find the antœci, the periœci, and the antipodes, of any place.*—Bring the given place to the meridian, then, in the oppoſite hemiſphere, and in the ſame degree of latitude with the given place, will be the *antœci*. The given place remaining under the meridian, ſet the index to 12, and turn the globe till the other 12 is under the index; then the *periœci* will be under the ſame degree of latitude with the given place, and the *antipodes* of the given place will now be under the ſame point of the brazen meridian where the *antœci* ſtood before.

22. *To find the two days on which the ſun is in the zenith of any given place between the tropics.*—That parallel of declination which paſſes through the given place, will cut the ecliptic line upon the globe in two points, which denote the ſun's place; againſt which, on the horizon, will be found the days required. The ſun is vertical at Barbadoes April 24, and Auguſt 18.

23. *The time and place being given, to find all thoſe places where the ſun is riſing, ſetting, culminating; and alſo where it is day-light, twilight, or dark-night.*—Find the place where the ſun is vertical at the given hour, rectify for the latitude of that place, and bring it to the meridian. Then all the places that are in the *weſt* ſemicircle of the horizon, have the ſun *riſing*; thoſe in the *eaſt* ſemicircle, have it *ſetting*; thoſe under the meridian above the horizon, have it *culminating*; and all places above the horizon, have the ſun ſo many degrees above the horizon as the places themſelves are. Thoſe places that are below the horizon, but within 18° of it, have *twilight*; thoſe lower than 18° have *dark-night*; and to thoſe under the meridian, it is *midnight*.

24. *To find the place of the moon, or any planet, for any given time.*—Take the nautical almanac, or White's Ephemeris, and againſt the given day of the month will be found the degree and minute of the ſign which the moon or planet poſſeſſes at *noon*. The degree thus found, and marked in the ecliptic on the globe, you may proceed to find the declination, right aſcenſion, latitude, longitude, altitude, amplitude, azimuth, riſing, ſetting, &c.

25. *To find the planets which are above the horizon at ſun-ſet, upon any given day and latitude.*—Find the ſun's place for the given day, bring it to the meridian, ſet the index hour to 12, and elevate the pole for the given latitude, then bring the ſun's place to the weſtern ſemicircle of the horizon, and obſerve what ſigns are in that part of the ecliptic above the horizon; then look to the ephemeris for the day, and it will be ſeen what planets are in thoſe ſigns, for ſuch will be viſible on the evening of that day.

26. *To find whether Venus be a morning or an evening ſtar.*—Rectify the globe for the latitude and ſun's place; find the ſituation of Venus by an ephemeris, and ſtick there a ſmall black patch; bring the ſun's place to the edge of the eaſtern horizon. If Venus be *in antedecentia*, that is, for inſtance, in Taurus when the ſun is in Gemini, ſhe will be a morning ſtar.—But, if Venus be *in conſequentia*, that is, for example, in Gemini when the ſun is in Taurus, ſhe will ſet after the ſun, and be an evening ſtar.

27. *To find all the places to which a lunar eclipſe will be viſible at any inſtant.*—Find the place to which the ſun is vertical at the given time, and bring that place to the zenith, and the eclipſe will be viſible to all the hemiſphere below the horizon, becauſe the moon is oppoſite to the ſun.—Since lunar eclipſes continue, in general, for a conſiderable time together, they may be ſeen in more places than in one hemiſphere of the earth; for, by the earth's rotation about its axis during the time of the eclipſe, the moon will riſe to ſeveral places after its commencement. But we cannot by a globe only, determine the places to which a ſolar eclipſe is viſible, becauſe that eclipſe does not happen to the whole hemiſphere next the ſun, nor does it happen at the ſame time to thoſe places where it is viſible. Calculations are therefore neceſſary; for which ſee the article ASTRONOMY, vol. ii. p. 443–452. And for the change of ſeaſons, and other phenomena of the earth not explained above, ſee the ſame article.

OF HISTORICAL GEOGRAPHY.

The hiſtorical, or progreſſive, geography of the world, is unqueſtionably a moſt captivating as well as intereſting branch of ſtudy; ſince it acquaints us, not only with the ancient and modern nations of the earth, but introduces us to a pleaſing view of the primitive economy of mankind; of the progreſſive ſtate of refinement and manners in ſociety; of the arts both of ſavage and of civilized life; and of the characters and coſtume of the inhabitants of the whole globe. In ſhort, this department of ſpeculative literature may begin with the firſt man; may trace the early ſtages of population among the antediluvian nations; and connect their hiſtory with the progreſſive geography of the ſons of Noah, quite up to the era of the preſent times.

Every event, and every circumſtance, attending ſuch reſearch, will concur in proving, that mankind are not compoſed of ſpecies eſſentially different from each other; but that, on the contrary, there was originally but one ſpecies of the human race, which, after multiplying and ſpreading over the whole ſurface of the earth, have undergone various changes by the influence of climate, food, mode of living, epidemic diſeaſes, and the fortuitous mixture of diſſimilar individuals: that, at firſt, theſe changes were ſcarcely diſcernible, producing only trifling and individual varieties, which afterwards became ſpecific, by being longer continued; and were rendered ſtill more ſtrongly marked, and more permanent, by the continual action of the ſame cauſes; and thus they have been tranſmitted from generation to generation, as deformities or diſeaſes paſs from parents to children, or from one hereditary family to another.

It will be ſeen, by a compariſon of the ancient geography with the modern, that there are immenſe regions of country, inhabited by people, who, although they have obtained among themſelves different names, are nevertheleſs clearly and diſtinctly of the ſame origin; only varied by the arts of life, by the cultivation of manners, and the poliſh of ſociety.

In a ſimilar way, the harſh and rugged features of unknown countries have been brought into view, by the immortal Cook, and other circum-navigators; at the peril of whoſe lives diſcoveries have been made far beyond the boundaries of ancient hiſtory. And by the perſevering induſtry of man, the progreſs of agriculture, and the extenſion of commerce, thoſe diſtant regions have been made to put on the face of luxuriance and plenty; and to pour out, as freſh incitements to civilization, their hidden ſtores, which the unreſtrained hand of Providence has made indigenous in different parts of the globe, for the ſuſtentation and comfort of his creatures, wherever found.

We cannot, however, in this article, purſue the thread of hiſtorical geography throughout the wide field of information which it preſents to our view, and which it is the province of the geographer to inveſtigate and digeſt. Our limits confine us within the circle of a ſmall horizon; and our plan conſtrains us to notice, under the proper names or titles of different countries, many eſſential particulars in their geography, as connected with their phyſical and political exiſtence. To each of theſe ſpecific titles, therefore, in the order of the alphabet in our Encyclopædia, we muſt refer the reader for more copious information; while we deem it convenient, if not eſſential, to give, in this place, a *Summary* of Ancient, and of Modern, Geography, whereby the young ſtudent may readily trace the various names and revolutions of

particular

Saxon Divisions
1 Northumbria
2 Mercia
3 East Anglia
4 East Saxia
5 Sud Saxia
6 West Saxia
7 Cantium
Milliari Romana vetera quorum 75 intra Spatium unius Gradus continentur.
10 20 30 40 50
Milliari Anglica quorum circiter 70 Gradui respondent.
10 20 30 40 50
IRISH SEA
HIBERNICUS OCEANUS
GERMANICUS OCEANUS
BRITANNICUS OCEANUS
ENGLISH CHANNEL
HIBERNIA
BRITANNIA
GALLIA
Isla I.
Jura
Cantire
Arran
Orrea
Stirling
Bodotria vel Bodotria Æst. Firth or Forth
Vanduara
Vidotara Sinus
Alauna
Tamulen
Alderva
Edinburg
Colania
Ostia Alauni vel Tuesis Tweed Mouth
Corda
Damnonorum
Corea
Perbles
Epidium Prom. Mull of Cantire
Robogdium Prom. Fair Head
Ceria Otadinorum
Bremenium
Habitancum
Bergonium
NOVANTÆ
Wigton
Uxellum
Hannum
Corbantum
Blatum Bulgium
Trimontium
Ostia Vedræ Tine Mouth
Novantum Pr. Port Patrick
Leucopibia
Olenacum
Vorda
Glanibanta
Durham
Dunum Æstuarium Tees Mouth
Legia Fl.
Iuna Æstuarium Solway F.
Morbium
Brovonocæ
Vinnovium
Magis
Galdacum
Lavatræ
Dicum
Maglove
Cataracto
Longovicium
Braboniacum
Bracchium
Flamborough Hd
Eburacum vel Eboracum
Sinus Portuosus
BRIGANTES
Lancaster
York
Moricambe Æstus
Kent R.
Pampocalia vel Calcaria
Delgovitia
Coccium
Petuaria
Setantiorum Portus
Ribble R.
Cambodunum vel Camulodunum
Belisma Æst.
Mersey R.
Manucium vel Mancunium
Presidium
Praetorium
Agelocum vel Agelocum
Anglesea I.
Seteia Æst.
Dee R.
Biovdunum
Belisma Fl.
Bradaci
Tacit. Mona
Eblana Dublin
S. Asaph
Conovium
Varæ
Flint
Condate
Dronne
Chester
Derventio
ad Portum
Lindum
Metaris Æstuarium The Wash
Nottingham
Branodunum
Ganganorum vel Canianorum Pro.
Brauchipult Pr.
Mediolanum
Bitupium
Pennocrucium
Virconium seu Uxaconium
Uxacona
Harlech
Medianamnum
Salisbury
Lichfield
Elacetum
Peterborough
Garrenonum
Garrhenum Fl.
Yare R.
Venta Icenorum
Norwich
Cardigan Bay
Stuccia Ostium
Avon R.
Maglona
Manduessedum
Venonum
Leicester
Durobrivæ
Camboricum
Monopia
Sabrina Æst.
Severn R.
Branogenium vel Braunium
New Radnor
Worcester
Presidium
Huntingdon
Sitamagus
Cambridge
Bedford
Salaue
Ipswich
St Davids Hd
Cardigan
Cuerdyn R.
Leucarum vel Lucarnium
Magna
Hereford
Lactodorum
Combretonium
Blackwater R.
Harwich
Brecon
SILURES
Maridunum
Carmarthen
Gobannium
Glevum
Gloucester
Buckingham
Verolamium vel Urolanium
Villa Fasini
Milford Haven
Pembroke
Blestium
Bullæum
Venta Silurum
Isca
Abone
Durocornovium
Oxford
Durolipons
Cæsaromagus
Tobii Ostia
Caerdiff
Bristol Channel
Sabrina Æstuarium
Bristol
Transactus
Aqua Solis
Aquæ Calidæ
Bath
Cunetio
Spinæ
Reading
Vindomis
Verlucio
Durobrivæ
Rochester
Durovernum Cantiorum
Canterbury
Portus Rutupiæ vel Ritupæ
Portus Dubris
Dubris seu Portus Dubris
Thames Mouth
Isamania Fl.
Ithancester
Convennos I.
Tamissa Æstu.
Tamium Prom.
N. Foreland
Recultium
London
Verulamium
Uxella Æstuarium
Bonium
Hercules Promont. Hartland Pt
Sarum
Salisbury
Brige
Venta Belgarum
Winchester
Ischa
Calleva
Vindonis
Chichester
Regnum
Inclusio vel Anderida
Portus Adurni
Portsmouth
Portus Novus Ryde Harb.
Beauly H.
Vectis In.
Isle of Wight
Vectis
Portus Magnus vel Hardour
Isca Dumnoniorum
Vindogladia
Uxella sive Uxella Tamum
Exeter
Durnovaria
Durotriges
Portus Alaunus
Race of Portland
St Albans H.
Voliba
Tamare
Tamari Ostium Plymouth Sound
Tor B.
Exmouth
Race Ostia
Landa Leda
Bolerium Prom.
Ictis Ostia Falmouth Haven
Dumnonium vel Ocrinum Prom. Lizard Pt
Start Point
Frudis Ostium
Sumeri Æst.
Sumner R.
Gesoriacum
Portus Itius
Portus Morinorum
Portus Lemanis
Portus Rutupiæ
Portus Dubris
Portus Adurni
Portus Novus Ryde Harb.
Portus Magnus vel Hardour
Race of Portland
Race Ostia
Tor B.
Exmouth
Tamari Ostium Plymouth Sound
Landa Leda
Bolerium Prom.
Ictis Ostia Falmouth Haven
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Portus Rutupiæ
Portus Dubris
Portus Adurni
Portus Novus Ryde Harb.
Beauly H.
Vectis In.
Isle of Wight
Vectis
Portus Magnus vel Hardour
Isca Dumnoniorum
Vindogladia
Uxella sive Uxella Tamum
Exeter
Durnovaria
Durotriges
Portus Alaunus
Race of Portland
St Albans H.
Voliba
Tamare
Tamari Ostium Plymouth Sound
Tor B.
Exmouth
Race Ostia

particular ſtates; and ſcan with a ſingle glance of the eye, the geographical connection of all the regions which inveſt the globe.

SUMMARY OF ANCIENT GEOGRAPHY.

The firſt diviſion of the Earth by the ancients, was into *land*, and *water*. The land was the *eaſtern* continent, ſurrounded by the ocean, compriſing Europe, Aſia, and Africa, which were ſometimes called by the ancients, *three* continents.

The ocean, *Mare* or *Oceanus*, was divided into two general parts: *Mare Externum*, and *Mare Internum*. The *Mare Externum* lay beyond the Streights of Gibraltar, *Herculis Columnæ*. To the north it was called *Oceanus Septentrionalis*, *Hyperboreus*, *Glacialis*, the Northern Ocean: to the weſt, *Oceanus Occiduus*, *Atlanticus*, *Heſperius*, the Atlantic: to the ſouth, *Oceanus Auſtralis*, *Meridionalis*, the Indian Ocean: to the eaſt, *Oceanous Eous*, *Orientalis*, commonly called the Pacific or Great South Sea.

Oceanus Septentrionalis, the Northern Ocean, was divided into *Mare Arctoum*, the North Sea, and *Mare Britannicum*, the Britiſh Sea.—*Mare Arctoum* included *Sinus Codanus*, the Baltic, and the ſeas to the north of *Thule*, generally ſuppoſed to be Iceland.—*Mare Britannicum* comprehended the ſeas from *Thule* to the coaſt of Spain and Portugal.—*Mare Internum* or *Noſtrum*, the Mediterranean, communicated with the ocean by *Fretum Herculeum* or *Gaditanum*, the Streights of Gibraltar. It may be divided into the following ſeveral parts:

1. *Mare Sardoum*, the Sardinian Sea, which extended from the Streights of Gibraltar to the iſland of Sardinia. 2. *Mare Inferum*, *Tyrrhenum*, *Tuſcum*, which waſhed the weſt coaſt of Italy down to Sicily. 3. *Mare Ionium*, the Ionian Sea, extending from Sicily to the Morea; it included *Mare Superum*, the Adriatic, or Gulf of Venice. 4. *Mare Ægeum*, the Archipelago. 5. *Mare Parthenium*, the Levant. 6. *Mare Lybicum*, the African Seas. 7. *Pontus Euxinus*, the Black Sea; at the entrance into which is *Propontis*, the Sea of Marmora; and beyond it *Palus Mæotis*, the Sea of Zabacche.

EUROPA.

This diviſion of the world, by the ancient geographers, is ſtated to be bounded on the North and Weſt by the Great Ocean; on the South by *Mare Internum*, the Mediterranean; on the Eaſt by the Tanais, or Don.—Ευρωπην δ' Ασιης Ταναις δια μεσσον οριζει. *Dionyſ. Perig.*

The Romans divided Europe into nine principal parts: 1. *Inſulæ Britannicæ*, the Britiſh Iſles. 2. *Hiſpania*, Spain. 3. *Gallia*, Gaul. 4. *Germania*, Germany. 5. *Sarmatia*, Poland, and part of Ruſſia. 6. *Dacia*, part of Hungary and Tranſylvania. 7. *Illyricum*, part of Auſtria and Hungary, Sclavonia, Boſnia, Dalmatia. 8. *Græcia*, Greece. 9. *Italia*, Italy.—Theſe we ſhall deſcribe in their reſpective order.

BRITANNIA ANTIQUA.—The Britiſh Iſles were divided into three parts: *Albion*, *Hibernia*, and *Inſulæ Minores*. Albion, or Britannia Major, *naturâ triquetra*, was divided into *Britannia Romana* or *Citerior*, South Britain; and *Britannia Ulterior*, or North Britain. Being of a triangular form; the point or headland to the North was called *Orcas*, Dungſby Head; the other two were *Bolerium Promontorium*, the Land's End, and *Cantium Promontorium*, the North Foreland. *Britannia Romana* or *Citerior*, South Britain, or England, was divided into *Superior* and *Inferior*, Higher and Lower.

ALBION SUPERIOR contained the three provinces of *Britannia Prima*, *Flavia Cæſarienſis*, and *Britannia Secunda*.—BRITANNIA PRIMA, the Southern part of England, lying between the Severn and Thames, was divided into ſix parts; and contained, 1. The *Cantii*, inhabiting Kent. Their chief towns were: *Dorobernium*, Canterbury; *Dubris*, Dover; *Rutupiæ* or *Rutupis*, Richborough; *Regulbium*, Reculver; *Durobrivis*, Rocheſter; *Portus Lemanis*, Stutfall Caſtle; according to others, Lime, near Hythe; *Anderidæ*, Newenden. 2. The *Regni*, inhabiting Surrey, Suſſex, and part of Hampſhire; and, 3. the *Belgæ*, inhabiting Somerſetſhire, Wiltſhire, and part of Hampſhire. Their chief towns were: *Aquæ Solis*, or *Calidæ*, Bath; *Theodorunum*, Wells; *Sorbiodunum*, Old Sarum; *Venta Belgarum*, Winchester. 4. The *Atrebates*, inhabiting Berkſhire: chief towns, *Galleva*, Wallingford; and *Spinæ*, Speen, adjoining to Newbury. 5. The *Durotriges*, inhabiting Dorſetſhire: chief town, *Durnovaria* or *Durnium*, Dorcheſter. 6. The *Damnonii*, inhabiting Cornwall and Devonſhire: their chief town, *Iſca*, Exeter. Here were alſo *Damnonium* or *Ocrinum Promontorium*, the Lizard Point; *Bolerium* or *Antiveſtæum Promontorium*, the Land's End; *Silurum Inſulæ*, or *Caſſiterides*, the Scilly Iſlands.

FLAVIA CÆSARIENSIS, ſo named from the family of Veſpaſian, was the country lying between the Thames and the Humber, alſo divided into ſix parts; and contained, 1. The *Trinobantes*, inhabiting Middleſex and Eſſex. Their chief towns were: *Londinum*, London; *Camalodunum*, Malden, or Colcheſter, perhaps the firſt Roman colony in Britain.—In Coloniam Camelodunum recens deducti, pellebant domibus, exturbabant agris. *Tacitus.*—2. The *Iceni*, inhabiting Suffolk, Norfolk, Cambridge, and Huntingdonſhire. Chief towns: *Venta Icenorum*, Norwich; *Villa Fauſtini*, St. Edmund's Bury; *Camboritum*, afterwards *Granta* and *Cantabrigia*, Cambridge. 3. The *Catyeuchlani*, inhabiting Buckinghamſhire, Hertfordſhire, and Bedfordſhire: whoſe chief towns were: *Pontes*, Colnbrook; and *Verulamium*, Verulam, near St. Alban's.—Eadem clades Municipio Verulamio fuit. *Tacitus.*—4. The *Dobuni*, inhabiting Glouceſterſhire, and Oxfordſhire. Their chief towns were: *Oxonia*, Oxford; *Clanum* or *Clevum*, afterwards *Claudia Caſtra*, Glouceſter. 5. The *Cornavii*, inhabiting Warwickſhire, Worceſterſhire, Staffordſhire, Shropſhire, and Cheſhire. Their chief towns were: *Præſidium*, called alſo *Verovicum*, Warwick; and *Deva*, or *Duna*, Cheſter. 6. *Coritani*, inhabiting the ſhires of Northampton, Leiceſter, Rutland, Lincoln, Nottingham, and Derby. Their chief town was, *Lindum Colonia*, Lincoln.

BRITANNIA SECUNDA, the ſecond part of the iſland conquered by the Romans, lay between the Severn and the Iriſh Sea; it is ſometimes called *Superior*, and anſwers to Wales. It contained, 1. The *Silures*, the inhabitants of Hereford, Radnor, Brecknock, Monmouth, and Glamorganſhire. To them belonged *Iſca Silurum*, Caerleon; *Venta Silurum*, Caerwent. 2. The *Demetæ*, inhabiting Caermarthen, Pembroke, and Cardiganſhire. 3. The *Ordovices*, inhabiting Flint, Denbigh, Montgomery, Merioneth, Caernarvonſhire, and Angleſea.

ALBION INFERIOR, contained the two provinces of *Maxima Cæſarienſis*, and *Valentia*. *Maxima Cæſarienſis*, lying between the Humber and the Tyne, contained, 1. *Pariſi*, the Eaſt Riding of Yorkſhire. 2. The *Brigantes*, inhabiting the Weſt and North Ridings of Yorkſhire, Durham, Lancaſhire, Weſtmoreland, and Cumberland. Their chief towns were: *Eboracum*, York, where Severus and Conſtantius Clorus died; *Luguballum*, or *Caſtra Exploratorum*, Carliſle.

Valentia, between the Tyne and Frith of Forth, was occupied chiefly by the *Ottadini*, inhabiting Northumberland. It alſo contained the three Roman walls, 1. *Adriani Vallum*, the Picts Wall, eighty miles in length, from the mouth of the Tyne to the Solway Frith. 2. *Antonini*, or *Lolli Urbici Vallum*, Graham's Dyke, thirty-eight miles in length, from the Frith of Forth to the Frith of Clyde, where Agricola had before raiſed forts. 3. *Severi Murus*, a wall of free-ſtone, built on or near Adrian's Rampart.

ALBION ULTERIOR, called alſo *Borealis*, or *Barbara*, now Scotland, was inhabited by the Picts, divided into the *Vecturiones* and *Caledonii*, or *Ducaledones*, *Attacottæ*, and *Horeſti*.—Rutilæ Caledonium habitantium comæ, magni artus,

artus, Germaniæ originem adſeverent. *Tacitus.*—In this diviſion, the general name of thoſe who lived to the ſouth of Antoninus's Rampart, was *Mæatæ*; and *Caledonii*, of thoſe who lived to the north of it. Their chief towns were: *Caſtra Alata*, Edinburgh; and *Alaterva*, Cramond.

Concerning the original ſtem-tribes of Britain, M. Mannert, in his "Northern Geography," ſtates as follows:—"Cæſar came to Britain, and found Celts immemorially ſettled there. He ſays, "people of Belgium," not that he meant to indicate a nation diſtinct from the Celts, as ſome believe, but becauſe the Belgian coaſt, lying next to Britain, may naturally be ſuppoſed to have furniſhed the coloniſts. That they did not differ from the other Celts, either in language or cuſtoms, may be inferred from the circumſtance that young men were ſent from Gaul to be educated under the Britiſh Druids. Later writers concur with Cæſar. Tacitus, in the life of Agricola, c. 11, diſcovers among the Britons manners and cuſtoms reſembling thoſe of the Gauls. The Silures appear to him a colony from Spain, on account of their full complexion and criſp hair. The Caledonians he derives from the Germans. Conceiving, like all his cotemporaries, that the weſtern extremity of Britain lay oppoſite to the north coaſt of Spain; and the northern extremity of Britain to have been its eaſtern part, and oppoſite to the north coaſt of Germany; he ſuppoſes each portion of the iſland to have derived its inhabitants from the moſt contiguous continent.

"In the interior of the iſland, Cæſar mentions a nation, which he conſiders as the *Autochthones*, but of theſe he had only heard. A century later, the march of the Roman conqueſts firſt led them under Agricola to this unknown people, who manfully reſiſted and never wholly ſubmitted to the invader. *Caledonii* was the name given by the Latins to this newly-found people, and probably it was their domeſtic appellation. The Grampian hills formed their favourite reſort. Tacitus and Ptolemy have preſerved the names of ſome ſubdiviſions of theſe tribes: Dion Caſſius, lxxvi. 12, aſſigns to them the collective name of *Maiatæ*. Theſe were no doubt Celts, who either ſtrolled thither at their original ſettlement, or were forced thither by the progreſs of the Roman arms. The next century affords no farther intelligence concerning the inhabitants of the north, until the ſudden appearance of the Picts and Scots in Ammianus Marcellinus, xxvii. 8; the former of which names, as may be inferred from Claudian, was beſtowed from their practice of tattooing with blue ſtains.—For the manner in which the ancient Britons tattooed or painted their bodies, ſee the article ENGLAND, vol. vi. p. 538.

"Probably the Caledonians of Scotland belong to the ſame race with the Iberi. Hiſtory, at leaſt, informs us, that, before the appearance of the Celts, the weſt of Europe was inhabited by a nation of this name, which retired before them. Our oldeſt accounts of the Caledonians deſcribe them as entertaining a violent antipathy againſt the Celts. We know of the Iberi, that ſome tribes were driven towards Spain, incorporated the Celts among them, and ſettled in Aquitaine. If this reſemblance do not ſubſiſt between the Iberians and the Caledonians, the latter muſt be a wholly inſulated European tribe. A cloſe compariſon of the language of the Biſcayans, who call themſelves *Euſcaldunac*, would aſſiſt in deciding this queſtion. The Maiatæ of the third century appear in the fourth divided into Attacotti and Scotti, the latter of which tribes has ultimately given its name to the northern provinces.

"The early native writers differ ſomewhat from the ancients. Beda (Hiſt. Eccleſ. i. 1.) places the Scots originally in Ireland, whither they are ſuppoſed to have come from Spain. The arrival of a Scythian fleet, bringing ſtrangers in ſearch of ſettlement, occaſioned firſt a war and then a compromiſe; in virtue of which the Gothic ſtrangers were provided with wives among the Scots of Ireland, and aſſiſted by their new relations in ſeizing that part of the oppoſite iſland which lay to the north-eaſt, where they became the people now called *Highlanders*."

This account by M. Mannert is in great part well founded, though liable to ſome objections. The three ſtem-tribes of the Britiſh nation, however intermingled in all the towns, retain in the mountainous diſtricts their original phyſiognomy and language. Theſe tribes are, 1. The Iriſh and Highland Scots, who ſpeak the Erſe or Gaelic tongue; 2. The Cumbrian or Cymbric race, who ſpeak the Welſh tongue; and, 3. The Goths from the vicinity of Denmark, one of whoſe tribes, called *Angles*, gave its name to the Engliſh tongue. The denomination of *Celt*, is often uſed vaguely, but it can with propriety be applied only to the firſt of theſe races; and, if ſo reſtricted, it is evident that Cæſar never ſaw the Celts of Britain at all: his intercourſe was confined to the ſecond race, who, like the Belgæ of Gaul, had Druidiſm for their religion, and Welſh for their language. The Silures of Tacitus are probably of the firſt race, as their phyſiognomical character agrees with that of the Celts: but his Caledonii, for the ſame reaſon, are of the third or Gothic race, and not, as Mannert ſuppoſes, Iberian or Celtic: the information of Beda being correct that the Lowlanders are the original inhabitants of Scotland, the antagoniſts of Agricola, and the conquerors of Caracalla; and that the Highlanders are an Iriſh colony of the third or fourth century.

The head lands on the coaſt of Britain were, *Cantium-Promontorium*, North Foreland; *Ocellum Prom.* Spurnhead; *Bolerium*, or *Antiveſtæum Prom.* Land's End; *Damnonium*, vel *Ocrinum*, Lizard Point; *Orcos*, Dungſby Head.—Rivers: *Tameſis*, the Thames; *Sabrina*, the Severn; *Abus*, the Humber; *Ituna*, the Eden; *Tueſis* vel *Alaunus*, the Tweed; *Bodotria*, the Forth; *Glota*, the Clyde; *Taus*, the Tay; *Devana*, the Dee. See the article ENGLAND, vol. vi. p. 534, and the Map of Ancient Britain annexed.

HIBERNIA, Ireland.—*Hibernia*, *Britannia Parva*, *Ierne*, *Scotia*, *Erin*, or the Country of the Weſt, was inhabited by eighteen different tribes, whoſe names it is unneceſſary to enumerate, as they ſeldom occur in hiſtory; but among them were tribes of *Scoti*.—Scotorum tumules flevit glacialis Ierne. *Claudian.*

Their chief towns were: *Eblana*, Dublin, with a tribe called *Eblani*. *Menapia*, Wexford, with a tribe called *Menapii*.—In the middle ages the *Nalli* occupied the centre of the country, the *Dalriadi* were to the north-eaſt, and the *Cruthini* to the north-weſt.

INSULÆ MINORES.—*Silures*, *Caſſiterides*, *Heſperides*, the Scilly Iſlands. The name *Caſſiterides* was not confined to thoſe iſlands, but ſometimes applied to the Britiſh Iſlands at large. *Vectis*, the Iſle of Wight. *Mona*, Angleſea, the principal ſeat of the Druids in Britain.—Monam inſulam, incolis validam, et perfugarum receptaculum. *Tacitus.*

Monabia, *Monœda*, and alſo *Mona*, the Iſle of Man. *Ebudæ*, *Hebudes*, *Hebrides*, the Weſtern Iſles. *Iona*, Icolm Kill. *Orcades*, the Orkney Iſlands. *Thule*, ſuppoſed to be Shetland, Iceland, the North of Scotland, &c. *Cæſarea*, Jerſey. *Sarnia*, Guernſey. *Arica*, Sark. *Riduna*, Alderney.

Of the various tribes, ſuppoſed to have been about thirty in number, inhabiting the Roman province of Britain, the moſt conſiderable were, the *Belgæ* to the weſt, the *Brigantes* to the north, the *Silures* in South Wales, and the *Iceni* in Norfolk and Suffolk. This province was of ſuch conſequence to the Romans, that they maintained on it one hundred and fifty military ſtations, and a ſtanding army of about thirty-ſix thouſand foot, and ſix thouſand horſe. Of the Roman roads, Watling-ſtreet led from *Rutupiæ*, Richborough in Kent, north-weſt through London to Cheſter; the Ermin-ſtreet paſſed from London to Lincoln, to Carliſle, and into Scotland; the Foſſe-way probably led from Bath and the weſt of England north-eaſt, till it joined the Ermin-ſtreet. The

OCEANUS CANTABRICUS
CANTABRI
ASTURES TRANSMONTANI
ASTURES AUGUSTANI
CALLAECI LUCENSES
CALLAECI BRACARII
VETTONES
LUSITANIA
CARPETANI
CELTIBERIA
OROSPEDA
IBERI
LACETANI
AUSETANI
COSTANI
ILERGETES
PYRENÆI MONTES
HEDETANI
EDETANI
CONTESTANI
ILLICITANUS
VIRGITANUS
BASTITANI
TURDETANI
OCEANUS OCCIDENTALIS
MARE INTERNUM quod et MEDITERRANEUM
SINUS GADITANUS
SINUS
BALEARES vel GYMNESIÆ INSULÆ
BALÆARIS MINOR
BALÆARIS MAJOR
PITYUSÆ INSULÆ
Fretum Herculeum vel Gaditanum STRAITS OF GIBRALTAR
Promontorium Apollinis
Promontorium Artabrorum Prom.
C.de Finisterra
C.S. Vincent
Sacrum Prom.
Calpe Promontorium
Junonis Prom.
C. Trafalgar
Barbarium Prom.
C. de Espichel
Veneris Templum seu
Afrodisium Promont.
Cabo de Creus
Rhodo Rhodope & Rhodopolis Fl.
Lunarium Promont.
Sacrum Promontorium
Julia Cæsarea
Algier
Oran
Tangier
Ceuta
Gades
Cadiz
LISBON
Olisipo
Tagus
Ebora
Evora
Beja
Pax Julia
Mirobriga
Segobriga
Toletum
TOLEDO
Complutum
Alcala
Caesaraugusta
Saragoca
Valladolid
Pintia
Numantia
Clunia
Uxama
Osma
Segovia
Segesama Julia
Salmantica
Salamanca
Ciudad Rodrigo
Coimbra
Eminium
Conimbriga
Aeminium
Lamego
Braga
Bracara Augusta
Viana
Aquæ Calidæ Citinicum
Volobriga Nemetanorum
Caeliobriga Celerinorum
Villa de Conde
Porto
Talabriga
Langobriga
Aquæ Flaviæ
Chaves
Miranda de Douro
Zamora
Toro
Simancas
Medina del Rio Seco
Medina Celi
Sigüenza
Guadalajara
Arriaca
Madrid
Avila
Arbucala
Ad Lippos
Mirobriga
Ocellum
Ciudad Rodrigo
Caurium
Augustobriga
Talavera
Talavera la Vieja
Mantiana
Villa Franca
Ilurtida
Ascha
Consaburum
Consuegra
Laconimurgum
Castra Cecilia
Caceres
Norba Cæsarea
Alcantara
Tamuga
Tamugus
Lacipea
Morbriga
Mundabriga
Myrtilis
Merida
Emerita Augusta
Augusta
Ad Sorores
Castra Julia
Ad Turres
Ad Turres Lascutanorum
Ciudad Real
Sisapon
Sisapo
Almaden
Cuenca
Castrum Altum
Lora
Ad Putea
Puteolis
Carthago
Ocana
Ipagrum
Valera
Alce
Mentercosa
Libisosa
Illiturgi
Illiturgis
Mentesa
Bastia
Baza
Basti
Baeza
Ad Morum
Carthago Nova
Cartagena
Saturni Scombraria Prom.
C. de Palos
Scombraria Insulæ
Illice
Elche
Orihuela
Murcia
Lorca
Moreta
Virgilia vel Vergilia
Carca
Caravaca
Ilorci
Eliocroca
Ilorci
Ilarcuris
Lupparia
Mellaria
Fuente Ovejuna
Corduba
Sabora
Ipasturgi
Vindolis
Ossigi
Ossigis
Phoenacis
Arva
Arsa
Astigi
Ecija
Ucubis
Carmona
Carmonia
Hispalis
Sevilla
Italica
Italica Urbs
Gibraleon
Ilipa
Ilipa Italica
Ostuca
Osuna
Callete
Urium
Arucci
Moura
Acurgia
Serpa vel Serpo
Serpa
Pinus
Curica
Castra
Segedo
Acinipo
Arunda
Arandis
Oxtuca
Prestamo
Lacobriga
Lagos
Lacobrigus Portus
Promontorium Cuneum
C. de Sta. Maria
Portus Annibalis
Tavira
Baesippo
Balsa
Ossonoba
Faro
Alfayates
Alfayates
Alfayates

laſt of theſe great roads is thought to have extended from Norwich ſouth-weſt, into Dorſetſhire. From theſe branched off others in various directions, the remains of which are in many parts of England ſtill viſible.

HISPANIA ANTIQUA, called alſo *Heſperia*, from its weſtern ſituation, and from the river *Iberus* called *Iberia*, or *Celtiberia*; comprehended both Spain and Portugal:

Pyrene celſa nimboſi verticis arce
Diviſos Celtis late proſpectat Iberos. *Sil. Ital.*

It was divided into two general parts; *Hiſpania Ulterior, Exterior*, and *Inferior*; and *Hiſpania Citerior, Interior*, or *Superior*.

HISPANIA ULTERIOR, was divided into *Bætica* and *Luſitania*. *Bætica*, ſo named from *Bætis*, the Guadalquiver, comprehended the provinces of Andulaſia, Granada, part of New Caſtille, and Alentejo. Its inhabitants were the *Baſtuli* or *Pæni*, *Celtici*, and *Turditani*. Their chief towns were, *Corduba*, Cordova, the birth-place of Seneca, Lucan, and Martial. *Hiſpalis*, Seville, the birth-place of Trajan and Adrian. *Italica*, Alcala del Rio. *Munda*, Monda, where Cæſar defeated Pompey's ſons. *Illiberis*, Elvira. *Gades*, Cadiz. *Tarteſſus*, Tariffa. *Carteia, Calpe, Columna Herculis*, Gibraltar. Abyla, on the coaſt of Africa, was the other pillar of Hercules. *Luſitania* lay between the Guadiana and the Douro. It contained Portugal, part of Leon, and the two Caſtilles. It was chiefly inhabited by the *Luſitani, Vettones, Celtici, Turdetani*:

—— Profugique a gente vetuſta
Gallorum Celtæ miſcentes nomen Hiberis. *Lucan.*

Their chief towns were: *Auguſta Emerita*, Merida; *Norba Cæſarea*, Alcantara; *Evora*, or *Liberalitas Julia*, Evora; *Oliſippo*, Liſbon, fabled to have been built by Ulyſſes; *Coimbrica*, Coimbra.

HISPANIA CITERIOR, or *Tarraconenſis*, the largeſt diviſion of Spain, extended from the Pyrenees to the mouth of the Douro, and was divided into twenty-eight diſtricts, being inhabited by as many tribes. The moſt remarkable of theſe were the *Gallæci*, who gave name to Gallicia; *Aſtures*; *Carpetani*; *Cantabri*, the laſt nation in Spain which yielded to the Roman arms.—Cantabrum indoctum juga ferre noſtra. *Horace.*—They gave the name of *Oceanus Cantabricus* to the Bay of Biſcay; *Celtiberi*; *Vaſcones*; *Concani*, a people of ſavage manners; *Ilergetes*; *Auſetani*.—Their chief towns were: *Tarraco*, Tarragona; *Barcino*, Barcelona; *Emporiæ*, Ampurias; *Gerunda*, Girona; *Rhoda*, Roſas; *Oſca*, Hueſcar; *Ilerda*, Lerida, where Cæſar reduced Afranius and Petreius; *Dertoſa*, Tortoſa; *Saguntum*, Morviedro; the occaſion of the ſecond Punic war:

Nec pavet hic populus pro libertate ſubire,
Obſeſſum Pæno geſſit quod Marte Saguntum. *Lucan.*

Valentia, Valentia; *Carthago Nova*, Carthagena; *Cæſar Auguſta*, Saragoſa; *Julia Celſa*, Xelſa; *Pompeiopolis*, Pampeluna; *Numantia*, which ſtood a fourteen years ſiege againſt the Romans:—Noviſſime, maximo duce oppreſſa civitas, nullum de ſe gaudium hoſti reliquit. Triumphus fuit tantum de nomine. *Florus.—Calagurris*, Calahorra; which underwent a ſevere famine in the Sertorian war. *Toletum*, Toledo; *Segovia*, Segovia; famous for its aqueduct; *Aſturica*, Aſtorga; *Calle*, Oporto.

Auguſtus diſtributed Spain into the three provinces of *Luſitania, Bætica*, and *Tarraconenſis*. It was afterwards divided into fourteen *Juridici Conventus*, or Juriſdictions. Of theſe, *Bætica* contained four, *Luſitania* three, *Tarraconenſis* ſeven. Under the later emperors it was divided into theſe ſeven provinces. 1. *Bætica*; chief town Seville. 2. *Luſitania*; chief town *Auguſta Emerita*, Merida. 3. *Galæcia*; chief town *Bracara-Auguſta*, Braga. 4. *Tarraconenſis*; chief town *Tarraco*, Tarragona. 5. *Carthaginienſis*; chief town *Carthago Nova*, Carthagena. 6. *Inſulæ*, Majorca, Minorca, &c. 7. *Mauretania*, and *Tingitana*, now Fez and Morocco in Africa, including alſo Cadiz in Spain. The chief town, taking its name from a cognominal people, *Tingi*, Tangier.

Rivers.—*Minius*, the Minho; *Durius*, Douro; *Tagus*, Tajo; *Anas*, Guadiana; *Bætis*, Guadalquiver; *Sucro*, Xucar; *Turtas*, Guadalaviar; *Iberus*, Ebro; *Sicoris*, Segre; *Rubricatus*, Lobregat; *Sambroca*, Ter.

ISLANDS ON THE COASTS OF SPAIN.—*Inſulæ Baleares*, or Gymneſiæ, contained *Majorca*, and *Minorca*. *Inſulæ Pityuſæ*, contained *Ebuſus*, Yvica; and *Ophiuſa*, Formentara.

CAPES. *Pyrenæum, Aphrodiſium ſive Veneris Promontorium*, Cape de Creus. *Charidemum Promontorium*, Cape de Gates. *Calpe Prom.* Gibraltar Rock. *Sacrum Prom.* Cape St. Vincent. *Barbarium Prom.* Cape d'Eſpichel. *Lunæ Prom.* Cape de Mandego. *Artabrum Celticum, ſeu Nerium Prom.* Cape Finiſterre.

Concerning the ancient hiſtory of Spain, we ſelect the following account from Mannert:—"The name of *Spain* is probably of Phœnician origin. The Romans borrowed it from the Carthaginians, through whom they firſt became acquainted with the country. The Greeks every where call it *Iberia*, without attaching always the ſame idea to the denomination. The elder Greeks, till the period of the Achæan league, and of their cloſer acquaintance with Roman affairs, underſtand by it the whole ſea-coaſt from the columns of Hercules to the mouth of the Rhine: becauſe, throughout this diſtrict, the Iberi were to be found, ſometimes apart, ſometimes mingled with Ligurians. The river Ebro has its name from them. The ſea-coaſt beyond the pillars they called Tarteſſis. The interior of the country went long without a name among the inhabitants, becauſe each nation conſidered itſelf as a whole, and lived nearly unconnected with its neighbours. Among the Greeks, it obtained the vague name of Kelrica; which was alſo applied to the whole north-weſt of Europe. Time altered theſe ideas, and the latter Greeks appropriated the name *Iberia* to the ſame country which the Romans called *Hiſpania*. Even this laſt name the Greeks occaſionally uſe, but underſtand by it the region between the Pyrenees and the Iber or Ebro. Not till the ſecond or third century was the Latin name fully received into the Greek tongue, although earlier inſtances occur. *Heſperia* or the *weſt country*, is a common name among the Greek poets both for Italy and Spain; for the latter, with the occaſional epithet *ultima*.

"Hiſtory mentions as the moſt ancient ſettled inhabitants of the country in the weſtern parts, the Kynetæ; and on the ſouthern coaſt, the Tarteſſians beyond, and the Iberians within, the pillars of Hercules. Part of the latter, between the Pyrenees and the Ebro, were known by the name of Igletæ. Herodotus learned theſe names from the Phocæans; ſo that our firſt notices of the country reach back to the times of the early Perſian kings. The fable of *Luſus* and *Pan*, generals of Bacchus, is ſaid to have given the names to Luſitania and Hiſpania. Herodotus alſo notices other intruded tribes, the Phœnicians who had colonized the coaſts, and the Celts who had wandered into the interior. Theſe dwell leſs weſtward than the Kynetæ, and probably in the ſame regions in which we find them at a later period; and theſe were probably the only Celts or Kelts of whom the Phocæans had experimental knowledge; which occaſions Herodotus to place erroneouſly among them a city, Pyrene, near to which he ſuppoſes the Danube to riſe.

"Whether the Phœnicians or the Kelts were the earlier intruders cannot be aſcertained. Both their immigrations precede the beginning of authentic hiſtory. The building of Gadeir, their chief ſea-port, by the Phœnicians, is placed ſoon after the Trojan war. The intruſion of the Kelts loſes itſelf in the miſt of antiquity. Later hiſtory mentions them to have come from beyond the Pyrenees, to have waged long wars with the Iberi, and finally to have melted into one nation; which, under the name of Keltiberi, poſſeſſed a conſiderable tract of land in the ſouth, and was noted for its bravery during the wars between the Carthaginians and the Romans.

The

The union was not general: only the inhabitants of the south became one nation with the Kelts; the other Iberi remained unmixed. From the great Keltic army some tribes separated, who established themselves near to the mouth of the river Anas (Guadiana.) Another portion occupied the north-west extremity under the name Artabri. The former preserved the general name of Kelts.

"The Greeks established some colonies along the coast of the Iberi within the columns: but, except the Saguntum of the Lakynthians, and the Emporium of the Massilians or Phocæans, they were of little importance. All the numerous tribes, therefore, which are afterward found in Spain, may be divided, 1. into the unmixed aboriginal inhabitants, and 2. into the tribes wholly or partially composed of intruders. The former occupied the east and west coast of the ocean, the Pyrenees, and great part of the country east of the Iber. It cannot be proved that the north-west inhabitants are the same with the proper Iberi of the south-east. To these belong the Lusitani, Karpetani, Kallaiki, and Vakkæi, of the west; the Asturian, Cantabrian, and Vask, of the north; the inhabitants of the Pyrenees, through whose territory many hordes passed without staying, and some tribes dwelling along the Iber, of the east; finally, the inhabitants of the highlands, of Ortospeda, the Oretani, Olkadi, and Bastitani, of the south. The language, manners, and weapons, of these people are alike: they are one people in many subdivisions.

"The mixed tribes may be again divided into the Keltiberi and the people of the south-coast. The former comprehend in a manner all the inland inhabitants of the south. The Kelts chiefly struggled with the Iberi in the neighbourhood of the river so called: but, after the incorporation, they jointly occupied the mountainous country on the west of the Iber, as far as the source of the Durius and Tagus. This was Keltiberia in its narrowest import: but the nation, having multiplied greatly, dispossessed or reduced to slavery several tribes, as the Vakkæi, Karpetani, Oretani, &c. who are thence incorrectly reckoned as a part of it.

"The people of the coast beyond the pillars of Hercules, are a mixture of the natives with Phœnicians; and, within the pillars, a mixture of the natives with Greeks, Romans, and Carthaginians. Their commerce with strangers destroyed all peculiarity of character. At first they learned the Punic, afterward the Roman, language and manners. The commerce, to which they were devoted, habituated them to assume every form. For this reason, the inlanders despised them, made inroads on them, and forced them to recur for defence to foreign protection."

GALLIA ANTIQUA.—This country was called by the Greeks *Galatia*, and *Celto-Galatia*. By the Romans it was divided into *Cisalpina*, *Citerior*, or *Togata*, and *Transalpina*, *Ulterior*, or *Comata*. *Gallia Cisalpina* is properly part of Italy. *Gallia Transalpina* was bounded by the Rhine, the Alps, Var, Pyrenees, and the Ocean.

The chief rivers of ancient Gaul were, *Rhenus*, the Rhine; *Mosella*, Moselle; *Mæsa*, Maese or Meuse; *Sabis*, Sambre; *Scaldis*, Schelde; *Matrona*, Marne; *Sequana*, Seine; *Liger* or *Ligeris*, Loire; *Carantonus*, Charente; *Garumna*, Garonne; *Duranius*, Dordogne; *Arar*, Saone; *Rhodanus*, Rhone, which passes through *Lacus Lemanus*, the lake of Geneva; *Isara*, Isere; *Druentia*, Durance; *Argentus*, Argens; *Varus*, Var.

The most noted mountains were: *Vogesus*, Mount Vauge; *Cebenna*, the Cevennes; *Jura*, Mount Jura; *Alpes*, the Alps. The Alps were divided into *Alpes Maritimæ*, *Cottiæ*, *Græcæ*, *Penninæ*, *Rhæticæ*, *Noricæ*, *Pannonicæ*, *Juliæ*, supposed in their circuit to embrace about five hundred and fifty miles, and extending in a direct line two hundred and fifty miles from *Monœci Portus*, Monaco, to *Sinus Flanaticus*, the Gulf of Carnero, in the Hadriatic.

Της δε προς αντολην αναφαινεται Αλπιος αρχη,
Της δια μεσσατιης κατασυρεται ὑδατα Ρηνε,
Υστατιον ποτι χευμα βορειαδος αμφιτειτης.
Ρηνῳ δ' εξεης επιτελλεται ἱερος Ιστρος. *Dionys. Per.*

Gaul was divided by Julius Cæsar into three parts; the *Belgæ*, *Galli* or *Celtæ*, and the *Aquitani*. *Gallia Belgica* was bounded by the Seine, Marne, mountains of Vauge, Rhine, and the Ocean. *Gallia Celtica* was bounded by the Seine, Marne, mountains of Vauge, Saone, Rhone, and Garonne. *Gallia Aquitanica* was bounded by the Ocean, Garonne, and the Pyrenees. *Gallia Celtica* was the most considerable division, and anciently gave its name to the whole country of Gaul; which was divided by Augustus into four parts; *Gallia Narbonensis* or *Provincia*, *Aquitania*, *Lugdunensis* or *Celtica*, and *Gallia Belgica*.

GALLIA NARBONENSIS, or *the Roman Province*, called also *Braccata*, from a part of the dress worn there, was bounded by the Pyrenees, Garonne, Cevennes, Alps, and the sea-coast of the Mediterranean; and was divided into two parts by the Rhone. It comprehended Languedoc, Provence, Dauphiny, and part of Savoy. There were in it seventeen different tribes; the chief of which, to the east of the Rhone, were the *Allobroges*, *Centrones*, and *Vacontii*; whose chief towns were *Geneva*; *Vienna Allobrogum*, Vienne in Dauphiné; and *Cutaro*, afterwards *Gratianopolis*, or Grenoble.—The *Cavares*; in whose country were these towns: *Avenio*, Avignon; *Arausio*, Orange; *Avia Julia*, Apt; *Vasio*, Vaison.—In the country of the *Salyes* or *Salvii*: *Aquæ Sextæ*, Aix; *Massylia*, Marseilles; *Telo Martius*, Toulon; *Forum Julii*, Frejus; *Antipolis*, Antibes; *Arelate*, Arles.—On the west of the Rhone, the *Helvii*, *Volcæ Arecomici*, and *Volcæ Tectosages*: whose chief towns were, *Nemausus*, Nismes; *Narbo Martius*, Narbonne; *Tolosa*, Toulouse; *Carcasso*, Carcassonne.

AQUITANIA, was bounded in Julius Cæsar's time, by the Pyrenees, the Ocean, and the Garonne.—In Augustus Cæsar's time, it was extended to the Loire, and included the part of the Lyonnois and Orleanois which is to the southward of that river. It contained eighteen states; the chief of which, to the south of the Garonne, were the *Convenæ*, *Tarbelli*, *Auscii*, *Vasates*, *Bituriges*, and *Vibisci*; whose chief towns were: *Aquæ Tarbellæ* on the *Aturus*, or Acqs on the Adour; *Vasates* or *Cossio*, Bazas; *Burdegala*, Bourdeaux; *Climberrum* or *Augusta Ausciorum*, Ausch.

Between the Garonne and the Loire, were the *Cadurci*, *Petrocorii*, *Lemovices*, *Santones*, *Pictones*, *Bituriges-Cubi*, *Arverni*, under whom are included the *Boii*. Their chief places were: *Uxellodunum*, near Cadenac; *Vesuna* or *Petrocosi*, Perigueux; *Mediolanum* on the *Carantonus*, or Xaintes on the Charante; *Santonum Portus*, Rochelle; *Uliarus Insula*, the Isle of Oleron; *Limonum*, Poictiers; *Augustoritum*, Limoges; *Avaricum*, Bourges; *Nemossus*, *Arvernum*, *Augustonomemetum*, Clermont; *Gergovia Boiorum*, Moulins; *Gergovia Arvernorum*, Gergoie.

GALLIA LUGDUNENSIS, or CELTICA, the largest part of Gaul, according to Cæsar's division, as it then included the *Helvetii* and *Sequani*, was bounded by the Ocean, the Loire, Seine, Marne, Rhine, and Rhone. It included part of the Lionnois, Burgundy, Champagne, Isle of France, Orleanois, and all Brittany and Normandy south of the Seine. In Cæsar's time it comprehended twenty-nine different states, including the *Helvetii* and *Sequani*, who being afterwards ranked by Augustus as part of Gallia Belgica, the boundaries of Gallia Celtica to the east became *Mons Vogesus* and the *Arar*.

Their chief states and towns were:—*Segusiani*, inhabiting chiefly the Lionnois; the cities *Lugdunum*, Lyons; *Forum Segusianorum*, Feurs.—*Ædui*, inhabiting Burgundy; their cities, *Bibracte* or *Augustodunum Æduorum*, Autun; *Cabalinum*, Chalons; *Matisco*, Macon.—*Mandubii*, inhabiting Auxois: chief town *Alesia*, or Alese, the last place reduced

GALLIA ANTIQUA.

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Longitude East of London
OCEANUS GERMANICUS
GERMAN OCEAN
Cimbrica Chersonesus
JUTLAND
SINUS CODANUS
Treva
Trevemund
Altera Wismar
ANGLI
VARINI
Sturio Stade
Marionis Hamburg
SAXONES
CAUCI MINORES
CAUCI MAJORES
FRISII
CHAMAVI
BRUCTERI
BATAVI
USIPII
Amisia F.
Ems R.
Visurgis F.
Weser R.
Albis F.
Elbe R.
Viadrus F.
Oder R.
LANGOBARDI
SUEVIA
FOSI
ANGRIVARII
CHERUSCI
Trapoea Drusi
Colonia Trajana
Cleves
Noviomagus Nimeguen
Luppia F.
R. Lippe
Luppia Lipstadt
SICAMBRI
MENAPII
Castellum Tassel
TENCTHERI
CATTI
Eburonum Juliers
Colonia Agrippina Cologne
Sigodunum Siegen
Mattium Marburg
MATTIACI
Confluentia Coblentz
Augusta Treves
Mogontiacum Mentz
Magnus F.
Mayn R.
Borbetamagus Worms
Noviomagus Spire
Aquæ Baden
Argentoratum Strasburg
GALLIA
TULINGI
Rhenus F.
Rhine R.
HERMUNDURI
Salinæ Saalfeld
Elbus F.
Elbe R.
Marobudum PRAGUE
BOIOHEMUM
GOTHINI
Lunasilva Neisse
BUBII
SEMNONES
Forest
OSI
MARCOMANNI
QUADI
NARISCI
Ebrum Olmutz
Eburodunum Brinn
Marus F.
Marsch R.
Regina Ratisbon
Celusum Kelheim
Danubius F.
Danube R.
Guntia Guntburg
Isarus F.
Iser R.
Boiodurum Ilzstadt
Augusta Augsburg
VINDELICIA
Ovilabis Wels
Lencia Linz
Laureacum
Vindobona VIENNA
Danubius F.
Danube R.
NORICUM
PANNONIA
Laacus Brigantinus Lake of Constance
Basilia Basle
Altera Confluentia
Cambodunum Kempten
Juvavum Salzburg
Brigantia Bregenz
Rhenus F.
Inn R.
Ad Pontem Mühra
Veldidena Innspruck
Tenoli Tirol
Lutanium St. Valentin
Lonaq
Linz
HELVETIA
RHÆTIA
Lucus Lansonius Lausanne
Tigurina Altdorf
Curia Coire
Wennes
Sabia Seben
Drausus F.
Drave R.
Celeia Cilley
Laacus Lemanus L. of Geneva
NANTUATES
Geneva
Geneva
SEDUNI
Vallis Penina
LEPONTII
Bilitio Bellinzona
Clavenna Chiavenna
Bauzanum Bolzano
STONI
CARNI
Cividal for. Julii
Aquileia
Emona Laubach
Mauriacus Ober Laubach
Sontius R.
Save R.
Tridentum Trent
L. Verbanus L. Maggiore
Larius Lacus L. Como
Aquileia
MARE ADRIATICUM G. of VENICE
Tergeste Trieste
Ancient Roman Miles 75½ to a Degree.
10 25 50 75 100 125 150
German Leagues 15 to a Degree.
5 10 15 20 25 30
British Miles 69½ to a Degree.
10 20 40 60 80 100 120 140
6 Longitude East of 8 London.
GERMANIA ANTIQUA.

reduced by Cæsar in Gaul.—*Senones*, the Senonois: chief cities, *Agendicum* or *Senones*, Sens; *Melodunum*, Melun.—*Parisii*, the Isle of France: chief city, *Lutetia* or *Lucotetia*, Paris.—*Carnutes*, the Chartrain, part of Orleannois: chief cities, *Autricum* or *Carnutum*, Chartres; *Genabum*, Gien, or perhaps Orleans.—*Turones*, Touraine: chief city, *Cæsarodunum* or *Turonica*, Tours.—*Andes* or *Andegavi*, inhabiting Anjou: chief city, *Juliomagus*, Angers.—*Nannetes*, inhabiting Nantois: chief city, *Condivienum*, Nantes.—*Veneti*, the country near Vannes: chief town, *Venetica*, Vannes.—*Curiosolitæ*, inhabiting the country about Quimpercorantin: chief town, *Vendona Portus*, Blavet.—*Osismii*, Osismer: chief city, *Brivates*, Brest.—*Rhedones*, the people about Rennes, Dol, and St. Maloes: chief towns, *Condate*, Rennes; *Aletum*, now in ruins near St. Maloes.—*Abrincatæ*, who succeeded the *Ambibari* in the country about Avranches: chief town, *Ingena*, Avranches.—*Unelli*, the Coutantin: chief towns, *Alauna*, Cherburg; *Cosedea*, Coutance.—*Lexovii*, inhabiting the country about *Noviomagus*, Lisieux.

The country along the coast from the *Liger* to the *Sequana*, was, in a subsequent period, called *Armorica*. The islands on this coast, besides *Riduna*, *Sarnia*, and *Cæsarea*, Alderney, Guernsey, and Jersey, which belong to Britain, were: *Uxantes*, Ushant; *Venetorum Insulæ*, Belleisle, Quiberon, &c. *Gobæum Prom.* Cape St. Mahé.

Gallia Belgica, was bounded, according to Augustus's division, by the Marne, Seine, Ocean, Rhine, Arar, and Rhone. It included part of Picardy and of the Isle of France, Champagne, the Low Countries, Germany to the west of the Rhine, Alsace, Lorrain, Franche Comté, part of Burgundy, and Switzerland. This part of Gaul, if we include in it the *Helvetii* and *Sequani*, contained twenty-three different states.

The chief of these states were the *Helvetii*, inhabiting Switzerland. The *Helvetii* were divided into nine different parts, viz. *Tigurinus Pagus*, the country of Zurich, Appenzil, and Rinthal: chief town, *Tigurum*, Zurich. Here was *Lacus Brigantinus* or *Venetus*, the Lake of Constance.—*Tugenus Pagus*, the country of Zug, Schwitz, Glaris, Uri: chief towns, *Tugum*, Zug; *Aquæ Helvetiæ*, Baden.—*Ambronicus Pagus*, part of Friburg, Berne, Underwald, Lucern, and Solothurn: chief towns, *Vindones*, Windisch; *Salodurum*, Solothurn.—*Urbigenus Pagus*, Neufchatel, part of Friburg, and the Pays de Vaud: chief towns, *Aventicum*, Avanches; *Urba*, Orbe; *Colonia Equestris* or *Noviodunum*, Nyon. These lay between the Lakes of Geneva and Constance.—*Nantuates*, the lower part of the Pays de Vaud: chief town, *Bibiscus*, Vevay.—*Rauraci*, inhabiting the canton of Basle: chief town, *Arialbinum* or *Basilea*, Basle.—The *Veragri*; the *Seduni*; and the *Latobrigi*; inhabited *Octodurus Veragrorum*, Martigni; and *Sedunum*, Sion.

The *Sequani*, inhabited Franche Comté, and were separated from the *Helvetii* by *Jura Mons*, Mount Jura: chief town, *Bisontio* or *Visontio*, Besançon.—The *Lingones*, inhabited *Lingones* or *Andomatunum*, Langres: the *Leuci*, *Verodunum*, Verdun: the *Tribocci*, *Argentoratum*, Strasburg: the *Nemetes*, *Noviomagus*, Spire: the *Vangiones*, *Vangiones* or *Borgetomagus*, Worms; and *Maguntiacum*, Mentz.

The *Treviri* inhabited *Augusta Trevirorum*, Treves or Triers; and *Confluentes*, Coblentz. The *Mediomatrici*, had their chief towns, *Divodurum*, Metz; and *Totonis Villa*, Thionville. The *Rhemi*, inhabited *Durocortorum*, Rheims; *Bibrax*, Braisne; and *Catalaunum* or *Duro-Catalauni*, Chalons. The *Suessiones*, had *Augusta Suessionum*, Soissons; and *Noviomagus*, Noyon. The *Bellovaci et Sylvanectes*, inhabited *Cæsaromagus* or *Bratuspantium*, Beauvais; and *Augustomagus*, Senlis. The *Velocasses et Caletes*, inhabited Upper Normandy: their chief towns were, *Rotomagus*, Rouen; *Caracotinum*, Havre de Grace; and *Juliobona*, Lisiebonne, perhaps Dieppe. The *Ambiani*, inhabited *Samarobriva*, Amiens. The *Veromandui*, Vermandois, had *Augusta Veromanduorum*, St. Quentin. The *Atrebates*, Artois, had *Nemetacum*, Arras.

The *Morini*, inhabited Picardy; their chief towns were, *Teruanna*, Terouenne; *Gesforiacum*, Boulogne sur Mer; and *Iccius Portus*, Gravelines, or Calais, or Mardike; supposed, however, by some to have been the same with Gesforiacum.—The *Nervii*, inhabited Hainault: their chief towns were, *Bagacum*, Bavay; *Valentinianæ*, Valenciennes; *Pons Scaldis*, Condé; *Camaracum*, Cambray.—The *Sunici*, inhabited Limburg and part of Juliers.—The *Ubii*, Cologne, and part of Juliers: their chief towns were, *Colonia Agrippina*, Cologne; *Ara Ubiorum*, *Bonna* or *Julia Bonna*, Bonne; and *Novesium*, Nuys.—The *Aduatici*, *Tungri*, *Germani*, *Esuones*, inhabited Namur, and part of Brabant: their chief towns were, *Atuatica*, Tongeren; *Fons Tungrorum*, Spa; and *Geminiacum*, Gemblours.

The *Menapii*, inhabited part of Flanders, Brabant, Cleves, and Juliers, including the *Gugerni* or *Sicambri*. *Castellum Menapiorum*, Kessel; *Asciburgum*, Asburg; *Colonia Trajani*.—The *Toxandri*, inhabited Zealand; and occupied *Helium Castellum*, the Brill; *Medioburgum* or *Mattiacum*, Middleburg; and *Batavi*, part of Holland and Gelderland; *Batavodurum*, Battenburg; *Lugdunum Batavorum*, Leyden; *Noviomagus*, Nimeguen; and *Arenacum*, Arnheim.

In this district were *Rhenus*, the Rhine, and its mouths; *Vahalis*, the Vahal; *Alveus Civilis*, the Lech; *Sala* or *Ifala*, the Issel; *Mæsa*, the Maese or Meuse.

Sylva Arduenna, the Forest of Ardenne, extended from the Rhine through the country of the *Treviri*, towards the *Rhemi* southwards, and *Nervii* northwards, about two hundred and fifty miles in length, and one hundred in breadth.

The Gallic side of the Rhine, having been occupied by various tribes of Germans, was called *Germania Cisrhenana*.—Neque enim conferendum esse Gallicum cum Germanorum agro, neque hanc consuetudinem victus cum illa comparandam. *Cæsar*.—It was divided into *Germania Prima* or *Superior*, and *Germania Secunda* or *Inferior*.

Germania Superior extended from Switzerland to the Moselle; and *Germania Inferior* from the Moselle to the mouths of the Rhine.

Gaul was, in the fourth century, divided into the five great provinces, *Lugdunensis*, *Belgica*, *Germania*, *Viennensis*, and *Aquitania*, which were again subdivided into other provinces. About the time of its first invasion by the Romans, it contained above a hundred independent states. Plutarch, and some others, increase the number of its tribes to three or four hundred. The name of *Gallia* is confined, by modern Latin writers, to France, as being the greater portion of ancient Gaul; *Belgium* to the Netherlands; *Belgium Regium*, the Austrian Netherlands; and *Belgium Fœderatum* or *Batavi*, the Seven United Provinces. After the irruption of the Franks, this country formed part of *Neustria*, or the New Kingdom. *Helvetia* became appropriated to Switzerland; the term *Helvetii* to the Swiss; and *Allobroges* to the people of Savoy.—See the article France, vol. vii. p. 647, &c.

GERMANIA ANTIQUA.—This country was called by the Romans *Germania Magna*, or *Barbara*. The natives called themselves *Theutisci*, *Theutoni*, *Theutones*, and were by others called *Germani*, *Celtæ*, *Alemanni*. It was bounded by the Rhine and German Ocean on the west; the Vistula, Sarmatia, and Carpathian Mountains, on the east; the Ocean, north; and the Danube and Alps south. The forest, called the *Hercynian* Forest, covered a great part of Germany; the *Silvæ*, *Bacena*, *Cesia*, *Gabreta*, *Luna*, and *Marciana*, were probably parts of it. It may be therefore considered as a common name for the *great woodland*. It was supposed to join the *Silva Arduenna*, in Gallia Belgica, on the one side, and the woods in *Sarmatia Europæa* on the other.

The rivers of ancient Germany were: *Rhenus*, the Rhine, which takes its rise in the country of the Grisons; *Nicer*, the Neckar; *Mænus*, the Maine; *Luppia*, the Lippe; *Sala*, the Sala; *Amisia*, the Ems; *Visurgis*,

the Weſer; *Albis*, the Elbe; *Suevus* or *Viadrus*, the Oder; *Viſtula*, the Viſtula; *Marus*, the Mariſch; *Cuſus*, the Waag; *Danubius* or *Iſter*, the Danube, which riſes at the foot of a mountain in Wirtemberg, formerly called *Abnoba*, the Baar.

The ſeveral tribes of the ancient Germans, are claſſed under the four following general diviſions:—The *Iſtævones*, who were ſubdivided into twelve tribes, chiefly between the Rhine and the Weſer. The *Hermiones*, divided alſo into twelve of the inland and ſouthern tribes. The *Vindeli*, into twenty-one northern tribes. The *Ingævones*, into three tribes, inhabiting Denmark, Norway, and Sweden.

The German nations were alſo divided according to the rivers between which they inhabited. 1. Between the Rhine and the Elbe. 2. Between the Elbe and the Viſtula. 3. Southern Germany, between the Rhine and the Danube. 4. Germany beyond Sea.—Between the Rhine and the Elbe, the chief nations were the *Friſii*, *Chauci*, *Bructeri*, *Angrivarii*, *Salii*, *Franci* or *Sicambri*:

Te cæde gaudentes Sicambri
Compoſitis venerantur armis. *Horace.*

the *Marſi*, *Uſipetes-Tenctheri*, and *Catti*. Alſo the *Ubii*, *Mattiaci*, and *Cheruſci*, who, under Arminius, defeated Varus at the head of three Roman legions.—Ingentes Albim liquere Cheruſci. *Claudian.*

Between the Elbe and the Viſtula were the *Angli Foſi*, or *Saxones*, in Holſtein and Mecklenburg; *Cimbri*, afterwards called *Jutæ*, inhabiting Jutland, to which they gave the name of *Cherſoneſus Cimbrica*; the *Varini*; and the *Suevi*, a name given in common to many of the inland German tribes between the Elbe and Viſtula, as the *Suevi Angli*, and *Suevi Semnones*; the *Burgundiones*, in part of Great Poland; *Longobardi*, in Brandenburg; *Gothones*, *Semovii*, and *Heruli*, in Pomerania.

Southern Germany contained the *Marcomanni*, near the Neckar; the *Boii*, in Bohemia, and afterwards in Bavaria; *Alemanni*, after whoſe name Germany is ſometimes called Allemagne; *Seduſii*, towards the Maine; *Harudes*, in Franconia; *Hermunduri*, in Miſnia; the *Nariſci* and *Quadri*, in Auſtria; and the *Gothini* and *Marſigni*, in Sileſia. The chief towns were: *Marobudum*, Prague; *Eburodunum*, Brin; *Eburum*, Olmutz; *Mattium*, Marpurg; *Lupia*, Lippe; *Chattorum Caſtellum*, Heſſe Caſſel; *Trophæa Druſi*, Tangermund; *Amiſia*, Embden; *Berama*, Bramen; *Statio*, Staden; *Marionis*, Hamburgh; *Marionis Altera*, Wiſmar; and *Treva*, Lubec.

Germany, beyond the *Oceanus Sarmaticus*, *Mare Suevicum*, or *Sinus Codanus*, the Baltic, was little known by the ancients. It comprehended what they ſuppoſed to be two large iſlands: 1. *Baltia*, *Scandia* or *Scandinavia*, Norway and Sweden. 2. *Finingia*, Finland; with ſeveral ſmaller iſlands; as, *Codanonia*, Zealand, &c. inhabited by the *Teutones*. Norway was inhabited by the *Suiones*, and Sweden by the *Sitones*, who are thought to have taken their name from *Sictuna*, their chief town. The *Hilleviones*, and other uncertain tribes, were alſo placed here.—Beſides *Helvetia*, and a great part of *Gallia Belgica*, there were other countries connected with the Germans; viz. *Vindelicia*, *Rhætia*, and *Noricum*.

VINDELICIA, the country between the Danube, from its ſource to the *Ænus*, the Inn, was inhabited by the *Brigantii*, in the Biſhopric of Conſtance, and part of Tyrol. The *Eſtiones*, and the *Licates*, inhabiting Walgow. The *Iſarci*, in Upper Bavaria; and the *Boii*, in Lower Bavaria. Their chief towns were: *Brigantium*, Brigentz; *Cumpodunum*, Kempen; *Damaſia* or *Auguſta Vindelicorum*, Augſburg; *Iſariſca*, Munich; *Batava*, Paſſau.

RHÆTIA, the country of the Griſons, Trent, Brixen, and Tyrol, was inhabited by the *Curia*, Coire; *Sarunetes*, the people and town of Sargans; *Brixentes*, the people and town of Brixen; *Tridentum*, Trent; *Feltria*, Feltri; *Terioli*, Tirol:

Videre Rhœti bella ſub Alpibus
Druſum gerentem et Vindelici. *Horace.*

Rhætia and *Vindelicia*, under the emperors, formed but one province; the former was called *Rhætia Prima* or *Propria*, the latter *Rhætia Secunda*.

The lakes in this country were, *Lacus Brigantinus*, the Lake of Conſtance; *Lacus Verbanus*, Laco Maggiore; *Lacus Larius*, Laco di Como. The rivers, beſides the Rhine and the Danube, were *Ticinus*, now the Teſin; *Addia*, the Adda; *Atheſis*, the Adige; *Vindo*, the Wertach; *Licus*, the Leck.

NORICUM, extended from the confluence of *Oenus*, the Inn, with the Danube, to *Cetius Mons*, Mount Kalenberg, near *Vindebona*, Vienna; and as far inland as the ridges of the Alps, including the higher part of the Drave. It was divided into *Noricum Ripenſe* on the Danube, at preſent part of Auſtria and Saltzburg; and *Noricum Mediterraneum*, towards the Alps; now Carniola, Stiria, and Carinthia. The chief towns were: *Boioduram*, Innſtat; *Lauriacum*, Larch; *Lentia*, Lintz; *Jovanum*, Saltzburg; *Celeia*, Cillei; *Emona*, Laubach.

SARMATIA, *ſeu* SCYTHIA EUROPÆA.—This country lies to the eaſt of Germany, being bounded by the Viſtula, Euxine, Don or Tanais, and the then unknown regions of the North. The Tanais ſeparated it from *Sarmatia Aſiatica*. The principal rivers were *Viſtula*, the Viſtula, which diſcharges itſelf into *Sinus Venedicus*, the Gulf of Dantzic; *Rubo*, the Lower Dwina, which diſcharges itſelf into *Sinus Clilipenus*, the Gulf of Livonia; *Tyra*, the Nieſter; *Hypanis*, the Bog; *Boriſthenes*, the Nieper or Boriſthenes; *Tanais*, the Don or Tanais; *Rha*, the Wolga.

The principal tribes were—The *Venedi*, and *Eſtiæi* or *Oſtiones*, who inhabited Pruſſia, Livonia, the North of Poland, and the *Inſulæ Electrides*, famous for the amber gathered on them. The *Peucinæ*, *Baſtarnæ*, and *Tyragetæ*, occupied the South of Poland, and the country as far as the mouth of the Danube. Their chief towns were: *Carrodunum*, Cracow; *Clepidava*, Caminiec.

The *Roxolani*, inhabited Muſcovy and Little Tartary. They were divided into the two nations of the *Hamaxobi* and *Georgi*. The *Hamaxobi* comprehended the *Eſſedones*, *Tanaitæ*, *Baſilydæ*, *Jazyges*, and *Mæotidæ*. To the north of theſe lay the *Rhyphæi*, *Agathyrſi*, *Arymaſpi*, *Hyperboræi*.—The *Georgi* conſiſted of the *Tauri* and *Boſphorani*, who inhabited *Taurica Cherſoneſus*, Crim Tartary, which had been poſſeſſed by the *Cimmerii*. It was bounded to the weſt by *Sinus Carcinites*, the Gulf of Nigropoli; to the eaſt by *Palus Mæotis*, the Sea of Caffa or Zabache; and the *Boſphorus Cymmerius*, the Strait of Caffa, which joined the Palus to the Euxine:

Βοσπορος, ὲ μονον ο Σκυθικος, αλλα και
Θρακιος ὡτως ἐκαλειτο. *Heſychius.*

—Their chief towns were: *Taphræ*, Perecop; *Cherſoneſus*, Cherſon; *Theodoſia*, Caffa; *Boſphorus* or *Panticapæum*, where Mithridates the Great died, now Kirche; *Cymmerium*, Bachiſerai.

DACIA.—This diſtrict, in its more extenſive uſe, was divided into three parts: 1. *Dacia Vera*. 2. *Jazyges Metanoſtæ*. And, 3. *Mœſia*.—*Dacia Vera*, extended from the Danube to *Montes Carpates*, Mount Crapach, between the rivers *Patiſcus* or *Tibiſcus*, the Theyſſe, on one ſide; and *Tyras*, the Dnieſter, on the other. It was divided into *Dacia Ripenſis*, *Dacia Mediterranea* or *Vera Gepidia*, and *Dacia Alpeſtris*. The inhabitants towards the Euxine were called *Getæ*, and thoſe towards Germany, *Daci*. Their chief towns were: *Tibiſcus* or *Zarobara*, Temeſwar; *Sarmizegethuſa* or *Ulpia Trajana*, Varhel or Gradiſki, the ſeat of Decebalus, who was defeated by Trajan; *Apulum* or *Alba-Julia*, Weiſſenburg; *Sandrova*, *Petrodava*, *Netindava*, *Prætoria Auguſta*, *Cokajon Mons*, the reſidence

of

of royal prieſts, who ſucceeded Zamolxis; *Jaſorum Municipium*, or Jaſſi.

Fugit in Rhodopen atque in deſerta Getarum,
Et lac concretum cum ſanguine potat equino. *Virgil.*

The *Jazyges Metanaſtæ*, reſided between *Dacia Vera* and the Danube. They were bounded to the North by *Montes Carpates* or *Alpes Baſtarnicæ*, the Carpathian Mountains. Their chief towns were: *Viſcenum*, Bars; *Tranſacincum* or *Contra-Acincum*, Peſth; *Singidunum*, Seged.—*Dacia Vera*, and the country of the *Jazyges Metanaſtæ*, anſwer to Upper Hungary, Tranſilvania, Walachia, and Moldavia.

Mœſia or *Myſia*, ſometimes called *Dacia Aureliana*, was the country which lay between the northern boundary of Thrace and Macedon, and the Danube. *Illyricum* and *Pannonia* lay to the weſt of it; and the Euxine to the eaſt. It was divided by *Ciabrus*, the river Zebritz, into *Mœſia Superior*, Servia, and *Mœſia Inferior*, called alſo *Scythia Minor*, Bulgaria. The inland part of it was called *Dardania*. The inhabitants were the *Mœſi*, *Dardani*, *Scordiſci*, *Triballi*, *Scythæ*, and *Peucini*, towards the mouths of the Danube. Among the laſt of theſe was *Tomi*, the place of Ovid's baniſhment:

Tum mihi cara Tomis; patriæ quæ ſede fugatis
Tempus ad hoc nobis hoſpita fida fuit. *Ovid.*

The places of moſt note were: *Singidunum*, Zenderin; *Aureus Mons*, Spenderow; *Pons Trajani*, Trajan's Bridge, conſiſting of twenty arches, over the Danube, intended to unite the provinces of *Dacia* and *Mœſia*; it was deſtroyed by his ſucceſſor Adrian; *Bononia*, Bidin; *Nicopolis*, Nicopoli; *Duroſtorus*, Driſtra; *Iſtropolis*, Kara-Kirman. In the inland country were *Naiſſus*, Niſſa; *Sardica*, Sophia, the reſidence of the Beglerbeg, or governor of Romili; *Ulpianum*, or Juſtindil.

In *Scythia Minor*, the country towards the mouth of the Danube, beſides *Tomi*, now Baba or Temeſwar, already mentioned, were *Calatis*, now Colia; *Odeſſus*, now Varna; and the point of land called *Dromus Achillei*:

Ιτρος ες αντολιην τετραμμενος αγχι θαλασσης
Ευξεινε, τοθε πασαν ερευγεται υδατος αχνην,
Πενταπορoις προχοησιν ελισσομενος περι Πευκην. *Dionyſ. Per.*

The rivers on the Dacian ſide of the Danube or *Iſter*, were: *Mariſus* or *Rhabo*, the Maros; *Tibiſcus*, the Theyſs; *Aleuta*, the Aluth; *Hieraſus* or *Poretus*, the Pruth; *Tyras*, the Dnieſter. On the Mœſian ſide were, *Drinus*, the Drinazzo, which bounded Mœſia to the Weſt; *Margis*, the Marawa; *Timacus*, the Timok; *Ciabrus*, the Zebritz; *Oëſcus*, the Eſker.

ILLYRICUM, ILLYRIS, or ILLYRIA.—This country, according to ancient authors, was variouſly bounded. It extended from *Arſia*, a river of *Iſtria*, to *Epirus*; and its general limits to the north were, *Noricum*, the Danube, and *Mœſia*. It comprehended great part of Auſtria, Hungary, Croatia, and Sclavonia. That part of it which lay to the north of *Liſſus*, was called *Illyricum Barbarum*; to the ſouth of it, as far as *Epirus*, along the Adriatic, was *Illyricum Græcum*.—Macedonibus aſſidua certamina cum Thracibus et Illyriis fuere. *Juſtin.*—It was divided into *Pannonia*, *Liburnia*, and *Dalmatia*.

PANNONIA, was bounded by *Noricum*, the Danube, *Mœſia*, and *Dalmatia*. It comprehended part of Auſtria, Hungary, &c. and was divided by *Arrabo*, the Raab, into *Superior* and *Inferior*. The rivers Drave and Save run through both diviſions. The country between theſe rivers was called *Interamna*. The chief towns in *Pannonia Superior*, were: *Vindebona*, Vienna; *Flexum*, Preſburg; *Sabarium*, Sarwar, Ovid's burying-place; *Viſontium*, Waradin.—In *Pannonia Inferior*, were: *Arrabona*, Rab; *Aquincum*, Buda or Offen; *Taurunum*, Belgrade, by others Semlin; *Acumincum*, Salamkemin; *Sermium*, Sermium.

LIBURNIA contained the *Japydes*, and *Liburni*. The *Japydes* inhabited part of Croatia and Iſtria.—Regna Liburnorum et fontem ſuperare Timavi. *Virgil.*

The chief towns of the *Japydes* were: *Flanona*, Fianona; *Tarſatica*, Terſatz; *Senia*, Segna; *Metulum*, Metuc Vetus.—The principal river: *Colapis*, the Kulp, one of the boundaries of the Alps.

The *Liburni* extended from the *Japydes* to the river *Titius*, now *Kerka*. Their country comprehended the weſt part of Dalmatia, with many ſmall iſlands. Their chief towns were: *Enona*, Nona; *Jadera*, Zara; *Scardona*, Scardo.

DALMATIA, was chiefly inhabited by the *Autariatæ*, *Vardæi*, and *Scordiſci*, whoſe chief towns were: *Salona*, Spalatro, the retreat of Dioclesian; *Tragurium*, Trau; *Narona*, Narenta; *Epidaurus*, Old Raguſa; *Liſſus*, Aleſſo; *Scodra*, Scutari; *Dalmium*, *Dalminium*, Delminio, which gave name to the nation.

Iſlands in the *Sinus Flanaticus*, the Gulf of Carnero, were: *Inſulæ Abſyrtides*, *Crepſa*, Cherſo; *Apſorus*, Oſero; *Arba*, Arbe; *Curieta*, Veglio; *Ciſſa*, Pago; *Scardona*, Iſola Longa; *Iſſa*, Liſſa; *Pharus*, Leſina; *Brattia*, Brazza; *Corcyra Nigra*, Curzola; *Melita*, Melida, by ſome thought to be the iſland on which St. Paul was ſhipwrecked.

Rivers: *Dravus*, the Drave; *Murus*, the Muer; *Saus* or *Savus*, the Save; *Colapis*, the Kulp; *Drinus*, the Unna.

Mountains: *Mons Cetius*, Calenberg; *Ocra*, *Bebius*, *Albius*, *Scardus*, now Monte Argentaro, ranges of mountains running from the Alps towards Macedonia.

Lakes in *Pannonia*, were: *Lacus Felix*, called alſo *Peiſo* or *Pelſo*, New Sedler Sea, near which was the country called *Deſerta Boiorum*; *Volciæ Paludes*, Balaton or Platen Sea; *Hiulca*, a marſh drained under the emperors: in *Japydia* was *Lugeus Lacus*, now the Lake of Zernitz, in which there is a ſingular ebb and flow.

Concerning the diſputed geography of Illyricum, Mannert ſtates as follows:—"The Illyrians are probably of the ſame ſtem with the Thracians; at leaſt, the elder writers, who had viſited the country or converſed with natives of it, confound them together: whereas the Kelts are always contradiſtinguiſhed from them, even when reſident among them. Of all the European nations, the Illyrians and Thracians only had the practice of tattooing their bodies. Their original language is probably preſerved in the Epirotic dialect of the preſent times: but in Illyria itſelf, the Slavonian tribes have wholly extinguiſhed every other tongue. The eaſtern continuation of the Alps compriſed the ancient dwellings of the Illyrian nations. From the Julian Alps, the high land ſpreads uninterrupted between the Save and the Adriatic to the Hæmus and to Macedon. Of this mountainous diſtrict, the Illyrians occupied the ſouthern declivity, together with the ſea-coaſt, from about Aquileia to the modern Epirus. On theſe very mountains, down the ſouthern declivity towards the Save, were the oldeſt ſeats of the Pæonians, as the Greeks ſtyled them: of the Pannonians, as the Latins called them. They extended from Ukrain to Macedonia. Thus Strabo ſpecifies their ſtation, and he flouriſhed while Auguſtus and Tiberius were in conflict with them; his account is confirmed by Velleius Paterculus, and Appian, from the commentaries of Auguſtus.

"Strabo does not in any thing diſtinguiſh the Pæonians from the other Illyrians. Herodotus, who knew them experimentally, does not indeed expreſsly reckon them as a branch of the Thracian ſtem, becauſe he ſays that the quantity of ſingle tribes is too great to be enumerated: but he knows only of Thracians on the ſouth-ſide of the Danube; he deſcribes them as covering many diſtricts, and places among them the Pæonians by the Strymon and the Drino, without diſtinguiſhing them from Thracians; and, as he deduces the Pæonians from the Teucri of Aſia, he farther corroborates the opinion

of their being of Thracian race, whofe Afiatic origin is certain. If the Thracians be one race with the Pæonians and Illyrians, the Kelts muft not be derived from the Thracians; for the Romans conftantly diferiminate between the language and warfare of Kelts and Illyrians. Thucydides alfo notices the Pæonians in this fite.

"Perhaps, in elder periods, they had extended their feats farther north into the Danube, and were compreffed in the fouthern mountains by the Kelts; who overflowed at one period the whole fouth of Hungary. Certain it is that the Romans found towns of the Pannonians only about the Save: but, when the Kelts were repulfed, and the plains emptied, the Pannonians began to migrate from their mountains into the champaign, and to extend their habitations to the Danube. At this period, probably under Claudius, Pannonia obtained its conftitution and boundary as a Roman province; although fortreffes had long before been raifed along the river. The original diftrict of the Pannonians materially differs, it fhould be remembered, from the Roman province of Pannonia.

"Dion Caffius, himfelf a governor of Upper Pannonia, blames the Greeks for confounding the Pæonians near Macedon with the Pannonians near the Danube: but, as he fupports his opinions on flight grounds, and would derive the name Pannonia from *pannis*, (the material of their large fleeves,) it feems more rational to reject his notion, truffing rather to Strabo, Velleius, and Appian, who place the Pæonians and Pannonians all along thefe mountains. His error is natural enough to one who firft knew the Pannonians in modern Hungary, in a tutored agricultural ftate, and had only heard of the rude Pæonians of Macedon; between which nations, much of Illyria and Mœfia feemed to interpofe."

GRÆCIA ANTIQUA.—This celebrated country was called *Græcia*, and *Hellas*; the people *Danai*, *Pelafgi*, *Argivi*, *Achivi*, *Græci*, and *Iones*. The general boundaries of it were, *Illyricum* and *Mœfia*, to the north; the Ionian Sea to the weft; the Cretan, fouth; and the Ægean, eaft.—Η απασα Ελλας χερρονησος οριζεται. *Strabo.*—It conffted of *Regnum Macedonicum*, the kingdom of Macedon, and *Græcia Vera*, Greece Proper. The kingdom of Macedon conffted, in Philip's time, of Macedon, Theffaly, Epirus, and Thrace.

MACEDONIA,—more anciently called *Pæonia*, and *Æmonia*, was bounded by *Illyricum*, *Thrace*, *Dardania*, and *Theffaly*. It was divided into four parts: 1. *Edonis*, the chief towns of which were *Crenides* or *Philippi*, famous for its plains, *Philippici Campi*; *Amphipolis* or *Novem Viæ*, Jamboli. The chief river of this part was the *Strymon*, which anciently divided Macedonia from Thrace. It runs into *Sinus Strymonicus*, the Gulf of Conteffa.

The principal countries of the Second Diviffon were, *Migdonia* and *Pæonia*, fometimes called *Pelagonia*. The chief towns were: *Therma* or *Theffalonica*, Salonichi; *Stobi*, Starachino; *Apollonia*, Polini; *Stagira*, Stauros, the birthplace of Ariftotle; *Chalcis*, *Potidæa*, the caufe, or the pretence, of the Peloponnefian war; *Olynthus*, one copious fubject for Demofthenes's Orations againft Philip, &c. The principal rivers were: *Axius*, the Vardari, and *Echedorus*, which run into the *Sinus Thermaicus*; *Chabrius*, which runs into *Sinus Singiticus*.—In this diviffon was *Athos Mons*, Mount Athos; the peninfula which joins it to the main land was cut through by Xerxes. It is now called Monte Santo, from the number of monafteries on it.

The principal countries of the Third Diviffon were, *Emathia* or *Macedonia Propria*, and *Pieria*. The chief towns were: *Pella*, the birth-place of Philip and Alexander, and capital of the kingdom; *Ægæ* or *Edeffa*, Vadena, the burying-place of the kings of Macedon; *Pydna* or *Citron*, *Methone*, *Coronæa*, *Beræa*, *Dium*, *Deborus*.—The rivers, *Erigonus*, the Veftrizza, running into the Axius; *Aliacmon*, the Pelacas, running into the *Sinus Thermaicus*.—The mountains, *Cambunii Montes*, *Olympus*, fabled to have been Heaven, on account of its height; *Pieris*, the haunt of the Mufes, between Macedon and Theffaly.

The Fourth Diviffon, now called *Albania*, was chiefly inhabited by the *Parthini*, *Albani*, and *Taulantii*.—Their chief towns were: *Albanopolis*, Albafano; *Epidamnus*, afterwards more auffpiciouffy called *Dyrrachium*, now Durazzo, the correfponding port to *Brundufium*; *Aulon*, Velona; *Elyma*, Canini.—The rivers: Two rivers of the name of *Drilo* or *Drinus*, Drino; *Naro*, Narenta; *Genufus*, Arzenza; *Apfus* or *Thapfus*, Spirnazo; *Aous* or *Alorus*, Polina; *Celidnus*, Salnich.

Gulfs of Macedon.—*Sinus Strimonicus*, Gulf of Conteffa, to the north, and *Sinus Singiticus*, Gulf of Monte Santo, to the fouth, of Mount Athos; *Toronaicus Sinus*, Gulf of Caffandria, to the north, and *Thermaicus Sinus*, Gulf of Salonichi, to the fouth, of the Peninfula of *Pallene* or *Phlegra*, famous for the fables of the Gigantomachia.—Ωκεν δ'αυτην οι μυθευομενοι γιγαντες, εθνος ασεβες και ανομον, ες Ηρακλης διεφθειρεν. *Strabo.*

Iflands.—*Scyros*, Skyro, for fome time the abode of Achilles, and the feat of Thefeus's exile; *Aloneffus*, Pélagnafi; *Peparethos*, Piperi; *Lemnos*, facred to Vulcan, Stalimene.—Hoc Pater Æoliis properat dum Lemnius oris. *Virgil.*

THESSALY, was bounded by the *Sinus Thermaicus*, and the mountains *Olympus*, *Stympha*, and *Oeta*. The Peneus runs through it from weft to eaft. On its banks lay the Vale of Tempé. The principal rivers it receives are, *Apidanus*, the Epideno; and *Enipeus*, Salampria.

Theffaly was divided into various countries: *Magnefia*, *Phthiotis*, *Pelafgiotis*, *Theffaliotis*, *Perrhæbia*, and *Dolopia*. The chief towns were: *Magnefia*, *Gomphi*, *Tricca*, *Joannina*, *Menelais*, *Pharfalus*, on the plains of which Cæfar defeated Pompey, now Pharfa; *Demetrias*, *Thebæ Phthioticæ*, *Iolcos*, *Aphetæ*, *Pagafæ*, from which the Argo failed:

Namque ferunt olim Pagafæ navalibus Argo
Egreffam longe Phafidos iffe viam. *Propert.*

Several of thefe cities ftood on *Sinus Pagafæus* vel *Pelafgicus*, the Gulf of Volo; *Lariffa*, the chief town of *Phthiotis*, the country of Achilles and the Myrmidons; *Thaumaci*, *Trachys*, *Lamia*: not far from this laft place runs the river *Sperchius*, now Agriomela, which difcharges itfelf into *Sinus Maliachus*, the Gulf of Zeiton. A little to the fouth are the Straits of *Thermopylæ*.

EPIRUS, was chiefly bounded by *Acroceraunii Montes*, to the north, and *Pindus*, to the fouth. The principal diviffons of it were, *Chaonia*, *Thefprotia*, *Moloffis*, and *Acarnania*. The chief towns: *Oricum*, to the north of Acroceraunia, Valona or Orcha; *Chimæra*, Chimæra; *Dodona*, famous for its prophetic oaks and cauldron.—Ore Jovis Dodona fonet. *Lucan.*—*Panormus*, Palormi; *Buthrotum*, Butrinto; *Argos Amphilochium*, Filoquia; *Ambracia*, l'Arta; *Leucas*, *Actium*, famous for the defeat of Anthony, Figalo. It has a bay, called *Ambracius Sinus*, Golfo de l'Arta.

Rivers.—*Acheron*, flowing from the Lake Acheruffa, and joined by *Cocytus*, infernal ftreams in mythology; perhaps common names for fetid peftilential ftreams, being applied to fome fuch in Italy and elfewhere. *Achelous*, Afpropotamo, which divides Acarnania from Ætolia.

Mountains.—*Cerauni* or *Acroceraunii*, Monti della Chimæra; *Pindus*, Monte Mezzovo. This range of mountains runs between Epirus, Theffaly, Macedonia, and Greece Proper. It has different names in different countries; as *Tymphe* or *Stymphe*, *Pelion*, *Othrys*, *Oeta*, &c.

THRACE, now ROMANIA, (though this name is applied by the Turks to all Greece,) was bounded, at firft, by the *Strymon*, afterwards by the *Neffus*, on the fide of Macedon; nay by fome it is thought at an early period to have included all the country to the north of the Ifthmus of Corinth; and on the other fides by the Ægean Sea, Propontis, Euxine, and Mount *Hæmus*, which feparates

GRÆCIÆ ANTIQUÆ.

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rates it from *Mæsia*. A branch of Mount Rhodope runs through it from west to east.

The country between the *Strymon* and *Nessus* was called *Macedonia Adjecta*. It was divided into Thrace between *Hæmus* and *Rhodope*; Thrace between Rhodope and the Sea; and the Thracian Chersonesus. The river *Hebrus* also, by its course, divides Thrace into north and south.

The chief provinces were: *Mædica* or *Græcia Macedonica*, *Drosica*, *Astica Cœnica*, *Selletica*, *Bessica*. The principal tribes: The *Bessi*, *Denseletæ*, *Medi*, *Edones*, *Odrysæ*, *Bistones*, *Cicones*, *Odomantes*, *Agriani*. Their chief towns between Rhodope and Hæmus, were: *Ulpia Plautalia*; *Bessapara*; *Trimontium* or *Philippopolis*; *Uscudama*, Statimaka; *Oresties* or *Hadrianopolis*, Adrianople or Hedrina; *Carpudemum*; *Zela* or *Flaviopolis*; *Deultum*, Develto; *Anchialus*, Akkiali; *Bizio*, Vise; *Beræa*, Eski-zadra; *Halmydessus*, Apollonia; *Mesembria*, Misevria; *Hæmi Extrema*, Hemenburn.

Between Rhodope and the Sea were: *Philea* or *Phrygea*, *Phinopolis*, Fenopoli; *Byzantium*, Constantinople; *Melantias*, from which a wall, *Macronteichos*, was built across the country to *Derkon*, on the Euxine; *Selymbria*, Seliurea; *Perinthus* or *Heraclea*; *Ganos*, *Bisanthe* or *Rhædestos*; Rhodosto; *Aphrodisias*, *Apros*, Aprio; *Dyme*, *Trajanopolis*, *Syracella*, *Cypsela*, *Aenos*, *Doriscum*, *Maronea*, Marogna; *Abdera*, the birth-place of Democritus, now Asperosa; *Nicopolis*, *Jamphorina*.

Of the Thracian Chersonesus, or Peninsula of Romania, the chief towns were, *Cardia*, afterwards *Hexamilium*; *Macronteichos*, which took its name from a wall built across the Isthmus; *Callipolis*, Gallipoli; *Aegos*, *Madytes*, Maitos; *Sestus* or *Posidonium*, the Castle of the Dardanelles, on the side of Europe; *Calus Portus*, *Elæus*, Critea; *Alopeconesus*, *Panormus*, Panormo; *Agora*, Malagra.

Mountains.—*Hæmus*, of which the southern branch was *Rhodope*, Monte Argentaro; *Pangæus Mons*, Monte di Malaca, or the Castagnats:

Vides Pangæa nivosis
Cana jugis, latosque Hæmi sub rupe Philippos. *Lucan.*

Islands.—*Thasus*, Tasso, famous for its marble; *Samothrace*, noted for the mysteries of the *Cabiri*, now Samandraki; *Imbros*, Imbro; *Proconnesus*, Marmora; *Cyanæa Insulæ*, called also *Symplegades* and *Sundromades*.

Rivers.—*Nessus*, Nesto; *Hebrus*, Mariza; *Melas*, Crionera, which flows into the *Sinus Melanes*; *Ægos Potames*, in the Chersonese, at the mouth of which Lysander destroyed the Athenian fleet; *Anzus Athyrus*, Aqua dolce; *Bathynias*, *Panysus*, the Nizo.

Seas, Gulfs, &c.—*Pontus*, the Euxine or Black Sea; *Bosphorus Thracius*, the Straits of Constantinople; *Propontis*, so called from its situation with respect to *Pontus*, the Sea of Marmora; *Sinus Heracleoticus*; *Hellespontus*, the Hellespont or Dardanelles; *Sinus Melanes*, on the south side of the Chersonese, so called from the river *Melas*, the Gulf of Eno.

Græcia Vera or Libera; or *Greece*, properly so called.—This country was variously called by the ancients, *Græcia*, *Hellas*, *Achaia*, *Doris*; and the people *Pelasgi*, *Danai*, *Argivi*, *Achivi*, *Græci*, *Iones*, *Dolopes*, *Myrmidones*. It was bounded, on the side of Thessaly, by the mountains *Othrys* and *Oeta*; on the side of Epirus, by the river *Acheloüs*; on the east by the Ægean, and on the west by the Ionian, Sea, or southern part of the Adriatic Gulf, forming what is now the southern part of Turkey in Europe: and it was divided into three parts; *Achaia*, *Peloponnesus*, and the *Islands*; though the Romans gave the name of *Achaia* to the whole.

Achaia, or Hellas, is the name commonly given to that part of Greece which lay to the north of the Isthmus: it was, however, borrowed from a people who lived in the Peloponnesus. It is now Livadia; and is divided into six parts.

1. *Ætolia*, now called Vlakia, from a colony of Wallachians settled there by the Greek emperors. It borders on Acarnania and Thessaly. The chief towns were: *Thermus*, *Erythræ*, *Chalcis*, *Calidon*, *Olenus*, *Pleuron*, *Oenias*, Dragomisto; *Naupactus*, Lepanto.

Οἱ Πλευρῶν ἐνέμοντο, καὶ Ὠλενον, ἠδὲ Πυλήνην,
Χαλκίδα τ' ἀγχίαλον, Καλυδῶνά τε πετρήεσσαν. *Homer.*

Rivers.—*Evenus*, Fidari; *Asius* or *Thestius*, *Acheloüs*, Aspri.—Poculaque inventis Acheloia miscuit uvis. *Virgil.*

2. *Locris*, inhabited by the *Locri Ozolæ*, so called from the bad smell said to have been emitted by the arrows of Hercules, which had been dipped in the blood of the Hydra, and buried there by Philoctetes. The *Locri Epicnemidii*, so called from Mount *Cnemis*, were separated by Mount Parnassus from the *Ozolæ*; and the *Locri Opuntii* took their name from the city Opus. The chief towns were: *Antirrhium*, the Castle of Romelia, opposite to Rhium, in the Peloponnesus, called the Dardanelles of Lepanto; *Opus Talandi*, *Scarphia*, *Thronium*, *Amphissa*.—In the country of the *Epicnemidii* were the Straits of *Thermopylæ*, between Mount *Oeta* and the *Sinus Maliacus*, famous for the stand made by Leonidas against the army of Xerxes; now called Bocca di Lupo.

3. *Doris*, or *Dorica*, was called *Tetrapolis*, from its four principal cities, *Erineus*, *Citineum*, *Bœa*, *Lilæa* or *Sperchium*.

4. *Phocis*, now Livadia, contained *Delphi* or *Pytho*, Castri, famous for the oracle of Apollo, at the foot of Mount Parnassus; near it was the *Fons Castalius*. It was called *Umbilicus Terræ*, as it was reckoned the centre of Greece, and of the world. *Elatia*, *Crissa*, which gave name to the *Sinus Crissæus*, the Gulf of Salona; *Cirrha-Anticyra*, famous for hellebore, Aspro-Spitia. The three last cities were destroyed in the sacred war.—Tribus Anticyris caput insanabile. *Horace.*

5. *Bœotia*, was bounded by *Phocis*, *Locris*, *Attica*, the *Euripus*, and extended as far as the Gulf of Corinth. It was called Τριθάλαττος, from its convenient situation on three seas. The chief towns were: *Thebæ*, Stives, destroyed by Alexander, who spared only the house of Pindar; its citadel, *Cadmea*, was so called from Cadmus, the founder of Thebes; *Lebadea*, Livadia, famous for the oracle of Trophonius, whence the name given to the country; *Cheronæa*, famous for several battles, especially for the defeat of the Greeks by Philip, which put an end to the liberties of Greece, and for being the birth-place of Plutarch; *Orchomenus*, near which was *Acidalus*, a fountain in which the Graces used to bathe; *Coronæa*, where Agesilaus defeated the Athenians and Thebans; *Haliartus*; *Thespiæ*, sacred to the Muses, who were sometimes called *Thespiades*; *Creusa*, the Port of Thebes, on the Corinthian Gulf; *Ascra*, the birth-place of Hesiod; *Leuctra*, where Epaminondas defeated the Lacedæmonians; *Platæa*, famous for the defeat of the Persians under Mardonius by Pausanias; *Larymna*, *Tanagra*, *Delium*, *Aulis*, a sea-port on the *Euripus*, the Straits of Eubœa, or the Negropont, from which the Greeks embarked for Troy:

Non ego cum Danais Trojanam exscindere gentem
Aulide juravi, classemque ad Pergama misi. *Virgil.*

Mountains.—*Cithæron*, famous for the orgies or rites of Bacchus, now Citherone, or Monte di Stiva; *Helicon*, and *Pimpla*, mountains sacred to the Muses, hence called *Heliconiades*, and *Pimpleides*.

Rivers.—*Cephissus*, the river Cephisso, which in its course forms *Copais Lacus*, the Lake of Stiva, and receives *Cuarias* or *Coralias*, the Corali; *Ismenus*, the Ismeno; *Asopus*, the Asopo.—The Fountains were: *Dirce*, *Aganippe*, *Hippocrene*, *Arethusa*, the haunts of the Muses:

Dicite quæ fontes Aganippidos Hippocrenes,
Grata Medusæi signa tenetis equi. *Ovid.*

6. *Attis*, or *Attica*, so called from its maritime situation, (Actè signifying shore.) It included *Megaris*, and extended to the Isthmus. The chief towns were: *Athens*, the seat of all the fine arts, now Atheni, or Setines. It was, by way of pre-eminence, called *Astu*, the City; and it had three ports, *Piræus*, *Munichia*, and *Phalerus*; *Eleusis*, famous for the temple and mysteries of Ceres

Lepſina; *Megara*, *Ægoſthena*, *Pagæ*, *Niſæa*, *Rhamnus*, *Marathon*, famous for the victory of the Athenians over the Perſians; *Oropus*, *Phyle*, *Decelea*, *Panormus*, *Sunium*, of the ſame name with the promontory which bounded *Attica* to the ſouth-eaſt, and which, from the ruins of a temple of *Minerva*, is now called *Capo di Colonni*.

Mountains.—The moſt remarkable are, *Hymettus*, famous for its honey; and *Pentelicus*, for its marble.—Its rivers: *Eridanus*, *Iliſſus*, and *Cephiſſus*.

Peloponnesus.—This country took its name from Pelops, ſon of Tantalus. From its ſuppoſed reſemblance to a mulberry-leaf, it is now called the Morea. The Iſthmus of Corinth, now called Hexa-mili, joins it to the main-land. The gulfs or bays which belong to it are: *Sinus Corinthiacus*, the Gulf of Lepanto; *Sinus Saronicus* or *Eleuſinius*, the Gulf of Engia; *Argolicus Sinus*, the Gulf of Napoli; *Laconicus Sinus*, the Gulf of Colocynthia; *Sinus Meſſeniacus*, or *Aſinæus*, the Gulf of Coron; *Cypariſſius Sinus*, the Gulf of Arcadi; *Mare Myrtoum*, the Sea between the Morea, Crete, and the Cyclades, ſometimes called the Sea of Mandria.

It was divided into ſix countries; *Achaia Propria*, *Argia* or *Argolis*, *Laconia*, *Meſſenia*, *Elis*, which occupied the circumference of the peninſula, and *Arcadia*, the more inland part.—1. *Achaia Propria* lay along the *Sinus Corinthiacus*, and included the Diſtricts of *Sicyon* and *Corinth*. Its chief towns were: *Corinthus*, Coranto; its citadel *Acrocorinthus* ſtood on an adjoining mountain; *Iſthmus*, famous for the celebration of the Iſthmian games in honour of Neptune; *Cenchreæ*, the port of Corinth, on the *Sinus Saronicus*, and *Lechæum*, its port on the *Sinus Corinthiacus*; *Sicyon*, which gave its name to the moſt ancient kingdom of Greece, Baſilica; *Phlius*, *Pellene*, *Ægira*, *Ægæ*, *Ægium*, where the ſtates of Achaia were held; *Patræ*, Patras; *Pharæ*, *Olenus*.—*Drepanum* or *Rhium Promontorium*, Cape Rio; and *Araxum Promontorium*, Cape Clarence.—Rivers: *Aſopus*, the Arbon; *Nemea*, the Angia.

2. *Argia* or *Argolis*.—Its chief towns were: *Argos*, Argo, to which *Nauplia*, Napoli di Romania, was the ſea-port; *Mycenæ*, the city of Agamemnon; *Epidaurus*, Pidavra, famous for a temple of Eſculapius; *Nemea*, Triſtena, near which the Nemean games were celebrated; *Tiryns*, which gave a name to Hercules, now Vathra; *Ægina*, Engia, which has given its name to the Gulf of Engia; *Troezen*, Damala.—*Spiræum Promontorium*, Cape Spireo; *Scyllæum Prom.* Cape Skilleo.—Rivers: *Inachus*, the Planiza; *Eraſinus*, Eraſino.—Lake: *Lerna*, Petrina, which gave name to the Hydra killed by Hercules.—Lernæus turba capitum circumſtetit anguis. *Virgil.*

3. *Laconia*: the inhabitants *Lacedæmonii*, *Lacones*, *Spartani*.—The chief towns were: *Sparta* or *Lacedæmon*, Miſtra, which ſtood on the River *Eurotas*, near Mount *Taygetus*; *Amyclæ*, Vordonia; *Zarex*, Care; *Epidaurus-Limera*, Malvaſia Vecchia; *Hælos* or *Gythium*, the inhabitants of which, *Helotæ*, were reduced by the Spartans to abject ſlavery, now Palæopoli, the port of Sparta; *Tænarus*, a cavern near which was one of the fabled entrances into hell, now Caibares:

Quo Styx et inviſi horrida Tænari
Sedes. *Horace.*

—River: *Eurotas*, Baſilipotamo.—Promontories: *Cynoſura*, Cape Sidro; *Malea Promontorium*, Cape Malea, to the North; *Tænarium Prom.* Cape Matapan, bounding the Laconic Gulf, and the moſt ſouthern point of Europe.—Mountains: *Taygetus Mons*, famous for hunting and Bacchanalian revels, the Mountains of the Mainots; *Chronius* or *Cturius*, Mount Grenenos.

4. *Meſſenia*: the chief towns in which were: *Meſſene*, famous for its wars with the Lacedæmonians, Moſſeniga; *Ithome*, a ſtrong fortreſs near to it; *Corone*, Coron; *Pylus*, the city of Neſtor, Novarin; *Methone*, Modon; *Cypariſſus*, Arcadia; and *Pheræ*, Cheramidi:

Rex Pylius, magno ſi quidquam credis Homero,
Exemplum vitæ fuit a cornice ſecundæ. *Juvenal.*

—Rivers: *Pamiſus* or *Arcadius*, the Pirnaza; *Neda*, the Longarola.—Promontories: *Acritas Promontorium*, Cape Gallo; *Coryphaſium Prom.* Cape Zunchi.

5. *Elis*: the part of this diſtrict which bordered on *Meſſenia*, was called *Triphyllia*. The chief towns were: *Elis*, on the *Peneus*, Belvidere; its ſea-port *Cyllene*, Chiarenza; *Olympia*, famous for the Olympic Games, on one ſide the *Alpheus*, Longanico; *Piſa*, which long enjoyed the right of preſiding at theſe games, on the other ſide the Alpheus. There were alſo in this diſtrict two towns of the name of *Pylus*.

Rivers: *Alpheus*, the god of which was fabled to have fallen in love with the nymph Arethuſa, now the Alfeo:

——Alpheum fama eſt huc Elidis amnem
Occultas egiſſe vias ſubter mare, qui nunc
Ore, Arethuſa tuo, Siculis confunditur undis. *Virgil.*

Stymphalus, which gave the name of *Stymphalides* to the ravenous birds on its banks, which fed on human fleſh; *Peneus*, the Igliaco.—Promontories: *Chelonites Promontorium*, Cape Torneſe; *Ichthys Prom.* Cape Jardan.—Mountain: *Erimanthus*, which gave name to the prodigy of a boar killed by Hercules, now Mount Dimizano.—Nigris aut Erymanthi Silvis. *Horace.*

6. *Arcadia*: which being a common centre to the other diſtricts, communicated with each of them. Its chief towns were: *Mantinea*, famous for the victory which Epaminondas gained over the Lacedæmonians, and which coſt him his life; *Orchomenus*, *Tegea*, *Megalopolis*, Leontari, the birth-place of Polybius.

Mountains: *Cyllene*, the birth-place of Mercury; *Pholoe*, *Stymphalus*, *Lycæus*, *Ceraufius*, *Mænalus*, ſacred to Pan; *Erymanthus*, *Olympus*.—Rivers: *Erymanthus* and *Ladon*, both of which flow into the *Alpheus*; *Styx*, a poiſonous ſtream, fabled to be a river of hell:

Cocyti ſtagna alta vides, Stygiamque paludem,
Di cujus jurare timent et fallere numen. *Virgil.*

Greek Islands.

The Greek Iſlands are commonly divided into thoſe in the *Ionian* Sea, the *Cretan* Sea, and the *Ægean* or Archipelago.—In the *Ionian* Sea: *Corcyra* or *Phæacia*, Corfu, where were the gardens of Alcinoüs, and on which Ulyſſes was wrecked; *Leucadia* or *Leucas*, alſo called *Neritos*, originally a peninſula, till its iſthmus was dug through, now Santa-Maura: it gave name to *Leucate Promontorium*, the Lovers Leap; *Echinades Inſulæ*, ſmall iſlands between the main land and *Cephalenia*, or *Same*, Cephalonia; *Zacinthus*, Zante; *Ithaca*, Ulyſſes's Iſland, Iſola del Compare; *Dulichium*, one of the *Echinades*, belonging to the ſame prince; *Strophades*, the Iſlands of the Harpies:

Jam medio apparet fluctu nemoroſa Zacynthos,
Dulichiumque, Sameque, et Neritos aſpera ſaxis. *Virgil.*

In the *Cretan* Sea: *Creta*, now Candia, from its capital. Its cities were formerly ſo numerous, that it was called *Hecatonpolis*. The principal cities were: *Gnoſſus*, *Gortyna*, on the river *Lethe*, famous for Minos's Labyrinth; *Cydon*, *Lyctus*.—Οι γαρ Κρητες εθαλασσοκρατησαν πρωτα, ναυτικῳ μεγαλῳ χρωμενοι. *Strabo.*

River of Crete: *Lethe*, the River of Oblivion.—Mountains: *Ida* and *Dicte*.—Cape: *Arietus Frons*, or *Kriou Metopon*, Cape Leon.

Between Crete and the Promontory of *Malea* was *Cythera*, or *Porphyris*, the Iſland of Venus Cerigo. Here was the principal port of the Lacedæmonians.

In the Ægean Sea, or Archipelago: *Cyclades Inſulæ*, about fifty in number, extending from the Cretan Sea to Euboea. They were ſo called from their being ſuppoſed to lie in a circle round Delus. The principal of theſe were: *Delus*, called alſo *Ortygia*, now Sdilles, the birth-place of Apollo and Diana. Hence the epithets of *Delius* and *Delia*, applied to theſe deities; as alſo of *Cynthius*.

ITALIA ANTIQUA.

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thius and *Cynthia*, from *Cynthus*, a mountain on the iſland; *Paros*, famous for its marble, Paro; *Oliarus*, Anti-Paro; *Naxos*, famous for its wines, Nicſia; *Ceos*, *Myconus*, *Andros*, *Melos*, *Gyarus*, &c.

The *Sporades* Iſlands are about forty in number, ſcattered chiefly over the Eaſtern part of the Ægean Sea, and commonly reckoned as belonging to Aſia, though ſeveral of them are on the European ſide of the Archipelago, as *Amorgus*, and *Thera*. The chief of the others were *Icaria*, which gave name to the Icarian Sea, Nicariſſa; and *Patmus*, Palmoſſa.

In the *Sinus Saronicus*, the Gulf of Engia, were *Ægina*, the country of *Æacus*, and for ſome time the rival of Athens, now Engia; *Salamis*, Coluri, famous for the defeat of the Perſian fleet by Themiſtocles.

Eubœa, Negropont, was parted from Bœotia by the *Euripus*, ſometimes denominated *Chalcidicus* and *Euboicus*, the Straits of Negropont, remarkable for the irregularity of its tides, which are ſaid to ebb and flow there ſeven times a-day.—Ὁ μεν γαρ Σικελικος, δις· ὁ δε χαλκιδικος, επταχις· ὁ δε κατα Βυζαντιον, ϐδ' ολως παλινοστει. *Strabo.*

Its chief towns were *Chalcis*, Negropont, and *Eretria*.

—Aulidaque Euboicam compleruntmille carinæ. *Ovid.*

ITALIA ANTIQUA.—This fertile country was anciently called alſo *Saturnia*, *Latium*, *Tyrrhenia*, *Magna Græcia*, *Auſonia*, *Ænotria*; and as it lay to the Weſt of the Greeks, it was by them called *Heſperia*. It was bounded to the North by the Alps, and the rivers *Varus*, the Var, and *Arſia*, the Arſa, which ſeparated it from Tranſalpine Gaul, Rhætia, Vindelicia, and Noricum; to the Eaſt by the Adriatic; and to the Weſt and South by the Mediterranean; being interſected from North to South by the Apennine:—Ορη (Αλπες) εν τειχυς σχηματι περικειται και προϐεϐληται Ιταλιας. *Herodian.*

It may be divided into three principal parts—*Gallia Ciſalpina*, *Italia Propria*, and *Magna Græcia*.

GALLIA CISALPINA took its name from the Celtic nations which here eſtabliſhed themſelves, was alſo called *Inter Alpes*, *Subalpina*, *Citerior*, and *Togata*, after the inhabitants were admitted to the right of Roman citizens. It was bounded by the Alps to the North; by the river *Arſia* and the Adriatic to the Eaſt; *Sinus Liguſticus*, the Gulf of Genoa, to the Weſt; and the rivers *Macra* and *Rubicon* to the South; the latter of which was the famous boundary of Italy and Gaul, now Fiumicino. It was divided by *Padus*, the Po, into *Gallia Tranſpadana* to the north, and *Ciſpadana* to the ſouth, of that river.

Of the principal tribes of *Gallia Tranſpadana*, the *Ligures* inhabited between the Macra and the Var. Thoſe on the coaſt were called *Capellati*, the others were *Montani*. Their chief towns were: *Genua*, Genoa; *Claſtidium*, *Dertona*, Tortona; *Statiellæ*, *Albium Intemelium*, Ventimille; *Albingaunum*, Albenga; *Portus Herculis Monœci*, Monaco; *Nicæa*, Nice.

The *Seguſini*, inhabited the country called *Regna Ideonni* et *Cottii*, part of Piedmont and Dauphiny. Their chief towns were: *Seguſia*, Suza; *Brigantium Vicus*, Briançon; *Ocellum*, Exilles.

In this diſtrict were *Graius Mons*, or *Cremonis Iugum*, Little St. Bernard; *Cineſius*, or *Cinereus Mons*, Mount Cenis; the *Alpes Cottiæ*, &c. And the river *Durentia*, the Durance.

The *Taurini*, *Salaſſi*, and *Lepontii*, alſo inhabited Piedmont. Their chief towns were: *Auguſta Taurinorum*, Turin; *Auguſta Prætoria*, Aouſt; *Pollentia*, Pollenza.

The *Inſubres* and *Orobii*, inhabited the Milaneſe. In their country were the *Raudii Campi*, famous for the victory gained by Marius over the Cimbri:

—— Ad Cimbros ſtragemque volabant
Qui nunquam attigerant majora cadavera Corvi. *Juv.*

—Chief towns were: *Mediolanum*, Milan; *Ticinum*, Pavia, which gave name to the river *Ticinus*, the Teſſin; on which Hannibal's firſt action with the Romans took place. *Laus Pompeia*, Lodi; and *Bergomum*, Bergamo.

The *Cenomanni*, inhabited part of the Cremoneſe, Veroneſe, Mantuan, &c. *Brixia*, Breſcia; *Mantua*, at a village near which, called *Andes*, Virgil was born; *Cremona*, where he was educated; *Bedriacum*, famous for the defeat of Galba by Otho, and of Otho by Vitellius's generals; and *Verona*, for its amphitheatre.

The *Euganei*, inhabited part of the Frentin, Breſſan, and Valteline. Their chief towns were: *Anaunia*, Nan; *Clavenna*, Chiavenna.—In this country was *Benacus Lacus*, the Lake of Garda; *Larius Lacus*, the Lake of Como; *Summus Lacus*, the Lake of Chiavenna:

Adde Lacus tantos, te Lari maxime, teque
Fluctibus et fremitu aſſurgens, Benace, Marino. *Virgil.*

Pars Rhætia, contained *Tridentum*, Trent, and *Feltria*, Feltra.

The *Veneti*, *Carni*, and *Iſtri*, inhabited the Venetian territories, Goritz, and a part of Iſtria. The chief towns of the *Veneti* were: *Patavium*, Padua, the birth-place of the hiſtorian Livy; *Adria*, Adri, which gave name to *Mare Adriaticum*, the Gulf of Venice:—of the *Carni*; *Aquileia*, Aquilea, famous for its reſiſtance to Attila king of the Huns; *Forum Julii*, Friuli; *Tergeſte*, which gave name to the *Sinus Tergeſtinus*, Trieſte:—of the *Iſtri*; *Pola*, Pola; *Parentium*, Parenzi; and *Ægida*, Cabo di Iſtria.

Rivers: *Eridanus*, or *Padus*, the Po; *Addua*, the Adda; *Oglius*, the Oglio; *Atheſis*, the Adige; *Medoacus Major*, the Brenta; *Timavus*, the Timavo.

Gallia Ciſpadana.—The principal tribes of *Gallia Ciſpadana* were: the *Anamani*, *Boii*, *Lingones*, and *Senones*, tribes from Tranſalpine Gaul, who ſucceſſively ſettled in different diſtricts of this country. The Flaminian and Æmilian roads paſſing through it, gave their names to it in a ſubſequent period. The chief towns of the *Anamani* were *Placentia*, Piacenza:—of the Boii, *Parma*: between Placentia and Parma was a canal, called *Foſſa Æmilia*: *Brixellum*, Briſcello; *Mutina*, where Brutus was beſieged by Marc Antony, Modena; *Forum Lepidi*, Rezzo; *Bononia*, Bologna:—of the *Lingones*, *Forum Cornelii*, Imola; *Faventia*, Faenza:—of the *Senones*; *Ravenna Umbrorum*, Ravenna, the reſidence of the exarchs, and of ſome of the emperors; *Forum Livii*, Forli; *Forumpopilii*, Forimpopoli:

Sit Ciſterna mihi quam vinea malo Ravennæ,
Cum poſſim multo vendere pluris aquam. *Martial.*

Rivers: *Trebbia*, Trebbia, famous for Hannibal's victory over the Romans commanded by L. Sempronius; *Adria*, Larcha; *Rhenus Parvus*, the Reno; *Tarus*, the Taro; *Rubicon*, already mentioned.

ITALIA PROPRIA, was bounded to the North by *Gallia Ciſalpina*, and to the South by *Magna Græcia*. It extended along the Mediterranean from the *Macra* to the *Silarus*, now the Silaro, and on the Adriatic from Ancona to the *Frento*, now Fortore. The principal diviſions of it were: *Etruria*, *Umbria*, *Picenum*, *Sabinia*, *Latium*, *Samnium*, and *Campania*.

1. *Etruria*, or *Tuſcia*, called by the Greeks *Tyrrhenia*, was bounded by the *Mare Inferum*, the Apennines, the *Macra*, and the *Tiber*. It was divided into *Tuſcia trans Arnum*, between the Magra and the Arno, and *Tuſcia cis Arnum*, between the Arno and the Tiber. The chief towns of *Etruria trans Arnum* were: *Luna*, *Luca*, Lucca; *Piſtoria*, Piſtoia. The principal people of this diſtrict were: the *Apuani Ligures*, and the *Magelli*.—*Tuſcia cis Arnum* was inhabited by twelve tribes, who took their names from their principal cities, and whoſe chiefs were named *Lucumones*.

On the *Arno* were *Piſæ*, Piſa; *Florentia* or *Fluentia*, Florence; *Arretium*, Arrezzo; *Cortona* and *Peruſia*, Perugia, were near *Lacus Thraſimenus*, the Lake of Perugia, where Flaminius was overthrown by Hannibal; *Sena Julia*, Sienna; *Volaterræ*, Volterra, noted for its hot ſprings; *Herculis Liburni Portus*, Leghorn; *Vetulonii*, from which the Romans borrowed the badges of their magiſtrates;

Populo-

Populonium, on a promontory of the ſame name, oppoſite the iſland *Ilva*, now Elbe; *Cluſium*, the ſeat of king Porſena, now *Cluſio*; *Ruſellæ*, *Portus Herculis Coſani*, Porto Hercole; *Tarquinii*, from which the Tarquins took their name, Torchina; *Vulſinii*, on a lake of the ſame name, Bolſena; *Centum Cellæ*, Civita Vecchia; *Cære*, the ſeat of Mezentius, the people of which (the *Cerites*) poſſeſſed the rights of Roman citizens, except that of voting, now Cer-veteri; *Veii*, the people of which were called *Vejentes*, long a formidable rival to the Romans, and taken, after a ten years ſiege, by Camillus; *Falerii*, the people of which were named *Faliſci*, taken alſo by Camillus; *Feſcennia*, which gave its name to the *Carmina Feſcennina*; *Soracte*, better known as the name of a mountain in its neighbourhood, ſacred to Apollo:

Vides ut alta
Stet nive candidum Soracte. *Horace.*

Rivers: *Arnus*, the Arno, which receives the *Auſer*, Il Serchio; *Cluſina Palus*, Chiana Palude, which communicated with the *Arnus*, and alſo with the Tiber, by the river *Clanis*, la Chiaca; *Cæcina*, at the mouth of which was the town of *Vada Volaterrana*; *Umbro*, Umbrone; *Marta*, which flows from the Volſinian Lake; *Cremera*, which flows into the Tiber, noted for the ſlaughter of the Fabii, now the Baccano.

2. *Umbria*; which was bounded towards the weſt by Tuſcany; and on the other ſides by the Rubicon, the Adriatic, the Tiber, Nar, and Æſis. It was divided by the Apennines into two parts. Of *Umbria trans Apenninum*, inhabited by the *Velumbri*, the chief towns were: *Ariminum*, Rimini; *Piſaurum*, Piſaro; *Fanum Fortunæ*, Fano; *Sena Gallica*, Senegaglia; *Forum Sempronii*, on the *Metaurus*, memorable for the defeat of Aſdrubal, Foſſombrone; *Urbinum*, Urbino; *Camarinum*, the people *Camertes*, Camarino.

Of *Umbria cis Apenninum*, inhabited by the *Olumbri*, the chief towns were: *Tifernum*, *Tiberinum*, Citta di Caſtello; *Nuceria*, Nocera; *Spoletium*, Spoleto; *Ocriculum*, Otricoli; *Narnia*, Narni; *Interamna*, Terni.

Rivers: *Ariminus*, the Marechia; *Piſaurus* or *Iſaurus*, the Foglia; *Metaurus*, the Metaro; *Æſis*, the Eſino; *Nar*, the Nera or Negra, which receives *Velinus*, the Velino, on which is the Fall of Terni.

3. *Picenum*; which lay to the ſouth of *Umbria*. The inhabitants were called *Picentes*. Their principal town was *Ancona*, which has given the name of the Marquiſate of Ancona to the greater part of the country. Their other towns were: *Auximum*, Oſimo; *Aſculum*, Aſcoli; *Hadria*, the chief town of a particular diſtrict belonging to the *Prætutii*, Arri; *Teate*, Chieti; *Aternum*, Peſcara, towns of the Marucini; *Amiternum*, belonging to the Veſtini, Amiterno.

4. *Sabinia*; bounded by the rivers *Tiber*, *Nar*, the Nera, and *Anio*, the Teverone; and was divided into two parts by the lake or river *Velinus*, the Velino, already noticed. Their chief towns were: *Cures*, whence the people of Rome were called *Quirites*, Correſe; *Reate*, near which Veſpaſian was born, Rieti; *Nurſia*, Norcia; *Amiternum*, the birth-place of Salluſt; *Nomentum*, *Cruſtumerium*, *Fidenæ*, *Collatia*, where lived Collatinus, the huſband of Lucretia.

Mountains: *Mons Sacer*, famous for the receſſions of the Roman Commons; *Mons Lucretilis* and *Uſtica*. Near Horace's villa, in this country, was *Fons Blanduſiæ*, which he has celebrated.—O Fons Blanduſiæ ſplendidior vitro. *Hor.*—Beſides the rivers already mentioned, here was *Allia*, the Aja, famous for the defeat of the Romans by the Gauls under Brennus.—Quoſque ſecans infauſtum interluit Allia nomen. *Virgil.*

5. *Latium*; under the kings, was a ſmall diſtrict, bounded chiefly by the *Anio*, the *Tiber*, the Sea, and the *Numicus*, and anſwers to a part only of what is now called the Campagna di Roma. Under the conſuls, in proceſs of time, as the Roman arms proved ſucceſsful, it comprehended the countries of the *Æqui* or *Æquiculi*, *Hernici*, *Rutuli*, *Volſci*, *Aurunci* or *Auſones*. *Circæus Mons*, and *Liris*, the river Garigliano, were at different times conſidered as its boundaries. The former was called *Latium Antiquum*, and the other additional countries were called *Latium Novum* or *Adjectitium*.

The chief city of *Latium Vetus*, was ROMA, *Rome*, long the miſtreſs of the world, about twelve miles from the mouth of the *Tiber*, and built on ſeven hills, from which it was called *Septicollis*. See the article ROME.

The other chief towns of *Latium* were: *Oſtia*, at the mouth of the Tiber, Oſtie, its harbour is now dried up; *Lavinium*, Patrica; *Laurentum*, San Lorenzo; *Ardea*, the chief city of the *Rutuli*, and the retreat of Camillus during his exile, Ardée; *Lavinium*, Citta Lavinia; *Aricia*, *Alba Longa*, Palazzolo, near which is the Alban Lake and Mount; *Tuſculum*, now Fraſcati; near it was the lake *Regillus*, famous for the defeat of the Latins by Poſthumius the Dictator; *Gabii*, *Præneſte*, Paleſtrina; *Tibur*, Tivoli, noted for the pleaſantneſs of its ſituation, near which was the wood and fountain of *Albunea*.

—— Atina potens Tiburque ſuperbum,
Ardea, Cruſtumerique et turrigeræ Antemnæ. *Virgil.*

The chief towns of the *Æqui* or *Æquicoli*, were: *Algidum*, which gave name to a mountain, Oſteria; *Corbio*, *Trebia*, *Carſeoli*, *Cliternum*.

The chief towns of the *Hernici*, were: *Anagnia*, Anagni; *Alatrium*, Alatri; *Ferentinum*, Ferentino; *Veroleæ*, Veroli.

The chief towns of the *Volſci*, who inhabited a conſiderable part of the Campagna di Roma, were: *Antium*, Nettuno, where was a celebrated temple of Fortune; *Aſtura*; *Circeii*, ſaid to have been the abode of Circe, Civita Vecchia, near which was *Circeium Prom.* Monte Circillo, oppoſite the Iſland *Pontia*, Ponza: here alſo were the Grove of *Feronia*, on the River *Ufens*, and the *Paludes Pomptinæ*, frequently, but in vain, attempted to be drained.—To the eaſt of the *Ufens*, *Anxur* or *Terracina*, Terracino; *Forum Appii*; *Tres Tabernæ*, Ciſterna; *Ulubræ*; *Sueſſa Pometia*; *Cora*; *Norba*; *Sulmo*.—Towards the *Liris*, they had ſeveral cities: *Sora*; *Arpinum*, the birth-place of Marius and Cicero, Arpino; *Fregellæ*; *Interamna*.

The *Aurunci* or *Auſones*, once poſſeſſed the coaſt of Italy, from *Circæum* to the Straits of Sicily. The *Montes Maſſici*, beyond the *Liris*, became afterwards their ſouthern boundary. Their chief towns were: *Amyclæ*; *Fundi*, Fondi, near which was the *Lacus Fundanus*, and about it the *Cæcubus Ager*, famous for its wine; *Auſona*; *Caieta*, Gaieta; *Formiæ*, Mola; *Formianum*, Cicero's villa, where he was aſſaſſinated; *Minturnæ*, near the mouth of the *Liris*, in the marſhes of which Marius concealed himſelf; *Sinueſſa* or *Sinope*, the laſt town of *Latium Novum*, towards Campania, la Rocca de Mondragone; and *Sueſſa Aurunca*, in the Campagnia itſelf, Liſſa.

Rivers: *Tiberis*, the Tiber, more anciently the *Albula*; it receives *Anio*, the Teverone; the *Allia*, *Cremera*, *Nar*, *Clanis*, la Chiana; and *Clitumnus*, famous for its milk-white herds; *Aqua Crabra* or *Tuſculana*, the Marana; *Numicus*, the Nemi or Numico; *Aſtura*, the Stura; *Ufens*, Aufento; *Liris*, the Garigliano, which receives *Trerus*, the Trero; *Coſa*, the Piſcia; *Fibrenus*, the Fibreno; *Melſis*, the Melſo, &c.

6. *Samnium*; which extended from *Picenum* and *Sabinia* to *Apulia*, and from *Latium* and *Campania* to the Adriatic, correſponding much with what is now called the Abruzzo. The people, beſides their name of *Samnites*, were alſo called *Sabelli*, being ſprung from the Sabines. Their principal tribes were: the *Peligni*, whoſe chief towns were *Corfinium*, San Perino; *Salmo*, Salmona, the birth-place of Ovid:—the *Marſi*, whoſe chief towns were, *Alba Fucentis*, Albi, on the *Lacus Fucinus*, now called Lago di Celano; *Marrubium*, Morea. Both of theſe tribes were inland:

Te nemus Angitiæ, vitrea te Fucinus unda,
Te liquidi flevere lacus. *Virgil.*

On

On the Upper Sea were the *Frentani*, whoſe chief towns were *Ortona*, Ortona; *Anxanum*, Lanciano; *Hiſtonium*, Guaſto d'Amone; *Buca*; *Larinum*.—Their rivers were: *Sagrus*, the Sagro; *Trinius*, the Trigno; *Trifernus*, the Biferno; *Frento*, the Fortore.

Samnium, the country of the Samnites, properly ſo called, lay inland, to the weſt of the *Frentani*. Their towns were: *Aufidenum*, Alfidenum; *Æſernia*, Iſernia; *Beneventum*, *Maleventum*, *Triventinum*, *Bovianum*, Boiana; *Caudium*, near which were the *Furcæ Caudinæ*, famous for the diſgrace the Romans ſuſtained from the Samnites under their general Pontius; *Allifæ*, Allifa; *Telæſia*, Teleſe. Their rivers were: *Sabatus*, the Sabato, which receives *Calor*, the Calore, and *Tamarus*, the Tamaro, and runs into the Vulturno.

The *Hirpini*, a Samnite people, dwelt to the ſouth of *Samnium*, in the country ſince called the Farther Principality. Their chief towns were: *Abellinum*, Avellino; *Compſa*, Conza; *Equus Tuticus*, Ariano; *Rufæ*, Rufo.—Their rivers: *Aufidi Fons*, the head of the Aufanto; *Amſanƈti Lacus*, a ſtinking lake, now called Mufiti, from Mefitis, the goddeſs of ſtench, who had a temple there. The exhalations of it were ſo unwholeſome, that the poets feigned it to be *ſævi ſpiracula ditis*:

Monſtrantur, ruptoque ingens Acheronte vorago
Peſtiferas aperit fauces. *Virgil.*

7. *Campania*, ſo famous for the richneſs of its ſoil, is now the chief part of the Terra di Lavora. It extended from *Latium* to *Lucania* in length; and was bounded in breadth by the Tuſcan Sea, and *Samnium*. It was inhabited by the *Campani* and *Picentini*. The chief towns of the *Campani* were: *Vulturnum*, Voltorno, on a river of the ſame name; *Liternum*, Torre di Patria, where Scipio Africanus died; *Capua* ſtood ſome miles from the place which now bears its name; its conſequence was transferred to *Neapolis* or *Parthenope*, Naples; *Cumæ*, near which was the Sibyl's Grotto:

Huc ubi delatus Cumæam acceſſeris urbem,
Divinoſque lacus, et Averna Sonantia Silvis,
Inſanam vatem aſpicies. *Virgil.*

Puteoli, the port of *Cumæ*, Puzzoli; near this place was Cicero's Academia, and alſo the *Campi Phlegræi*, or burning plains; *Baiæ*, famous for its baths, and the pleaſantneſs of its ſituation, being the winter reſidence of the Romans, as Tibur, Tuſculum, Teanum, &c. were their ſummer retreats; *Miſenum*, a promontory and town, which was the ſtation of a Roman fleet; *Herculaneum*, Torre di Greco, which, as well as *Pompeii*, now Safati, was overwhelmed by an earthquake during an eruption of Veſuvius, in Nero's time; *Surrentum*, Sorrento, near *Minervæ Promontorium*, alſo oppoſite the iſland *Capræa*, Capri, famous for Tiberius's retreat, and *Sirenuſæ* or *Sirenum Scopuli*, the Iſlands of the Sirens.

Near the promontory of *Miſenum*, ſo called from Miſenus, Hector and Æneas's trumpeter, now Cape Miſeno, were the iſlands *Prochyte* and *Inarime*, thought to have been rent aſunder by an earthquake:

Monte ſub aerio, qui nunc Miſenus ab illo
Dicitur, æternumque tenet per ſæcula nomen. *Virgil.*

The inland towns were: *Teanum*, Tiano; to the north of which, towards Sinueſſa, were the famous Maſſic and Falernian vineyards; *Sueſſa Aurunca*, Seſſo; *Venafrum*, Venafro; *Nola*, where Marcellus repulſed Hannibal; *Sueſſula*, famous for its oil; *Acerræ*, *Nuceriæ*.

Rivers and lakes: *Vulturnus*, the Vulturno; *Liternus* or *Glanius*, the Clanio; *Sebethus*, on which Naples ſtands, the Fornello; *Sarnus*, the Sarno; *Lacus Acheruſius*, the Lake of Collucia; *Avernus*, the Averno, a cave near which was the fabulous deſcent to Hell; *Lacus Lucrinus* or *Baianus*, once famous for its fiſh, but changed by an earthquake into a marſh, Laco de Licola: the Lucrine and Avernine lakes were joined together by Auguſtus; *Charoneæ Scrobes*, Grotto del Cane; *Sinus Baianus*, the Gulf of Pozzuolo, is ſtill celebrated for its elegant ſalubrity.—Nullus in orbe ſinus Baiis prælucet amænis. *Horace.*

Mountains: *Gaurus*, Monte Barbaro; *Tifata*, Monte de Caſſerta; *Maſſicus* or *Falernus Mons*, Monte Dragone; *Veſuvius*, Monte di Somma, the country about which, was called *Campus Phlegræus*.

The *Picentini*, probably a colony from the *Picentes*, on the Adriatic, occupied a part of the Hither Principality. Their chief towns were: *Salernum*, Salerno; *Picentia*, Bicenza.

MAGNA GRÆCIA; though it might be made to include *Campania*, and much of the weſt coaſt of Italy, on account of the various Greek colonies there ſettled, yet is commonly underſtood to mean only *Apulia*, and *Oenotria*.

APULIA was divided into *Daunia*, *Pucetia*, and *Meſſapia*. 1. *Apulia Daunia*, part of the Capitanata, lay between the rivers *Frento* and *Aufidus*, the Fautore and Aufanto, and was divided by *Cerbalus*, the Cervaro. *Mons Garganus*, Mount St. Angelo, is on the peninſula which here advances into the Adriatic, as the ſpur of the boot, to which the ſhape of Italy has been compared.—The chief towns were: *Teanum Apulum*, Teani; *Hurium*, Rodia; *Arpi*, built by Daunus, father-in-law to Diomedes, who gave his name to the country now Arpe; *Sipuntum*, Siponto; *Uria*, Manfredonia, which gave name to *Urias Sinus*, the Gulf of Manfredonia; *Luceria*, Lucera; *Aſculum Apulum*, Aſcoli, famous for the defeat of Pyrrhus by Dentatus and Fabricius; *Salapia*, Salpe, near which was the *Palus Salapinus*, Lago Salſo.

2. *Apulia Pucetia*, the Terra di Bari, and part of the Capitanata, extended from the *Aufidus* to *Brunduſium*. The ridge of the Apennines, which paſſes through this country, was called *Nultur Mons*.—The chief towns were: *Cannuſium*, Canoſa, near which was the village of *Cannæ*, famous for the overthrow of the Romans by Hannibal;—Duo maximi exercitus cæſi ad hoſtium fatietatem, donec Annibal diceret militi ſuo, "Parce ferro." *Florus.*—*Barduli*, Barletta; *Turenum*, Trani; *Barium*, Bari; *Egnatia*, Torre d'Anazzo; *Acherontia*, Acirenza; *Venuſia*, the birth-place of Horace, Venoſa, near which was *Bantia*, and *Ferentum*, Forenza.

3. *Meſſepia*, *Calabria*, or *Japygia*. Theſe names were ſometimes applied to different parts of the ſouth-eaſt peninſula of Italy, though, for the moſt part, common names to the whole of it, now Terra d'Otranto.—The chief towns were: *Brunduſium*, Brindiſi, from which paſſage was uſually taken to *Dyrrachium* in *Illyricum*, by thoſe who were travelling to Greece. Oppoſite to it was a ſmall iſland, called *Pharos*, from the ſimilarity of its uſe to the Pharos of Alexandria; *Aletium*, Leccia; *Lupia*; *Rudiæ*, Ruia, the birth-place of Ennius; *Hydrus* or *Hydruntum*, Otranto, from which there was a paſſage ſtill ſhorter than that of *Dyrrachium*, to *Apollonia* or *Oricum*, in *Epirus*; *Caſtrum Minervæ*, Caſtro; *Veretum*, Aleſſano, not far from which was *Promontorium Salentinum* or *Japygium*, Cape di Leuca; *Callipolis*, Gallipoli; *Uxentum*, Ugento; *Neretum*, Nardo; *Tarentum*, where Phalantus, the Lacedæmonian, planted his colony, and from which the adjoining gulf takes its name, Tarento; near Tarentum was *Mons Aulon*, famous for its vines; and *Galeſus Fluvus*, the Tara. The people who inhabited this coaſt, to the weſt of the Apennine, were called *Salentini*, and *Meſſapii*.

OENOTRIA, was divided into two parts, inhabited by the *Lucani* and *Bruttii*. 1. *Lucania* was, towards the lower ſea, divided from the Picentini by *Silarus*, the Selo or Silaro, and from the Bruttii by *Laüs*, the Laino. On the Tarentine Gulf it extended from *Bradanus*, the Bradano, to *Thurii*, and the river *Sybaris*. It contained a part of the Hither Principality, the Hither Calabria, and Baſilicato. The chief towns, &c. were: *Poſidonia* or *Pæſtum*, Pieſti, now famous for its ruins. It ſtood on the *Sinus Pæſtanus*, the Gulf of Salerno, in which were

Sirenuſæ or *Inſulæ Sirenum*; *Velia*, oppoſite the *Oenotrides Inſulæ*, *Pontia* and *Iſchia*, now Ponza and Iſchia; *Palinurum Promontorium*, which took its name from Æneas's pilot, Cape Palinuro; *Puxus* or *Buxentum*, Polycaſtro, which ſtood on *Sinus Laüs*, the Gulf of Polycaſtro.

On the Tarentine Gulf, were *Abellinum Marſicum*, Avellino; *Metapontum*, where Pythagoras taught, now Torre di Mare; *Siris*, *Heraclea*, *Aciris*, *Sybaris*, famous for its greatneſs, infamous for its luxury: at one time it ruled over ſeveral of the neighbouring nations, and could ſend into the field an army of 300,000 men. On the ruins of it, when deſtroyed by the people of Crotona, was founded *Thurii*, the laſt place for which Charondas legiſlated, for ſome time the reſidence of Herodotus and Lyſias. The Tarentines having planted a colony there, gave it alſo the name of *Copiæ*.

2. The *Bruttii* inhabited what is now called the Hither and Farther Calabria. Their country is the foot or ſouth-weſt peninſula of Italy, being bounded to the north by the Iſthmus and *Laüs*, the Laino, and *Thurii*. They were divided into the *Ciſmontani* and *Tranſmontani*. The former of theſe were alſo called *Rhegini*; the latter *Locri* or *Crotontatæ*. The chief towns of the *Bruttii Ciſmontani* were: *Cerilli*, Cerilli; *Pandoſia*, Mondicino; *Conſentia*, Coſenza, not far from which was the branch of the Apennine called *Clibanus*; *Tropæa*, Tropea; *Metaurum*, on a river of the ſame name; *Valentia*, *Vibo* or *Hipponium*, Bivona, on the *Sinus Terinæus* and *Vibonenſis*, the Gulf of St. Euphemia; *Gioia*, Gioio; *Mamertum*, Oppido; *Scillæum*, Sciglio, on that promontory which gave riſe to the fable of Scylla and her dogs. Oppoſite is Charybdis, and the *Promontorium Pelorium*; *Poſidonium*, Colonna; *Rhegium*, Rheggio; near to it was *Leucopetra*, *Rhegium Herculis*, and *Zephyrium Promontorium*, the termination of the Apennine mountains. This laſt is the moſt ſouthern extremity of Italy, and is called Cape Sparti Vento.

Of the *Bruttii Locri*, the chief towns were: *Ruſcianum*, Roſſano; *Petelia*, Strongoli; *Croton* or *Crotona*, Cortona, the city of Milo, the famous athlet; near it were *Lacinium Promontorium*, on which ſtood a temple of Juno, Cape de la Colonna; and more to the ſouth, *Japygum tria Promontorium*, Cape St. Mary, and oppoſite, *Ortygia*, Calypſo's Iſland; *Caſtra Hannibalis*, Caſtelli; *Scylacium*, Squillaci, which gave name to the *Sinus Scylaceus*, the Gulf of Squillaci; *Aulon* or *Caulon*, Caſtro Vetere; *Locri Epizephirei*, the city of Zaleucus the legiſlator, who is thought to have been the firſt who drew up a written code of laws: it is now Gierazzo, on the *Sinus Locrenſis* or *Bruttius*, the Gulf of Girazzo.

Auguſtus divided Italy into eleven regions; the emperor Antoninus divided it into ſixteen provinces; and Conſtantine into ten. The ſeveral highways took their names chiefly from the perſons who conſtructed them. They were meaſured by miles, marked on pillars or ſtones, reckoning from the *Milliarium Aureum*, a gilt pillar erected in the forum by Auguſtus. *Diverticula* were croſs-roads or bye-ways, leading from the main road. The principal highways were: *Via Appia*, leading from Porta Capena, through Latium, to Capua; and from thence, in two branches, to Brunduſium. *Via Flaminia* took a north-eaſt direction, through Etruria and Umbria, towards the Adriatic, and at *Ariminum*, Rimini, joined the *Via Æmilia*, and from thence paſſed into Ciſalpine Gaul.

The chief intermediate roads were the *Valerian* and *Salarian*; the former leading to *Corfinium* and *Aternum*, the latter to *Reate* and *Ancona*. *Via Aurelia* ran along the ſea-coaſt of *Etruria*, *Liguria*, and the province of Gaul. Near *Luna* it was joined by the *Via Caſſia*, which paſſed through the middle of *Etruria*. It was alſo, in its courſe, joined by the *Via Claudia*, a branch of the *Caſſia*. Some of the roads alſo took their names from the places to which they led; as the *Nomentana*, *Præneſtina*, *Oſtienſis*, &c.

ISLANDS, in *Mare Inferum*, or Sea on the Weſt Coaſt of Italy.

SICILIA.—Sicily, the largeſt iſland in the Mediterranean, was more anciently called *Sicania*. Its triangular ſhape alſo occaſioned its being called *Trinacria* and *Triquetra*. Its three promontories are—*Pelorum*, to the north, Cap de Faro; *Pachynum*, to the ſouth, Paſſaro; and *Lilybæum*, to the weſt, Cap de Boëo.

Fretum Siculum, the Straits of Sicily, about ſeven miles over, ſeparate it from Italy. On the Italian ſhore is the dangerous rock of *Scylla*, and towards the Sicilian, the whirlpool of *Charybdis*. The north coaſt is ſkirted by a range of mountains called *Heræi*, or the mountains of Juno, now Monte Arteſino; *Nebrodes*, or the Mountains of the Fawns, now the Madonia, branches from which run in different directions, of which are the *Montes Hyblæi*, famous for their honey; *Gemelli Colles*; burning *Ætna*, or Monte Gibello, a mountain of great height and extent, and the moſt famous volcano in the world:—Horrificis juxtà tonat Ætna ruinis. *Virgil.*—*Eryx*, Mount Trapani, after Ætna the higheſt in the iſland: on the top of it ſtood the temple of Venus Erycina.

The north coaſt was bounded by the promontories *Pelorum* and *Lilybæum*. The chief towns on it were: *Naulochus*, Diveto, between which and *Melæ*, now Milazzo, Sextus Pompey's fleet was defeated by Octavius's; *Tyndaris*; *Haleſa*; *Himera*, on a cognominal river, now Termini; *Panormus*, Palermo; *Eryx*, Trepano Vecchio; *Drepanum*, Trepano; *Segeſte* or *Aceſte*, which derived its name from king Aceſtes, now Barbara.

The ſouthern coaſt extended from *Lilybæum* to *Pachynum Prom.* The chief towns upon it were: *Lilybæum*, Marſala; *Mazarum*, Mazara, from which one of the three modern diviſions of Sicily is called Val di Mazara; *Selinus*, famous for its palm-trees, and ſeated on the river *Hypſa*, which falls into *Criniſſus*, the Bolici, on the banks of which Timoleon defeated the Carthaginians, now Terra degli Pulci; *Agragas* or *Agrigentum*, the reſidence of Phalaris, Gergenti, on a river of the ſame name; it was the next city in magnificence and population to Syracuſe, containing about 200,000 inhabitants:

Arduus inde Agragas oſtentat maxima longe
Mœnia, magnanimum quondam generator equorum.
Virgil.

Phintias, Licata, at the mouth of *Himera*, the Salci, a different river from that of the ſame name on the north of the iſland, this being the largeſt of all Sicily, and for ſome time the boundary between the Syracuſans and Carthaginians: near to *Phintias* was the mountain *Ecnemos*, on the top of which was Phalaris's citadel, called Dædalium, in which he had his brazen bull. But the ſame is ſaid of *Phalarium*, another caſtle of the ſame prince. *Gela*, Terra Nuova, on a river of the ſame name; the country near it was called *Campi Geloi*; *Camarina*, Camarana.

The eaſt coaſt of Sicily extended from *Pachynum Promontorium*, Cape Paſſaro, to *Pelorum Prom.* Cape di Faro. Along it were *Helorum* and *Helorina Tempe*, Muri Ucci, on a river of the ſame name, which is now called Abiſo; *Neætum*, Noto, which has given its name to the Val di Noto; *Acræ*, d'Arcia; *Phœnicus Portus*, Falconara; *Syracuſæ*, Syracuſe, near which was the iſland *Ortygia*, and the fountain *Arethuſa*, ſuppoſed to communicate with the Alpheus in Peloponneſus; alſo the *Fons Cyane* and the river *Anapus*, the Alfeo, which falls into the *Portus Magnus* of Syracuſe:

Alpheum fama eſt huc Elidis Amnem
Occultas egiſſe vias, ſubter mare; qui nunc
Ore, Arethuſa tuo, Siculis confunditur undis. *Virgil.*

Syracuſe was above twenty-two miles in circuit: it conſiſted of five parts or towns, *Ortygia*, *Acradina*, *Tyche*, *Neapolis*, *Epipolæ*. The other towns were—*Megara* or *Hybla*, of which name there were ſeveral in Sicily; *Leon-*

tium, Lentini, the country about it was called *Campi Leontini*, and more anciently *Læſtrigonii*, from a people coeval with the *Cyclopes*; *Morgentium*, San Giorgio; *Catana*, Catanea, at the foot of Mount Ætna; not far from it to the ſouth was *Simæthus Fl.* the Giaretta, and to the north *Acis Fl.* which has given its name to the Caſtel d'Iaci; *Tauromínium*, Taormino, near which was the *Argennum Promontorium*, Cape St. Aleſſio; *Meſſana* or *Zancle*, Meſſina, the people of which were ſometimes called *Mamertini*, from a mixture with coloniſts of that name from Italy.

Inland towns.—*Noe*, Noara; *Galata*, Galata; *Tiſſa*, Randazo; *Miſſa* or *Ætna*, Maſcali; *Centuripe*, Centorbe; *Agyrium*, the birth-place of Diodorus Siculus, San Philippo d'Agirone; *Enna*, the centre of the iſland, and fabled to have been the abode of Ceres and Proſerpine, now Caſtro-Janni; near which *Perguſa Lacus*, where Proſerpine was carried off by Pluto, now Lago di Goridan; *Menæ*, Meneo; *Palica*, Paliconia, near which was *Fons Palicinus*, Naptia; *Erbeſſus*, Paluzzuolo; *Entella*, Bitella; *Jetæ*, Jato; *Macella*, Strongoli.

The iſlands near Sicily were—To the north, the *Inſulæ Liparenſium*, called *Æoliæ*, from their being the fabled abode of Æolus, king of the Winds; alſo called *Vulcaniæ*, from the volcanos in which they abound, the Lipari iſlands: they are eight in number. One of them is a noted volcano. The *Egades* or *Eguſæ*, three in number, to the weſt: and to the ſouth-eaſt, *Melita*, Malta, on which St. Paul was wrecked; though it is more likely that this happened on *Melite*, at the entrance of the Adriatic; and *Gaulos*, Gozo, ſuppoſed by ſome to have been the iſland of Calypſo.

SARDINIA, or SARDO, called alſo *Ichnuſa*, and *Sandaliotis*, from its ſuppoſed reſemblance to the ſole of the foot. Sardinia is ſeparated to the north from Corſica by a ſtrait, anciently called *Taphros*, or *Foſſa*. The natives were called *Sardi* and *Sardoi*. The chief towns were: *Caralis*, Cagliari, on the *Caralitanus Sinus*, the Gulf of Cagliari; *Sulci*, Palma di Sole; *Uſellis Colonia*, Oriſtagni, near which is *Thyrſus*, the Thyrſo, the largeſt river on the iſland; *Boſa*, Boſa; *Turris Libiſſonis*, Torre; *Tibula*, Longo Sardo; *Olbia*, Terra Nova; *Luquido*, Lugodori. Of the mountains on this iſland, the moſt noted were thoſe to the north, called *Montes Inſani*, Monte di Canelle.

CORSICA, called alſo *Cyrnus*, and the people *Corſi*. The chief towns were: *Mantinorum Oppidum*, Baſtia; *Nicæa* or *Mariana*, a colony planted by Marius, Caſa Barbarica; *Aleria*, a colony planted by Sylla, Leria; *Palania*, Balagna; *Urcinium*, Ajaccio. The northern point of the iſland forms *Sacrum Promontorium*, now Cape Corſo.—See further particulars, with a map of ANCIENT EUROPE, vol. vii. p. 84.

ANCIENT ASIA.

The early geographers ſuppoſed Aſia to be bounded nearly in the ſame manner as is now laid down by modern geographers. They were not, however, well acquainted with thoſe parts of it which lie to the north and north-eaſt; nor as yet are the moderns, notwithſtanding the pains they have been at to inveſtigate them. They were equally ignorant of the parts to the ſouth-eaſt, knowing little of China, of the countries beyond the Ganges, and not much of the countries between the Indus and Ganges. The ancients ſeparated Aſia from Europe by the Don or Tanais, the Euxine, and the ſeas and ſtraits between the Euxine and Mediterranean; and from Africa, according to ſome, by the Nile, but more generally by *Iſthmus Ægypti*, the Iſthmus of Suez, and *Sinus Arabicus*, or *Mare Rubrum* (in the reſtricted ſenſe of the word), the Red Sea. The *Oceanus Eous*, *Mare Erythræum*, the Eaſtern Ocean, bounded it to the ſouth.

The ancients divided it into Aſia on this ſide *Taurus* and the river *Halys*, and Aſia on the fartheſt ſide.—*Ταυρος ος διαιρει διχα την Ασιαν κατα μηκος. Strabo.*—*Aſia Citerior* or *Minor*, a diſtinction of no very ancient date, and which now commonly paſſes under the name of Anatolia, includes the peninſula between the Euxine and Mediterranean, and extends eaſtward as far as the Euphrates. The country beyond the Euphrates was called *Aſia Ulterior* or *Magna*. *Aſia* has been divided into three general parts: the Northern, the Middle, and the Southern. The Northern contained *Sarmatia*, *Scythia*, and *Serica*. *Sarmatia Aſiatica*, extended from the Euxine to the Caſpian, between the rivers Don or Tanais, and the Rha or Wolga. The principal tribes who occupied this country were, the *Sarmatæ*, *Mæotæ*, *Alani*, *Sabiri*, a tribe of Huns. It was ſuppoſed to include part of *Albania*, *Iberia*, and *Colchis*:

Herbaſque quas et Colchis atque Iberia
Mittit venenorum ferax. *Horace.*

The modern diviſions of it are the Cuban Tartary (ſuppoſed to take its name from the *Hypanis*), Circaſſia, Georgia, Mingrelia. In this country were *Caucaſus*, *Hippici*, and *Ceraunii Montes*.

Beyond *Sarmatia* and the Caſpian Sea lay *Scythia*, Tartary, reaching to *Mare Hyperboreum*, the Frozen Sea, and *Serica*, or Northern China. It was uſually divided into *Scythia intra Imaum*, between the *Iaxartes* and *Imaus*; and *Scythia extra Imaum*, Hither and Farther Scythia. *Imaus* was a chain of mountains connected with Mount *Taurus* by *Paropomiſus*, running into various branches; one branch north and ſouth, is the Belur Tag of Tartary. Another, the Himmala, is the northern chain of the Tibetian Alps. An eaſtern branch of it, *Emodus*, ſeparated India from Scythia. The chief tribes of Scythians were the *Maſſagetæ* or Great *Getæ*; *Dahæ*, towards the Caſpian; and the *Sacæ*, towards the Ganges. In the Farther Scythia, the country of the Mongul and Calmuck Tartars, were placed the fabulous nations of the *Abii*, celebrated for their probity; the *Hippophagi*, the *Anthropophagi*; the *Arimaſpi*, men with only one eye; and the *Griphi*, who guarded the treaſure which the *Arimaſpi* would have carried off.

Serica, comprehending the country of the Bogdoi-Tartars, Cathai, and the northern parts of China, was little known. Beyond theſe were the *Hyperborei Scythæ*, Northern or Ruſſian Tartary; and *Montes Riphæi*, the mountains of Stolpe or Oby.

The few notices which relate to Northern China, are collected, and thus ſet down, by Mannert:—Serica is bounded on the weſt by Scythia, on the north-eaſt by an unknown country; on the ſouth by India beyond the Ganges, and alſo by the Sinæ, in a latitude of about 35°. This comprehends Koſhotey, the Chineſe province of Shien-ſi, Mongolia, and part of Siberia. The people are called *Sêres*.

The ſouthern part of the country has many mountains, which are continuations of thoſe in Scythia; ſuch as of the Afzak mountains in the Ruſſian province Nertſhink. Still farther ſouth, occur the Aſmiræan mountains (Ασμιραια ορη), which form the northern limit of the deſert of Kobi. To theſe adjoin the Kaſian mountains, which ſtretch along the Chineſe wall. Mount Thaguron (το Θαγαρον ορος) ſtretches from ſouth to north at the eaſtern end of the Kaſian mountains, and muſt be that part of the Mongolian chain which meets the river Hoang-ho. Next lie the Emodian mountains, which extend from the north of Thibet towards the province Shien-ſi; of which the Ottorokorras, (το Οττοροκορρας,) on which many rivers riſe that fall into the Yellow river, is a portion.

Two great rivers water the major part of Serica. Firſt, the Oichardes, of which the northern ſource is to be ſought in the mountains of Afzak. A ſecond ſtream of it comes from the Aſmiræan mountains of the ſouth-eaſt in the 47½ degree of latitude. Farther weſt, where the main ſtream inclines towards the Emodian mountains, a third tributary river ariſes, under the 44th degree

gree of latitude, but more to the north than the Bautiſus. This latter arm is undoubtedly the Erzineh, which loſes itſelf in the deſert of Sohuk, or in the lake Sopu. The eaſtern ſtream can hardly be any other than the river Onghen; which, like the Erzineh, never mingles with the main ſtream, but in a manner approaches it. Ptolemy, it ſhould ſeem, had two accounts before him: an intervening diſtrict was unknown to both his travellers: it was only from probability that he conducted their ſeveral rivers into the great one. The main-ſtream, Oichardes, then, muſt be the Selenga; which, according to the geographer, takes a ſoutherly direction.

Secondly, the Bautiſus (or, according to the edition of Eraſmus, the Bautes) has its ſource in the north by the Kaſian mountains on the borders of Serica in the 43d degree of latitude. It bends ſouth-eaſt towards the Emodian hills for four degrees, when it receives a ſecond arm thence deſcending. In their farther progreſs, they bend towards the mountain Ottorokorra, and paſs into an eaſtern unknown country. The Hoang-ho, or Yellow river, can ſcarcely be more clearly deſcribed from mere reports. Its northern arm Olanmuren ariſes in Koſhotey, near to the deſert of Kobi, and from the ſame mountains as the Erzineh. Its courſe is ſouth-eaſtward, when it receives a ſouthern branch Haramuren; which, from the mountains of Thibet, takes a crooked north-eaſt courſe. Of its northern bend Ptolemy ſays nothing: but he appears to pre-ſuppoſe it, as he aſſumes another bend to the eaſt; which, if he ſuppoſed the ſtream to flow ſtraight, would be needleſs. The rivers Pſitaras, Cambari, and Lanos, which Pliny aſſigns to the Sêres, probably belong not here, but to the Indian coaſt eaſt of the Ganges.

The people of Serica were divided into the Amthropophagi (or, according to Ammianus, xxiii. 6, Alitrophagi) of the north, and the Annibi, who dwelt contiguous to theſe. Between the latter and the Aſzak mountains are the Siſyges. The Cannibals are placed in the north of Siberia, of which nothing was known; of the other two, who ſeem to have dwelt near the ſea of Baikal, he may have heard. Above the Oichardes are the Damnæ and the Piadæ, and near to the river the Oichardæ. Again, in the north, but eaſt of the Annibi, were ſituated the Garenæi and Rabanei; probably among the Monguls of Kalkas: for, immediately below them, occurs the diſtrict Aſmiræa at the foot of the mountains ſo named. Below theſe extends to the Kaſian mountain the great nation of the Iſſedones. There can be no doubt that, by this name, Herodotus meant Monguls. Beſide them are Throani, near a town of this name; and below them, on the eaſt, Thaguri. Farther to the north-eaſt, Dahuri. Among the Iſſedones dwell Aſpakaræ, who have their name from a city. Near theſe, the Battæ; and the moſt ſoutherly are the Ottokarræ mountaineers. Thoſe three nations occupy the province of Shien-ſi: Ptolemy knew nothing of the more eaſterly parts.

The cities of Serica were Damna, at the weſtern end of the Oichardes, and at ſome diſtance northward from the river: Piada, on the ſouthern bend of the Selenga, here called the Itſcha: Aſmiræa, near the mountains ſo named: Throana, on the eaſt ſide of the Onghen, in the region in which the ruins of Karakorum, once the metropolis of the Mongul ſovereigns, are uſually ſought. The tribes above-mentioned are probably named from theſe towns.

Iſſedon Serica is contradiſtinguiſhed from Iſſedon Scythica, which lay more to the north-weſt. This Chineſe town, which Ptolemy names after the great nation of the Iſſedones, was ſituated north-eaſt from the ſource of the Erzineh, and conſequently on the borders of the deſert of Shamo: he places, in fact, no town beyond it. Aſpakara, which gives name to a tribe, lay near to the northern Bautiſus, and eaſtward from its ſource; on the Olanmuren river, therefore, and probably in Koſhotey. Rhoſoche lay much farther eaſt in the ſame latitude. Paliana and Abragana were both on the banks of the northern Bautiſus and in Koſhotey. Togara and Daxata were both in the middle of the province Shien-ſi, and probably near the Hoa-ho; for all theſe places were in a ſouth-eaſt line towards the bend of the Bautiſus, and towards Sera, the metropolis. Orofana lay near the ſource of the ſouthern Bautiſus, or the Haramuren. Ottorakorra along the courſe of the ſame river near its eaſterly bend, and to the north of the diſtrict to which and to whoſe inhabitants it gives its name. Solana was more eaſtward.

Sera, the capital, was at ſome diſtance from the ſouth bend of the Bautiſus. If Ptolemy means, by this ſouth εκτροπη, the contiguous river Hoa-ho, this Sera can be no other than Singan-fu, which is at ſome diſtance from its ſouthern evolution: but, if he knew of the bow of the Hoang-ho, it muſt be placed more eaſtward, at Honan. The firſt ſeems to me more probable, as Ptolemy appears ignorant of the eaſtern courſe of the river, and may well have miſtaken a part of the Hoa-ho for a continuation of the Bautiſus; and alſo as Signan-fu is named as a former metropolis of the north-weſt parts of China. Sera was the eaſternmoſt reſort of the merchants; and beyond it Ptolemy knows nothing.—See the article CHINA, with the Map, vol. iv. p. 435.

The Middle part of Aſia comprehended *Aſia Minor*, *Armenia*, *Syria*, *Arabia*, and the *Perſian* or *Parthian* Empire.—*Aſia Minor*, may be divided into three parts, each containing four principal countries. The Northern part, towards the Propontis and Euxine, contained *Myſia*, *Bithynia*, *Paphlagonia*, and *Pontus*. The Intermediate part; *Lydia*, *Phrygia*, *Galatia*, and *Cappadocia*. The Southern part, towards the Mediterranean; *Caria*, *Lycia*, *Pamphylia*, and *Cilicia*.

NORTHERN DIVISION.—MYSIA lay between the Propontis and the Ægean Sea, *Bithynia* and *Lydia*. Part of it, from the ſtrait on which it bordered, was called *Helleſpontus*. It was alſo divided into *Major* and *Minor*; the former on the Ægean Sea, and the latter towards the Propontis and Helleſpont. *Troas*, or the kingdom of TROY, may be conſidered as part of Myſia, containing *Ilium* or *Troja*.

The Rivers *Simois*, and *Xanthus* or *Scamander*, however ennobled by Homer, have not now a name. They are ſmall ſtreams, which have but a ſhort courſe from Mount *Ida* to the ſea.

This country was alſo ſometimes called *Phrygia Minor*, to diſtinguiſh it from the Greater *Phrygia*. On the *Thymbris*, a ſtream which runs into the Scamander, ſtood *Thymbra*, famous for the temple of Apollo, called from it *Thymbræus*, in which Achilles was ſlain.—The city of *Dardanus*, which gave the name of *Dardania* to a diſtrict of Troas, and from which the Dardanelles derive their name, no longer exiſts. The ruins which now bear the name of Troy, are the remains of *Alexandria-Troas*:

Jacet ingens littore truncus,
Avulſumque humeris caput, et ſine nomine corpus. *Virg.*

Abydus, the ruins of which are near the caſtle of the Dardanelles on the Aſiatic ſide: near this was the bridge thrown over by Xerxes. *Lampſacus*, Lampſaki.—Europamque Aſiæ, Seſtonque admovit Abydo. *Lucan.*

Towards the Propontis, were *Parium*, Camanar; *Priapus*, Caraboa, near which are the rivers *Æſepus*, the Spiga, and *Granicus*, the Ouſvola, famous for the victory gained in paſſing it by Alexander, and for the defeat of Mithridates by Lucullus. Theſe ſtreams alſo take their riſe in Mount *Ida*, the higheſt ſummit of which was *Gargarus*. Alſo *Cyzicus*, Chyzico, a city of ſuch conſequence, as to ſtand a ſiege againſt all the force of Mithridates; near *Rhyndacus* or *Lycus*, the Artacho, empties itſelf into the Propontis. This river formed the boundary between *Myſia* and *Bithynia*.

On

On the other ſide, oppoſite Alexandria-Troas, is the iſland Tenedos, and near it *Rhætium Promontorium*, where Ajax's tomb was, and *Sigeum Promontorium*, where that of Achilles was. Near the *Prom. Lectum*, now Cape Babo, was *Aſſus*, now *Aſſo*; *Adramyttium*, Adrameſto. That part of the coaſt which lay between the rivers *Caicus*, the Gerinaſti, and *Hermus*, the Sarabat, having been, after the ruin of Troy, ſeized on by a colony of Æolian Greeks, was called *Æolis* and *Æolia*. The river Hermus ſeparated it from Lydia.

At the mouth of the *Caicus* ſtood *Elæa*, now Ialea: it was the ſea-port of *Pergamus*, the capital of the dominions of Eumenes, afterwards left to the Romans by Attalus, the laſt king of Pergamus; it is now Bergamo. *Scepſis*, where Ariſtotle's works were found buried. *Adramyttium* gave name to the bay on which it ſtood; *Thebæ*, the country about which was called *Cilicia Hypoplacia*.

On this coaſt lay the iſlands *Arginuſſæ*, where the Athenians gained a great victory over the Lacedæmonians. Oppoſite is the iſland *Leſbos*, the birth-place of Sappho, now Mitylene, one of the largeſt iſlands in theſe ſeas.

BITHYNIA, more anciently called *Bebricia*, was bounded towards Myſia by the Rhyndacus, and extended from the Sea of Marmora along the Black Sea, to the river *Parthenius*, Partheni. Mount *Olympus*, which is in this country, (there are reckoned no leſs than five mountains of this name in other countries,) gave to part of it the name of *Olympena*. At the foot of it ſtood *Pruſa*, now Burſa, for ſome time the capital of the Turks, before they took Conſtantinople.

On the Propontis ſtood *Myrlea*, called alſo *Apamea*, now Moudania; on the Lake Aſcanius, *Nicæa*, Nice, called alſo Iſnik, where the firſt general council was held; *Nicomedia*, the capital of *Bithynia*, Nicmid; near which was *Libyſſa*, the burial-place of Hannibal. *Chalcedon*, called the City of the Blind, on account of the bad choice of its founders, who overlooked the more advantageous ſituation of *Byzantium*; it is now called *Kadikeni*, or the City of the Cadi. More towards the Boſphorus was *Chryſopolis*, now Scutari. Near this was the temple of *Jupiter Urius*, the Giver of fair Winds.

The next part of Bithynia, towards the Euxine, was inhabited by the *Thyni*. Beyond *Sangaris*, the Sangari, and iſſuing from the mountains called *Hypii*, was the river *Hypius*, the Lippo; and the town *Pruſa ad Hypium*, perhaps now Uſkubi; *Heraclea Pontica*, now Erekli. The promontory which forms a bay near this was called *Acheruſia*, from the fable of Hercules having dragged Cerberus from the lower regions through a cave here:

Tartareum ille manu cuſtodem in vincla petivit
Ipſius a ſolio regis; traxitque trementem. *Virgil.*

The *Mariandyni* and *Caucones* inhabited this part of Bithynia, which, under the Greek emperors, was formed into a province called *Honorias*.

PAPHLAGONIA, extended from the river *Parthenius*, now Partheni, to *Halys*, the Kizil-Ermak, having the Euxine to the north, and Galatia to the ſouth. Its chief towns were—*Seſamus*, incorporated with *Amaſtris*, which took its name from a niece of Darius Codomannus, Amaſreh; *Carambis*, Karempi, near a promontory of the ſame name, which is the correſponding point of land to *Kriu-metopon*, in the *Cherſoneſus Taurica*; *Sinope*, Sinub, a colony from *Miletus*, for ſome time the reſidence of the kings of *Pontus*, and the birth-place of Diogenes. The *Heneti* and the *Chalybes* were the chief tribes inhabiting this country.

PONTUS, extended along the Euxine, from the river *Halys* to the river *Bathys* or *Acampſis*, in the neighbourhood of *Colchis*. It was divided into *Pontus Galaticus*, *Pontus Polemoniacus*, and *Pontus Cappadocius*. The chief towns were: *Amiſus*, now Samſoun, gave its name to the *Sinus Samiſenus*, a gulf which enters deep into the country, and into which flow the rivers *Lycus* and *Iris*; *Amaſia*, Amaſieh, the birth-place of Strabo; *Eupatoria*, called from Pompey *Magnopolis*; *Zela*, Zeleti, where Cæſar defeated Pharnaces, ſon of Mithridates; alſo famous for the rites of *Anaitis*, a Perſian divinity; and *Comana*, famous for thoſe of Bellona. *Themiſcyra*, a city and plains on the banks of the *Thermodon*, Termeti, is ſuppoſed to have been the country of the Amazons.—Θεμισκυρα, εν η τα βασιλεια των Αμαζονων υπηρχε. *Diodorus Siculus.*—*Polemonium*; *Ceraſus*, whence the cherry-tree is thought to have been brought by Lucullus; *Trapezus*, Trebiſond, the reſidence of a branch of the Comnenian princes, till it was taken by Mahomet II. Here were many uncivilized tribes of Moſynæci, Drydæ, Chalibes, Chaldæi. Many ranges of mountains run through the country, viz. the *Paryadres*; *Teches*, from which the Greeks, on their retreat under Xenophon, firſt deſcried the ſea; and *Scydiſſes*, near which are the ſources of the Euphrates.

The INTERMEDIATE COUNTRIES.—LYDIA, otherwiſe called *Mæonia*, lies between the Ægean Sea, Myſia, Phrygia, and Caria. The ſea-coaſt of it between the rivers *Hermus*, Sarabat, and *Mæander*, Meinder, was called, from the coloniſts who ſettled on it, *Ionia*. Theſe Ionians, having been driven out of the Peloponneſus by the Heraclidæ, came into this part of Aſia under the conduct of the ſons of Codrus. Its chief city, *Epheſus*, once adorned with a temple conſidered to be one of the ſeven wonders of the world, is now a heap of ruins, under the name of Aioſoluc; it ſtood near the mouth of the *Cayſter*, now the Chaici; it gave birth to Heraclitus the weeping philoſopher, and Parrhaſius the painter.—Παρραλιην Εφεσον, μεγαλην πολιν. *Dion. Per.*—*Smyrna*, called by the Turks Iſmer, is a city of great trade; it ſtands on the river *Meles*, near which Homer is ſaid to have been born, hence called *Meliſigenes*; no leſs than ſeven cities claimed the honour of his birth-place: *Smyrna*, *Rhodes*, *Colophon*, *Salamis*, *Chios*, *Argos*, *Athenæ*.—*Phocæa*, Fochia, a colony from which founded Marſeilles. *Cumæ* or *Cyme*, which gave name to the *Sinus Cumæus*, the Gulf of Smyrna. *Clazomene*; *Erythræ*, Erethri, on a peninſula oppoſite the iſland *Chios*, Scio; *Teos*, the birth-place of Anacreon; *Lebedus*, noted for feaſts and games in honour of Bacchus; *Colophon*, on the river *Haleſus*: between the two laſt towns was the grove, temple, and fountain, of *Claros*, ſacred to Apollo; and near them was the town and promontory of *Myonneſus*.

Oppoſite the iſland *Samos* is the promontory and mountain *Mycale*, famous for the deſtruction of Xerxes's fleet by the Greeks. *Priene*, on the north of the *Mæander*, was the city of Bias, one of the ſeven wiſe men of Greece, and the ſeat of the Pan-Ionian ceremonies. On the ſouth of that river was *Miletus*, an Ionian city, though within the bounds of *Caria*. It was the birth-place of Thales, the father of philoſophy among the Greeks, and of his ſcholar Anaximander, the inventor of maps and dials, and of Timotheus, the muſician. It was alſo the mother country of many colonies ſettled on the coaſts of the Propontis and Euxine.

In the inland country, *Sardes*, now Sart, was, till the defeat of Crœſus by Cyrus, the capital of a kingdom, which extended to the banks of the *Halys*, the Caſilirmar. It was the uſual reſidence of the king of Perſia's ſatraps or viceroys of this country. *Tmolus*, at the bottom of which it ſtood, is now Bouz-dag, or the Cold Mountain. The country about it is watered by the *Pactolus*, ſometimes called *Chryſorrhoas*, the ſand of which is fabled to have been of gold, and which joins the *Hermus*:

—— Non ſufficit aurum
Quod Tagus et rutila volvit Pactolus arena. *Juvenal.*

At the foot of Mount *Sipilus* is *Magneſia Sipili*, Magneſi, near which Antiochus was defeated by Scipio Aſiaticus. It was for ſome time the reſidence of the Turkiſh princes. *Thyatira*, Ak-hiſſar, or the White Caſtle; *Hypæpi*, Berki; *Magneſia Mæandri*, Guzel-hiſar, the Fair Caſtle; *Tralles*; *Nyſa*, at the foot of Mount *Meſogis*, Noſli; *Philadelphia*,

which long maintained its independence againſt the Turks. An extenſive tract of this country, from *Myſia*, paſſing through *Phrygia*, was called *Catakecaumene*, from its being much ſubject to earthquakes and conflagrations.

PHRYGIA, to the eaſt of *Myſia* and *Lydia*, was the moſt inland part of Aſia Minor. It was divided into *Epictetus* and *Paroreias*: the former expreſſing the country which was diſmembered by the Romans from *Bithynia*, and added to *Phrygia*, in favour of the kings of *Pergamus*; and the latter, the diſtrict which was in the neighbourhood of the mountains. In a ſubſequent period it was divided into *Pacatiana* and *Salutaris*. *Laodicea*, Ladik; and *Coloſſæ*, Chonos, on the *Lycus*, were the chief towns of the firſt of theſe; *Synnada*, of the ſecond. *Celænæ*, afterwards *Apamea Cibotos*, ſtood on the confluence of the *Marſyas* and *Mæander*. *Cotyæum*, Kutaich, now the reſidence of the Beglerbegs of Anatolia.

GALATIA, was the north-eaſt part of *Phrygia*, bordering on *Cappadocia*, ſeized upon by a colony of Gauls in the time of Brennus, and from them called *Galatia*, alſo *Gallo-Græcia*, on account of the mixture of Greeks there was in that country. They were divided into the *Tecto-ſages*, *Toliſto-Boii*, and *Trocmi*. Their chief towns were: *Ancyra*, Angora, now famous for its camblet manufactures and breed of goats; near this place Bajazet was defeated and taken by Tamerlane; *Peſſinus*, at the foot of Mount *Dindymus*, celebrated for the temple and rites of Cybele, the mother of the gods:

O vere Phrygiæ, neque enim Phryges, ite per alta
Dindyma, ubi aſſuetis biforem dat tibia cantum.
Tympana vos buxuſque vocat Berecynthia matris
Idæa. *Virgil.*

Gordium, once the reſidence of the kings of this country, and where Alexander cut the Gordian knot; *Angra*, Kiangari, the reſidence of various princes. There are alſo many mountains in this country; among others, a Mount *Olympus*, different from that of Phrygia.

LYCAONIA, lay between *Phrygia* and *Cappadocia*, and was ſometimes reckoned part of the one, and ſometimes of the other. Its principal town, *Iconium*, Koni, was long the reſidence of the Seljuk Sultans, and the capital of Caramania; *Laodicea Combuſta*, Jurekiam Ladik; *Laranda*, Larandeh. From the *Lycaonum Colles*, the hills of Foudhalbaba, which were to the north-eaſt of *Iconium*, a wide and parched plain ſtretched as far as *Galatia*. In it was *Tatta palus*, a ſalt lake, called by the Turks Tuzla. *Galatia*, and part of *Lycaonia* and *Pamphilia*, were erected into a kingdom for Amyntas, king Dejotarus's ſecretary and general, who quitted the party of Brutus to join that of Anthony and Cæſar.

CAPPADOCIA, included *Armenia Minor*. — *Cappadocia* extended from *Pontus* and the vicinity of Mount *Taurus*, to the banks of the Euphrates. It was ſometimes called *Cappadocia Magna* or *Propria*, or *ad Taurum*, to diſtinguiſh it from *Pontus*, which had the name of *Cappadocia ad Pontum*. Both countries were inhabited by the *Leuko-Siri*, or White Syrians, and were diſmembered from each other under the Perſian monarchy. The part of *Cappadocia* which bordered on the Euphrates was called *Armenia Minor*.

Mazaca, the capital, afterwards called *Cæſarea*, Kaiſarich, was ſurnamed *ad Argæum*, a mountain, from the top of which both ſeas, it was believed, might have been diſcovered. From *Argæus*, Argehdag, iſſued the river *Melas*, which ſtill has a name expreſſive of the blackneſs of its water. Near this the *Halys*, Kizil-Ermak, has its ſource. The chief towns were: *Archelais*, Herekli; *Nazianzus*, which gave its name to one of the Gregories; *Nyſſa*, which has done the ſame to another; *Cybiſtra*, Euſtereh; *Nora*, Nour, where Eumenes ſuſtained a ſiege.

A branch of *Taurus*, called *Antitaurus*, cuts off a diſtrict called *Cataonia*. The chief towns of it were *Tyana* and *Comana*; the former (called *Dana* by Xenophon) was the country of the impoſtor Apollonius; and the latter was famous for a temple of Bellona or Diana, the prieſt of which was a prince little inferior to the kings of Cappadocia. Through *Comana* flowed, in its way ſouthward, the river *Sarus*, Shion.

Melitene, Malaria, gave name to a diſtrict between the *Melas*, Korah-Sou, and *Euphrates*: it was the ſtation of the thundering legion. *Cabira*, afterwards called *Sebaſte*, Sivas, is now the reſidence of the Beglerbeg of Roum, a name given to part of the eaſtern frontier: it ſtood near the *Halys*, and not far from the Mountain *Paryadres*. *Novus*, the ſtrong-hold where Mithridates depoſited his treaſures. *Sinibra*, a retreat of Mithridates, Snarvier; *Tephrice*, Divriki, called Nicopolis, in commemoration of Pompey's victory over Mithridates; *Analiba* or *Daranalis*, Derindeh, where the Euphrates forces its way through a narrow paſſage in Mount *Capotes*, now Kepouh; *Arahrace*, Aralkir; *Satala*, Arzingan, the laſt on the frontier, and the ſtation of a legion.

CARIA, LYCIA, PAMPHYLIA, and CILICIA, are the countries towards the Mediterranean.—CARIA is ſeparated from Lydia and Phrygia by the Mæander and the Lycus, and from Lycia by Glaucus Sinus, the Gulf of Macri. It was divided into *Caria*, *Doris*, *Peræa*, and *Caria Mediterranea*. The *Leleges*, driven from the neighbourhood of Troy, dwelt in part of this country. The chief cities were: *Miletus*, already mentioned as an Ionian city; near it was Mount *Latmus*, fabled for the viſits of Diana to Endymion; *Jaſſus*, which gave name to *Jaſſius Sinus*, Kalaſi; *Mindus*, Mindes; *Halicarnaſſus*, the reſidence of the kings of *Caria*, where Artemiſia erected the monument to her huſband Mauſolus; alſo the birth-place of Herodotus, and Dionyſius the hiſtorian and critic; *Ceramus*, Keramo, gave name to *Sinus Ceramicus*, the Gulf of St. Peter. On this gulf, and at the extremity of the peninſula of Doris, called *Triopium*, or Cape Crio, was *Cnidus*, famous for the worſhip of Venus. —*Peræa*, being ſubject to Rhodes, which is oppoſite to it, was called *Peræa Rhodiorum*. More inland were *Alabanda*, *Antiochia-Mæandri*, *Strattonicea*.

The iſlands in this part of the Ægean Sea are: the *Sporades*, or diſperſed iſlands, the chief of which are, *Rhodus*, απο των ῥοδων, Rhodes, famous for its power at ſea, for its Coloſſus, and for having been, in modern times, the reſidence of the knights of St. John, and the long and furious ſiege by which it was reduced, under Soliman II. A. D. 1522. See the article EGYPT, vol. vi. *Carpathus*, Scarpanto, which gave name to *Mare Carpathium*, the Sea of Scarpanto; *Cos*, now Stanzo, the country of Apelles the painter, and Hippocrates the phyſician; *Patmos*, Palmoſa, where St. John wrote the Revelations; *Icaria*, Nicaria, which derived its name from Icarus, ſon of Dædalus, and which gave name to *Mare Icarium*; *Samos*, ſacred to Juno, and the country of Pythagoras; *Chios*, Scio; *Leſbos*, Mitylene, the country of Alcæus, Sappho, Arion, and Theophraſtus; *Tenedus*, Tenedo, behind which the Grecian fleet lay when they made a feint of raiſing the ſiege of Troy; *Lemnos*, ſacred to Vulcan, Stalimene.

LYCIA, was ſeparated by a gulf on each ſide from Caria and Pamphylia. Ridges of mountains to the north run between it and Phrygia. *Telmeſſus Macri*, on the Gulf of Macri, where runs Mount *Cragus*, an arm of which is called *Anticragus*; *Chimæra*, a volcano, is one of the eight peaks of this mountain.

Xanthus, Ekſenidé, on a river of the ſame name; *Patara*, the oracle from which the *Lyciæ ſortes* were delivered, Apollo reſiding the winter half of the year here, and the ſummer half at *Delos*; *Olympus*, built near a mountain of this name, and *Phaſelis*, on the confines of Piſidia, were noted haunts of pirates, both of them deſtroyed by Servilius Iſauricus.—Sed nec mare ſubmo-

ville

viſſe contentus, validiſſimas urbes eorum, et diutina præda abundantes, Phaſelin et Olympon evertit. *Florus.*

Promontorium Sacrum, or *Chelidonium*, was the commencement of Mount *Taurus*; a branch of which, called *Climax*, projects ſo far into the ſea, that Alexander's army were obliged to march waiſt-deep in water to go round it.—The north of *Lycia*, with part of *Phrygia* and *Piſidia*, formed a country not much known, called *Milyas*.

PAMPHYLIA, and PISIDIA.—The boundaries of theſe two countries are difficult to ſettle. *Pamphylia* lay towards the coaſt; *Piſidia*, more inland. *Pamphylia* extended from *Phaſelis* to *Cilicia Aſpera*. The chief towns were: *Attalea*, Satalie, on the river *Catarractes*; *Perga*, on the *Ceſtrus*; *Aſpendus*, on the *Eurymedon*, at the mouth of which Cimon deſtroyed the Perſian fleet and army; *Side*, *Coraceſium*.—Cypriorum et Phœnicum ducentarum navium claſſem devictam cepit; eodemque die pari fortuna in terra uſus eſt. *Nepos et Plutarchus.*

More inland were, *Termeſſus*, Eſtenaz, once the capital of the *Solymi*, and of an intermediate country between *Lycia* and *Pamphylia*, called *Cabalia*; *Selga*, a ſtrong town of Lacedæmonian extract. *Iſauria* lay to the eaſt of Piſidia, and was inhabited by a people addicted to violence and rapine. Their chief town, *Iſaura*, was deſtroyed by Servilius Iſauricus. Other towns were, *Derbe*, *Lyſtra*, *Coralis*, Kerali. The name of Iſauria was alſo given to part of Cilicia.

CILICIA, was bounded to the north by the ridges of Taurus, and extended along the Mediterranean, from Pamphylia to Syria. The mountainous part of it was called *Trachea*, and alſo *Iſauria*, on account of its vicinity and likeneſs to that country. The chief towns were: *Selinus*, Selenti, where Trajan died; *Antiochia*, Antiochetta, at the foot of a mount named *Cragus* (not to be confounded with that in *Lycia*); *Charadrus*, Calandro; *Anemurium*, Eſtenmur, on a point oppoſite Cyprus; *Celenderis*, Kelnar; *Seleucia Trachea*, Selefkeh, on the *Calycadrus*, now Kelikdni. More inland were: *Homonoda*, a ſtrong-hold, Ermenak; *Olba*, chief town of a diſtrict named *Cetis*.

In the level country, called *Cilicia Campeſtris*, were *Corycus*, Curco; *Soli*, afterwards *Pompeiopolis*; *Anchiale*, ſaid to have been built by Sardanapalus, and where there was a tomb bearing his name; *Tarſus*, Tarſous, once the ſeat of the arts and ſciences, and the birth-place of St. Paul: it ſtood on the *Cydnus*, bathing in which had nearly proved fatal to Alexander; *Adana*, on the river *Sarus*, Scihoun; *Mopſus* or *Mopſueſtia*, Meſſis, on *Pyramus*, the Geihoun; on the ſame river was *Anazarbus*, Anzarba. This part of Cilicia was called, in the time of the cruſades, the kingdom of Leon.

Iſſus, Aiaſſe, where Alexander gained his ſecond victory over Darius, gave name to *Sinus Iſſicus*, a gulf which runs deep into the country. It ſtood near the river *Pinarus*, Deli-Sou. In commemoration of this victory were built *Nicopolis* and *Alexandria apud Iſſum*, in Syria. *Amanus*, Monte Negro, bounds Cilicia towards Syria, and approaches ſo near the ſea as to form the paſs called *Pylæ Syriæ*, or *Amanicæ*. There were other paſſes through the mountains, called *Pylæ Ciliciæ*, *Pylæ Tauri*, &c.

ARMENIA, and the neighbouring countries of COLCHIS, IBERIA, and ALBANIA.—ARMENIA was bounded to the ſouth and eaſt by *Meſopotamia*, *Aſſyria*, and *Media*; to the weſt by the *Euphrates* and *Armenia Minor*; and to the north by the nations of *Colchis*, *Iberia*, and *Albania*, which occupied the country from weſt to eaſt between the Euxine and the Caſpian; on which ſide it extended as far as the confluence of the *Araxis*, the Aras, and *Cyrus*, the Kur. The weſtern part of this country is now Turcomania.

Armenia abounds, and is ſurrounded, with lofty mountains. One ridge of Mount Taurus parts it from Meſopotamia; *Niphates*, which may be conſidered as another, parts it from Aſſyria; *Antitaurus* extends its arms towards it from Cappadocia; the *Montes Moſchi et Caſpii* lie to the north and eaſt of it; while the *Paryadres*, *Gordiæi*, *Ararath*, and others, are ſcattered over the face of it.

Beſides rivers of leſs note, the *Tigris*, *Euphrates*, and *Araxes*, Aras, take their riſe in the mountains of this country; the two latter are ſaid to have their ſource in the ſame mountain, *Abus*, the one running eaſt, and the other weſt.—Tigris et Euphrates uno ſe fonte reſolvunt. *Boetius.*

Quaque caput rapido tollit cum Tigride magnus
Euphrates. *Lucan.*

Phaſis, the Phazzeth, another conſiderable river, gave name to the diſtrict of *Phaſiane*, Paſini, and to *Mare Phaſianum*, the eaſtern part of the Euxine. The country where this river approaches Media, was called *Atropatene*. The *Acampſis*, which flowed between *Armenia* and *Colchis*, roſe in the mountains inhabited by the *Sanni*; the higheſt part of this river is called Boas.

The chief towns in Armenia were: *Arze* or *Arzira*, Erzerum, near which the Euphrates takes its riſe, while another branch, which is alſo called Euphrates, riſes in a diſtrict called *Caranitis*. The country towards the junction of theſe rivers was called *Aciliſene*, now Ekilis. *Artaxata* was a city of great conſequence; *Arſamoſata*, now Shimſet, was another, in an extenſive diſtrict, called *Sophene*; *Amida*, Amid, or Diarbekir, on the Tigris, the ſources of which are in the mountains anciently called *Niphates*: Ὁ Τιγρις απὸ τῦ Νιφατῦ ὀρεος ὁρμηθεις ταχυτατος ἐστιν και ἀμικτος. *Strabo.*—*Tigranocerta*, founded by Tigranes, now Sered; *Artemita*, Van, on the Lake *Narciſſa*, called the Lake of Van.

COLCHIS, the fabulous country of the golden fleece, extended as far as *Caucaſus* to the north, and *Iberia* to the eaſt. It comprehended Mingrelia, Guria, Imaretta, and part of Circaſſia. In the time of the Lower Empire, it was called *Lazica*, and the people *Lazi*. The chief towns were: *Cyta*, Kotatis, the birth-place of Medea; *Æa*; *Phaſis*, on the river of the ſame name: in it were the temple of Phryxus, and the golden fleece; *Pityus*, Pitchinda.

Beſides the nations peculiar to the country, we find here the *Suani*, *Abaſci*, and *Moſchi*.

IBERIA, lay between Colchis and Albania, Caucaſus and Armenia. It now anſwers to great part of Georgia. To the north of this country were *Pilæ Caucaſiæ*, a difficult paſs between the mountains. The river *Cyrus*, Kur, on quitting Armenia, traverſes this country, till it meets the *Araxes*.

ALBANIA lay along the Caſpian to the eaſt of *Iberia*, and was bounded to the ſouth by the *Cyrus*, which parted it from *Media Atropatene*. It anſwers to Dagheſtan and Shirvan. The paſſes through the mountains in this country were called the *Caſpiæ* and *Albaniæ Pylæ*; *Validus Murus* or *Portæ Ferreæ*, Derbent.

SYRIA, including PALESTINE, was bounded to the north by Taurus, and that branch of Taurus called *Amanus*, now Monte Negro; by Arabia and Egypt to the ſouth; extending eaſt and weſt between the Mediterranean and Euphrates. The principal rivers of this country were: the *Orontes* and the *Jordan*.—Jam pridem Syrus in Tiberim defluxit Orontes. *Juvenal.*—It was divided into five parts; *Commagene*, *Syria Propria* or *Seleucis*, *Cœlo-Syria*, *Phœnicia*, and *Paleſtine* or *Judæa*.—The moſt northern of theſe was *Commagene*, in a later period called *Euphrateſia*. It lay between *Amanus* and the Euphrates. Its chief towns were: *Samoſata*, Semiſat, the birth-place of Lucian, on the Euphrates; and *Zeugma*, where there was a bridge over that river.

The next diviſion to the ſouth was *Seleucis*, or Syria Proper; the chief towns of which were: *Antiochia*, Antioch, where Chriſtians firſt received their name. It ſtood upon the Orontes, was founded by Seleucus Nicator,

cator, and was the reſidence of the kings of Syria. Near it was the delightful village and grove of *Daphne*. The ſame Seleucus founded the cities of *Seleucia* and *Apamea* in this diſtrict. *Seleucia* was alſo called *Pieria*, from a neighbouring mountain. Near it was Mount *Caſius*, of a fabulous height. The iſland *Melibœa*, famous for its purple, was at the mouth of the *Orontes*. Near the ſource of this river was *Emeſa*, the city of Heliogabalus.

In *Cirrheſtica*, a diſtrict of this country, lay *Berœa*, now Aleppo, almoſt midway between the ſea and the Euphrates; *Bambyce* or *Hierapolis*, the temple of the Syrian goddeſs *Aſtargatis* or *Mahog*, who was feigned to have the face of a woman and the tail of a fiſh: ſhe was called by the Greeks *Derceto*, and was thought by ſome to have been the ſame with *Aſtarte*.

To the eaſt and ſouth-eaſt of Syria Proper, between the mountains of *Libanus* and *Antilibanus*, lay *Cœlo-Syria*, or Hollow Syria. The chief city of which, *Damaſcus*, now Damas, being delightfully ſituated, ſtill retains much of its ancient importance. It was watered by the two ſtreams of *Abana* and *Pharphar*. *Heliopolis*, Balbec, was famous for a magnificent temple of the ſun, the ruins of which ſtill remain.

This part of Syria was alſo named *Laodicene*. Between it and the Euphrates ſtood *Palmira*, Thadmor, the city of Odenatus and his queen Zenobia, ſubdued by Aurelian, A.D. 272.—Palmyra urbs nobilis ſitu, divitiis ſoli et aquis amœnis; vaſto undique ambitu, arenis includit agros, ac veluti terris exempta a rerum natura. *Pliny*.—It gave the name of *Palmyrene* to the neighbouring country and deſert. Its intermediate ſituation, between two ſeas and two great empires, raiſed it to that importance which is ſtill manifeſted by its ruins. In this diſtrict is ſometimes reckoned *Thapſacus*, where there was a bridge over the Euphrates.

Phœnicia was a narrow tract of coaſt, bounded by the river *Eleutherus*, *Cœlo-Syria*, *Paleſtine*, and the Mediterranean:

Phœnices primi, famæ ſi creditur, auſi
Manſuram rudibus vocem ſignare figuris. *Lucan.*

It contained the cities of *Tyre* and *Sidon*, famous for their commerce. There were two cities of the former of theſe names: the firſt, or ancient Tyre, ſtood upon the continent; it was deſtroyed by Nebuchadnezzar; New Tyre, upon an iſland. The ruins of Old Tyre furniſhed Alexander with materials for building the mole by which he took the town. Tyre was alſo famous for its purple: its preſent name is Sur; that of Sidon is Seyde. *Tripoli*, Tarabolous; *Sarepta*, Sarfat; *Ptolemais* or *Acon*, Acre; *Beritus*, Berut; and *Laodicea*, Ladikieh (which was to the north of the *Eleutherus*) were conſiderable towns. In the mountains of this country dwell ſome Maronite tribes, and the Druzes, who pretend to be deſcended from the cruſaders. On one of theſe alſo is Maſiat, a fortreſs formerly the reſidence of the prince of the Aſſaſſins.

Between this coaſt and that of Cilicia, is the iſland CYPRUS, ſuppoſed to have originally taken its name from its copper mines. It was peopled by the Phœnicians.—The chief towns were: *Salamis*, founded by Teucer, afterwards *Conſtantia*, Coſtanza, not far from Famagouſta; *Paphos*, ſacred to Venus; *Idalium*, alſo ſacred to Venus, Dalin; *Citium*, the birth place of Zeno, founder of the ſect of the ſtoics; *Ledra*, Nicoſia; *Amathus*, where was the temple of Adonis.

PALÆSTINE, or *Judæa*, called alſo the HOLY LAND, and in Scripture the Land of Canaan, the Land of Iſrael, and of Judah, extended from *Phœnicia* to *Arabia*. The Jordan is the only river of note in it; which riſes in Hermon, a branch of *Antilibanus*. Having paſſed through the Lake of Gennesareth, or the Sea of Tiberias or Galilee, after a courſe of one hundred and fifty miles, it loſes itſelf in the *Aſphalites*, or Dead Sea, called alſo the Sea of the Plain. This lake is ſuppoſed to occupy the place of the accurſed Sodom and Gomorrah.

Paleſtine was at different times differently divided. The chief towns of the Philiſtines, its ancient inhabitants, were: *Azotus* or *Aſhdod*, *Gaza*, *Aſcalon*, *Gath*, *Ekron*. Theſe lay in the country between Dan and Simeon and the Sea, and were the chief cities of the five lordſhips of the Philiſtines. The other principal tribes were, the Canaanites, Hittites, Perizzites, Amorites, Jebuſites.

On the driving out of the Canaanites, it was divided between the twelve tribes. After the revolt of the ten tribes under Rehoboam, it was divided into the kingdoms of Judah and Iſrael. On the return from the Babylonian captivity, and during the ſecond temple, it was diſtinguiſhed into the countries of Judæa, Samaria, Galilee, on this ſide the Jordan; and *Peræa*, the country beyond or to the eaſt of Jordan. Of theſe Galilee lay to the north, Judæa to the ſouth, and Samaria occupied the intermediate country. Judæa was ſometimes a general name for the whole.

JUDÆA PROPER, extended from the Dead Sea and the Mediterranean to Egypt, and included, beſide the tribe of Judah, thoſe of Benjamin, Dan, and Simeon. The chief city was *Hieroſolyma*, Jeruſalem, ſometimes called *Jebus*, from its having belonged to the Jebuſites, and ſuppoſed to have been the Salem of Melchiſedec. It was built on ſeveral hills, the higheſt of which was Sion, on which ſtood the Tower of David. Mount Moriah, whereon Iſaac was to have been ſacrificed, was the ſeat of the temple. The other places of note near Jeruſalem were: to the north and eaſt, *Emaus*, *Hierichus*, Jericho; *Bethel*, *Gilgal*, *Ephraim*:—to the ſouth, BETHLEHEM, the birth-place of our Saviour; *Hebron*, *Mamre*:—on the weſt, *Rama*, *Gibea*, *Lydda*, *Joppa*, now Jaffa, the moſt convenient ſea-port for Jeruſalem. Near to *Joppa* Andromeda is fabled to have been expoſed to the ſea-monſter, from which ſhe was delivered by Perſeus.

The city of *Samaria* having been rebuilt by Herod, was called by him *Sebaſte*, in honour of Auguſtus. *Sichem* had been the royal city before Samaria; it was afterwards called *Neapolis*, Nabolus; it ſtands at the foot of Gerizim, on which the Samaritans had their temple; *Cæſarea*, previouſly called *Turris Stratonis*, for ſome time the reſidence of the Roman governors.

The lower part of Galilee was diſtinguiſhed from the northern part of it, which bordering on Phœnicia, was called "Galilee of the Gentiles." The towns of it are: *Jezreel*, Eſdrelon; *Capernaum*; *Bethlehem*, the birth-place of our Saviour; *Nazareth*, his reſidence till he entered on his miniſtry; *Cana*, where he performed his firſt miracle, by turning water into wine; *Aca* or *Ptolemais*, Acre, a ſea-port famous in the time of the cruſades; *Sepphoris* or *Dio Cæſarea*, now Seſouri; *Tiberias*, upon a lake of the ſame name, alſo called the lake of Gennesareth; *Panium* or *Cæſarea Philippi*, more anciently Dan and Laiſh.

The mountains not already mentioned were: *Ghilboa*, famous for the defeat of Saul and Jonathan; *Thabor*, on which our Saviour was transfigured; *Carmel*, the retreat of the prophet Eliſha; *Hermon*, called alſo Sihon, a branch of Lebanon.

Peræa, in general expreſſes all the country beyond, or to the eaſt, of Jordan. It is, however, chiefly applied to the diſtrict between the *Arnon* and the Lake of Gennesareth. The chief towns of it were: *Machærus*, *Heſhbon*, *Medaba*, *Gilead*, *Ephron*, *Ramoth*. The plain between the two lakes of *Aſphaltites* and Gennesareth, was called *Aulon*. Here were the mountains of *Gilead*, *Abarim*, *Nebo*, and *Piſgah*, from which laſt Moſes enjoyed a view of the promiſed land. Certain ſubdiviſions of this country were called *Trachonites* or *Iturea*, *Gaulonitis*, *Batanea* or *Baſan*, *Auranitis*. The reſpective limits of theſe are not well aſcertained. There was in this part of the country a *Decapolis*, or confederacy of ten cities. To the eaſt

MARE MAGNUM OCCIDENTALE
nobis MEDITERRANEUM
MARE ERYTHRÆUM Sive RUBRUM
ARABIA DESERTA
DESERTA ARABIA
PALESTINA
PHŒNICIA
SYRIA
CYPRUS
CRETA
ÆGYPTUS
LYBIA
ARABIA PETRÆA
IDUMÆA
NABATÆORUM REGIO
DESERTA PLANITIES Arabibus ALDAHNA dicta
Strata Regio Procopii
Terra HUZ sive
Barrahi al Sham
Ausitis
Aisitæ Ptolemæi seu Potius Ausitæ
Orcheni Arabes Ptolemæi
Thamiditæ
Jerusalem
Damascus
Antiochia
Aleppo
Alexandria
Memphis
Cayro
Babylon
Bagdad
Ctesiphon
Basra
Mesopotamia
Assyria
Media
Susiana
Chaldæa
Arabia Transeuphratia
Palmyrena
Phœnicia
Cœlosyria
Judæa
Galilæa
Samaria
Idumæa
Arabia Petræa
Arabia Deserta
Ægyptus
Lybia
Cataonia
Cappadocia
Lycaonia
Isauria
Pisidia
Pamphylia
Lycia
Caria
Mysia
Bithynia
Paphlagonia
Pontus
Armenia
Gordiene
Adiabene
Media Atropatene
Cambadene
Susiana
Apolloniatis
Chalonitis
Mygdonia
Parætotamia
Commagene
Osroene
Mare Mediterraneum
Mare Rubrum
Mare Erythræum
Nili Ostia
Ostium Canobicum
Ostium Sebennyticum
Ostium Tanaiticum
Ostium Mendesium
Ostium Pelusiacum
Ostium Diolcum
Fons in deserto Arabibus Karacar
Mons Horeb
Mons Sinai
Mons Pharanitis
Mons Casius
Mons Taurus
Mons Niphates
Mons Zagros
Mons Orontes
Mons Libanus
Mons Antilibanus
Mons Hermon
Mons Carmelus
Mons Gilboa
Mons Gerizim
Mons Ephraim
Mons Seir
Mons Hor
Mons Nebo
Mons Abarim
Mons Pisgah
Mons Peor
Mons Gilead
Mons Hermon
Mons Amanus
Mons Taurus
Mons Casius
Mons Sinai
Mons Horeb
Mons Pharanitis

lay *Ammonitis*, the chief town of which was *Rabbath-Ammon*, afterwards called *Philadelphia*; to the ſouth, *Moabitis*, whoſe chief town was *Rabbath-Moab*.

Idumæa or *Edom*, lay to the ſouth of the Dead Sea. Its chief towns were: *Zoar* and *Theman*. *Bozra*, at the foot of Mount *Seir*, was reckoned part of Arabia.

Other names which occur in ſacred geography were: *Aſhur*, the ſame as Aſſyria.—*Aram*, part of Syria, with Cœlo-Syria and Meſopotamia.—Land of *Uz*, the South of Syria.—*Elam*, Perſia; *Lud*, a country near it.—Land of *Cuſh*, Æthiopia, including Arabia; part of which, *Sheba*, probably was Arabia Felix; *Havilah*, Arabia Deſerta, near *Babylonia*; *Raamah* and *Dedan*, lying on the Perſian Gulf.

Ophir, concerning which there are various conjectures; ſome placing it in the Eaſt Indies, ſome in Africa, and ſome in Spain.—*Mizraim*, Egypt; part of which, on the eaſt of the Nile, was *Goſhen*.—*Lub* or *Lubim*, Libya, to the weſt of Egypt.—*Phut*, the more diſtant parts of Egypt.—*Hamath*, a royal city, and part of Phœnicia; in it alſo was the city of *Riblah*.—*Arvad* or *Arpad*, *Sepharvaim*, *Henah*, and *Ivah*, cities and principalities near *Hamath*. *Sepharvaim* is ſuppoſed to have been Aleppo.

ARABIA.—The ancient name and boundaries of this country are the ſame with the modern. It extends from the Euphrates and Paleſtine to the Arabian Gulf or Red Sea—(this latter name was given by the ancients to all the Indian Ocean)—and the Perſian Gulf, and forms a large peninſula. The Northern diviſion, comprehending *Idumæa*, or the land of the children of Edom, took the name of *Petræa* from *Petra*, the reſidence of the kings of the *Nabathæi*. *Ælana*, Ailah, gave its name to the *Sinus Ælanites*. From *Eſiongeber*, Solomon's fleets ſailed for *Ophir*. On the Gulf of *Heroopolis* ſtood the town from which it took its name, now Kalaat-Agerud; alſo *Paran*, which gave name to the adjoining wilderneſs; *Arſinöe*, or *Cleopatris*, is now Suez, from which the iſthmus takes its name. In this part of Arabia were Horeb and Sinai, famous for the promulgation of the Moſaic law, contiguous mountains, or perhaps the ſame. The Midianites, Moabites, Amalekites, and Iſhmaelites, dwelt in this country.

Arabia Deſerta, lay to the ſouth-eaſt of *Petræa* and *Syria*, and extended as far as that part of Chaldea now called Baſſora. Arabia Felix bounded it to the ſouth and ſouth-weſt. The principal tribes inhabiting it were the *Scenitæ* and *Nomades*, now commonly called Bedouin Arabs.

Arabia Felix, ſo called from the excellence of its productions, lay between the Gulf of Perſia and the Red Sea. It was inhabited by various tribes, the *Nomades Scenitæ*, and *Nabatæi*, the *Saraceni*, *Homeritæ*, and *Sabæi*, whoſe country, ſuppoſed to have been called *Panchæa*, anſwers nearly to the kingdom of Aden and Yemen. It produces frankincenſe, and is the moſt fertile part of Arabia. Their chief town, *Sabatha*, is probably Sanaa; *Meriaba*, Mareb; *Macoraba*, Mecca; *Jatrippa*, Medina; *Gerra*, El Catif; *Moſcha*, Maſcat; *Niſa*, the fabulous birth-place of Bacchus, is alſo ſuppoſed to have been in this country as well as in India.—India mittit Elur, molles ſua thura Sabæi. *Virgil.*—*Diræ*, were the ſtraits of Babel-Mandel; *Arabia Emporium*, Aden; *Dioſcoridis Inſula*, Socotora.—See the article ARABIA, vol. ii. p. 1–26.

The PARTHIAN EMPIRE, after the revolt from the Syrians, included *Media*, *Aſſyria*, *Babylonia*, *Perſia*, and the dependant countries.—*Media* was ſeparated on the north from Armenia by the *Araxes*; on the other ſides it was bounded by the Caſpian Sea, Perſia, Aſſyria, and Aria. A great part of it is known by the name of Irak-Agemi, or the Perſian Irak, to diſtinguiſh it from Irak-Arabi, the Turkiſh diviſion of it. The part which bordered on Armenia was called *Atropatene*, from the ſatrap Atropates, who ſhook off the Macedonian yoke, and eſtabliſhed his family in this principality. It is now called Aderbeitzin, or the Country of Fire, having been the native country of Zoroaſter, legiſlator of the Magi.—Μαγοι παρα Περσαις οι φιλοσοφοι και φιλοθεοι. *Suidas.*—Its chief city was *Gazæ*, or *Gazaca*, probably now Tauris. *Thebarmai*, Urmiah, was the birth-place of Zoroaſter.—The ſouth-eaſt part, bordering on Perſia, was called *Media Magna*, the chief towns of which were *Ecbatana*, the ſummer retreat of the kings of Perſia, and afterwards of the kings of Parthia, now ſuppoſed to be Hamedan.—Urbem hanc nunc tenent Parthi, eaque æſtiva agentibus ſedes eſt. *Q. Curtius.*—*Ragæ*, called alſo *Europus* and *Arſacia*: the *Nyſæi Campi* in this country were famous for the horſes bred there; the *Pylæ Caſpiæ*, a famous paſſage, was in Mazanderan, the country of the *Tapuri*.—Another diviſion of the country towards *Perſia*, was called *Perætacene*.

Parthia, or *Parthiene*, the eaſtern corner of Media, was, in a great meaſure, bounded by *Hyrcania*, *Aria*, and *Carmania*. The people who inhabited this narrow tract, having ſhaken off the Syrian yoke, formed the formidable empire of the Parthians. Their chief cities, however, *Seleucis* and *Cteſiphon*, were not in this country.

The *Aſſyrian* empire comprehended the greater part of Aſia; but *Aſſyria*, in the limited ſenſe of the name, lay between Armenia to the north, and Babylonia to the ſouth; the Tigris bounded it to the weſt; and on the eaſt it was ſeparated from *Media* by Mount *Zagros*, called by the Turks Tag-Aiaghi: it was ſometimes called *Aturia*, from a diſtrict near Nineveh; and ſometimes *Adiabene*, from a province to the ſouth of it; the *Curduchi*, now Kurdes, who inhabited the mountainous part of it, have given it the name of Curdiſtan.—Imperium Aſſyrii, mille trecentis annis habuere. *Juſtin.*

The principal rivers of this country, beſides the Tigris, were: *Zabus*, ſcarcely inferior to the Tigris, called by the Greeks *Lycus*, or the Wolf, now Zarb; *Zabus Minor*, or *Caprus*, the Boar, now the River of Gold; and the *Gyndes* and *Gorgus*.—A celeritate qua defluit Tigri nomen eſt inditum; quia Perſica lingua Tigrim ſagittam appellant. *Q. Curtius.*

Nineveh, the capital of Aſſyria, ſaid to have been ſixty miles in circumference, ſtood on the eaſt bank of the Tigris: its ruins are oppoſite Mouſul; *Arbela* was famous for the victory of Alexander over Darius, though the battle was fought at ſome diſtance from it, at *Gaugamela*.—Alexandro traditur Arbela, regia ſupellectili Dariique gaza repleta; totius exercitus opibus in iſtam ſedem congeſtis. *Q. Curtius.*—In the neighbourhood of *Corcura*, Kerkur, were many naphtha ſprings; *Sittace* gave name to the province of *Sittacene*, in which was the city of *Cteſiphon*, the reſidence of the Parthian kings.

Babylonia now anſwers to Irak, or Irak Arabi, the northern part of which was *Meſopotamia*, or the country between the rivers, and the ſouthern *Chaldæa*, extending towards the Gulf of Perſia. Between theſe lay *Babylonia Proper*, commencing at the junction of the rivers.

Meſopotamia, alſo called *Aram*, now Diarbec, where not waſhed by the Euphrates and Tigris, was bounded by ridges of Mount Taurus. Its chief towns were: *Niſibis*, on the river *Mygdonius*, the bulwark of the Roman empire againſt the Parthians, now Niſibin; *Seleucia* or *Seleucis*, Bagdat, built by Seleucus Nicanor, with the view of weakening Babylon, as *Cteſiphon* was afterwards by the Parthian princes, with the ſame view againſt *Seleucia*; *Carræ*, Haran, memorable for the defeat and death of Craſſus, and for the murder of Caracalla:

——— Miſerando funere Craſſus
Aſſyrias Latio maculavit ſanguine Carrhas. *Lucan.*

Edeſſa, Roha, near Mount Taurus; *Apamia*, joined to *Zeugma* by a bridge over the Enphrates; *Labana*, now Moſal, on the Tigris, oppoſite Nineveh; *Sippharah*, built immediately above the branching of the Euphrates into its three channels. Some hordes of Arabs gave to

part of this country the name of *Arabia Scenitarum*, or *Euphratenſis*.

Babylonia Proper, was every where encompaſſed by the Tigris, and branches of the Euphrates. *Babel* or *Babylon*, the capital, was founded by Belus, and adorned and enlarged by Semiramis and Nebuchadnezzar; it is ſuppoſed to have been fifty miles in circuit. *Vologeſia* and *Alamundari* took their names from Parthian princes; *Borſippa* gave its name to a Chaldean ſect.

The Euphrates was cut into many branches and canals, communicating with the Tigris. The chief canals were: *Marſes*, *Pallacotta*, and the Royal Canal; veſtiges alſo remain of a channel by which the Euphrates once diſcharged itſelf into the Perſian Gulf, without mixing its waters with thoſe of the Tigris.

Chaldea was ſeparated from Arabia on the ſouth-weſt by a ridge of mountains; it was bounded on the other ſides by the Euphrates, Tigris, and their branches.—Χαλδαιοι τοινυν των αρχαιοτατων οντες Βαβυλωνιων. *Diod. Siculus.*—The chief towns were: *Teredon*, advantageouſly ſituated on the united ſtream of the two rivers for the Indian trade; it is perhaps now Buſſorah; *Orchöe*, ſuppoſed to have been *Ur* of the Chaldees, the ſeat of Abraham's anceſtors; it gave name to a Chaldean ſect. Near it, the moſt weſtern branch of the Euphrates loſt itſelf in the ſands. The rivers, after their junction, were called *Paſitigris*. A tract of land formed by the branching of their mouths, was called *Meſene Euphratis*, to diſtinguiſh it from another inſular tract higher up the river, called *Meſene Tigridis*.—*Mare Erythræum*, the denomination of the whole Eaſtern Ocean, was ſometimes reſtricted to the Gulf of Perſia.

Perſia, or *Perſis*, Pars, Fars, Iran, lay north and ſouth, between Media and the Perſian Gulf; and between the Tigris to the weſt, and *Aria* to the eaſt.—Περσις ολη μεγαλοισι περιδρομος εστι γαια. *Dionyſ. Per.*

Cyrus, who drew this country from obſcurity, ſubjected to it the greater part of Aſia. The country properly ſo called, among others, contained theſe provinces: *Suſiana*, Chuſiſtan, the moſt weſtern. *Suſa*, the chief town, is now thought to be Souſter, the winter reſidence of the kings of Perſia. It is traverſed by the river *Eulæus* or *Choaſpes*, now Karun, which ſupplied the water chiefly drunk by the kings of Perſia.—Ad Choaſpem amnem pervenit, delicatam, ut fama eſt, vehentem aquam. *Q. Curtius.*—The ſame river is the weſtern boundary of the province of *Elimais*, part of Chuſiſtan, on the Perſian Gulf. The diſtrict between the *Elimais* and the mouth of the Tigris, was called *Characene*, from its chief town *Charax*. *Perſis Propria*, now Farſiſtan, and part of Erac Agem. The chief towns of it were: *Perſepolis*, on the *Araxes*, deſtroyed by Alexander; Schiras is not far from its ruins. *Paſargadæ*, an ancient royal city, where Cyrus was buried; *Aſpadana*, Iſpahan.

The Perſian empire, in the time of the Darius's, was divided into twenty large provinces or ſatrapies.—The principal rivers, beſides thoſe already mentioned, are the *Araxis* or *Aroſis*, (not to be confounded with the river of the ſame name, which flows into the Caſpian,) and *Medus*, which run into each other, and the *Cyrus*. Their courſe is into the Perſian Gulf. The *Oxus*, Gihon, or Amu, was one of the boundaries of Perſia; the country within it was Iran, thoſe beyond it were called Aniran.

Eaſtward lay the province of *Carmania*, Kerman; divided into *Deſerta*, the northern part, and *Vera*, the ſouthern, towards the Arabian Sea. The chief towns were: *Carmana*, *Harmozia*, Ormus.

Gedroſia, extended from *Carmania* to India: it now anſwers to Mekran. The coaſt of it was occupied by the *Ichthyophagi*; the greater part of this country was deſert, and has proved fatal to the armies of ſeveral princes.

Aria, the name of a particular province, when applied to ſeveral of the adjoining countries, was called *Ariana*. *Aria Proper* anſwers to the country now called Choraſan and Sabluſtan. In its more extenſive uſe it contained *Regio Parapameſadum*, Candahar, and the eaſt part of Sabluſtan; *Drangiana*, part of which was occupied by the *Ariaſpæ Evergetæ*, Sigiſtan; *Arachoſia*, extending from *Drangiana* to the *Indus*.

Hyrcania, lay to the north of *Aria*, from which it was ſeparated by the high ridge of mountains called *Parapamiſus*, and which were ſometimes, but improperly, called *Caucaſus*. It extended to the Caſpian Sea, to part of which it gave name: it now anſwers to the north of Choraſan.

To the north of *Hyrcania* lay *Margiana*, inhabited by the *Meſſagetæ*, whoſe queen Tomyris is ſaid to have cut off Cyrus; *Bactriana* and *Sogdiana*, now Uſbeck Tartary, or the Great Bucharia and Balk.—The rivers of this country were: *Margus*, the Morgah; *Oxus*, the Gihon or Amu; *Polytimetus*, *Iaxartes*, the Sirr or Sehoon, *Rymnicus*, *Daix*. Of theſe and others it is difficult to ſay whether their names are proper, or the appellatives of ſeveral.

The South of Asia.—The ſouthern part of Aſia conſiſted of *India intra Gangem*; *India extra Gangem*; *Sinarum Regio*; and *Inſulæ Maris Indici*. The firſt of theſe, *India intra Gangem*, whoſe capital was *Palibothra*, Alihabad, or, according to others, Patna, lay between the two great rivers Indus and Ganges. Beſides other countries, it comprehended the kingdoms of Porus and Taxiles, and a great part of the country of the *Praſii* or *Gangaridæ*, whoſe chief town was *Ganga*. It was very imperfectly known to the ancients. The ſame obſervation is with more reaſon applied to *India extra Gangem*, the farther India, and *Sinarum Regio*, Cochin-China; the northern part of which was *Serica*, Cathai, and China; by others it is thought to be no more than Siam, and *Serica* to have been Tongut.

Taprobane, called alſo *Salice* and *Sielediba*, is thought to be the iſland of Ceylon or Selandib; the ancients thought this a very extenſive country, and conſidered it as the Antipodes or Antichthones of their hemiſphere: *Aurea Cherſoneſus*, Malacca, according to others, Pegu; *Ophir*, the farther peninſula (but of this there are various conjectures), it was alſo called *Argentea Regio*, part of it *Aurea Regio*; *Sabaracus Sinus*, probably was the Gulf of Martaban, and *Beſyngetis*, Pegu; *Promontorium Magnus*, Cape Romania, preceded by *Perimulicus Sinus*, the Straits of Malacca, leading to *Sinus Magnus*, the Gulf of Siam, beyond which the ancients ſeem to have been quite in the dark: *Bonæ Fortunæ Inſulæ*, Great Andaman; *Maniolæ*, the Little Andaman; *Jabadii Inſulæ*, Sumatra; *Sindæ*, the Celebes.

Of the few towns on theſe coaſts, mentioned by ancient geographers, *Patala*, on the *Indus*, built by Alexander, is thought to be Tatta; *Barygaza* on *Namadus*, the river Nerbuddah, Baroach; *Muſiris*, Merjee; *Nigama* anſwers to Negapatam; *Meſolia*, Maſulipatam, was at the mouth of *Meſolus*, the Kiſtnah; *Arcati*, Arcat; *Palura*, Balaſor; *Chaberis Fl.* was the river Cauvery, and *Tyndis*, the Godaveri; the *Magnum Oſtium* of the Ganges anſwers to Hoogli. Several *Emporia*, or factories, are alſo mentioned. The Romans appear to have been better acquainted with this country than the Greeks. There is no reaſon, however, for thinking that the one or the other ſailed round Malacca, or went as far as China.

Many of the ancient names carry with them a marked coincidence to the modern ones; ſuch as, *Dachanos* or *Dachanades*, the Deccan, or country to the ſouth of the Nerbuddah; *Agora*, Agra; *Male*, Malabar; *Comaria Promontorium*, Cape Comorin, the terminating point of the Hither Peninſula, of the projection of which the ideas of the ancients were ſo deficient, that they made its bearing eaſt and weſt, inſtead of ſouth and north. Between it and Ceylon was *Sinus Colchicus*, and *Colymbeſis Pinici*, the pearl-fiſhing coaſt. *Modura* anſwers to Madura.—See further particulars, and Map of Ancient Asia, vol. ii. p. 262.

ANCIENT AFRICA, or LIBYA.

This diviſion of the world is parted from Aſia by the Iſthmus of Suez and the Red Sea; on the other ſides it is waſhed by the Ocean, and the Mediterranean. The parts of it chiefly known to the ancients were Egypt, and the country on the coaſt of the Mediterranean.

Mizraim, or Egypt, is a narrow vale on each ſide of the Nile, widening where the river branches off, before it empties itſelf into the Mediterranean. It was divided into *Inferior et Superior*, Lower and Upper.

Lower Egypt extended along the coaſt from *Plinthines Sinus*, the Gulf of the Arabs, to the *Lacus Sirbonis*, Lake Bardoil, towards Paleſtine. It included the *Delta*, and ſtretched ſouthward as far as *Heptanomis*. It was divided into the four following provinces:

Mareotis Nomos, towards Libya, took its name from the Lake *Marea*, Birk-Mariout, and was famous for its wines.—Mentemque lymphatam Mareotico. *Horace.*

Alexandrina Regio, between the Lake *Marea* and the weſtern branch of the Nile. Its chief town was *Alexandria*, famous for its commerce and opulence, built by Alexander, where the town of *Rhacotis* had ſtood, and the reſidence of the Ptolemies. It was called by the Jews *No*, and is now Scanderik. It was joined by a mole to the oppoſite iſland of *Pharos*, on which was erected a light-houſe, reckoned one of the wonders of the world.

The *Delta*, was comprehended between the eaſtern and weſtern branches of the Nile and the Mediterranean. Of the channels of the Nile there were ſeven large, and five ſmall. Theſe began to branch off near *Memphis*, and their extreme points on the Mediterranean were the towns of *Canopus*, Bekir or Aboukir to the weſt, and *Peluſium*, Damietta, to the eaſt, which gave name to the contiguous channels:

——Luxuria, quantum ipſe notavi,
Barbara famoſo non cedit Turba Canopo. *Juvenal.*

The intermediate channels took their names from thoſe towns which ſtood towards their mouths; *Tanis*, alſo called Zoar; *Mendes*, *Sebennytus*, *Bolbetyne*, &c. On the Canopic branch ſtood *Metelis*, now Roſetta. On the eaſtern ſide of the Delta were, *Magdolum*, *Bubaſtus*, *Babylon*, the Land of *Goſhen*, *Heroopolis*, Kalaat-Agerud; *Arſinöe*, Suez; *Caſius*, with a mountain of the ſame name, at the bottom of which ſtood Pompey's tomb. Near this town was the Lake *Sirbonis*, into which Typho is fabled to have thrown himſelf after the murder of Oſiris. *Rhinocolura*, on the Jewiſh frontier, an intermediate ſtation between Tyre and the Red Sea, long convenient to the Phœnicians, is now Faramina: the ſandy deſerts on this ſide of Egypt rendered the invaſion of it from Aſia difficult. The *Delta*, as indeed all Egypt, was divided into various nomes or præfectures: of theſe there were in all fifty-three.

Upper Egypt commenced at the ſouthern point of the Delta, and was generally divided into *Heptanomis*, and *Thebais*.—*Heptanomis* was ſo called from the ſeven *Nomoi* or governments into which it was divided. The chief of theſe was that of *Memphis*, long the capital of all Egypt, on the weſtern bank of the Nile. Not far from its ruins are the Pyramids, ſuppoſed to have been the burial-places of the kings of Egypt. The largeſt of theſe covers about eleven acres of ground, and is above five hundred feet in height. Near the pyramids are the mummy-pits or ſubterranean vaults, in which the embalmed bodies were depoſited. Grand Cairo, on the oppoſite ſide of the river, has ſucceeded to a part of its conſequence. The canals which ſeparated Memphis from the burying-grounds, according to ſome, ſuggeſted to the poets the ideas of the infernal rivers of *Styx*, *Acheron*, *Cocytus*, and *Lethe*.

In the nome of *Arſinöe*, or the City of the Crocodiles, now Feyyum, was *Mœris Lacus*, Lake Kein, dug to receive the overflowing of the Nile. On the banks of it ſtood the famous labyrinth, conſtructed by twelve princes who ruled Egypt at the ſame time; it is ſaid to have conſiſted of twelve palaces and three thouſand apartments; *Heracleopolis*, *Oxyrinchus*, ſo called from the worſhip of a fiſh of this name, now Bohneſe; *Hermopolis Magna*, Aſhmouneim; *Beſa*, afterwards *Antinöe*, in honour of the favourite of Adrian, now Enſene.

In this diviſion of Egypt lay the Greater and the Smaller *Oaſis*; diſtricts of dangerous acceſs, on account of the moving ſands with which they were ſurrounded. They lay to the ſouth-weſt, and near one of them was the temple of Jupiter Ammon.

Thebais, which took its name from the ancient Thebes, now Said, extended from *Heptanomis* to Æthiopia. Its chief towns and nomes on the weſt of the Nile were: *Lycopolis*, Oſiot; *Hypſele*, Sciot; *Thin*, *Ptolemais*, Menſhié; *Dioſpolis Parva*, How; *Tentira*, Dendera; the town and iſland of *Elephantine*, near which was the laſt cataract of the Nile. The people who lived near the cataracts were called *Catadupæ*.

On the eaſtern ſide were thoſe of *Antæopolis*, Kau; *Panopolis*, *Coptos*, Keft, from which a great trade was carried on to *Berenice*, on the Red Sea; *Thebæ* or *Dioſpolis Magna*, now Luxor, a very great city, ſaid to have had a hundred gates:

Dimidio magicæ reſonant ubi Memnone chordæ,
Atque vetus Thebe centum jacet obruta portis. *Juvenal.*

Syene, Aſuan, under the Tropic of Cancer:

—— Quis ad exuſtam, Cancro torrente, Syenem
Ibit, et umbrifera ſiccas ſub Pleiade Thebas? *Lucan.*

Philæ, an iſland and town above the cataract; and *Metacompſo*, which, with *Elephantine*, were the ſouthern boundaries of Egypt.—See the article EGYPT, vol. vi. p. 353.

Beſides the towns of *Heroopolis*, Kalaat-Agerud; *Arſinöe*, Suez; and *Berenice*, founded by Seleucus for the Indian trade; there were, on the Egyptian ſide of the Red Sea, *Cly ſma*, now Kolſum; *Myos-Hormos* or *Aphrodytes*, Suſany-ul-Bahri; *Philoteræi Urbs*, Coſſeir.

Theſe coaſts were inhabited by ſavage tribes of *Ichthyophagi*, and *Troglodytæ*, who lived in caves; they are now part of Abyſſinia: the higher parts of the Nile were occupied by the *Nobatæ*, in whoſe country was the greater cataract; by the *Blemmyes*, ſaid to have been of monſtrous ſhape; the *Sebridæ*, *Auxumitæ*, *Nubæ*, *Ethiopes*, different tribes of Nubians and Abyſſinians. The rivers *Aſtaboras* and *Aſtapus* form, with the Nile, the iſland or peninſula of Meröe. The *Aſtaboras* receives for its modern appellation the name of Tacaze; the *Aſtapus*, that of Abawi.

The next diviſion of Africa, between Egypt and the Greater Syrtes, included *Marmarica*, *Cyrenaica* or *Pentapolis*, and *Libya*. This laſt name was alſo extended to them all, and even to the whole of Africa, by the Greeks, to whom this part of it was beſt known. Under the Ptolemies theſe countries were ſubject to Egypt; they now form the kingdom of Barca. A conſiderable declivity in the country, called the *Catabathmus Magnus*, ſeparated *Cyrenaica* from *Marmarica*. It was alſo made by ſome a line of diviſion between Africa and Aſia, ſo as to include Egypt in Aſia.—The chief towns were: *Cyrene*, Curin; *Berenice*, Bernic; *Ptolomais*, Tolometa; *Arſinöe*, Teukira; *Barce*, Barca, and the temple of Jupiter Ammon. At *Berenice* are thought to have been the gardens of the Heſperides:

Maſſylæ gentis monſtrata ſacerdos,
Heſperidum templi cuſtos, epulaſque draconi
Quæ dabat, et ſacros ſervabat arbore ramos. *Virgil.*

Among other tribes inhabiting this country, were the *Naſamones*, infamous for their cruelty to thoſe wrecked on the Syrtes; and the *Pſylli*, who, by certain charms, poſſeſſed power over the moſt venomous ſnakes:

Natura locorum
Juſſit ut immunes mixti ſerpentibus eſſent. *Lucan.*

Libya Deserta had no towns. It is now chiefly the Defert of Barca. The country extending from Libya weſtward to the Atlantic Ocean, contained *Africa Propria*, *Numidia*, and *Mauritania*. The Greater *Syrtes*, now the Gulf of Sidra, a bay full of dangerous ſhoals, parted it from *Cyrenaica*. The ſmaller *Syrtes*, now the Gulf of Gabes, lay to the weſt of the bay. *Phycus Promontorium*, Cape Raſat, bounded it to the eaſt, and *Cephalæ Prom.* Cape Meſrata, to the weſt. Another mark of ſeparation was the *Philenorum Aræ*, monuments in honour of the two Phileni, brothers who devoted themſelves to death to extend the territories of their country, Carthage:

Per inhoſpita Syrtis
Litora, per calidas Libyæ ſitientis arenas. *Lucan.*

The country lying between the two Syrtes was called *Syrtica Regio*, and anſwers to the preſent kingdom of Tripoli. The three towns of *Sabrata*, Sabart; *Oea*, Tripoli, and *Leptis Magna*, Libada, gave to one diviſion of it the name of Tripoli. It was bounded on the eaſt and weſt by the rivers *Cinyps*, Macre; and *Triton*, Capès. Minerva is thought to have taken her name from the laſt of theſe.

The iſland of *Meninx* or *Girba*, on this coaſt, now Zerbi, was alſo called *Lotophagitis*, from the *lotos*, a ſweet intoxicating fruit, the chief article of food to ſeveral tribes of the *Regio Syrtica*.

The next diviſion of the country weſtward, from the Leſſer Syrtes to Numidia, was *Africa Propria*, now the kingdom of Tunis. It was divided into the two regions of *Byzacene*, and *Zeugitana*. The former of theſe took its name from the town of *Byzacium*, now Bighni. It extended from the Leſſer Syrtes to *Adrumetum*. It alſo contained *Tacape*, Capès, near the mouth of the *Triton*; *Adrumetum*, now Mahometta, its chief town; *Macomades Minores*, now El Mahres; *Taphrura*, Sfakes; *Tyſdrus*, El Jem; *Tapſus*, a place of note in Cæſar's wars, now Demſas; *Thenæ*, Taineh; *Leptis Minor*, Lemta. This diviſion, on account of its great fertility, was alſo called *Emporia*.

Of the towns of *Zeugitana*, which commenced at *Adrumetum*, and extended to *Numidia*, from which it was ſeparated chiefly by the river *Tuſca*, Guadelbarbar; *Neapolis* is now Nabel; *Curubis*, Gurbes; *Clypea*, Aklibia, near *Hermæi* or *Mercurii Promontorium*, Cape Bona; *Tunis* or *Tunetum*, Tunis, become, ſince the fall of Carthage, a great city; *Carthago*, called alſo *Carthada* and *Carchedon*, Carthage, was built by the Phœnicians, deſtroyed by Scipio, reſtored by Auguſtus, and finally ruined by the Saracens, towards the end of the ſeventh century. Its citadel was called *Byrſa*. The principal harbour was formed by the iſland *Cothon*, which had ranges of docks for ſhips all round it.

Utica, where Cato died, now Satcor, ſtood near the mouth of the *Bagradas*, now Megrada; *Hippo Zarytos* is now Benzert; *Tabraca*, Tabarca; and *Vacca*, Vegjo:

Quales umbriferos ubi pandit Tabraca Saltus,
In vetula ſcalpit jam mater ſimia bucca. *Juvenal.*

On the banks of the *Bagradas* Regulus met the enormous *boa* ſnake, againſt which he was obliged to employ his military engines. See BOA, vol. iii. 134.—The chief inland towns of this diviſion were: *Taburda*, *Sicca Venerea*, Kef; *Tucca*, Tugga; *Zama*, where Scipio defeated Hannibal; *Capſa*, Cafsa, a ſtrong-hold of Jugurtha's in the Defert; *Telepte*.

The bay lying between *Mercurii* and *Apollinis Promontorium*, Cape Bona and Cape Negro, is now the Bay of Tunis; *Prom. Candidum*, Cape Mabra, formed with *Prom. Apollinis*, the Bay of Bona, formerly *Sinus Hipponenſis*.

Numidia, which takes its name from the Nomades, now the kingdom of Algiers, extended from *Tuſca*, the river Guadelbarbar, to the *Mulucha* or *Molocath*, now the Mulvia. The river *Ampſaga*, Wad-el-Kirbir, the Great River, and *Tretum Promontorium*, Cape Sefarous, divided it into *Numidia Propria* or *Maſſylorum*, to the eaſt, and *Numidia Maſſæſylorum* to the weſt, which was generally conſidered as part of Mauritania. The former was ſubject to Maſſiniſſa, the latter to Syphax. They became one kingdom in the family of Maſſiniſſa, on account of his attachment to the Romans, and were afterwards made over to Bocchus for betraying Jugurtha. Being divided in his family, the eaſtern part was called the kingdom of Bocchus, and the weſtern the kingdom of Bogud. The river *Malva* was the common boundary of this diviſion. The chief towns were: *Hippo Regius*, the epiſcopal ſeat of St. Auguſtine, now Bona, near which was Mount *Pappua*, the retreat of Gelimar, after his defeat by Beliſarius, now Edoug. On the *Sinus Numidicus*, the Gulf of Stora, was *Ruſicade*, Sgegada; *Cirta*, the reſidence of the kings of Numidia, is now Conſtantina; *Tagaſte*, Tajelt; *Tebeſte*, Tebeſs.

To the ſouth of this country, and of Mauritania, was *Gætulia*, a diſtrict of which was named *Zaba*, from a river which flowed through it. The people of this country, in a ſubſequent period, were the *Bereberes*, from whom Barbary has taken its name.

Mauretania, ſo called from its people the *Mauri*, lay behind *Numidia Maſſæſylorum*, and ſtretched from the river *Ampſaga* to the Ocean: it contained, with part of Algiers and Biledulgerid, the kingdoms of Fez and Morocco. That part of Numidia which was annexed to Mauretania by Auguſtus, was called *Mauretania Cæſarienſis*. The other part, the ancient *Mauretania*, was diſtinguiſhed by the name of *Tingitana*, and extended to the Atlantic.

In the firſt of theſe were the following towns: *Igilgilis*, Tigel; *Saldæ*, Tedles; *Tubuſuphis*, *Cartenna*, Tenez; *Cæſarea*, ſo called by Juba, its preceding name being *Iol*, now thought by ſome to be Algiers, and by others to be Serſel; *Portus Magnus*, Arzeu; *Portus Divini*, Oran and Marz-al-Kibir; *Siga*, for ſome time the reſidence of Syphax, now Ned-Roma. Upon the river *Molocath* was *Calaa*, now Calaat-el-Wad; *Sitifi*, an inland town, now Setif, gave name to the diſtrict of *Cæſarea Sitifenſis*.—The ſea-coaſt of theſe countries was planted with many Roman colonies.

Tingitana, or *Mauretania Proper*, extended from the *Molocath* to the Atlantic, and took its name from its chief town, *Tingis*, now Tangier: it nearly anſwers to the preſent kingdom of Fez. The people were the *Mauri* and *Mauruſii*. Part of it, under the Weſtern Empire, was ranked under a diviſion of Spain, and was called *Hiſpania Tranſretana*.

The promontories on this coaſt were: *Metagonium*, Cape Three Forks, which is by ſome ſuppoſed to have been *Ruſadir Promontorium*; *Abyla*, Apes Hill, one of Hercules's pillars; *Septem Fratres*, the Promontory, and *Septum*, the town of, Ceuta; *Ampeluſia Cotes*, Cape Spartel. *Arſenarium Prom.* Cape Bojador, according to others Cape Verd. Θεων Οχημα, the Chariot of the Gods, probably the mountains of Sierra Leone. Of the towns, beſides *Tingis*, Tangier, already mentioned, the moſt remarkable were *Ruſadir*, Melilla; *Parietina*, Velez; *Tœnia Longa*, Targa; *Jagath*, Tetuan. On the Ocean, *Zilis* is now Azzilia; *Lixus*, the abode of *Anteus*, l'Arais or l'Arache; *Volubilis*, Gualili. The chief rivers on this ſide are *Lixus*, the Lucos; *Subur*, the Subou, the ſources of which, as alſo of the *Gir*, perhaps now the Niger, are in the ranges of Mount Atlas:

—— Quanto ſublimior Atlas
Omnibus in Libya ſit montibus. *Juvenal.*

—— Cælifer Atlas
Axem humeris torquet ſtellis ardentibus aptum. *Virgil.*

Beſides the *Gætuli*, already mentioned, and the *Melano Gætuli*, towards the deſerts, lived the *Naſamones*, the *Mazices*, the *Daræ*, who gave name to the Defert of Zarah Saharrah; the *Garamantes*, *Libyes*, *Æthiopes*, &c.

Weſt

Weſt of the coaſt were *Inſulæ Purpurariæ*, the chief of which was *Cerné Atlantica*, the Madeiras; *Inſulæ Fortunatæ*, the Canaries; one of which, *Nivaria*, is ſuppoſed to be Teneriffe; *Inſulæ Heſperides et Gorgonum*, the Cape Verd Iſlands; *Cerne Æthiopica*, perhaps Madagaſcar. The accounts, however, of theſe are thought to be fabulous, as alſo of Plato's *Atlantis*, which by ſome has been ſuppoſed to be America. How far to the ſouth the weſt coaſt of Africa was known to the ancients, is not aſcertained; but many are of opinion that the circumnavigation of it was not unknown to them. For more particulars, and Map of ANCIENT AFRICA, ſee vol. i. p. 144.

SUMMARY OF MODERN GEOGRAPHY.

The epoch or period unto which the ancient geography has been brought up, and at which that of the modern muſt have taken its riſe, would ſeem to be about the middle of the fifth century of the Chriſtian era. The notices we have of geography from the pens of thoſe who are termed "ancient or claſſical authors," extend not in any eſſential degree beyond the above-mentioned time; and the diſcovery of the continent of America, or New World, by Chriſtopher Columbus in 492, is deciſive of the period at or about which our reſearches in modern geography ought to commence. This department, therefore, embraces an inveſtigation, from that period, of the ſtate of all thoſe countries or diſtricts contained in what have been vaguely termed "the four quarters of the globe," namely, Europe, Aſia, Africa, and America; and alſo of thoſe newly-diſcovered regions which ſome late French geographers denominated "the *fifth* and *ſixth quarters* of the world;" but which the generality of modern writers have agreed to diſtinguiſh by the names of AUSTRALASIA and POLYNESIA. Of each of theſe diviſions of the earth we ſhall briefly treat in their reſpective order; and for an elucidation of their geographical poſitions, we refer the reader to the annexed map of the Eaſtern and Weſtern Hemiſpheres.

EUROPE.

This portion of the globe, though not the largeſt, is nevertheleſs the moſt celebrated for its progreſs in arts, ſciences, and literature. It is in the modern, what Aſia was in the ancient, geography,—the moſt enlightened part of the civilized world. It is ſituated between ten degrees weſt and ſixty-five degrees eaſt longitude from Greenwich, and between thirty-ſix and ſeventy-two degrees of north latitude. By recent calculation it is ſaid to be about three thouſand miles in length, from Cape North to the ſouth of Spain, or Italy; and about two thouſand five hundred miles in breadth, from Cape Finiſtre to the river Don; being bounded on the north by the Icy or Frozen Sea, on the ſouth by the Mediterranean, by Aſia on the eaſt, and the Atlantic Ocean on the weſt; and it is by ſome writers divided into *north*, *middle*, and *ſouth*.

North Europe compriſes Lapland, Denmark, Norway, Greenland, Iceland, Sweden, and Ruſſia.

Middle Europe contains Pruſſia, Poland, Holland, Germany, Bohemia, Hungary, Tranſilvania, Sclavonia, Croatia, Flanders, France, Swiſſerland, Savoy, Piedmont, England, Scotland, and Ireland.

South Europe includes Spain, Portugal, Italy, and what is uſually called Turkey in Europe.—See the map of Modern Europe, vol. vii. p. 84.

LAPLAND.—This region of the arctic circle is divided into Daniſh, or North Lapland; Swediſh, or South Lapland; and Ruſſian, or Eaſt Lapland.—North Lapland, which is under the dominion of his Daniſh majeſty, lies between the Northern Sea, the river Pais, and the lake Enarak, and is included in the government of Wardhus. South Lapland comprehends all the country from the Baltic to the mountains that ſeparate Norway from Sweden, and it is divided into ſix diſtricts, diſtinguiſhed by the names of rivers, as Una, Peta, Torna, &c.—Eaſt Lapland is ſituated been the lake Enarack and the White Sea; it is divided into three prefectures or lepories: that towards the north is called Mournanſkoi; in this is the port of Kola: Terſkoi Leporie is one on the coaſt of the White Sea: the other is inland, and is called Bellamoreſkoi Leporie.

Lapland is bounded on the north and eaſt by the Northern and White Sea, and on the ſouth and weſt by Sweden and Norway. It is covered with immenſe foreſts, chiefly of pine or fir.

The whole of Lapland extends from North-Cape, in latitude ſeventy-one degrees and a half, to the White Sea under the Arctic Circle; its ſurface may contain from ſeventy to eighty thouſand ſquare miles; but its population cannot be aſcertained with any degree of accuracy. The chief towns are, Kola and Tornea.

In the higheſt part of Lapland the ſun is abſent for about ſeven weeks; the ſtars are viſible at noon, and the moon ſhines without intermiſſion. In the ſummer, on the contrary, the ſun never ſets for ſeven weeks together, and the moon and ſtars are never ſeen.

DENMARK.—This kingdom extends from the river Elbe in the ſouth, to the northern extremity of Daniſh Lapland. It is ſurrounded on the north, eaſt, and weſt, by the ſea: and on the ſouth by the Duchy of Holſtein, part of which belongs to Denmark. Within theſe limits, Norway is included, as well as Denmark Proper; which of itſelf is but a ſmall territory, containing only the peninſula of Jutland, and the iſlands of Zealand, Funen, &c. at the entrance of the Baltic. Its chief town, Copenhagen, is in the iſland of Zealand. At Elſinore, all foreign ſhips that trade to the Baltic pay toll. That part of the ſea ſituated between Zealand and Funen, is called the *Great Belt*; and that which divides Funen from the continent of Denmark, is called the *Little Belt*.

Excluſive of the iſlands in the Baltic, theſe countries lie between fifty-four and fifty-eight degrees north latitude; and between eight and eleven degrees eaſt longitude. The whole ſurface of the two countries united, may be reckoned at 19000 ſquare miles; and the population is computed at two millions and a half.

NORWAY, the appendage to Denmark, is divided into four general governments, viz. Aggerhus, Bergen, Drontheim, and Wardhus. The chief town of Norway is Chriſtiana. It is one of the moſt mountainous countries in the world; and the rivers and cataracts, which interſect the mountains, render travelling exceedingly dangerous. The inhabitants have neither corn-fields nor gardens, but ſubſiſt chiefly by hunting and fiſhing. On this coaſt is the famous vortex of the ſea called the *Maelſtroom*: it is heard at a great diſtance, and forms a whirlpool of vaſt depth and extent, and ſo violent, that, if a ſhip comes near it, it is drawn in and ſhattered to pieces. The chief wealth of Norway lies in its white and yellow deals, with which foreign nations are ſupplied. It poſſeſſes quarries of excellent marble, and mines of various metals.

GREENLAND.—Weſt-Greenland, as well as the Ferroe iſlands, is alſo ſubject to the king of Denmark. It is the moſt remote tract of land towards the north-pole that has yet been diſcovered; being ſituated between the meridian of the obſervatory at Greenwich and fifty degrees of weſt longitude; and between ſixty and ſeventy-ſix degrees of north latitude. Its extent has never yet been calculated with any degree of preciſion: but it is ſaid to be inhabited as far as ſeventy-ſix degrees of north latitude: the Daniſh ſettlements, however, have never extended beyond ſeventy-three degrees. The whole number of its inhabitants does not

probably exceed eight thouſand. Its coaſt has been long famous for the whale fiſhery.

Eaſt Greenland, or Spitſburgen, and Weſt Greenland, are ſuppoſed to be a continuation of the ſame country; but this fact cannot be determined until their boundaries towards the north pole ſhall have been aſcertained; which will probably never happen, on account of the impoſſibility of navigating the frozen ocean.

ICELAND.—This frozen iſland is likewiſe under the dominion of Denmark. It is ſituated in the North Atlantic Ocean, between Norway and Scotland, lying between ſixty-three and ſixty-eight degrees of north latitude, and between fifteen and twenty-five degrees of eaſt longitude. The extent of it may be about one hundred thouſand ſquare miles, and the number of inhabitants is eſtimated at from ſixty to ſeventy thouſand. This iſland is celebrated for the volcano of mount Hecla.

SWEDEN.—The kingdom of Sweden is ſituated at the north of Europe, and is of very conſiderable extent, reaching from the ſouthern promontory of Scone, to the northern extremity of Swediſh Lapland, more than eleven hundred Britiſh miles in length; and from the Norwegian Alps to the Ruſſian dominions, about ſix hundred miles in breadth. The country is included between fifty-five and ſeventy degrees of north latitude, and between the twelfth and thirty-ſecond degrees of longitude eaſt from Greenwich. It is bounded by the Baltic Sea, the Sound, and the Scaggarac, on the ſouth; by the mountains of Norway on the weſt; by Norwegian Lapland on the north, and by Ruſſia on the eaſt. The extent of Sweden has been computed at more than two hundred thouſand ſquare miles; and the number of inhabitants has been eſtimated at nearly three millions.

This kingdom, including the greateſt part of ancient Scandinavia, is divided into Sweden Proper, Gothland, Finland, Swediſh Lapland, and the Swediſh iſlands. The chief towns are Stockholm, the capital, which ſtands on ſeven rocky iſlands, united by wooden bridges; Upſal, famous for its univerſity; Gothenburg, in Gothland; Tornea, in Lapland; and Abo, in Finland. The chief wealth of this country ariſes from its mines of ſilver, copper, lead, and iron. The mines are very ſpacious, afford commodious habitations for numerous families, and ſeem to form a ſubterraneous world.

Sweden is a mountainous country, and is celebrated for the number and extent of its lakes; its rivers are numerous, but not navigable: almoſt all of them riſe from the mountains in Norway. Its iſlands, about the lakes and gulfs on the coaſt of the Baltic, are ſo numerous, that ſeveral thouſands of them are reckoned to be inhabited, and the reſt are deſert rocks. In the Baltic Sea there are no tides; and a current is always running into the German ocean.

RUSSIA.—The Ruſſian empire is perhaps the moſt extenſive that ever exiſted: the length is computed at more than nine thouſand miles, and the breadth at two thouſand four hundred. It is ſituated partly in Europe, and partly in Aſia. European Ruſſia extends from forty-four degrees, to nearly ſixty-nine degrees north latitude, and from twenty-three degrees to ſixty-eight degrees eaſt longitude. It is bounded by the Frozen Ocean on the north, by Aſiatic Ruſſia on the eaſt, Tartary and Turkey on the ſouth, and the dominions of Sweden, Auſtria, and Pruſſia, on the weſt. The extent of ſurface of European Ruſſia is reckoned at nearly a million and a quarter of ſquare miles, and the population is eſtimated at thirty-three millions.

By the partition of Poland, in 1772 and 1793, Ruſſia acquired two-thirds of that country, and about ſix millions of ſubjects. In ſome parts of Ruſſia the climate is ſo ſevere, that icicles are frequently ſeen hanging to the eye-laſhes, and the drivers of carriages are often found frozen to death on their ſeats. The principal towns are Peterſburgh, the capital, on the Gulf of Finland; Moſcow; Archangel, on the borders of the White Sea; Cherſon, on the Black Sea; Aſtrachan, near the Caſpian; and Tobolſk, the capital of Siberia. Peterſburgh, built ſince 1700, contains about 150,000 inhabitants. The principal lakes are Ladoga and Onega.

Ruſſia is moſtly a level country; from Peterſburgh to Pekin in China there is ſcarcely a hill; the ſame may be ſaid of the road from Peterſburgh to the north of France. The principal rivers are the Wolga, which, after winding a courſe of three thouſand miles, diſcharges itſelf into the Caſpian Sea by more than ſeventy mouths; the Don, or Tanais, the Nieper, and Nieſter. By theſe means the inland navigation is very extenſive; goods may be conveyed by water from Peterſburgh to China, with an interruption of only ſixty miles. Ruſſia is alſo celebrated for its timber and flax trade, its iron and copper mines in the Uralian mountains, and its fiſheries.

Among the natural curioſities of this northern region muſt be mentioned the rocks of ice, of many miles in extent, and aſtoniſhing height, adorned like cathedrals with pinnacles which reflect every variety of colours in the ſun, and preſent themſelves all along the Frozen Ocean.

PRUSSIA.—Excluſive of ſmall detached territories, this kingdom extends from Hornburg and the river Oder, in the country of Halberſtadt, the fartheſt weſtern connected diſtrict, to the river Memel. It is bounded on the north by the Baltic Sea; on the eaſt and ſouth by parts of Ruſſia, and Auſtria, and on the weſt by the German States. It is ſituated chiefly between fourteen and twenty-four degrees eaſt longitude, and between fifty and fifty-five degrees north latitude.

Pruſſia, in its moſt flouriſhing era, was ſuppoſed to contain about 150,000 ſquare miles, and its population may amount to 8,000,000, including the margraviate of Anſpach and Bayreuth, (ſince lopped off by Napoleon Bonaparte,) and the acquiſitions from Poland. The chief towns are Berlin, on the river Spray; Konnigſberg, Breſlaw, Warſaw, and Dantzick. Potzdam is a recent city; it is ſituated on an iſland amidſt lakes and canals; its caſtle was built in 1663, and has ſince been a favourite reſidence of the Pruſſian monarchs.

This territory is divided into Royal Pruſſia, and Ducal Pruſſia. Royal Pruſſia lies on the weſt ſide of the Viſtula, and Ducal Pruſſia on the eaſt.—What may be the extent of this kingdom, or whether it will exiſt at all, after the preſent war with France, (1806,) time alone muſt develope.—The chief rivers are the Viſtula, the Pregel, and the Memel.

HOLLAND.—The republic of Holland, or Batavia, but now the kingdom of Holland under Louis Bonaparte, conſiſts of what were formerly called, Seven United Provinces, viz. Groningen, Grieſland, Overyſſel, Holland, Utrecht, Guelderland, and Zealand. Theſe provinces extend from the north of Groningen to the ſouthern boundary along Flanders and Brabant, about 150 Britiſh miles; and in breadth from the North Sea to the circle of Weſtphalia, about one hundred miles. It is bounded on the north by the German Ocean, on the weſt by the Britiſh Channel, on the eaſt by the German Ocean, and on the ſouth by ſome of the newly-acquired dominions of France. It is ſituated between three and ſeven degrees eaſt longitude, and between fifty-one and fifty-four degrees of north latitude. The whole country has been eſtimated at 10,000 ſquare miles, and the number of inhabitants at about 3,000,000.

The chief towns in the kingdom of Holland are, Amſterdam, Leyden, Rotterdam, and Haarlem. The Hague is the largeſt, and was the richeſt, *village* in the world; it is thirty miles from Amſterdam; and was, before the revolution, the ſeat of government, and the reſidence

reſidence of the principal people. Amſterdam, the capital, is curiouſly built upon wooden piles. Leyden is famous for its univerſity. The ſtreets have canals running through them, the borders of which are planted with rows of trees. The principal rivers are the Rhine, the Maeſe, and the Scheldt. The canals are very numerous, and ſerve the ſame purpoſes as roads in other countries, viz. travelling, and the conveyance of goods.

GERMANY AND AUSTRIA.—Germany is ſituated in the middle of Europe; it conſiſts of a number of inferior ſtates, and of the dominions of Auſtria, which comprehend part of Germany, Hungary, and a large portion of what was formerly called Poland. According to its modern limits, it is bounded on the north by the German Ocean, Denmark, the Baltic, and part of Pruſſia. It includes Tranſylvania on the eaſt; on the ſouth it extends to Turkey in Europe; and its confines on the weſt are ſeveral departments of France.

This extenſive country is included between the eighth and twenty-ſixth degrees of eaſt longitude from London; and between forty-five and fifty-three degrees north latitude. The whole Auſtrian dominions have been eſtimated at more than 184,000 ſquare miles, with a population of 20,000,000; and the other German ſtates are more than equal to theſe, both in extent and number of inhabitants. Germany is compriſed under nine great diviſions, called circles: three northern, Weſtphalia, Lower Saxony, and Upper Saxony: three in the middle, Lower Rhine, Upper Rhine, and Franconia: and the three ſouthern, Swabia, Bavaria, and Auſtria. Theſe circles are ſubdivided into principalities, duchies, electorates, biſhoprics, &c. Beſides theſe there are a number of free cities, which are ſovereign ſtates; and ſome of them are ſtyled imperial towns.

The emperor is (or was) elected, by ten electors, for life, under the title of Emperor of Germany and King of the Romans. The emperor Francis is alſo, in his own right, Emperor of Auſtria and King of Bohemia. The ten electors are: the king or elector of Bohemia; the king or elector of Bavaria; the elector of Saxony; the elector of Brandenburgh (king of Pruſſia); the elector of Hanover (king of England); the elector archchancellor of the empire, whoſe reſidence is at Ratiſbon; the elector of Saltſburgh; the elector of Baden; the king or elector of Wirtemburgh; and the elector of Heſſe.

The electors of Saxony and Brandenburgh have been regarded as the principal potentates in the north of Germany; and the king of Bavaria and the king of Wirtemburgh in the ſouth. Pruſſia and Auſtria are conſidered as independent powers. Almoſt every prince in Germany, of which there were about two hundred, was arbitrary in the government of his own eſtate; but together they form a great confederacy, governed by political laws. The head of all theſe petty ſovereigns was the emperor; but ſoon after the Confederation of the Rhine was formed by Bonaparte, (July 12, 1806,) which drew all the princes in the ſouth of Germany from their allegiance to the emperor, and placed them under his own controul, Francis II. formally renounced the title of Emperor of Germany, (Aug. 6, 1806,) and at preſent his title is Francis I. Emperor of Auſtria.

The chief towns are: Vienna, the reſidence of the preſent emperor. Dreſden, the reſidence of the elector of Saxony, famous for its gallery of pictures, its various collections in the fine arts, and its porcelain manufactory. Berlin, which is the capital of the Pruſſian dominions. Hamburgh, ſituated on the Elbe, and one of the firſt commercial cities in Europe. Leipſic and Frankfort, famous for their fairs. Gottingen, Jena, Leipſic, and Halle, celebrated for their univerſities. Beſides Hanover, Munich, Manheim, Wirtemburgh, Heidelburgh, Augſburgh, Conſtance, and Prague. The principal rivers of Germany are; the Danube, the Rhine, the Maine, and the Elbe.

The Auſtrian dominions comprehend Auſtria, Bohemia, Hungary, and part of Poland; and contain upwards of twenty millions of inhabitants. By the partition of Poland, Auſtria acquired one-ſixth part of that country, and more than four millions of ſubjects.

The capital of this compact military empire is Vienna, where the emperor is conſidered as the ſucceſſor of Auguſtus. The other chief towns are Venice, Prague, Preſburg, Buda, Cracow, and Trieſte.—The principal mountains are the Tyroleſe, the Alps, and the Carpathian mountains, under and amongſt which numerous and extenſive foreſts ſpread themſelves in every direction.

By the treaty of Luneville, in 1801, the Rhine from Swiſſerland to Holland having been ſettled as the line of limitation between Germany and France, all that part of the German territory which lay to the weſt of the Rhine was ceded to France. The princes who ſuffered from this ceſſion, were ultimately to be indemnified by exchanges, and by ſeculariſing many of the eccleſiaſtical ſtates. This indemnification, however, has not yet taken place.

POLAND.—Though this kingdom has been annihilated by the rapacity of its neighbours, yet it is expedient that the former ſtate of its exiſtence ſhould ſtand upon record. Its geographical ſituation was E. lon. 16. 34. N. lat. 46. 57. Length, 700 miles; breadth, 680; and its capital was Warſaw. It was bounded by the Baltic and Ruſſia, north; Hungary and Turkey, ſouth; Ruſſia, eaſt; Germany, weſt. It contained the provinces of Courland, Poliſh Livonia, Samogitia, Poliſh or Royal Pruſſia, Lithuania, Polachia, Poleſia, Volhinia, Podolia, Red Ruſſia, Great Poland, Little Poland, and Mazovia.

There belonged to Poland 230 towns, and 2377 villages. Its rivers are, Lower Dwina, Niemen, Viſtula, Bog, Nieper or Boriſthenes, and Nieſter. The population was ſuppoſed to amount to 11,000,000. The government was a limited and elective monarchy. An attempt was made in 1792, to improve and render it hereditary; but it ended in the deſtruction of the monarchy, and of the independence of the kingdom.

By the firſt partition of Poland in 1772, Ruſſia having ſeized great part of Lithuania, the emperor great part of Red Ruſſia and Little Poland, and the king of Pruſſia that part of Poland which borders on his dominions, the revenue, population, and extent of this country were then much diminiſhed; ſo that but a weak reſiſtance could be made to the ſecond partition in 1793, when the remaining part was divided between Ruſſia and Pruſſia.

TURKEY IN EUROPE.—This fine and fertile country is bounded on the north by Ruſſia and Auſtria; on the eaſt by the Black Sea and the Sea of Marmora; on the ſouth by the Archipelago and the Mediterranean; and on the weſt by the Gulf of Venice and Dalmatia. Its geographical poſition is between ſeventeen and thirty degrees of eaſt longitude, and between thirty-ſix and forty-eight degrees of north latitude; and is computed to contain more than 180,000 ſquare miles, and the population is eſtimated at 8,000,000.

Turkey in Europe includes GREECE, which anciently was the moſt celebrated region in the world. It comprehended Macedonia, Albania, Epirus, Theſſaly, Achaia, the Morea, together with numerous iſlands on its coaſt, and in the Archipelago. It was bounded on the north by Bulgaria and Servia, on the eaſt by the Archipelago, on the weſt by the Gulf of Venice, and on the ſouth by the Mediterranean. The government is under the Grand Seignior, who is maſter of the lives and properties of his ſubjects. He aſſumes the titles of God upon earth, the ſhadow of God, the brother of the ſun and moon, &c.

The northern provinces of Turkey in Europe are, Moldavia, Beſſarabia, Walachia, Servia, Boſnia, and Dalmatia; thoſe in the middle are, Bulgaria, Romania, Macedonia, Albania, and Epirus; the ſouthern part,

or remnant of Greece, contains Theſſaly, Achaia, and the Morea.

The metropolis of Turkey is Conſtantinople, finely ſituated between the Sea of Marmora and the Black Sea, and ſtill one of the moſt conſiderable cities in Europe. Adrianople is the ſecond city in the Turkiſh empire, and was formerly the capital. The principal rivers are, the Danube, the Save, and the Nieſter. The chief mountains are, Pindus and Olympus, which ſeparate Theſſaly from Epirus; Parnaſſus, in Livadia; Athos, and Hæmus. Athos is celebrated for its loftineſs, and is now inhabited by thouſands of monks and hermits.

The iſlands belonging to Turkey are very numerous. The chief are Rhodes, and Candia, in the Mediterranean. Zante, Cephalonia, Corfu, and others of the Ionian iſles, lying weſt of Turkey, form the new republic of the "Seven Iſlands."

France.—This is one of the moſt weſterly kingdoms of Europe. Its boundaries are, the Britiſh Channel and Holland on the north; Germany, Swiſſerland, and part of Italy, on the eaſt; the Mediterranean and Spain on the ſouth; and the Atlantic Ocean on the weſt. It is ſituated between forty-two and fifty-two degrees north latitude, and between five degrees weſt and eight degrees eaſt longitude. Since the late acquiſitions made to France, its extent of ſurface cannot be leſs than 200,000 ſquare miles, and the population is probably under-rated at 32,000,000.

France was anciently divided into provinces; but ſince the revolution, it has, with the Netherlands, and various other territories acquired by the revolutionary war, been divided into 115 departments.

Paris, the capital of France, is, next to London, the largeſt and moſt conſiderable city in Europe. It contains about 500,000 inhabitants, and has lately been enriched with immenſe collections of works of art, the ſpoil of conquered countries. The other principal towns are, Lyons, Marſeilles, Bourdeaux, Liſle, and Geneva, formerly an independent ſtate.

The principal mountains in France are, the Alps, which anciently divided it from Italy; and the Pyrenées, which divide it from Spain. The principal rivers are, the Rhone, the Garonne, the Loire, the Seine, and the Somme. The Rhine forms the boundary between France and Germany. The canals are very numerous; the chief work of this kind is the canal of Languedoc, about 180 miles in length. Near Toulon are the iſles of Hyeres, which are the ſame as Homer's iſle of Calypſo. The iſle of Rhé is oppoſite Rochelle. Belleiſle has been repeatedly attacked by the Engliſh. The iſle of Uſhant is well known as the moſt weſterly headland in France.

Swisserland.—This romantic country is ſituated among the Alps, between France, Germany, and Italy; being bounded on the north by Germany, on the weſt by France, and on the ſouth and eaſt by Italy. Its geographical poſition is between five and eleven degrees eaſt longitude, and between forty-five and forty-eight degrees north latitude. The ſurface of Swiſſerland is eſtimated to be nearly equal to 15,000 ſquare miles, and the population is reckoned at 2,000,000.

Swiſſerland is remarkable for its mountains and glaciers, as well as for the ſimple character of its inhabitants. It is divided into thirteen cantons; Zurich, Berne, Underwalden, Zug, Schweitz, Baſil, Glaris, Soleure, Uri, Appenzel, Lucerne, Fribourg, and Schaffhauſen. The three principal towns are Baſil, Berne, and Zurich.

The ſources of the Rhine and the Rhone, two of the grandeſt rivers in Europe, are to be found in the mountains of Swiſſerland. The lakes of Conſtance and Geneva have been long celebrated for their beauty. The Alps, which divide Swiſſerland from Italy; the mountains of St. Gothard, in the canton of Uri; and Mont Blanc, on the borders of Savoy; form the moſt majeſtic ſcenery in Europe.

Italy.—This rich and fertile country is ſituated in the ſouth of Europe, extending far into the Mediterranean; and is uſually conſidered under three diviſions, the ſouthern, the central, and the northern. The ſouthern part comprehends the kingdom of Naples; the central diviſion conſiſts of the dominions of the church, and the kingdom of Etruria; and the northern diviſion comprehends what has been called "the Ciſalpine or Italian Republic."—Its boundaries are the Adriatic and Mediterranean ſeas, and the grand barrier of the Alps, which ſeparate it from France, Swiſſerland, and Germany.

Italy, properly ſo called, including Sicily, lies between the ſeventh and nineteenth degrees of eaſt longitude, and between the thirty-ſixth and forty-ſeventh degrees of north latitude. The length of this country from Mount Roſa, the higheſt ſummit of the Italian Alps, to the Cape de Leuca, is about 670 Britiſh miles, while the mean breadth between the Gulf of Venice and the Mediterranean is about 100 miles; but from the Adige, the breadth is about 200 miles. The population is eſtimated at 13,000,000.

Italy has always been conſidered as the garden of Europe, and the parent of the arts and of civilization. Once the miſtreſs of the world, it ſtill remains a fine, populous, and intereſting, country, but inhabited by a race of people who are degenerated by ſuperſtition and political ſlavery. It is ſubdivided into the kingdom of Italy; the kingdom of Etruria; the Roman States; and the kingdom of Naples.

The Apennines form a grand chain of mountains, which run through almoſt the whole extent of Italy. Mount Veſuvius, near Naples, is a celebrated volcanic mountain. But Veſuvius, compared with Etna in Sicily, is only a ſmall hill: the circuit of Veſuvius is only 30 miles, that of Etna is 180.

Rome is the principal city of the pope's dominions, the preſent capital of Italy, and once the capital of the civilized world. Its population was formerly very great, but does not now exceed one hundred thouſand. Milan was the capital of the Italian republic, but now of the new-made (May 26, 1805,) kingdom of Italy.

Sicily, the largeſt of the Italian iſlands, is ſeparated from the ſouth-weſt part of Naples by the ſtrait of Meſſina. This ſtrait was famous for the Scylla and Charybdis of the ancients, the former being a rock, the latter a whirlpool, both very dangerous to the navigators of that period. The chief towns are Palermo, Meſſina, and Syracuſe.

Sardinia, another large, but ſterile, iſland, is ſituated almoſt in the centre of the Mediterranean: the principal town is Cagliari.

Corſica is ſeparated from the northern parts of Sardinia by the Strait of Bonafacio; its chief town is Baſtia.

The iſland of Malta lies about ſixty miles ſouth of the iſland of Sicily, and is celebrated for the ſtrength of its fortifications, which are now garriſoned by the troops of Great Britain. Candia, to the ſouth of Greece, is famous for Mount Ida. Both Malta and Candia are renowned for withſtanding ſieges by the Turks, who in the former loſt 30,000 men, and in the latter 180,000.

Rhodes, north-eaſt of Candia, is famous for its coloſſal ſtatue, between the legs of which ſhips ſailed into the harbour. In its right hand was a light-houſe for the direction of mariners. It was deſtroyed ſeveral ages ſince by an earthquake.—The principal rivers are the Po, the Tiber, the Var, and the Adige.

Spain.—This country forms the moſt weſterly part of the continent of Europe; and from its weſtern ſituation, the ancients called it *Heſperia*. It is bounded on the north by the Bay of Biſcay, and the Pyrenean mountains, which ſeparate it from France; on the eaſt by the Mediterranean ſea, on the ſouth by the Straits of Gibraltar,

raltar, and on the weſt by Portugal and the Atlantic Ocean. It is ſituated between the thirty-ſixth and forty-fourth degrees of north latitude and between the ninth degree weſt longitude, and the third degree of eaſt longitude. It contains nearly 150,000 ſquare miles of ſurface, and the number of its inhabitants is equal to about 11,000,000.

Spain is remarkable for its immenſe and valuable poſſeſſions in South America, and for the national inactivity and ſupineneſs which thoſe poſſeſſions have created. From having been one of the firſt powers in Europe, it now does not rank above thoſe of the ſecond order. It is divided into fourteen diſtricts, or provinces, viz. Aſturia, Biſcay, Navarre, Galicia, Leon, Old Caſtile, Arragon, Catalonia, Valencia, New Caſtile, Eſtramadura, Andaluſia, Murcia, and Granada.

Its chief towns are Madrid, the capital; Barcelona, Seville, Corunna, and Cadiz, ſometimes called Cales. The principal rivers are the Ebro, the Tagus, and the Douro, all of which have their riſe in Spain.

On an elevated promontory, in the ſouth of Spain, ſtands Gibraltar, which has been in the poſſeſſion of the Engliſh for above a century; and is ſo defended by nature and art, as to be conſidered impregnable.—The chief iſlands circumjacent to Spain, are Majorca, Minorca, and Ivica.

Portugal.—This kingdom repoſes on the breaſt of Spain, by which it is bounded on the north and eaſt; and on the ſouth and weſt it is waſhed by the Atlantic Ocean. It is ſituated between the eighth and tenth degrees weſt longitude, and between the thirty-ſeventh and forty-ſecond degrees of north latitude. Its ſurface is ſuppoſed to contain 27,000 ſquare miles, with a population of nearly 2,000,000 of inhabitants.

Portugal, like Spain, has been enervated by its foreign poſſeſſions, and is now one of the moſt abject powers in Europe. The people are debaſed by indolence and ſuperſtition. The country is divided into ſeveral provinces, as Eſtramadura, Entre-Minho, Douro, Alentejo, &c.

The chief towns are Liſbon, the capital; and Oporto, famous for its exports of wine. Liſbon, the foundation of which is fabulouſly aſcribed to Ulyſſes, was deſtroyed by an earthquake in 1755, but has ſince been rebuilt in an elegant manner. The Azores belong to Portugal; they are ſituated at an equal diſtance from that country and Newfoundland.

Great Britain and Ireland.—Great Britain, which conſiſts of England, Wales, and Scotland, is ſituated weſt of the continent of Europe; and Ireland is conſiderably to the weſt of Great Britain.—England is bounded on the eaſt by the German Ocean; on the ſouth by the Engliſh Channel; on the north by the Cheviot Hills; and on the weſt by St. George's Channel. Scotland is ſeparated from England by the Cheviot Hills; and its other boundaries are the North Seas. Ireland lies in the Atlantic; but its eaſtern boundary is in St. George's Channel.

The whole United Kingdom lies between fifty and fifty-nine degrees north latitude, and between one degree eaſt and a little more than ten degrees weſt longitude. The extent of ſquare miles in the United Kingdom is equal to nearly one hundred and five thouſand; of which forty-nine thouſand four hundred and fifty belong to England and Wales, and the reſt is divided in nearly equal parts between Scotland and Ireland. The population is equal to about fifteen millions; more than ten of which are in England and Wales, and the reſt in Ireland and Scotland, of which Ireland has nearly double the number of thoſe in Scotland. The three capitals are London, Edinburgh, and Dublin.

Great Britain has the happineſs of being the undiſputed miſtreſs of the ſeas, which are every where covered with her ſhips. Her wealth, the value of her manufactures, and the extent of her commerce, are unequalled. The induſtry and intelligence of her inhabitants, the excellent form of her political conſtitution the juſt adminiſtration of her laws, and the independence ariſing from her inſular ſituation, combine to render her an object of pride to her own inhabitants, and of admiration to all other nations.

England contains forty counties or ſhires, ſituated in the following order, taken from north to ſouth:

1. Northumberland, ſeventy-four miles long, and forty-five broad; has forty pariſhes, and five market towns; and ſends eight members to parliament.

2. Cumberland, ſeventy-five miles long, and twenty-ſeven broad; has fifty-eight pariſhes, and twelve market towns; and ſends ſix members to parliament.

3. Weſtmoreland, forty miles long, and twenty-four broad; has twenty-ſix pariſhes, and eight market towns; and ſends four members to parliament.

4. Durham, thirty-five miles in length, and twenty-four in breadth; has one hundred and eighteen pariſhes, and ſix market towns; and ſends four members to parliament.

5. Yorkſhire, the largeſt county in England, is about ninety miles in length, and ſeventy-five in breadth; it contains five hundred and ſixty-three pariſhes, and fifty-eight market towns; and ſends thirty members to parliament.

6. Lancaſhire, ſeventy miles long, and thirty broad; has ſixty-ſix pariſhes, and twenty-three market towns; and ſends fourteen members to parliament.

7. Cheſhire, fifty miles long, and thirty-three broad; has twenty-ſix pariſhes, and thirteen market towns; and ſends four members to parliament.

8. Derbyſhire, fifty-four miles long, and twenty-four broad; has one hundred and ſix pariſhes, and nine market towns; and ſends four members to parliament.

9. Staffordſhire, forty-four miles long, and twenty-ſeven broad; has one hundred and thirty pariſhes, and ſixteen market towns; and ſends ten members to parliament.

10. Warwickſhire, forty-ſeven miles long, and twenty-ſeven broad; has one hundred and fifty-eight pariſhes, and ſeventeen market towns; and ſends ſix members to parliament.

11. Worceſterſhire, thirty-five miles long, and twenty-ſeven broad; has one hundred and fifty-two pariſhes, and eleven market towns; and ſends nine members to parliament.

12. Shropſhire, borders on Wales; is forty-eight miles long, and twenty-eight broad; has one hundred and ſeventy pariſhes, and thirteen market towns; and ſends twelve members to parliament.

13. Herefordſhire, forty miles long, and twenty-ſeven broad; has one hundred and ſeventy-ſix pariſhes, and thirteen market towns; and ſends eight members to parliament.

14. Monmouthſhire, thirty-three miles long, and twenty-two broad; has one hundred and twenty-ſeven pariſhes, and ſeven market towns; and ſends three members to parliament.

15. Glouceſterſhire, ſixty-five miles long, and thirty-two broad; has two hundred and eighty pariſhes, and twenty market towns; and ſends eight members to parliament.

16. Oxfordſhire, forty-ſeven miles long, and twenty-nine broad; has an Univerſity, conſiſting of twenty colleges, and five halls; has two hundred and eighty pariſhes, and twelve market towns; and ſends ten members to parliament.

17. Buckinghamſhire, forty miles long, and about eighteen broad; has one hundred and eighty-five pariſhes, and fifteen market towns; and ſends fourteen members to parliament.

18. Bedfordſhire, about twenty-four miles long, and ſixteen broad; has one hundred and ſixteen pariſhes, and ten market towns; and ſends four members to parliament.

19. Huntingdonſhire, about twenty-five miles in length, and ſeventeen in breadth; has ſeventy-nine pariſhes, and ſix market towns; and ſends four members to parliament.

20. Northamptonſhire, about forty miles long, and twenty broad; has three hundred and twenty-ſix pariſhes, and eleven market towns; and ſends nine members to parliament.

21. Rutlandſhire, the ſmalleſt county in England, about fifteen miles in length, and eleven in breadth; has forty-eight pariſhes, and two market towns; and ſends two members to parliament.

22. Leiceſterſhire, thirty-three miles long; has one hundred and ninety-three pariſhes, and twelve market towns; and ſends four members to parliament.

23. Nottinghamſhire, thirty-eight miles long, and twenty broad; has one hundred and ſixty-eight pariſhes, and eight market towns; and ſends eight members to parliament.

24. Lincolnſhire, fifty-five miles long, and thirty-ſix broad; has ſix hundred and thirty pariſhes, and twenty-four market towns; and ſends twelve members to parliament.

25. Norfolk, ſixty miles long, and thirty-four broad; has ſix hundred and ſixty pariſhes, and twenty-ſeven market towns; and ſends twelve members to parliament.

26. Suffolk, fifty miles long, and twenty-five broad; has five hundred and ſeventy-two pariſhes, and twenty-eight market towns; and ſends ſixteen members to parliament.

27. Cambridgeſhire, forty-ſeven miles long, and eighteen broad; has one hundred and ſixty-three pariſhes, and nine market towns; has alſo an Univerſity, conſiſting of twelve colleges, and four halls; and ſends ſix members to parliament.

28. Hertfordſhire, about thirty-one miles long, and twenty-eight broad; has one hundred and twenty pariſhes, and eight market towns; and ſends ſix members to parliament.

29. Middleſex, twenty miles long, and fourteen broad; has one hundred and twenty-ſix pariſhes, and four market towns, beſides London; and ſends eight members to parliament.

30. Eſſex, forty-four miles long, and forty-two broad; has four hundred and fifteen pariſhes, and twenty-ſeven market towns; and ſends eight members to parliament.

31. Kent, fifty-eight miles in length, and forty-eight in breadth; has four hundred and eight pariſhes, and twenty-ſeven market towns; and ſends ten members to parliament.

32. Surry, thirty-ſix miles long, and twenty-three broad; has one hundred and fifty pariſhes, and ſeven market towns; and ſends fourteen members to parliament.

33. Suſſex, eighty miles long, and twenty-four broad; has three hundred and twelve pariſhes, and thirteen market towns; and ſends twenty members to parliament.

34. Hampſhire, a moſt opulent maritime county, is forty miles long, and thirty-five broad; has two hundred and fifty-three pariſhes, and twenty market towns; and ſends twenty-ſix members to parliament.

35. Berkſhire, forty miles long, and twenty-four broad; has one hundred and forty pariſhes, and twelve market towns; and ſends nine members to parliament.

36. Wiltſhire, fifty-four miles long, and thirty-three broad; has three hundred and four pariſhes, and twenty market towns; and ſends thirty-four members to parliament.

37. Dorſetſhire, fifty-two miles long, and twenty-ſeven broad; has two hundred and forty-eight pariſhes, and fifteen market towns; and ſends twenty members to parliament.

38. Somerſetſhire, fifty-ſix miles long, and twenty-eight broad; has three hundred and eighty-five pariſhes, and thirty-five market towns; and ſends eighteen members to parliament.

39. Devonſhire, ſeventy-three miles long, and fifty-three broad; has three hundred and ninety-four pariſhes, and twenty-eight market towns; and ſends twenty-ſix members to parliament.

40. Cornwall, ſeventy-five miles long, and twenty-ſix miles over where broadeſt; has one hundred and ſixty-one pariſhes, and twenty market towns; and ſends forty-four members to parliament.—See a topographical deſcription, with a correct map of each county, under their alphabetical arrangement, in this Encyclopædia.

London, the capital of the Britiſh dominions, contains nearly a million of inhabitants, is twenty miles in circumference, and is the largeſt, moſt opulent, and moſt flouriſhing, city in the world.—The principal towns, famous for their reſpective manufactures, are Birmingham and Sheffield, for cutlery and hardware; Manchester, for cotton goods; and Leeds, Wakefield, Froome, Trowbridge, and Bradford, for woollen cloth. The great commercial ſea-ports, beſides London, are Liverpool, Briſtol, Hull, Newcaſtle, Whitehaven, Yarmouth, and Poole.—The dock-yards for the navy are Portſmouth, Plymouth, and Chatham.

The principal rivers in England are the Severn, the Thames, the Humber, the Merſey, the Trent, and the Medway.

The principal lakes, are thoſe in Cumberland, and Winander Mere in Weſtmoreland.

The Iſle of Wight, on the ſouth of Hampſhire, is famous for its cultivation; Jerſey and Guernſey are near the coaſt of France. The Iſle of Man is in the Iriſh Sea. The Scilly iſlands are rocks which ſtretch beyond the promontory of Cornwall, from which they are viſible in fair weather.

Wales, inhabited by the invincible deſcendants of the ancient Britons, is divided into twelve counties, which are as follow:

1. Flintſhire, twenty-nine miles long, and eighteen wide; has twenty-one pariſhes, and two market towns; and ſends two members to parliament.

2. Denbighſhire, thirty-nine miles long, and fifteen broad; has fifty-ſeven pariſhes, and four market towns; and ſends two members to parliament.

3. Montgomeryſhire, thirty-five miles long, and thirty-four broad; has ſixty-eight pariſhes, and ſix market towns; and ſends two members to parliament.

4. Angleſea, twenty-four miles long, and fourteen broad; has ſeventy-four pariſhes, and two market towns; and ſends one member to parliament.

5. Carnarvonſhire, fifty miles long, and thirteen broad; has ſixty-eight pariſhes, and ſix market towns; and ſends two members to parliament.

6. Merionethſhire, forty-ſeven miles long, and twenty-five broad; has thirty-ſeven pariſhes, and five market towns; and ſends one member to parliament.

7. Radnorſhire, about thirty miles in length, and twenty-five in breadth; has fifty-two pariſhes, and four market towns; and ſends two members to parliament.

8. Brecknockſhire, thirty-nine miles long, and twenty-ſeven broad; has ſixty-one pariſhes, and four market towns; and ſends two members to parliament.

9. Glamorganſhire, twenty-ſeven miles long, and twenty-five broad; has one hundred and eighteen pariſhes, and nine market towns; and ſends two members to parliament.

10. Pembrokeſhire, about thirty-ſeven miles long, and eighteen broad; has one hundred and forty-five pariſhes, and five market towns; and ſends three members to parliament.

11. Cardiganſhire, about forty-two miles long, and twenty broad; has ſixty-four pariſhes, and four market towns; and ſends two members to parliament.

12. Carmarthenſhire, forty-eight miles long, and twenty-five broad; has one hundred and forty-five pariſhes, and eight market towns; and ſends two members to parliament.

Angleſea is an iſland. The common paſſage from England

England to Ireland is from Holyhead in this iſland; from whence packets ſail regularly for Dublin.

SCOTLAND, the northern diviſion of Great Britain, is inhabited by a valiant, hardy, induſtrious, well-informed, and temperate, race of people. It is divided into thirty-three ſhires or counties, viz. 1. Orkney, including Shetland. 2. Caithneſs. 3. Sutherland, including Strathnaver. 4. Roſs. 5. Inverneſs. 6. Cromartie. 7. Nairn. 8. Elgin, including Murray. 9. Bamff. 10. Aberdeen. 11. Kincardin, or Mearns. 12. Forfar, including Angus. 13. Perth. 14. Fife. 15. Kinroſs. 16. Clacmanan. 17. Stirling. 18. Dumbarton. 19. Argyle. 20. Bute. 21. Renfrew. 22. Lanerk, or Clydeſdale. 23. Air. 24. Kircudbright, or Eaſt Galloway. 25. Wigton, or Weſt Galloway. 26. Dumfries. 27. Peebles, or Tweedale. 28. Selkirk. 29. Roxborough. 30. Merſe, or Berwick. 31. Haddington, or Eaſt Lothian. 32. Linlithgow, or Weſt Lothian. 33. Edinburgh, or Mid Lothian.

The moſt conſiderable mountains in Scotland are the Grampian, Pentland, Lammermuir, Tiviot, Ben Nevis, Ben Lomond, and Fergus.

The moſt conſiderable towns in Scotland are Edinburgh, Glaſgow, and Aberdeen, famous for their univerſities: Glaſgow is no leſs ſo for its extenſive commerce. Berwick-upon-Tweed lies between England and Scotland, and is diſtinguiſhed from both, by having its own peculiar privileges, and a ſmall territory within its juriſdiction.

The iſlands belonging to Scotland are the Shetland, the Orkney, and the Hebrides, or Weſtern Iſlands.—The principal rivers are the Forth, the Tay, the Dee, and the Don.—The moſt conſiderable lakes are Loch Tay; Loch Lomond, which contains ſeveral iſlands; and Loch Neſs, in Inverneſshire.

IRELAND, for many ages a kingdom of itſelf, is divided into four large provinces: viz. Ulſter northward, Leinſter eaſtward, Munſter ſouthward, and Connaught weſtward. Theſe provinces contain the following thirty-two counties:

1. ULSTER compriſes the counties of Donnegal, Londonderry, Antrim, Tyrone, Fermenagh, Armagh, Down, Monaghan, and Cavan.

2. LEINSTER, comprehends the counties of Louth, Eaſt Meath, Weſt Meath, Longford, Dublin, Kildare, King's County, Queen's County, Wicklow, Carlow, Wexford, and Kilkenny.

3. MUNSTER, contains the counties of Clare, Limerick, Kerry, Cork, Waterford, and Tipperary.

4. CONNAUGHT, includes the counties of Leitrim, Roſcommon, Mayo, Sligo, and Galway.

The chief towns are Dublin, the capital; Cork, Londonderry, and Belfaſt. Cork is a flouriſhing commercial city, and remarkable for its fine harbour.—The principal rivers are the Shannon, the Blackwater, the Boyne, and the Liffy.

Before the union with Great Britain, the government was veſted in a houſe of peers, and a houſe of commons, conſiſting in the whole of three hundred members. The king ſtill continues to be repreſented by a viceroy ſent from England. The commons of Ireland are now repreſented by a hundred members in the Britiſh parliament; the lay lords, by twenty-eight peers, and the ſpiritual, by one archbiſhop and three biſhops.

See particulars at large of all theſe European ſtates, with correct maps of the ſame, under their proper titles in this Encyclopædia.

ASIA.

This diviſion of the earth extends, in length, from the Helleſpont to what is called the Eaſt Cape; or from about the 26th degree of longitude eaſt from Greenwich or London, into the other hemiſphere to near 190° of eaſt longitude, or 170° weſt from London; being no leſs than 164°, or (taking the degree at a medial latitude) more than 6500 geographical miles. From the ſouthern cape of Malacca to the cape of Cevero Voſtochnoi, which bounds the Icy or Arctic ocean, the breadth extends from about 2° of northern latitude to about 77°, or nearly 4500 geographical miles. If, for the ſake of a comparitive calculation, one ſixth part be added for the difference between the ſtatute and geographical mile, the length of Aſia would be about 7583 Britiſh miles, and the breadth 5250.

Of the real extent of Aſia, the ancients entertained moſt indiſtinct ideas; and in fact the diſcovery of the remoter parts of this great diviſion of the world may be ſaid to have commenced with the travels of Marco Polo, the Venetian, in the end of the thirteenth century; and it was not completed, with regard to the eaſtern extremities, till the recent travels were publiſhed in Ruſſia, and the voyages of Beering, Cook, and La Perouſe. It is now well known that Aſia is limited, on the eaſt, by a ſtrait which divides it from America; and which in honour of the diſcoverer is called Beering's ſtrait. The northern and ſouthern boundaries are the Arctic and Indian oceans, in which laſt many large iſlands, particularly that of New Holland, which forms part of *Auſtralaſia*, afford a new line of boundary to this diviſion of the globe. The weſtern limits of Aſia have Europe, Africa, the Mediterranean, and the Black Sea, for their boundaries.

The population of Aſia is by all authors allowed to be wholly primitive and original; if we except that of the Techuks or Tchuktchi, who, by the Ruſſian travellers and Mr. Tooke, are ſuppoſed to have paſſed from the oppoſite coaſt of America. A few colonies have migrated from Ruſſia to the northern parts, as far as the ſea of Kamtſchatka: and there are European ſettlements in Hindooſtan, and the iſles to the ſouth-eaſt; but the firſt ſerious attempt to colonize what is called a part of Aſia, was the recent ſettlement at Port Jackſon. With theſe trifling exceptions, Aſia preſents a very extraordinary inſtance of original population.

The conqueſts of the famous Zingis, or Genghis Khan, in the beginning of the thirteenth century, firſt opened the diſcovery of the diſtant parts of Aſia; the Moguls, or Monguls, whoſe ſovereign he was, being ſituated to the eaſt of the Huns, who had before diffuſed terror over Europe. The firſt feat of the Monguls was in the mountains which give ſource to the river Onon; and at a ſhort diſtance to the ſouth-weſt was Kara-kum, or Karacum, the firſt capital of the Mongul empire. The victories of Zingis extended from Cathai, or the northern part of China, to the river Indus; and his ſucceſſors extended them over Ruſſia, while their inroads reached Hungary and Germany. This widely-diffuſed power of the Monguls naturally excited an attention and curioſity, never ſtimulated by petty tribes; and at the ſame time it facilitated the progreſs of the traveller, who, as in Africa, had been impeded by the enmities of diminutive potentates. By force of arms the Monguls alſo firſt opened the obſcure receſſes of Siberia. Sheibani Khan, A. D. 1242, led 15,000 families into thoſe northern regions; and his deſcendants reigned at Tobolſkoy above three centuries before the Ruſſian conqueſt of that country.

After the diſcovery of America, and the Cape of Good Hope, the maritime parts and iſlands of Aſia began to be ſucceſſively diſcloſed. Yet the modern voyages of the Ruſſian navigators, of our immortal Cook, and of the unfortunate La Perouſe, evince that much remained to be done; and concerning the interior of Siberia ſcarcely any ſolid information aroſe, till Peter the Great, after the battle of Pultowa, ſent many Swediſh priſoners into that region; and Strahlenberg, one of the officers, publiſhed an account of Siberia. This knowledge has been greatly improved and increaſed by the travels of Dr. Pallas, and others. Yet our knowledge of Aſia is far from being perfect, eſpecially

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in reſpect to Daouria, and other regions near the confines between the Ruſſian and Chineſe empires; not to mention central Aſia in general, Thibet, and ſome more ſouthern regions; nor had even the geography of Hindooſtan been treated with tolerable accuracy, till Major Rennell publiſhed his excellent memoir.

Though Aſia cannot vie with Europe in the advantages of inland ſeas, yet beſides its ſhare of the Mediterranean, it poſſeſſes the Red Sea, the Arabian Sea, and Gulph of Perſia; the bays of Bengal and Nankin; and other gulphs, which diverſify the coaſts much more than thoſe of Africa or America, and have doubtleſs contributed greatly to the early civilization of this celebrated diviſion of the world. The Red Sea, or the Arabian Gulph of antiquity, conſtitutes the grand natural diviſion between Aſia and Africa; but its advantages have chiefly been felt by the latter, which is entirely deſtitute of other inland ſeas; Egypt and Abyſſinia, two of the moſt civilized countries in that diviſion, having derived great benefits from that celebrated gulph, which from the ſtraits of Babelmandel to Suez, extends about 21 degrees, or 1470 Britiſh miles; terminating not in two equal branches, as delineated in old maps, but in an extenſive weſtern branch, while the eaſtern aſcends little beyond the parallel of Mount Sinai. The Perſian Gulph is another noted inland ſea, about half the length of the former, being the grand receptacle of thoſe celebrated rivers the Euphrates and the Tigris.

The Caſpian Sea is properly a lake of Aſia, extending about 10°, or 700 miles in length, and from 100 to 200 in breadth. This lake ſeems at one period to have ſpread further to the north, where the deſerts are ſtill ſandy and ſaline, and preſent the very ſame ſhells that are found in the Caſpian: but the chain of mountains which branches from the weſt of the Urals to the north of Orenburg, and reaches to the Volga, muſt, in all ages, have reſtricted the northern bounds of thoſe waters. To the eaſtward, this remarkable ſea, in the opinion of moſt geographers, extended at no very remote period quite to the lake of Aral; the deſerts on that ſide preſenting the ſame materials as thoſe to the north; though there be now an elevated level between the ſea of Aral and the Caſpian, occaſioned perhaps by the quantity of ſand rolled down by the Gihon, the Sirr, and other rivers which now flow into the Aral. The northern ſhores are low and ſwampy, often overgrown with reeds; but in many other parts the coaſts are precipitous, with ſuch deep water that a line of 450 fathoms will not reach the bottom. This ſea is the receptacle of many rivers, as the Jemba, the Ural or Jaik, and the Volga from the north: the Kuma, Terek, Kur, and Kizil Ozen, from the weſt: from the eaſt the Caſpian is ſuppoſed ſtill to receive the Tedjen; and the Gihon, or Oxus of antiquity, flowed into the Caſpian, at leaſt by one or two branches, till it was forced northward, and driven into the ſea of Aral.

Beſides the Caſpian, Aſia alſo poſſeſſes the ſea or lake of Aral, which is about two hundred miles in length, and about ſeventy miles in breadth; receiving the rivers anciently called Iaxartes, and Oxus; or the Sirr, and Gihon, abovementioned. The ſea of Aral, being ſurrounded with ſandy deſerts, has been but little explored. Another remarkable ſea is that of Baikal in Siberia, or Aſiatic Ruſſia, extending from about the fifty-firſt to the fifty-fifth degree of north latitude, being about three hundred and fifty Britiſh miles in length, but its breadth not above thirty-five. The water is freſh and tranſparent, yet of a green tinge, commonly frozen in the latter end of December, and clear of ice in May. The Baikal is, at particular periods, ſubject to violent and unaccountable ſtorms, whence, as terror is the parent of ſuperſtition, probably ſprings the Ruſſian name of *Svetoie More*, or the Holy Sea. The chief river flowing into Baikal is the Selinga, from the ſouth; while from the north it emits the Angara, which joins the extenſive ſtream of the Yeniſei.—The chief rivers of Aſia are the Kian-Ku and Hoan-Ho, the Lena, the Yeniſei, and the Ob, ſtreams which rival in the length of their courſe any others on the globe. The Volga has been named among the rivers of Europe, to which the principal part of its courſe belongs. Next are the Amur, and the Maykaung of Laos, the Sampoo or Barrampooter, and the Ganges.

Of the Aſiatic mountains, the Altaian chain may be claſſed among the moſt extenſive, reaching from about the ſeventieth to the one hundred and fortieth degree of eaſt longitude from Greenwich, or about five thouſand miles, thus rivalling in length the Andes of South America. The Altaian chain, beyond the ſources of the Yeniſei, is called the mountains of Sayanſk; and from the ſouth of the ſea of Baikal the mountains of Yablonnoy: branches of which extend even to the country of the Techuks, or extreme boundaries of Aſia. To the ſouth of the Altaian ridge extends the deſert of Cobi or Shamo, running in a parallel direction from eaſt to weſt; and the high region of Thibet forms a part of this central prominence of Aſia. The chain of Alak may perhaps be regarded as a part of the Altaian, branching to the ſouth, while the Taurus, now known by various names in different countries, was by the ancients regarded as a range of great length, reaching from cape Kelidoni on the weſt of the gulph of Satalia, through Armenia, even to India. The other mountains of Aſia are Bogdo, Changai, Belur, thoſe of Thibet, the eaſtern and weſtern Gauts of Hindooſtan; and the Caucaſian chain between the Euxine and Caſpian ſeas.

The principal governments or diviſions of Aſia are the following; Tartary, including Thibet; Ruſſian Tartary, or Ruſſia in Aſia; Turkey; Arabia Perſia; India within the Ganges, or Hindooſtan; India beyond the Ganges; which includes the Birmah empire, and the empire of China.

TARTARY.—The limits of this country are not correctly aſcertained; but it is ſuppoſed to be about 3000 miles in length, and 2000 in breadth. It is bounded by the Frozen Ocean, north; Pacific Ocean, eaſt; Ruſſia in Europe, weſt; China, India, and Perſia, ſouth. Part of it belongs to Ruſſia, part to China, part to Perſia, and part of it is independent.

The principal Tartar tribes, or hordes, are, the Samoieda, Siberian, Tatar properly ſo called, Bucharian, Elut or Kalmuc, Oſtiac, Circaſſian, Turcoman, Uſbec, Kirgus, Tibetian, Mongul, Cathai, Tunguſian or Manſhur, Bratſki, Jakutſkoi, and Kamtſchatka, Tartars. Of theſe the moſt powerful are the Kalmucs, the Kirguſes, the Uſbecs, and the Bucharians. Some ſuppoſe the Tatars, Monguls, and Tunguſi, to be the radical tribes.

Their cities and towns are few, owing to their wandering life. The moſt conſiderable of them are, Samarcand, which was the reſidence of Tamerlane, in Great Bucharia, or Uſbec Tartary; Bokhara, Balk, Zouf, Urghentz, Haſhar, Hazaraſp, Karacum, the capital of the Monguls.

The rivers of Tartary are, the Wolga, Jaik, Tobol, Oby, Irtis, Geneſa, Lena, Anadir, Argun, the Amu or Gihon, which receives the Sogd, on the banks of which ſtands Samarcand, the Sirr or Sihon.

Their princes are called khans, as ours are kings or emperors. The moſt of them, as alſo the Great Mogul, and the emperor of China, are deſcended from Tamerlane the Great.

The Delai, or Grand Lama, in Thibetian Tartary, is not only ſovereign pontiff, but alſo receives adoration as a deity. The khans, who do not affect being independent, pay tribute to one or other of the powerful neighbouring empires. Thibet is diſtinguiſhed into *upper*, *lower*, and *middle*. The greater part of it is under Chineſe influence.

RUSSIAN TARTARY, or RUSSIA IN ASIA.—This immenſe portion of the Ruſſian dominions extends almoſt the

the whole length of Aſia. It is bounded on the north by the Arctic Ocean, on the eaſt by the ſeas of Kamtſchatka and Ochotſk; the weſtern frontiers correſpond with thoſe between Aſia and Europe; on the ſouth, the river Cuban, and part of the Caucaſian chain of mountains, divide the Ruſſian territory from Turkey and Perſia; the Altain mountains ſeparate it from the Chineſe empire; and farther to the eaſt the boundaries of Ruſſia, the river Amour, and the Noblonnoy mountains. By geographical poſition it extends from the thirty-ſeventh degree of longitude eaſt of Greenwich, to one hundred hundred and ſeventy degrees of weſtern longitude. Almoſt the whole of this empire lies north of fifty degrees of latitude. The chief towns are, Aſtracan, at the mouth of the Wolga; Azof, on the Aſiatic ſide of the Don; Tobolſk, the capital of Siberia; Kolywan, famous for its ſilver mines; and Irkutſk, the chief mart between Ruſſia and China.

The general appellation of this country was Siberia; the population of the whole of it not exceeding three millions and a half. The kingdoms of Cazan and Aſtracan were added to the Ruſſian empire in the ſame century as Siberia. The population of all Ruſſian Aſia is calculated at about five millions.

Siberia is divided into two great governments; that of Tobolſk in the weſt, and Irkutſk in the eaſt; which again are ſubdivided into ſmaller. Tobolſk and Aſtracan are the two metropolitan ſees of Ruſſian Aſia. Irkutſk, Zuruchaita, and Kiachta, are the principal ſeats of the commerce between Ruſſia and China.—The Kurilian iſlands belong to Aſiatic Ruſſia; they extend from Kamtſchatka to Jeſſo.

Kamtschatka.—This part of Aſiatic Ruſſia is a large peninſula on the north-eaſtern part of Aſia. It is bounded on the eaſt and ſouth by the ſea of Kamtſchatka, on the weſt by the ſeas of Ochotſk and Penſhinſk, and on the north by the country of the Koriacs. It lies between fifty-one and ſixty-two degrees of north latitude, and between one hundred and ſeventy-three and one hundred and eighty-two degrees of eaſt longitude. The natives are divided into Kamtſchatkans or Kamtſchadales, Koreki, and Kuriles; but all together do not amount to above five thouſand people.

Nova Zembla is a region on the north of Aſiatic Ruſſia, in the Frozen Ocean; but whether it be an iſland, or part of a great continent, has not yet been ſatisfactorily determined by any geographers or navigators. And ſo little is known concerning this inhoſpitable country, that it ſeems wholly uncertain whether there be any conſtant inhabitants reſiding there or not. Towards the end of the ſixteenth century ſome Dutch ſeamen wintered in Nova Zembla, and with great difficulty kept themſelves alive, though conſtantly inured to a cold climate.

Turkey in Asia.—This region extends from the ſhores of the Archipelago, to the confines of Perſia; a ſpace of more than a thouſand miles. It is bounded on the north by the Black Sea and the Caucaſian mountains; on the eaſt by the Caſpian Sea and Perſia; and on the ſouth and weſt by the Red Sea, Arabia, and the Mediterranean. Its geographical poſition lies between twenty-ſix and forty-three degrees of eaſt longitude, and between thirty-three and forty-three degrees of north latitude. The whole of the Turkiſh empire in Aſia is eſtimated at nearly five hundred thouſand ſquare miles, and the population is reckoned at ten millions. Turkey is divided into ſeveral provinces, as follows:

1. Natolia, or Aſia Minor, which includes Natolia, properly ſo called; Amaſia, Aladulia, and Caramania. The principal towns of which are, Smyrna, Burſa, Amaſia, Trapezond, Sinope, Ajazzo, Marat, and Satalia.

2. Syria; the principal towns of which are Aleppo, Damaſcus, Said or Old Sidon, Tripoli; alſo Balbec, anciently Heliopolis; and Palmyra, anciently Tadmor.

3. Paleſtine; the capital of which is Jeruſalem.

4. Turcomania, or Turkiſh Armenia; the capital of which is Erzerum.

5. Diarbec, Algezira, or Meſopotamia; the chief towns of which are, Diarbec, and Mouſoul.

6. Irak-Arabi, or Chaldea; the chief towns of which are, Buſſora, and Bagdat.

7. Curdiſtan, or Aſſyria; the chief towns of which are, Nineveh, and Betlis.

8. Choriſtan; the chief town of which is Buſſorah.

9. Circaſſia, or Tſherkeſs; part being under the protection of Turkey, part under Ruſſia, and part under Perſia.

10. Georgia; the principal town of which is Teflis.

11. Mingrelia; and, 12. Imiretta; the principal town of which is Cotalis.

The Turkiſh kingdom of Roum extended from the Euphrates to the Helleſpont, and from the Euxine to Syria.

In Natolia, or Aſia Minor, were the ſeven churches of Aſia, mentioned in the book of Revelation; viz. Pergamos, Laodicea, Philadelphia, Thyatira, Sardis, Epheſus, and Smyrna; but theſe places, excepting Smyrna, are now moſtly in ruins.

South of Natolia is that part which is uſually called the *Holy Land*, on account of its having witneſſed the ſacred miſſion of Jeſus Chriſt. It is alſo called *Judea*, from the patriarch Judah. The river Jordan is now a very ſmall ſtream that empties itſelf into the Red Sea, near the ſpot where Sodom and Gomorrah once ſtood.

Armenia is alſo ſtyled Turcomania. The ancient Meſopotamia, between the Tigris and Euphrates, correſponds with Diarbec or Algezira. Syria, or the ancient Canaan, is ſituated on the eaſtern extremities of the Mediterranean.

The principal river in Aſiatic Turkey is the Euphrates; next to this is the Tigris.—The mountains in this country have always been celebrated; theſe are Taurus, Libanus, and Ararat; on the laſt Noah's ark reſted after the flood.

The chief iſlands of Aſiatic Turkey are, Mytelene, Scio, Samos, Cos, Rhodes, and Cyprus, which produce cotton, ſilk, oil, fruits, and wines. Turkey is alſo famous for its carpets and rhubarb.

Of the Turkiſh cities in Aſia, the moſt populous are, Aleppo, containing about two hundred and fifty thouſand inhabitants; Damaſcus, about one hundred and eighty thouſand; and Smyrna, about one hundred and twenty thouſand. Burſa or Pruſa is very populous, and was the capital of the Turkiſh empire, till they paſſed over to Conſtantinople, in Europe.

Arabia.—This country is bounded by Turkey, north; the Indian Ocean, ſouth; the Red Sea, weſt; and the Perſian Gulf, eaſt. Its geographical poſition lies in eaſt longitude thirty-five degrees ſixty minutes; north latitude twelve degrees thirty minutes. It is in length, one thouſand three hundred miles; and in breadth, one thouſand two hundred. The capital is Mecca.

It is divided into three provinces, viz. 1. Arabia Petræa; the chief town of which is Suez, anciently Arſinoe. 2. Arabia Deſerta, including Hajaz, a ſmall tract on the Red Sea; the chief towns of which are, Anna, Mecca, Giodda or Gedda, the port of Mecca, and Medina. 3. Arabia Felix, or Yemen; the chief towns of which are, Sanaa, Mocha, Aden, Hadramut, Maſcate, and Oman.

To Arabia Deſerta belongs Neged, the interior mountainous country inhabited by the Bedouins, divided into Ared eaſt, and Kirjé weſt. The chief towns of it are, Aijana, the birth-place of a late prophet named Waheb; and Munfoha, in Ared; and Imama, and Salemia, in Kirjé. It extends eaſtward to Oman, on the Gulf of Ormus, and Lahſa or Ahſor, on the Perſian Gulf.—Oman is by ſome conſidered as the name of a province, of which Maſkat is the chief town.

To this diviſion of Aſia belongs the Red Sea, Perſian Gulf, or Gulf of Baſſora, and the Gulf of Ormus; alſo the Straits of Babelmandel and Ormus.

The two moſt noted Arabian iſlands are, Socotra, famed for its aloes; and Bahrin, in the Perſian Gulf, for its pearl fiſhery. The government is under xeriffs, emirs, imans, ſheiks, cadis, &c. moſt of whom are tributary to the Turks, though ſome of them are independent. Yemen, which is part of Arabia Felix, is a conſiderable and hereditary principality. Bahrein, a tract on the Perſian Gulf, is ſubject to Perſia. Its chief town is Gerra, or Katif.

PERSIA.—The Perſian empire is bounded by Circaſſia, the Caſpian Sea, and Tartary, on the north; the Gulfs of Perſia and Ormus, on the ſouth; Turkey, on the weſt; and India, on the eaſt. It is ſituated in eaſt longitude forty-four degrees ſeventy minutes; north latitude twenty-five degrees forty-five minutes. In length, it is one thouſand three hundred miles; breadth, one thouſand one hundred. Its capital is Iſpahan.

Perſia is divided into the following provinces, viz. 1. Dagiſtan, and part of Georgia or Gurgiſtan; the chief town, Teflis. 2. Sherwan; chief town, Derbent. 3. Aderbeitzin; chief town, Tauris. 4. Ghilan; chief town, Reſht. 5. Mazanderan; chief town, Mazanderan. 6. Chorazan; chief town, Meſched. 7. Sableſtan; chief town, Roſt. 8. Candahar, Cabuliſtan, Caſhmir, the kingdom of Eaſtern Perſia, or Perſia in India; chief towns, Candahar, Cabul, and Caſhmir. 9. Sigiſtan; chief town, Sigiſtan. 10. Mecran; chief town, Kidg. 11. Sirjam or Kerman; chief towns, Gombroon, and Ormus. 12. Fars or Farſiſtan; chief towns, Schiras, near which are the ruins of Perſepolis; and Iſtaker. 13. Chuſiſtan; chief town, Souſter. 14. Irak Agem, being part of Diarbec; chief towns, Iſpahan, and Ecbatana.

Part of Curdiſtan, and part of Armenia, alſo belong to the Perſians. The chief town of Perſian Armenia is Erivan.

The rivers of Perſia are, the Kur and Aras, which run into the Caſpian; the Oxus, Gihon or Amu, into Lake Aral; and the Tigris, and Euphrates, into the Perſian Gulf.

The Parapamiſus, or Mountains of Gaur, are ranges which cut the country in every direction. The deſerts alſo are very extenſive. The government of Perſia is abſolute, under a ſophi or emperor, who takes the title of ſhah, and alſo thoſe of khan, and ſultan. The population is ſaid to be about ten millions. The inhabitants of Iſpahan about ſix hundred thouſand.

HINDOOSTAN, OR INDIA WITHIN THE GANGES.—*The Empire of the Great Mogul.*—This country, fertile in gold and diamonds, is bounded by Tartary, on the north; Thibet, and the Bay of Bengal, on the eaſt; the Indian Ocean, on the ſouth; and Perſia, on the weſt. Its geographical ſituation lies in eaſt longitude ſixty-ſix degrees ninety-two minutes; north latitude ſeven degrees forty minutes. Its length is two thouſand miles; its breadth, one thouſand five hundred; and its capital is Dehli.

It is ſometimes divided into Hindooſtan Proper, to the north of the Nerbudda; and the Deccan, or the country to the ſouth of that river. But the name of Deccan has been limited to a ſmaller extent of country, lying to the north of the Kiſtna, while that to the ſouth is diſtinguiſhed by the general name of *Carnatic*.

This extenſive country is divided into the following provinces and chief towns: Cachemir, Cachemir; Atok, Atok; Penjab, Lahore; Multan, Multan; Bankitch, Banou; Nagracut, Nagracut; Siba, Siba.—Belonging to the Rohillas: Ghor, Ghor; Jeſuat, Rajapour; Necbal, Catmandur; Dehli, Dehli; Agra, Agra; Bando, Bando; Tatta or Sindi, Tatta.—Belonging to the Rajpoots: Bhakor, Bhakor; Bundelcund, Callinger, and the Purna Diamond Mines; Jeſſelmere, Jeſſelmere; Agimere, Agimere; Soret, Soret.—Belonging to the Mahrattas, in the Deccan: Candiſh, Burhampour; Balagate, Aurengabad; Berar, Nagpour; Chitur, Chitur; Malwa, Ratipour; Gualeor, Gualeor.—Belonging to the Nabob of Oude: Rotas, Rotaſgur; Halebas, Alehabat; Oude, Lucknow and Oude; Benares, Benares, where there is a Gentoo univerſity; Bahar, Patna.—Belonging to Bengal: the province of Burdwan; chief towns, Muſcadabat, Burdwan, Caſimbajar, Hoogli, Chandenagore, Calcutta, and Midnapour. Province of Dacca; Dacca, and Chittagong.

Hither Peninſula of Deccan, in the Eaſtern Coaſt, or Coromandel.—Province of Orixa; chief towns, Orixa, Baliſore, Cattock, and Jaggernaut, where there is a famous pagoda.—Province of Telingana; chief towns, Golconda, Hyderabad or Bagnagur, and Dowlatabad.—The Northern Circars, of the ſame name, for the moſt part, as their chief towns; which are, Gangam, Chicacol, Rhajamandri, Maſulipatnam, Kondovir or Condour.

Carnatic, in the Eaſtern Coaſt, or Coromandel.—Province of Jaghire; chief towns, Conjevetam, and Madras or Fort St. George; Arcot, Arcot, Velore, and Paliconda; Pondicherry; Trichinopoly, Trichinopoly; Tanjour, Tranquebar, Negapatam, and Tanjour; Dindigul, Dindigul; Madura, Madura; Marawa, Ramnad, and Shevigunga; Tinevelli, Palamcotta.—Carnatic, in the Weſtern Coaſt, or Malabar.—Province of Travancore, Travancore; Cochin, Cochin; Calicut (to the zamorin), Calicut, Tellicherry, and Cannanore; Miſore (Tippoo's country), Myſore, Seringapatam, Bangalore, Adoni, Condanore, Rachori, and Cuddapah; Canara, Mongalor.—In the Deccan, and Concan.—Province of Viſiapour; Goa, Viſiapour, Rajapour, and Bombay; Cambay or Guzerat, part belonging to the Mahrattas, Surat, Cambaya, Amedabad, and Dieu.

Cape Comorin, is the moſt ſouthern part of the Hither Peninſula.

The principal rivers are, the Indus or Sinda, in the higher part of its courſe called the Attuck; Ganges, Gagra, Jumma, Burrampooter or Sanpoo, Nerbudda, Andi, Ganga or Goadaveri, Mahanada, Kriſna, Coleroon or Tanjore river, Caveri; of which the Indus, Ganges, and Kriſna, are reckoned by the natives *holy rivers*.

The mountains are, the Gauts or Balagate; Naugracut; Sewalick, where the Ganges deſcends into the plains of Hindooſtan; Himmaleh, under which the Ganges paſſes, and then riſes at the cavern called the Cow's Mouth; Kentaiſſo, on the oppoſite ſides of which the Ganges and Burrampooter are thought to take their riſe; the Bootan mountains.

The population is ſaid to be as follows: the Mahometans or Moors, about ten millions; the Indians, Hindoos, or Gentoos, about one hundred millions.

The Gentoos are divided into four great tribes: 1. Brahmins, the prieſts and philoſophers of the nation. 2. The Khatry Caſt, conſiſting of ſoldiers, who are alſo their civil magiſtrates in peace. 3. The Bhyſe, conſiſting of huſbandmen and merchants. And laſtly, the Soodera, or artiſans and ſervants. Theſe are ſubdivided into about eighty-four inferior tribes or caſts. There are various other diviſions of them, as Talingas, Malabars, Mahrattas, Canaras, Malleallums, Rajahpoots, Nyars, &c. The Pariars or Chandalas are the outcaſts, the moſt degraded of all.

The Gentoo prieſts are called *Brahmins*. Their doctrines are contained in the *Shaſtah*, which is a commentary on the *Vidam*, their ſacred book, which has been long loſt. The Shaſtah is written in the Shanſcrit, a dead language, underſtood by the Brahmins alone; but lately reſtored by the indefatigable ſir William Jones.

Of their various mendicant ſects, the Faquirs are generally Mahometans, though many of them alſo are Hindoos, and the Joghis are idolaters. The Banyans profeſs

profeſs the Gentoo religion, and act as brokers to the Europeans.

Government.—The Great Mogul is an abſolute prince; but his viceroys, called nabobs, rajahs, ſubahs, &c. have little more than a nominal dependence on him. The preſent Mogul, (1806,) is Shah Allum.

Hindooſtan, ſoon after the Mahometan conqueſt of it, was divided into eleven ſoubahs or provinces. Theſe were again divided into circars, and the circars into purgunnahs. The eleven ſoubahs were, Lahore, Moultan (including Sindy), Agimere, Dehli, Agra, Oude, Allahabad, Bahar, Bengal, Malwa, and Guzerat. A twelfth was added towards the weſt fources of the Indus, called Cabul: it included Candahar. Three more were added from conqueſts in the Deccan, Berar, Candiſh, Amednagur; fifteen in all.

Invaſions and revolutions, however, have altered many of theſe diviſions. Caſhemir and Sindy are tributary to the king of Candahar. The poſſeſſions of the ſheiks extend from the Indus to the neighbourhood of Dehli; and from Caſhmere and Thibet to Bakhor, on the Indus, including Atoc, Multan, and Lahore. Dehli is the reſidence of the Great Mogul, who, after long being dependent on a Mahratta chief, has lately been delivered from this thraldom by the Britiſh arms.

There are two Mahratta ſtates or empires: the Poonah or Weſtern, and the Berar or Eaſtern, Mahrattas. Their poſſeſſions extend from eaſt to weſt, acroſs the wideſt part of the peninſula, from Guzerat to Bengal; and from Agra northward, to the Kriſna ſouthward, and are about one thouſand miles in length, and ſeven hundred in breadth.

The Weſtern Mahratta chiefs acknowledge the ram-rajah to be their ſovereign, and the peiſhwah to be his vicegerent. The ram-rajah reſides at Sattarah, and the peiſhwah reſides at Poonah, not far from Bombay.

Berar, the other diviſion, though very extenſive, is leſs powerful. The nabob of it lives at Nagpour. To him alſo belongs the greater part of Orixa.

The Rajpoots are uſually divided into the two tribes or claſſes of Rathore and Chohan. Their prince is ſometimes called *Rana*.

The nabob of Oude poſſeſſes, under the protection of the Engliſh, extenſive dominions; the ſoubah of Oude, Allehabad, the Douab or country between the Ganges and Jumma towards their junction, Benares, and the eaſtern parts of Agra and Dehli. His principal city is Lucknow. His revenue is thought to amount to two millions and a half; the population of his dominions to near twenty millions.

The nizam or ſoubah of the Deccan, though he poſſeſſes extenſive dominions, is tributary to the Mahrattas. His capital, Hyderabad, is near Golconda.

The five northern circars, ſo called as lying to the north of Madras, and extending to Oriſſa, are Cicacole, Rajamundry, Ellore, Condapilly, in poſſeſſion of the Engliſh, and Guntoor, called alſo Condovir, belonging to the nizam.

The dominions of the nabob of the Carnatic, extend from Guntoor and the Kriſna to Cape Comorin, including the dependencies of Tanjore, Madura, &c. His reſidence is at Arcot, from which he takes the title of "Nabob of Arcot." Four of the circars, the Jaghire, and Cuddalore, depend on Madras.

Hyder Ali and Tippoo Sultan's territories touched upon Viſiapour and Guntoor to the north; Madura and Travancore to the ſouth; the mountains of Sautgud and Attore to the eaſt; and the ſea on the weſt. They included Myſore, Bednore, Canara, Condanore, &c. Seringapatam was his capital. His revenue was ſuppoſed to amount to five millions ſterling, and his army to three hundred thouſand men. In 1792 and 1799 the Engliſh became maſters of theſe dominions, and appointed a deſcendant of the race which had been dethroned by Tippoo, rajah of the Myſore.

The Polygars and Colleries are ſome Indian tribes, who maintain a ſort of wild independence in the mountains chiefly towards the ſouthern extremity of the peninſula. The Sheiks, Jets, and Afgans, are to the north. Lahore is the capital of the Sheiks.

The general revenues of Hindooſtan, in the time of Aurungzebe, were eſtimated at thirty-two millions ſterling; ſuppoſed equal to five times that ſum, according to the preſent value of money. The number of his ſubjects has been calculated at ſixty millions, which is indeed ſuppoſed to be the preſent population of what then formed his empire. The population of Calcutta is ſuppoſed to be half a million.

The revenue of the Engliſh poſſeſſions in Bengal, Bahar, and Orixa, is about five millions and a half ſterling. Calcutta is their principal ſettlement. The Madras revenue is above one million. At Bombay and Bencoolen, the expences have much exceeded the receipts. The population ſubject to Great Britain is calculated from twelve to fourteen millions.

INDIA BEYOND THE GANGES.—The countries lying between Hindooſtan and China, occupy what is called *the Farther Peninſula*. Its geographical poſition is in eaſt longitude ninety-two degrees one hundred and nine minutes; north latitude one degree thirty minutes. Its length is about two thouſand miles; and its breadth about one thouſand. It is bounded by Thibet and China, on the north; Straits of Malacca, on the ſouth; Bay of Bengal, and Hindooſtan, on the weſt; and China, and the Chineſe Sea, on the eaſt. It contains the following kingdoms.—1. Part of Upper, Middle, and Lower, Thibet; chief towns, Tonkar, called alſo Boronthala, Laſſa, and Putala.—2. Napaul and Bootan, the ſouthern part of Thibet; chief towns, Baſſaſudon, and Catmandu.—3. The Birman Empire, compriſing Azem or Achem; whoſe chief towns are, Chamdara, Tipera, Kirganu, or Ghargan; Aracan or Reccan, Aracan; Ava or Burma, Ava, Ummerapoora; Pegu, Pegu; Martaban, Martaban; Siam, Siam, Bankok.—4. Tonquin China, chief town, Cacao or Keccio.—5. Laos, Langtſhang.—6. Cochin-China, Toanhoa.—7. Cambodia, Camboja.—8. Siampa, Padram.—9. Peninſula of Malaya, Malacca.

The chief rivers are, Sampoo or Burrampooter, or Thibet river, which riſes near the Ganges, and joins it at its mouth, though in their courſe they become more than a thouſand miles aſunder; Domea, Pegu, Mecon, Menan, Anan, Iratoady, on which is built the capital, Ummerapoora, Holi Kian.

The Birmans are only ſeparated from the Hindoos by a very narrow range of mountains; yet the diſpoſitions of the two people are extremely different. The Birmans are a lively inquiſitive race, iraſcible and impatient. The Birman empire is divided from Aſam on the north; and on the weſt a range of mountains ſeparate it from the Britiſh dominions in Bengal.

Ava is of conſiderable extent, though obviouſly tending to ruin and decay. Pegu, ſouth of Ava, is ſuppoſed to be the golden Cherſoneſus of the ancients. The Birmans, like the Chineſe, have no coin; but ſilver in bullion, and lead, are current among them.

The foreſts in this empire are large and numerous; the teek-tree is pre-eminent over them, and ſaid to be ſuperior to the European oak.

Malaya, or Malacca, contains ſeveral kingdoms and provinces. The inhabitants are called *Malays*, or *Malayans*; and the country is celebrated for its numerous wild elephants. Oppoſite to this coaſt are the iſlands of Andaman and Nicobar. On a barren iſle to the eaſt of the Andamans is a volcano, which emits ſhowers of red-hot ſtones. A Britiſh ſettlement has been formed on the greater Andaman, for convicts from Bengal.

Siam is ſituated in a large vale, between two ridges of mountains; and its river, Meinam, which ſignifies the *mother of waters*, is celebrated among the oriental ſtreams.

The elephants of Siam are diſtinguiſhed for ſagacity and beauty. The trees on the banks of the Meinam are finely illuminated with ſwarms of fire-flies, which emit and conceal their light as uniformly and alternately as if it proceeded from a machine of the moſt exact contrivance.

Cambodia is celebrated for the camboge gum. The chief river in Tonquin-China is Holi-Kian, which paſſes by Keſho, the capital.

The Birman empire, lately eſtabliſhed by the chief Alombra, conſiſts of Achem, Aracan, Ava, part of Pegu, Martaban and Siam. The population of it is ſuppoſed to be about ſixteen millions. The capital town is Ummerapoora.

The countries bordering on China are ſaid to pay tribute to the Chineſe. The others are independent. They are all of them in a very barbarous ſtate.

Chinese Empire.—The Chineſe empire extends from thoſe parts of the Chineſe and Japannic ſeas to the rivers Saraſon and Sihon in the weſt, a ſpace of nearly five thouſand Britiſh miles; and from the Uralian mountains in the north to the moſt ſouthern parts, it extends more than two thouſand miles. This vaſt empire conſiſts of three principal diviſions: 1. That of China Proper. 2. Chineſe Tartary, or the territory of the Monguls or Manſhurs. 3. The region of Thibet.

China Proper.—This is bounded on the eaſt and ſouth by the ſea; on the north by the great wall, and the deſert of Shamo; and on the weſt by Thibet. It lies between twenty and forty-one degrees north latitude, and between ninety-nine and one hundred and twenty-one degrees eaſt longitude from London. The population is eſtimated at three hundred and thirty-three millions; and the ſquare miles of ſurface at more than one million and a quarter.

Chinese Tartary.—This portion of the Chineſe empire extends from the ſeventy-ſecond degree of eaſt longitude to the one hundred and forty-fifth; and the breadth, from the northern frontier of Thibet to the Ruſſian confines, is ſomething more than twelve hundred Britiſh miles. It is bounded on the ſouth by the great wall of China, and the northern limits of Thibet; on the eaſt by the ſea; on the north it is ſeparated from Ruſſia, and the weſtern boundary is ſupplied by the mountains of Belur Tagg or the Cloudy Mountains, which divide the Chineſe empire from Balk and the Greater Backaria; while the range on the weſt of the lake Palkati ſeparates the Calmucs ſubject to China from the Kirguſes of Independent Tartary.

Thibet.—The boundaries of this part of the Chineſe empire are not by any means diſtinctly marked; they ſeem to be, Tartary on the north, China Proper on the eaſt, the Birman and the Mogul empires on the ſouth and weſt. According to the moſt recent maps, Thibet extends from the ſeventy-fifth to the one hundred and firſt degrees of eaſt longitude, and from the twenty-ſeventh to the thirty-fifth degrees of north latitude. Its population is not eſtimated at more than half a million.

China is celebrated for its immenſe and induſtrious population; for the variety of its manufactures and peculiar productions; for the excellence of its inland navigation; and for the jealous policy of its government towards other nations.

The Chineſe wall, though built theſe two thouſand years, is in a high ſtate of preſervation; it is fifteen hundred miles long, and broad enough for five horſemen to travel abreaſt.

The chief cities of China Proper are Pekin, Nankin, and Canton. Pekin contains two millions of inhabitants, and the others not leſs than one million each.—The imperial canal interſects China Proper from north to ſouth, and employed thirty thouſand men forty-three years for its conſtruction.—Corea is ſubject to China, and is conſidered as a part of it.

The largeſt of the Chineſe iſlands, which are very numerous, and ſcattered along the ſouthern and eaſtern coaſts, are Formoſa and Hainan. The iſles of Leookeoo, which conſiſt of thirty-ſix in number, between Formoſa and Japan, conſtitute a ſmall civilized kingdom, ſubject to China.

The Chineſe empire poſſeſſes rich mines of all the precious metals. It produces abundance of corn, rice, and fruit.

Chineſe Tartary is inhabited chiefly by the Eaſtern and Weſtern Moguls; the former conquered China in 1644, under whoſe government the empire ſtill continues. It produces corn, rice, and valuable ſkins. The iſland of Segalien, or Tehoka, belongs to Chineſe Tartary.

Thibet is included between China and Hindooſtan. The chief town is Laſſa.—The iſlands contiguous to the Chineſe empire, beſide thoſe already noticed, are as follow: Japan, forming an extenſive, rich, and remarkable, empire, the population of which is calculated at thirty millions. The largeſt iſland is Niphon; and the chief towns are, Jeddo, Miaco, the ſpiritual capital, and Nagaſaki. Theſe iſlands trade only with the Dutch and Chineſe. The Jeſſo iſlands, to which the Danes trade for furs; and the iſland of Macao, which lies in the Bay of Canton, and belongs to the Portugueſe.—Beſides theſe, there are many ſmall iſlands dependent on Japan; among which is Fatſiſio, the place of exile for the diſgraced grandees.

The principal rivers of the Chineſe empire are, Yamour, Argun, Hoan-ho, Kian-ku, otherwiſe called Whambo or the Yellow River, and Kiam or Blue River. Theſe rivers, in their ſources, their ſeparation, and their junction, reſemble the Ganges and Burrampooter, but much exceed them in length of courſe. They receive many tributary ſtreams.

The revenue of China is calculated at ſixty-ſix millions.—The population of Pekin is calculated at three millions; that of Nankin is ſaid to be greater. Canton is thought to contain a million and a half. This empire in the whole is ſaid to contain four thouſand four hundred walled cities.—See the article China, with correſponding map, vol. iv. p. 435.

Eastern Archipelago.—This contains, 1. The iſlands of Sunda, or the Sumatran chain, which compriſe Sumatra, Java, Balli, Lombock, Florez, and Timor, with ſeveral others of leſs importance. 2. Borneo, and ſome ſmaller ſurrounding iſlands. Borneo is, excepting New Holland, the largeſt iſland in the world. 3. The Manillas, or Philippine iſlands, including Luzon, Mindanoo, Palawa, Mindora, Pany, Negros, Zebu, Leyta, Samar, and ſeveral hundred ſmaller iſlands. 4. The Celebezian iſles, viz. Celebes, Boutan, and the ſurrounding ſmall iſlands. Boutan is governed by a Mahometan ſultan. 5. The Spice iſlands, including the Moluccas: theſe are Gilola, Ceram, Bouro, Oby, Amboyna, Banda, Tidore, Ternate, &c. Theſe famous iſlands produce nutmegs, cloves, and all the valuable ſpices.

AFRICA.

This diviſion of the world is the third in ſize; but in political and ethical eſtimation it is the meaneſt and moſt uncivilized of what are called the four quarters of the earth. From the ſouthern extremity to the Mediterranean are about ſeventy degrees of latitude, or four thouſand two hundred geographical miles. The breadth, from eighteen degrees weſt to fifty-one degrees eaſt, may be aſſumed on the equator at four thouſand one hundred and forty geographical miles. The name is ſuppoſed to have ſpread by degrees from a ſmall province, in the north, over the reſt of the continent. In the central parts on the ſouth the population appears to be indige-

nous

nous and peculiar, these being the native regions of the negroes, whose colour, features, and hair, distinguish them from all the other races of mankind. In the northern parts there have been many successions of different inhabitants, the Egyptians and Abyssinians being of Arabian extract; while further to the west the Carthaginians passed from Syria: and according to Sallust, other maritime parts were peopled by the Medes, Persians, and Armenians. The original inhabitants of the northern parts appear to have been, in all ages, radically distinct from the negro race, from whom they were divided by the great desert of Sahara; and in the eastern parts the latter were yet further repelled, by the Arabian colony which settled in Abyssinia.

The Romans appear to have explored the north of Africa as far as the river Niger; and they established flourishing colonies in many parts. Upon the fall of their empire the Vandals of Spain passed into Africa, A. D. 429, and established a kingdom which lasted till A. D. 535. In the following century the Mahometan Arabs subdued the north of Africa; and under the name of Moors constitute a great part of the present population. There have been recently discovered in the interior some nations or tribes of a copper colour, with lank hair; but the geography of this country is yet too imperfect to admit of a precise illustration of the interior nations.

The climate of Africa, towards the north, is intensely hot; but it is rather more moderate in the southern extremity, the antarctic cold being more powerful than that of the other pole. In the centre it is said there is a prodigious ridge of mountains, extending from those of Kong in the west, to those of Kumri or of the moon, and those of Abyssinia, in the east; the whole range being about north latitude ten degrees. And from this another chain seems to extend, about longitude thirty degrees east from Greenwich, in a southern direction.

In Africa, the want of inland seas is not supplied, as in South America, by large navigable rivers; and the remarkable deficiency of both may be regarded as a radical cause of the striking want of civilization, as well as of the slow progress of African geography. Inland seas, or navigable rivers, would have naturally invited commercial intercourse and foreign settlements, on a far larger scale than the small factories now established on the coast; and the more southern parts might easily have rivalled the settlements on the Mediterranean, and the Red Sea. But these grand inlets are rather the boundaries than parts of Africa: and there are no navigable waters whatever at present known that can diffuse commerce and industry from the shores to the centre.—See the article AFRICA, and corresponding maps, vol. i. p. 184.

The following is a brief statement of those parts of Africa at present known:

Empire of Morocco, including Fez, Suez, and Tafilet. The chief towns are, Fez, Morocco, Taradant, Mequinez, Sallee, Larache, Tangier, and Ceuta, belonging to Spain.—Republic of Algiers; chief towns, Tremesan, Oran, and Algiers.—Republic of Tunis; chief towns, Tunis and Sfax.—Republic of Tripoli; chief town, Tripoli.—Kingdom of Barca; chief town, Tolemeta.

The above are the states of Barbary, which, as well as Egypt, are in a vague manner tributary to the grand seignior. They are all addicted to piratical practices.

Principal divisions.—Biledulgerid; chief town, Dara. Zaara, or Sahara; chief town, Tegessa. Fezzam; Mourzook. Tombuctoo; Tombuctoo and Houssa. Gonja; Gonja. Soudan; Cashna and Agadez. Bornou; Bornou. Fur; Darfur.—Upper Egypt; chief towns, Girge, Sayd or Thebes, Coffir, and Assuan or Syene.—Lower Egypt; chief towns, Suez, Alexandria, Rosetta, Damietta, and Cairo.—Upper Ethiopia; includes Abyssinia; chief towns, Ambamargen, Gondar, Axum, and Mazua. Nubia; chief towns, Sennar, Dongala, with cognominal states. And Abex; chief town, Swakin.—Lower or inland Ethiopia; no town known.—Negroland; chief town, Mandinga.—Upper Guinea; including the Grain Coast, Ivory Coast, Gold Coast, Whydah, and Benin; chief towns, Benin, and Cape Coast Castle.—Lower Guinea, includes Macoko; chief town, Macoko. Loango; Loango. Congo; St. Salvador. Angola; Loanda. Benguela; Benguela. Mataman; no towns. Ajan; Brava, Adel, and Magadoxa. Zanguebar; Melinda, Quiola, Mosambique, Sofala; with some cognominal countries. Monomugi; Merango. Monomotapa; Zimbaou. Terra de Natal; no towns. Caffraria, or Country of the Hottentots, near the Cape of Good Hope.

AFRICAN ISLANDS.—Babelmandel; chief town, Babelmandel. Zocotora; Tamara. Almirante; no town. Comorra Islands, the chief of which is Joanna. Madagascar, one of the largest islands in the world; chief town, St. Augustine. Belonging to France: Bourbon; Bourbon. Mauritius, or the Isle of France; Mauritius. St. Helena; chief town, St. Helena; belonging to England. Ascension. Annobon; Annobon. St. Thomas; St. Thomas. Prince's Island. Fernandopo. St. Matthew; St. Matthew.

The *Cape Verd Islands* belong to Portugal.—The *Canary Islands* belonging to Spain; and are as follow: Canary; chief town, Palma. Teneriffe; St. Christopher's. Ferro; Palma, &c.—The *Madeira Islands* belong to Portugal; chief town, Funchal, &c. The *Azores*, or *Western Islands*, belong to Portugal. They are: Tercera; chief town, Angra. St. Maria; chief town, Fayal.

The principal headlands are: Cape Gardafui, Cape of Good Hope, Cape Verd, Cape Bojador, Cape Spartel, Cape Three Forks.

The mountains are: Atlas, the Mountains of the Moon, Sierra Leona, the Peak of Teneriffe, 15,396 feet high; the Peak of the Azores, also very high; and Table Mount, at the Cape of Good Hope.

Sahara, or the Great Desert, extends from the shores of the Atlantic to the vicinity of Egypt, 2,500 miles in length, and 720 in breadth.—See the article DESERT, vol. v. p. 758.

The principal rivers are: the Nile, receiving the Abawi or Astapus, and the Tacuz or Astaboras, and formerly forming at their confluence the Isle of Meroe; the Niger, the Gir, the Senegal, and the Gambia, supposed by some to be a branch of the Senegal.—The lakes are: Maravi, Tzana or Dembea, and Bournou.

The general population is supposed to be one hundred and fifty millions; but by some writers restricted to a much lower amount.—The prevailing religion is Mahometanism, and gross Paganism; except in Abyssinia, where a corruption of Christianity is professed.

Abyssinia, Monomotapa or Mocorango, and Monomugi, as well as Morocco, are called empires; but in so degraded a state are these countries, that, though in extent little inferior to France or Germany, their topography and history are equally obscure.

The emperor or king of Morocco pretends to be descended from the Saracen princes called *xerifs*. The chiefs of the republics of Algiers, Tunis, and Tripoli, are called *deys*. The grand seignior, or emperor of Turkey, has a viceroy or bashaw in Egypt; but whose power is so much limited by the mamaluke beys, sheiks, and inferior governors, as to give to the government of this country the appearance of a republic.—See the article EGYPT, vol. vi. p. 289.—See also all the different countries of Africa under their respective names or titles, in this Encyclopædia; and the map of modern Africa, vol. i. p. 184.

AMERICA.

The popular division of the wide continent, or New World, into two parts, called North and South America,

rica, has not only been in long and general acceptation, but is ſtrongly marked by the hand of nature, in an iſthmus more narrow than that which ſeparates Aſia from Africa, and by a great diverſity in the languages and manners of the original inhabitants. The ſouthern limit of the American continent is clearly eſtimated from the ſtrait of Magellan. But the northern extent is not aſcertained with equal preciſion. But amidſt every geographical uncertainty, it will be ſufficient to eſtimate the length of America from the ſeventy-ſecond degree of north latitude to the ſtrait of Magellan, or the fifty-fourth degree of ſouth latitude; a ſpace of one hundred and twenty-ſix degrees, or ſeven thouſand five hundred and ſixty geographical miles. In South America the greateſt breadth is from Cape Blanco in the weſt, to that of St. Roque in the eaſt; which, according to the beſt maps, is forty-eight degrees, or two thouſand eight hundred and eighty geographical miles. But in the north the breadth may be computed from the promontory of Alaſka to the moſt eaſtern point of Labrador, or even of Greenland, which would add more than a third part to the eſtimate. In Britiſh miles the length of America may be eſtimated at eight thouſand eight hundred; and ſuppoſing the breadth of North America three thouſand eight hundred and forty geographical miles, it will, in Britiſh miles, be about four thouſand four hundred.

North America includes the United States, Spaniſh America, Britiſh America, and the independent Indian nations. The inland ſeas of North America are the gulfs of Mexico, California, and St. Lawrence; with Hudſon's Bay, and Davis's Straits.

The gulf of St. Lawrence is cloſed by the iſland of Newfoundland, and the great ſand bank, about four hundred miles in length, celebrated for the cod fiſhery. The Lakes Superior, Michigan, Huron, Wennipeg, and Slave lake, are the grandeſt in the world, and might, with propriety, be denominated ſeas. The rivers are alſo on a grand and extenſive ſcale. Of theſe, the principal are the Miſſouri or Miſſiſſippi, the Ohio, and the St. Lawrence.

The moſt celebrated mountains are the Apalachian, paſſing through the territory of the United States. Among theſe the Ohio has its riſe. Excepting the Apalachian, all the mountains in North America lie weſt of the United States.

United States.—Theſe are ſituated on the eaſtern part of North America; and are bounded on the eaſt by the Atlantic, and on the weſt by the river Miſſiſſippi: on the northern boundaries are the river St. Lawrence and the lakes; and on the ſouth the United States are bounded by the Floridas. Louiſiana has lately been united to theſe ſtates by purchaſe. Before the ceſſion of Louiſiana, the United States lay between the ſixty-fifth and ninetieth degrees weſt longitude. The ſquare acres have been eſtimated at ſix hundred and forty millions, including fifty-one millions of acres of water. The population is eſtimated at ſix millions.

The United States are celebrated for the excellence of their conſtitution, which provides for political liberty and individual ſecurity. The inhabitants are juſtly famed for their ardent love of freedom, for their hoſpitality and induſtry, and for the great attention which they pay to agriculture and commerce. Their ample territory is divided into northern, middle, and ſouthern. The northern ſtates are Vermont, New Hampſhire, Maſſachuſetts, Connecticut, and Rhode Iſland. The middle ſtates are New York, New Jerſey, Pennſylvania, Delaware, and the territory on the north-weſt of the Ohio. The ſouthern ſtates are Maryland, Virginia, Kentucky, North Carolina, Georgia, and the country ſouth of Kentucky. The chief cities and towns are Waſhington, the capital, Philadelphia, New York, Boſton, Baltimore, and Charleſtown.

Theſe ſtates are in a very flouriſhing and improving condition, and promiſe eventually to become one of the moſt powerful and happy communities in the world. They export to Europe iron, copper ore, timber, pitch, potaſh, ſkins, corn, tobacco, rice, cotton, &c.

British America.—Theſe poſſeſſions conſiſt of Canada, New Brunſwick, Nova Scotia, Cape Breton, Newfoundland, and the Bermudas or Somer Iſlands. Canada, the principal part of Britiſh America, is divided into Upper and Lower; the former is the weſtern diviſion, on the north of the great lakes; while the lower diviſion is on the river St. Lawrence towards the eaſt. They are ſituated between forty-five and ſixty-five degrees north latitude, and between ſeventy and one hundred and forty weſt longitude.

Thoſe parts of North America which belong to Great Britain, are very extenſive; but the population cannot be eſtimated at more than two hundred thouſand ſouls, of which, in the year 1784, that of Canada amounted to one hundred and thirteen thouſand. The chief towns are Quebec and Montreal.

This part of North America is mountainous and barren; abounding, however, with lakes, rivers, and bays, that afford plenty of fiſh. The fur trade and fiſheries render theſe colonies exceedingly valuable to Great Britain.

Spanish Dominions in North America.—Theſe conſiſt of Eaſt and Weſt Florida; New Mexico; and Old Mexico, or New Spain. This territory is ſituated between ſeven and thirty-eight degrees of north latitude, and between ſeventy-nine and one hundred and twenty degrees weſt longitude. Its population is eſtimated at ſix millions, of whom the greater part are native Indians. The chief towns are Mexico, Acapulco, and Santa Fe.

The leaſt fertile part of theſe dominions is ſaid to produce two crops of corn in a year; the valleys are extremely rich, and produce ſpontaneouſly fruits and vegetables common to the moſt fruitful parts of the United States. Mexico is the capital of all Spaniſh America. The chief river in Spaniſh North America, is Rio Bravo, and the principal lake is Nicaragua.

West Indies.—The moſt important of theſe iſlands are Cuba, and Porto-Rico, Spaniſh; St. Domingo, or Hipaniola, at preſent an independent black empire, called *Hayti*; and Jamaica, Engliſh. North of St. Domingo and Cuba, are the Bahamas, the principal of which is Providence Iſland. The Caribbee iſlands extend from Tobago in the South, to the Virgin iſlands in the north. Thoſe belonging to Great Britain are Barbadoes, Antigua, St. Chriſtopher's, St. Vincent, Dominica, Grenada, and Trinidad, Montſerrat, Nevis, and the Virgin iſles.

The French Caribbee iſlands are Martinique, Guadaloupe, St. Lucie, and Tobago. The two laſt (1806) are in the poſſeſſion of the king of England.

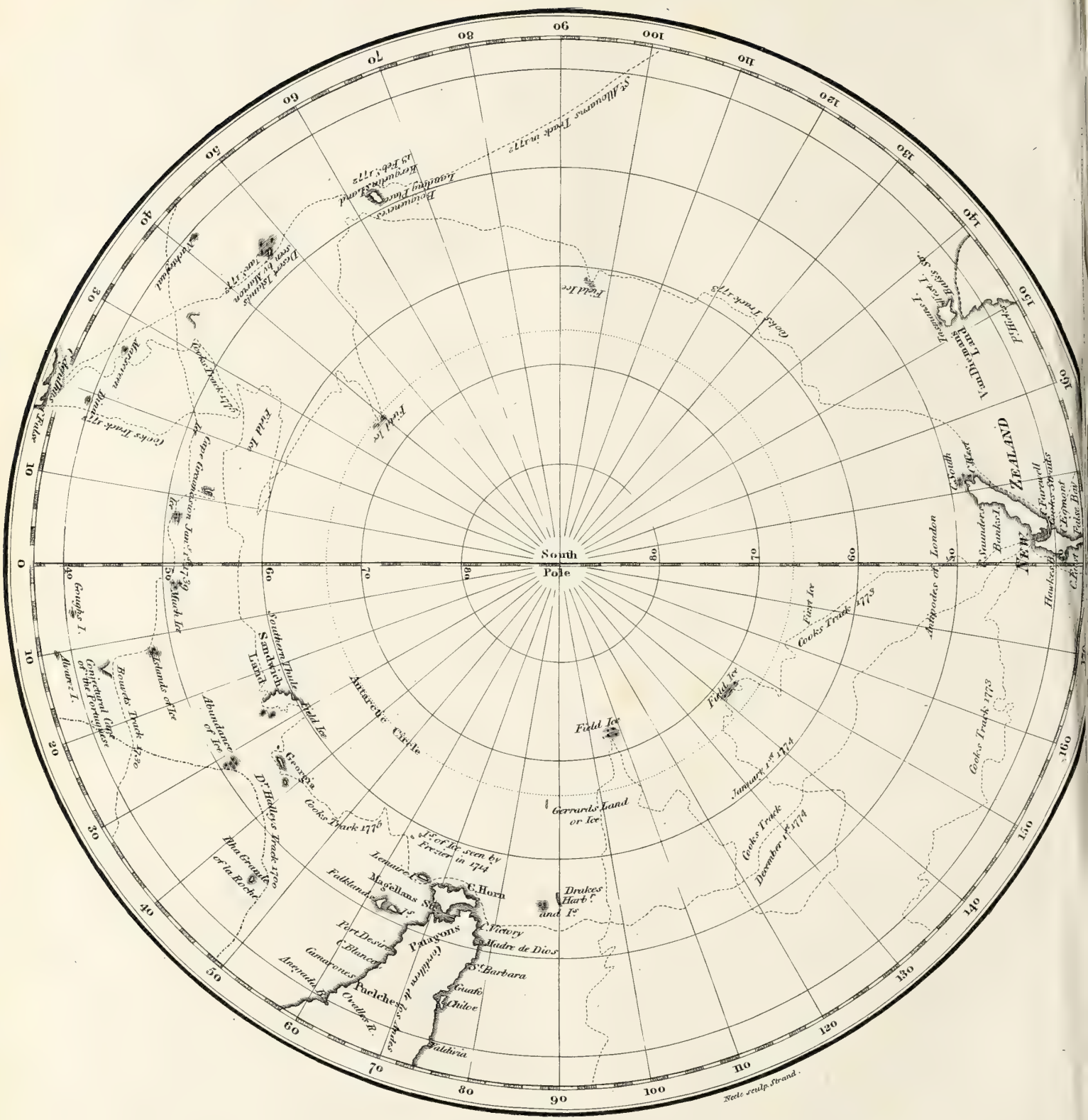
The Danes poſſeſs St. Croix and St. Thomas. St. Bartholomew belongs to the Swedes, and Euſtatia to the Dutch. From theſe iſlands are procured ſugar, rum, cotton, indigo, ſpices, cocoa, and coffee.

South America.—This diviſion of the New World is beſt known for its gold and ſilver mines, which have been wonderfully productive to Spain. The choiceſt gums and drugs are likewiſe found in various parts of this immenſe continent.

South America comprehends Terra Firma, Guiana, Amazonia, Peru, Brazil, Paraguay, Chili, and Patagonia.

Amazonia and Patagonia are not under the dominion of any European power; they are divided into ſeveral kingdoms, each of which has its chief. The inhabitants worſhip the images of their departed heroes, but have no temples or prieſts. This country boaſts of no

inland



COUNTRIES surrounding the SOUTH POLE.

London, Pub.d as the act directs, Oct.r 19.th 1807, by J. Wilkes.

Meridian of Greenwich
North Pole
OCEAN
NORTH
ASIA
EUROPE
GREENLAND
BAFFINS BAY
HUDSONS BAY
AMERICA
NORTH
ARCHIPELAGO
Behrings Str.
Arctic Circle
Jas. Lancaster Sd.
Barrows Str.
Cumberland I.
Mt. Raleigh
Cumberland Sd.
I. of Good Fortune
Resolution I.
Hudsons Str.
Chesterfield Inlet
Marble I.
Southampton I.
C. Southampton
C. Smith
N. North Wales
PR. WILLIAMS LAND
Wager R.
Repulse Bay
Dobbs B.
King Charles Bay
Frozen Str.
New S.
Whale Sound
Baffins Landing Place
Horn Sd.
Broad Fiord
Shalhole
Lopp Nes
Pr. Regent Inlet
Pr. William Sound
Cocks R.
Hearne's R.
Copper Indians
Buffalo L.
Dog-Rib'd Indians
North. Indians
HARE INDIANS
Great Slave Lake
Great Bear Lake
Melville I.
Banks I.
Prince of Wales I.
Barrow Str.
Lancaster Sd.
Ice extending fr. Cont. to Cont.
Icy C.
Cape Lisburne
Kotzebue Sd.
Shoal Water
Icy C.
Bhering's Str.
E. Cape
C. De Wales
C. Prince of Wales
C. Rodney
C. Denbigh
C. Lisburne
Pt. Shallow Water
C. Clerke
C. Stephens
Pt. Barrow
Icy C.
Icy C.
Icy C.

inland ſea, but the river Amazon and that of La Plata are celebrated as the largeſt in the world. They both have their riſe among the Andes.

The mountains of South America are the loftieſt on the whole ſurface of the globe, and are intermixed with volcanos of the moſt ſublime and terrific deſcription. The Andes follow the windings of the coaſt, and extend four thouſand ſix hundred miles. The higheſt are four miles high, and are covered with perpetual ſnow.

The Spaniſh dominions in South America are Buenos Ayres, (taken by the Engliſh in 1806,) Peru, Chili, and New Grenada. Peru and Chili are famous for their gold and ſilver mines. In Chili it never rains, the ſky is ſeldom cloudy, but the dews of night ſupply the want of rain.

The Portugueſe territory of Brazil is perhaps equal in extent to the Spaniſh, compenſating by its breadth for its deficiency in length. Guiana belongs partly to the French, and partly to the Dutch. Cayenne conſiſts of a conſiderable territory on the continent, and of an iſland of the ſame name.

The ſouthern extremity of South America is Patagonia, a deſolate country inhabited by ſavage Indians, ſome of whom are of great ſtature.

The iſlands contiguous to South America are Trinidad, the Falkland iſlands, Terra del Fuego, Chiloe, and Juan Fernandez. The Gallipago iſlands are near the equator, and the Pearl iſlands lie in the bay of Panama.—See the article AMERICA, and the correſponding Map, vol. i. p. 435.

AUSTRALASIA.

The diviſion of the world called Auſtralaſia, contains the following iſlands: 1. New Holland or Notaſia, and all the iſlands between twenty degrees weſt, and between twenty and thirty degrees eaſt, of it. New Holland is about three-fourths as large as Europe. 2. Papue or New Guinea, and the Papuan iſles. 3. New Britain, New Ireland, and the Solomon iſles. 4. New Caledonia, and the New Hebrides. 5. New Zealand. 6. Van Dieman's Land, which is ſeparated from New Holland by Baſſe's Strait or channel, and is about thirty leagues wide.

POLYNESIA.

The diviſion of the earth called Polyneſia, conſiſts of 1. The Pelew iſlands. 2. The Ladrone or Marian iſlands, the principal of which are Guan and Tinian. 3. The Carolines, the largeſt of which are Hogolen and Yap. 4. The Sandwich iſlands, diſcovered by captain Cook; at one of which, Owhyhee, he loſt his life. 5. The Marqueſas, which are very numerous. 6. The Society iſlands are about ſixty or ſeventy in number; Otaheite is the largeſt. 7. The Friendly iſlands and the Fejee iſlands. 8. The Navigator's iſlands, the principal of which is Maouna. The largeſt iſland in Polyneſia is Owhyhee, about one hundred miles in length.—See particulars of theſe iſlands under their reſpective titles in this Encyclopædia.

OF THE SEAS AND COASTS OF THE KNOWN WORLD.

Recent diſcoveries have evinced, that more than two-thirds of this globe are covered with water; and theſe waters, whether oceans, ſeas, lakes, or rivers, are contained in hollow ſpaces, more or leſs large, which the modern French geographers have ſtyled *baſſins*. They may perhaps with more propriety be called *concavities*; while, on the other hand, the chief *convexities* or protuberances of the globe, by the French ſtyled *plateaux*, conſiſt of uplands, hills, and mountains. Long chains of mountains commonly proceed from thoſe chief convexities, branching off in various directions; and from theſe the principal rivers of the world proceed, or have their ſource.

The grandeſt concavity of this globe is filled by the Pacific Ocean, occupying nearly half of its ſurface, from the eaſtern ſhores of New Holland to the weſtern coaſt of America; and diverſified with ſeveral groups of iſlands, which ſeem as it were the ſummits of vaſt mountains emerging from the waves. This chief concavity, ſeparately conſidered, receives but few rivers, the chief being the Amur from Tartary, and the Hoan-Ho, and Kian-Ku, from China; while the principal rivers of America run towards the eaſt.

The next grand concavity is that of the Atlantic Ocean, between the ancient continent and the new. A third is the Indian Ocean. The ſeas between the arctic and antarctic circles and the poles, are ſtyled the Arctic and Antarctic Oceans; the latter having ſupplanted the Terra Auſtralis, and being in fact only a continuation of the Pacific, Atlantic, and Indian, Oceans; while the Arctic Sea is partly embraced by continents, and receives many important rivers. Such are the principal concavities of the globe, while others are filled by more ſubordinate ſeas, as the Mediterranean, the Baltic, and others of yet ſmaller extent, till we deſcend to the inland lakes, and freſh-water ſtreams.

Out of this vaſt expanſe of oceanic waters, ariſes in the ancient hemiſphere, that wide continent, which contains Aſia, Europe, and Africa; and in the modern hemiſphere or New World, the continent of America, now diſcovered to be divided by a ſtrait only of the ſea from the ancient continent.

However prevalent it may have been to ſpeak of the Atlantic Ocean generally, as comprehending the ſea or ocean between the weſtern coaſts of Europe and Africa as its *eaſtern* limit, and the eaſtern coaſts of North and South America as its *weſtern* limit; we feel a pleaſure in ſtating that it is now a rule in modern geography to diſtinguiſh theſe into the North Atlantic Ocean on the *north* ſide of the equator, and the South Atlantic Ocean on its *ſouth* ſide. This laſt has been ſometimes called the Ethiopic or Southern ocean, but we are inclined to favour the diſtinction of South Atlantic. Theſe diſtinctions form an additional means of impreſſing upon the mind the true ſituation of any coaſt or particular place in either ocean, ſo as to point out more readily or communicate more forcibly the idea of their being in north or ſouth latitude. To the Pacific Ocean, the ſame obſervations are equally applicable; and the diſtinction between the North and South Pacific Oceans is as neceſſary and important as in the Atlantic.—See the Map of the World, on Mercator's Projection, hereunto annexed.

In like manner, it may be obſerved, of the ocean to the eaſtward of the Cape of Good Hope, that it is frequently known by the general name of the Indian Ocean, from that point of Africa to the ſouth-weſt point of the extenſive iſland of New Holland, which latter is not three degrees more to the ſouth than the former. The ſmall iſlands of Amſterdam and St. Paul, are only about a degree to the ſouthward of the fairway, between theſe two points, and one of them not quite ſo much, and but a few degrees to the weſtward of the middle diſtance. Yet the Arabian Sea, which waſhes the ſouth coaſt of Arabia, between the Straits of Babelmandel and the weſtern coaſt of India, has been deſcribed in many works under the general name of the Indian Ocean. It will alſo occur in many books of geography, that iſlands, ports, or places, which are ſituated to the eaſtward of Sunda and Malacca Straits, as far as to Endeavour Straits between the north point of New Holland and the ſouth coaſt of New Guinea, are deſcribed as lying in the eaſtern Indian ocean, in that tract of ſea or ocean which has commonly been known by the name of the Dutch Eaſt Indies. This is uſually confined to about ten degrees to the ſouthward of the equator, and to nearly as much on the north, excepting to the north-eaſt along the continent from the ſtraits of Malacca, which is known by the name of the Chineſe Sea.

It is almoſt needleſs to mention that the ocean, ſuppoſed to be near the North Pole, is ſometimes called the North.

North Frozen Ocean, Arctic or Icy Sea, as that near the oppoſite pole has been called the Antarctic Icy Sea, or South Frozen Ocean. But the latter is not conſidered as affording any thing inviting to navigation; and the former is more commonly underſtood by the name of the Greenland ſeas. This laſt name, however, is confined to thoſe parts of it which lie to the north and north-weſt from Europe; whereas the general name of Arctic Sea comprehends all the ſea to the north of Siberia, along the north coaſts of Aſia quite to the opening of the ſtraits between Aſia and America, and extending eaſtward as far as into one hundred and five degrees of weſt longitude. Of the coaſt of this ſea, from about ten degrees of weſt longitude, and about ſeventy-eight degrees of north latitude on the eaſt coaſt of Old or Weſt Greenland, to this point, in longitude one hundred and five degrees weſt, and about ſeventy-one degrees of north latitude, which is not more than about twenty-three degrees weſt from the weſt ſide of Baffin's Bay, and the direction it takes, is a matter ſtill unknown to European navigators.

The Engliſh Channel, along the ſouth coaſt of England; the Britiſh Ocean, ſometimes called the German Ocean, to the north of the Straits of Dover; and the North Sea, between the eaſt coaſt of Scotland, including ſome of the Engliſh countries to the Humber, and the coaſts of Germany, Denmark, and Norway; are too well known to require any further illuſtration here.

Of the ſmaller parts of the ocean, known by the name of ſeas, ſtraits, and bays, we have ſpoken already. The Mediterranean and Baltic Seas, the Euxine or Black Sea, to the northward of the ſtraits of Conſtantinople, and the Sea of Azoph to the north-eaſt from that, may be conſidered as inland ſeas. Of this laſt deſcription is the Caſpian Sea of Aſia; and the Red Sea and Perſian Gulf can ſcarcely be entitled to any other character. It may not be improper here to notice the Bay of Bengal on the ſouth, with the Kang or Yellow Sea of China, the Gulf of Korea, and the Sea of Kamſchatka, or Ochotſk, all upon the weſtern coaſt of what may be deemed the North Pacific Ocean, or the eaſt coaſt of Aſia. On the coaſt of America, we may reckon, Davis's Straits, and Baffin's Bay, with Hudſon's Straits and Bay to the weſtward from the former, and the Gulf of St. Lawrence on the weſt ſide of the iſland of Newfoundland. The Gulf of Mexico, between North and South America, may alſo be noticed, and the Gulf of California, on the North Pacific Ocean, acroſs the Iſthmus, nearly to the weſt of it. Of parts of the ocean ſtill ſmaller, or ſubdiviſions ſtill more minute, it cannot be neceſſary to make mention here.

Of the COASTS of EUROPE.

Beginning with Great Britain, we muſt of courſe take England as our firſt object; for the coaſts of which the reader is referred to the article ENGLAND, vol. vi. p. 532. We are next to advert to thoſe of Scotland; beginning at the Frith where they meet the Engliſh coaſt, and running along the weſt ſide of the kingdom, they come round by the north down the eaſtern ſhore, till they terminate at Berwick.

The ſhire of Dumfries is the moſt eaſterly county on the north ſide of Solway Frith. The river Nid, which falls into the Frith below the town of Dumfries, ſeparates it from Kircudbrightſhire on the weſt, as that again is divided from Wigtonſhire on its weſt by Wigton Bay. The Mull of Galloway is the extreme ſouth-weſt point of Scotland, from whence the coaſt turns north to Loch Ryan, within Fairland point, which divides this ſhire from Airſhire on the north; which county extends at north by eaſt along the eaſt ſide of the Frith of Clyde. The two iſlands of Bute and Arran are on the weſt ſide of the Frith. To the weſt of the laſt is Cantire, the ſouth point of which is called the Mull of Cantire, being the ſouth part of Argyleſhire, and is nearly ſouth-weſt from Arran Iſle. The coaſt, along its weſt ſide, runs due north to the Sound of Jura, on the weſt ſide of which ſound are the iſlands called Iſla and Jura. Mull iſland, and the Sound of Mull, are to the north and north-weſt from the north end of this ſound, and the weſternmoſt land of Argyleſhire. Round a point in about fifty-ſeven degrees north, the land trends in to the eaſt, where it forms a boundary to the large ſhire of Invernefs, extending quite acroſs the kingdom to the Murray Frith. As in other parts of this ſea, here are ſeveral iſlands to the weſtward from the coaſt; but the Sky iſlands, which run off to the north-weſt from that point of the county, are the moſt conſiderable. The limit is nearly due weſt, a little ſouth, from the Murray Frith on the oppoſite coaſt. Roſsſhire is the next county on the north, which firſt inclines to the north-weſt within the Sky iſlands; and then paſſes away to the north-north-eaſt to Calvo Bay, where it divides on the coaſt from Sutherlandſhire; the coaſt of which laſt ſhire extends to Cape Wrath on the extreme point to the north-weſt, and then due eaſt or nearly ſo, with intermediate lochs and bays to Strathy Bay, where it joins Caithneſsſhire. This laſt county forms the north-eaſt part of the kingdom of Scotland, unleſs we are to include the Orkney and Shetland iſlands. Ord Head, near the mouth of Henkſdale River, is the ſouthern limit of this ſhire, in the direction of about ſouth-ſouth-weſt from Dungſby Head, the extreme north-eaſt point. Sutherlandſhire coaſt then comes in again here to the bottom of Dornock Frith; and the peninſula of the eaſt ſide of Dornock Frith is a part of Roſsſhire, which alſo extends to the eaſtern coaſt of the kingdom, where it ſtretches down to Murray Frith, except that the ſmall ſhire of Cromartie, which it ſurrounds on all ſides but to ſeaward, comes in along the coaſt. The ſhire of Nairn, which joins to Inverneſsſhire, on the weſt of Fort George, then goes eaſt in the direction of the coaſt, to the mouth of Findorne river; and to the eaſt of that is Murrayſhire, extending to Spey river. Bamffſhire coaſt extends from Spey due eaſt to Dovern river; and Aberdeenſhire ſtretches eaſt to Kinnaird's Head, and thence ſouth-eaſt to Peterhead, and then ſouth-ſouth-weſt to the river Dee at Aberdeen. Mearnsſhire extends from Aberdeen at about ſouth-ſouth-weſt to the North Eſk river; and Angusſhire in the ſame direction nearly to the Frith of Tay. Fifeſhire then comprehends the peninſula between this frith and the Frith of Forth, extending along the eaſt coaſt at about ſouth-ſouth-eaſt to Fifeneſs, and then weſt-ſouth-weſt along the north ſhore of the Frith. On the ſouth coaſt of the Frith is Edinburghſhire, and to the eaſt of that is Haddingtonſhire, at the extreme north-eaſt point of which ſhire is North Berwick. Muſſelburgh is ſituated near the limit between the two laſt-mentioned counties; and between Dunbar and St. Abb's head on the ſouth-eaſt, is the boundary between Haddingtonſhire and Berwickſhire. It is almoſt needleſs to ſay, that the town of Berwick is the extent of the laſt, and the limit between Scotland and England.

The coaſt of Ireland may begin with Dublin, the capital of the kingdom; after which the county of its name will follow. To Dublin, on the eaſt coaſt of the kingdom, ſucceeds to the northward Eaſt Meath, Louth, Down, and Antrim, at the north-eaſt extremity; on the weſt of which laſt, along the north coaſt, are Londonderry and Donegal counties; after which, on the weſt coaſt, and to the ſouth-weſt of the laſt, is Sligo, Mayo, and Galway, then Clare and Kerry, which comes down near to the ſouth-weſt extremity. To the eaſtward, along the ſouth coaſt, are Cork and Waterford; then Wexford at the ſouth-eaſt; and to the north of that is Wicklow, or the next county on the ſouth, and along the eaſt coaſt of Ireland again, to the county of Dublin.

Proceeding hence to the continent of Europe, we ſhould begin with Norway, at the North Cape; but this

Impenetrable Ice July 1773
SPITSBERGEN
PART of OLD GREEN LAND
ICELAND
Faroe Is.
Shetland Is.
Orkney Is.
IRELAND
SWEDEN
DENMARK
RUSSIAN EMPIRE
GOVERNMENT of TOBOLSK
ARCHANGEL
POLAND
GERMANY
FRANCE
HUNGARY
AUSTRIA
TURKEY
Black Sea
Caspian Sea
Aral
Great Tibet
CHINESE EMPIRE
CHINA
Pekin
Corea
Japan
HINDOOSTAN
Bay of Bengal
Ceylon
ARABIA
PERSIA
TARTARY
Desert of Cobi
Desert of Arabia
Sahara
Coaco Desert
Great Desert Barca
NUBIA
ABYSSINIA
Mecca
Bombay
Calcutta
Madras
Canton
Philippine Isles
Borneo
Celebes
NEW GUINEA
SUNDA ISLES
JAVA
Sumatra
Malacca
Ladrone Is.
Pelew Is.
Magindano
Caro
Andaman
Comoro Is.
Madagascar
Mozambique
Channel of Mozambique
Zanguebar
Monomotapa
Sofala
Caffrees
HOTTENTOTS
Cape Town
Algoa Bay
C. of Good Hope
Table B.
Walwich B.
Sandwich B.
Delagoa B.
C. S. Mary
Bourbon
Mauritius
Tropic of Capricorn
Tryal Rocks
Coates I.
NEW HOLLAND
Edels Land
Lions Land
Van Diemans Land
Land of Peter Boys 1697
C. Chatham
K. G. III Harb.
St. Pauls
Amsterdam
Desert I.
Defolation I.
Br. Edwards I.
Sandwich Land
Tristan da Cunha
Diego I.
Goughs I.
Ascension I.
St. Helena
Saxemburg
ATLANTIC OCEAN
INDIAN OCEAN
Cooks Track
Phipps Track
Barrows Track
Icy Is.
Spitsbergen
Nova Zemlia
Lapland
Archangel
Petersburg
Moscow
Riga
Konigsberg
Prussia
Berlin
Amsterdam
Paris
Vienna
Madrid
Lisbon
Gibraltar
Genoa
Naples
Sardinia
Sicily
Tunis
Tripoli
Algiers
Morocco
Canary Is.
Madeira I.
Azores
Alexandria
Cairo
Suez
Gaza
Damascus
Bagdad
Ispahan
Bassorah
Mocha
Aden
Abyssinia
Nubia
Kuku
Darfur
Tombuctoo
Kassina
Kaniaga
Sennaar
Nile R.
Senegal R.
Gambia R.
Bissago Is.
C. Verd
C. Verd Is.
Gold Coast
Popo
Kong
Guinea
Gulf of Guinea
C. Lopo
Loango
Congo
Angola
Benguela
B. Coanza
Fungeno
Nimeamat
Jagas
Borotos
Cimbebas
C. Negro
Mocaranga
Inhambane
Biri
Zanguebar
Mozambique
Channel of Mozambique
Comoro
Madagascar
Bourbon
Mauritius
Delagoa B.
C. S. Mary
Caffrees
Hottentots
Cape Town
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Table B.
Walwich B.
Sandwich B.
C. Voltas
Saxemburg
Tristan da Cunha
Diego I.
Goughs I.
Ascension I.
St. Helena
Sandwich Land
Br. Edwards I.
Desert I.
Defolation I.

'ORS PROJECTION.

August 14th 1807 by J. Wilkes

The WORLD, on MERCATORS PROJECTION.

London Pub.d as the Act directs August 24.th 1807 by J. Wilkes

Neele sc Strand

this coaſt is ſo far north, and ſo very little frequented, that it will abundantly ſuffice to mention two or three places in ſucceſſion to the ſouthward, as Surroy, Maelſtroom, Drontheim, and Chriſtianſund, Staten Land, Bergen, and the Naze, at the entrance of the Scaggerac Sea, or the ocean which leads to the Cattegatte and the opening into the Baltic Sea.

As we ſhall not have another opportunity of mentioning it in this general view, it is here to be noted that the iſland of Spitzbergen, or Eaſt Greenland, is conſidered as belonging to Europe. We may here alſo briefly ſtate the coaſts of the Baltic from the Naze Point, within which to the north-eaſt is the coaſt of Aggerhuys, and on the eaſt coaſt to the ſouthward that of Bahus. Weſt Gothland and Schonen follow to Falſterborn Point, or the opening to the Baltic, round which, to the north-eaſt or the weſt coaſt of the Baltic, are the coaſts of Biekinga, Eaſt Gothland, Sudermania, Upland. To theſe on the north are Geſtricia, Helſinga, and Medelpadia, on the weſt ſhore of the Gulf of Bothnia, as far as to ſixty-three degrees of north latitude. Eaſt Bothnia and Finland are on the eaſt coaſt of the ſame gulf; and a part of the Finland coaſt, with Nyland and Carelia, from the north coaſt of the Finland Gulf, as far as to Peterſburgh, to the ſouth-weſt of which is Ingria. Livonia on the weſt not only forms the ſouth coaſt of the Finland Gulf, but extends ſouthward round the weſternmoſt point to the bottom of Riga Gulf. Courland is to the weſtward of that, comprehending the weſt coaſt of that gulf, and alſo trending ſoutherly from the point on the eaſt coaſt of the Baltic; a ſmall extent of Samogitia ſucceeds to it, nearly to Memel, and next the coaſt of Pruſſia, including Dantzic Gulf. On the ſouth-weſt is the coaſt of Pomerania, as far as Stralſund, and then Holſtein, as far as to the ſouthward of Funen Iſland. From hence Sleſwick and Jutland run up north to the point of the Scaw, which forms the ſouth ſide of the entrance from the Scaggerac into the Cattegatte Sea.

To the ſouth of the entrance to the Scaggerac Sea, is the peninſula of Jutland, Sleſwick, and Holſtein, the laſt of which is limited by the river Elbe; and on the ſouth ſide of it is the diſtrict of Bremen in Germany, being bounded by the river Weſer on the ſouth-weſt, in which direction nearly the coaſt trends away towards the mouth of the Ems river, and the entrance to Embden and the Dollart Sea, at the north-eaſt extremity of the Low Countries. The coaſt then turns weſt along Groningen and Weſt Frieſland to the opening into the Zuyder Zee within the Texel iſlands; along the outſide of theſe the coaſt turns again nearly ſouth to the mouth of the Maeſe, and thence ſouth-weſt without the iſlands of Zealand as far as Sluys. The coaſt goes on in that direction nearly to Calais, oppoſite to Dover on the Engliſh ſhore. Being now come to the north coaſt of France, or the ſouth ſhore of the Engliſh channel, it trends off ſouth, a very little weſterly to Dieppe, and from thence to Havre de Grace, at the mouth of the Seine. The coaſt afterwards turns weſt and north of weſt to Cape de la Hogue, and again turns ſouth a little eaſt to Cancale bay, where it once more trends to the weſt, with ſome variation, till it bends ſouth-weſt towards the iſland of Uſhant, off the north-weſt extremity of France. What is called the weſt coaſt of France, extends from hence to the bottom of the Bay of Biſcay near Bayonne, in the direction of about ſouth by eaſt.

The coaſt from hence turns due weſt, or a little north of weſt, to Cape Ortegal, and may either be called the north coaſt of Spain, or the ſouth ſhore of the Bay of Biſcay. It then changes ſouth-weſt to Cape Finiſterre, and afterwards to Minho river, due ſouth, which divides Spain from Portugal. Theſe coaſts comprehend Biſcay, beginning from the eaſtward, with Aſturias and Galicia. With a ſmall bow the coaſt of Portugal is ſouth to the mouth of the Tagus or the river of Liſbon, which direction it continues nearly to Cape St. Vincent; from whence it changes due eaſt to the mouth of Guadiana river, which here again divides Portugal from Spain. From hence to the Straits of Gibraltar, the coaſt trends about ſouth-eaſt by ſouth, paſſing along near Cadiz, and is called the coaſt of Andaluſia; near which, on the 21ſt of October, 1805, the immortal Nelſon gained the completeſt victory over the combined fleets of France and Spain, that was ever recorded in the annals of the world.

To continue the European coaſt, the northern ſhore of the Mediterranean, within Gibraltar Straits, extends variably towards the north-eaſt; having firſt the coaſt of Granada as far as to Portilla, at north-north-eaſt from Cape Gates, and then Murcia, extending round the point to the eaſtward of Carthagena. Valencia, ſometimes called the kingdom of Valencia, extends from hence northward nearly to Sofa Bay; and Catalonia ſtretches away at north-eaſt to Cape Creux to the northward of Roſa Bay. The ſouthern coaſt of France now again comes in, when the coaſt of Rouſillon ſtretches north, a little weſterly towards Narbonne; this ſea being uſually called the Gulf of Narbonne. The inlet or lake between Salce and Leucate, to the north of Perpignan, is the limit between Rouſillon and Languedoc; the coaſt of this laſt extends again to the north-eaſt by Montpellier, as far as the mouths of the river Rhone. On the eaſt ſide of that river is Provence, now the department of the Var, which ſtretches by a circular coaſt to Toulon and the Hieres, and thence to Nice, which forms the boundary of Italy at the mouth of the Var.

Piedmont poſſeſſes a ſmall ſpace of coaſt to the eaſtward of Nice as far as Ventimiglia; after which Genoa, round the gulf of its name, poſſeſſes a long extent of coaſt, as far as the Gulf de Mayre or Maſſa. Lucca next poſſeſſes a ſmall ſpace of coaſt; and Tuſcany, which commences to the north-weſt of Leghorn, ſtretches away to the ſouth-eaſt nearly to Orbitello. Here the coaſt on this ſide commences belonging to that diſtrict which, till the French revolution, has been called the States of the Church of Rome, extending as far as to Terracina on the eaſt of Mount Cercelli, in the direction of ſouth-eaſt. The kingdom of Naples next ſucceeds, which comprehends all the extremity of Italy on both coaſts, and as far to the north-weſt on the coaſt of Italy in the Gulf of Venice, as to Fronto river. On this ſide, the States of the Church extend to the mouth of the river Po, where the coaſt of Venice commences, which then begins to turn round to the north and north-eaſt, as far nearly as to Aquileia.

Next commences the Gulf of Trieſte, in the north-eaſt angle at the bottom of the Gulf of Venice or the Adriatic Sea; the coaſt being called by the name of *Carniola*, on the ſouth-eaſt of which is the peninſula of Iſtria. To the laſt ſucceeds on the ſouth-eaſt the Gulf of Quarnero, in which are ſeveral iſlands running parallel to the ſhore, being long and narrow, and the coaſt known by the name of *Morlachia*, which belongs to Turkey in Europe. Dalmatia ſucceeds to this alſo on the ſouth-eaſt; and Albania in the ſame direction from that. Epirus, Achaia, and the Morea, ſucceſſively follow to Cape Matapan, or the extreme ſouth point of the peninſula of Greece. The coaſt doubles round by Cape St. Angelo on the eaſt ſide towards the north, to the Gulf of Napoli and the Gulf of Engia or Angia, ſometimes called the Gulf of Corinth. From the bottom of this gulf to that of Lepanto on the weſt ſide is but a very narrow iſthmus, the land to the ſouth forming the peninſula of the Morea. The Archipelago ſea is on the eaſt between Greece and the coaſt of Aſia; but the land of Greece ſtill inclines round the capes to the north-eaſt as far as to the ſouth-eaſt extremity of the large iſland of Negropont, when it runs up to the north-weſt to the Gulf of Salonichi. From thence it trends north-eaſt, or more eaſterly, to the Gulf of Conteſſa; from the bottom of

which the coaſt changes eaſt to the Gulf of Caridia, to the ſouth of which is the opening of the ſtrait of the Dardanelles into the ſea of Marmora up to Conſtantinople. From the Gulf of Corinth hither has been comprehended under the general name of Romelia; but, more diſtinctly conſidered, Athens; the eaſt coaſt of Achaia, and Theſſaly, ſucceed on the weſt ſide of the Archipelago, Macedonia on the north-weſt, and Romania, or the ancient Thrace, on the north.

The weſt and north coaſts of the Black Sea, through the ſtraits of Conſtantinople, are alſo in Europe; where we meet with the eaſtern limits of Romania, Bulgaria, and Beſſarabia, belonging to Turkey, extending to the river Dnieſter, to which Budziac Tartary, and Little Tartary, with the peninſula of the Crimea, ſucceed on the north coaſt of that ſea; the coaſt of Little Tartary forming alſo the north-weſt coaſt of the ſea of Azoph, which is alſo within the limits of Europe. Theſe ſeas are at preſent but little known to any except the Ruſſians and Turks.

WESTERN COASTS OF ASIA.

Commencing our view of the coaſts of Aſia, we may begin with the Sea of Azoph and the Black Sea, on the eaſt coaſts of which we meet with Circaſſia; to which ſucceeds Armenia on the ſouth of the latter ſea, and Natolia or Anatolia on the weſt and ſouth-weſt of it, along the eaſt coaſt of the ſtraits of Conſtantinople, to the ſouthward from the Dardanelles. Caramania ſucceeds to this to the ſouth, and extends eaſtward towards Scanderoon at the north-eaſt angle of the Levant coaſt. The coaſt from hence turns due ſouth again, forming the eaſtern extreme coaſt of the Mediterranean, or the weſt part of Syria; to which ſucceeds Paleſtine, changing a little to the weſt of ſouth, as far as the mouth of the river Nile in Egypt, or the eaſternmoſt branch of it below Peluſium, now called Damietta. This is the extent of Aſia in this ſea.

COASTS OF AFRICA.

Leaving therefore, for a time the coaſts of Aſia, which here ſeem to forſake us, we run weſtward along the north coaſt of Africa, where Egypt, the firſt country on the eaſtward, ſalutes us. But we have no knowledge of the coaſt farther weſt than to Alexandria, though the coaſt of Egypt is ſaid to extend to Alberton to the weſtward of Cape Carabea, where the coaſt of Tripoli commences, conſidered as one of the ſtates of Barbary by geographers. This comprehends a great extent of coaſt, as far to the weſtward as the Gulf of Cabes, which is nearly due ſouth from Cape Bona. The coaſt of Tunis, another of the Barbary ſtates, runs northward from this Gulf to Cape Bona, and thence weſterly as far as the Seven Capes, in about eight degrees of eaſt longitude. Here commences the coaſt of Algiers, another of the Barbary ſtates, which ſtretches along to the weſt and ſouth-weſt, to the bottom of the gulf, in which near the coaſt are the Zaffarine iſlands, at ſouth-eaſt from Cape Three Points, or De Tres Forcas. The coaſt of Morocco or Fez there begins, and ſtretches to the ſtraits of Gibraltar, by Ceuta and Tangier, and to the ſouth-weſt without the ſtraits as far as Cape Non; this is the moſt weſterly of the Barbary ſtates. The deſert of Zanhaga is to the ſouthward of this; and to the ſouth of that is Senegambia, which begins at the iſland and fort of St. Louis. The coaſt of the kingdom of Mandingho is farther to the ſouth, on which is the ſettlement of Sierra Leone. To this ſucceeds, as the coaſt trends to the eaſtward, being known by the general name of the coaſt of Upper Guinea, the Grain coaſt, the Ivory Tooth coaſt, the Gold coaſt, and the Slave coaſt, extending as far as to the Gulf of Guinea. To theſe ſucceed towards the ſouth-eaſt, the kingdoms of Benin, comprehending Calabar and Calbongos; and to the ſouth of the equator are Loango, Congo, Angola, and Benguela, the coaſt trending a little to the eaſt of ſouth, which laſt reaches to about fifteen degrees of ſouth latitude. From thence to the ſouth is the coaſt of the Cimbebas, after which the coaſt is deſert, and little known till the approach to the Cape of Good Hope, on each ſide of which the country is called the coaſt of the Hottentots.

Being now advanced into the eaſtern ocean, the coaſt of Monomotapa ſucceeds, including Natal, Fumos, Inhambane, and Sofala; after which Mozambique, Zanguebar, Ajan or Samhar, and Adel, follow, to the entrance of the ſtraits of Babelmandel, where the coaſt of Africa, facing the Eaſtern or Indian ocean, terminates. Of the large and extenſive iſland of Madagaſcar we need only ſay, that it runs almoſt parallel to this coaſt, about north-north-eaſt off the coaſts of Monomotapa and Mozambique, from four to ſeven degrees of longitude on the eaſtward; the ſpace between is frequently called the channel of Mozambique.

SOUTH AND EAST COASTS OF ASIA.

The coaſt of Arabia Felix extends in the direction of north-eaſt by eaſt from the mouth of the Red Sea to the opening of the Perſian gulf; the ſouth coaſt of Perſia then turns nearly eaſt to the River Indus, which is the boundary to the country of Hindooſtan. This runs down to the ſouth-eaſt by the Gulfs of Cutch and Cambaya, and then more ſouth by Bombay and Goa along the Malabar coaſt of the peninſula of India to Cape Comorin; from whence, round the iſland of Ceylon, the coaſt runs up north and north-eaſt along the coaſt of Coromandel with Golconda, the Five Circars, Oriſſa, and Bengal, on the weſt ſide of the bay of Bengal, at the bottom of which it paſſes the mouths of the Ganges. The coaſts of Chittigong, Aracan, and Ava, in the kingdom of Pegu, are on the eaſt ſide of the bay, with Martaban, Tanas, Sarim, and Quedah, in the long and narrow peninſula of Malacca; the laſt being along the coaſt within the ſtraits of Malacca into the Eaſtern Indian Ocean. The large and extenſive iſland of Sumatra forms the other ſide of theſe ſtraits on the ſouth-weſt, and runs out to the ſtraits of Sunda, between the ſouth-eaſt end of Sumatra Iſland, and the weſt end of Java Iſland.

Being advanced into the Eaſtern Indian Ocean, we ſhall only obſerve of the large and numerous iſlands here, that they form various ſtraits and channels, of which we cannot in this place take notice. See the annexed Map on Mercator's Projection. Turning up the coaſt, therefore, from the ſouth-eaſt extremity of the Malacca Straits, the eaſtern coaſt of the peninſula of Malacca turns to the north-north-weſt into the Gulf of Siam, of which, after running up from one degree to fourteen degrees of north latitude, it forms an eaſt coaſt down to Point Camboja in about nine degrees, where it again trends to the north-eaſt to Cape Avarilla. The bottom of the gulf may be called the coaſt of Siam, and this laſt-mentioned coaſt is known by the name of Cambodia, from the mouths of that river which here diſcharge its waters into the China Sea. Hereabouts commences the coaſt of Cochin-china, which turns north-north-weſt; then Quinam ſucceeds, and afterwards Tonquin, along the bottom of the Gulf of Tonquin, where the coaſt again paſſes to the north-eaſt. After doubling the iſland of Hainan, Canton ſucceeds to the north-eaſt; then Fokien, Chekien, and Shanton; which laſt forms the weſt coaſt of the opening to the Yellow Sea, which runs up into a gulf towards Pekin. The peninſula of Korea is on the eaſt of this ſea, and on its eaſt ſide the Gulf of Korea, within the iſlands of Japan on the north-weſt. Jeſſo Iſles, which form the ſtraits ſo called, between them and the coaſt of Eaſt Tartary, are to the north eaſt, along which coaſt to the north-eaſt and north is the courſe to the large and open ſea of Ochotſk, in the north and north-weſt parts of which are the Koriaks. The peninſula of Kamtſchatka makes the

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WESTERN HEMISPHERE, or NEW WORLD.

NORTH POLE
ARCTIC OCEAN
RUSSIAN EMPIRE
Samoyeds
Siberia
Moscow
Petersburg
Archangel
Obdorsk
Tobolsk
Omsk
Yakutsk
Okhotsk
Kamtschatka
Sea of Okhotsk
Sea of Japan
Sea of Sangaar
Lena R.
Baikal
Yenisei R.
Obi R.
Irtish R.
Volga R.
Caspian Sea
Black Sea
Aral Sea
Tartary
Turkistan
Great Desert
Mongols
Pekin
Nankin
Canton
Chinese Empire
Great Tibet
Lahore
Delhi
Agra
Bengal
Calcutta
Assam
Tonkin
Aracan
Pegu
Hindoostan
Bombay
Goa
Madras
Ceylon
Maldive Is
Laccadive Is
Sea of Oman
Persian Gulf
Arabian Sea
Mecca
Arabia
Aden
Abyssinia
Nubia
Egypt
Cairo
Suez
Alexandria
Barbary
Morocco
Algiers
Tripoli
Tunis
Mediterranean Sea
Spain
France
Germany
Poland
Turkey
Italy
Sweden
Norway
Ireland
Iceland
Greenland
Canaries
Cape Verd Is
Guinea
Benin
Mujaco
Bornou
Darfur
Sahara or Great Desert
Negroland
Gulf of Guinea
Coast of Guinea
Congo
Angola
Benguela
Loango
Zanguebar
Mozambique
Monomotapa
Abyssinia
Adel
Socotra
Mocaranga
Biri
Sabia
Manica
Namaquas
Hottentots
Cape of Good Hope
Table B.
Cape Town
Algoa B.
Natal
Port Natal
Delagoa B.
Madagascar
Comoro Is
Mauritius
Bourbon
Rodrigue
Diego Garcia
Chagos
Maldive Is
Laccadive Is
Ceylon
Sumatra
Java
Sunda Isles
Straits of Sunda
Straits of Malacca
Borneo
Celebes
Timor
Moluccas
Philippines
Manilla
Mindoro
Luconia
Formosa
Hainan
Paracels
Pegu
Aracan
Tonkin
Canton
Chusan Island
Japan

the eaſt boundary of this ſea, to the point of which the Jeſſo and Kurile Iſlands form a chain from Japan. The coaſt from this point runs north-eaſt by the ſea of Kamtſchatka, along to the Gulf of Anadir, the country between belonging alſo to the Koriaks in this eaſtern part: the north coaſt of which gulf turning to the eaſt and ſouth of eaſt, afterwards trends about to the northward to Eaſt Cape, which is the point of Beering's Strait on the weſt ſide between the eaſternmoſt point of Aſia and the weſternmoſt point of America. Here, therefore, terminate the coaſts of Aſia.

EAST COASTS OF NORTH AMERICA.

Beginning from the north, we can only obſerve in general, that the large peninſula to the eaſt of Davis's Straits and Baffin's Bay, is known by the general name of Greenland, and ſometimes its eaſt coaſt is called Old Greenland. For the dreary country on the north of Cumberland Straits round Cape Walſingham, we have no diſtinct name; but that to the ſouth-eaſt from Hudſon's Straits to the ſtraits of Belleiſle, at the north end of Newfoundland, is known by the name of the Labrador Coaſt, as well as the north coaſt of the Gulf of St. Lawrence. Sometimes, however, this laſt is called the coaſt of Eſquimaux, and extends northward without the ſtrait as far as to Cape Harriſon, the north point of the entrance into the great bay of Eſquimaux. On the main continent, on the weſt ſide of the Gulf of St. Lawrence, is the country or coaſt of New Brunſwick, on the ſouth of Chaleurs Bay, and Nova Scotia eaſtward of the bay of Fundy, running up to the north-eaſt nearly to Cape Breton Iſland. The extenſive coaſt of New England ſucceeds to New Brunſwick on the ſouth-weſt; in which are comprehended the coaſts of New Hampſhire, Maſſachuſett's, Rhode Iſland State, and Connecticut. To theſe on the weſt ſucceeds New York, which has but a ſmall extent of coaſt, to the eaſtward of the city and iſland of its name, and that is up the Eaſt River, or paſſage into Long Iſland Sound. On the weſt and ſouth is the coaſt of New Jerſey, as far as to Cape May, the northern point of the entrance into the River Delaware. The coaſt of Maryland then ſtretches along ſoutherly to Cape Charles, the north point of the entrance into the Cheſapeak River or Bay; but ſome diviſions of the country make the coaſt down the weſt ſide of the Delaware River by Cape Hinlopen, and two or three leagues to the ſouth of Rehoboth Bay, to belong to Pennſylvania, which diminiſhes the extent of the Maryland Coaſt, as juſt repreſented. Virginia next ſucceeds from Cape Henry, the ſouth point of the Cheſapeak, which has but a very ſmall extent of coaſt, as far as to Currituck Inlet, or the northern part of Currituck Sound; after which North Carolina ſtretches along to the ſouth and ſouth-weſt to the weſtward of Cape Fear, near Little River, where the coaſt of South Carolina begins, and ſtretches away to Savannah River. This is the boundary, for a long way up the country, to Georgia, the coaſt of which extends to the ſouth as far as Fort St. George, to the north of St. Auguſtine. Here the coaſt of Eaſt Florida begins, which comprehends the peninſula, and here forms the weſt ſhore of the channel of Bahama or Gulf of Florida, from Cape Canaveral to Cape Sable, or the ſouth point. The other coaſt of the peninſula forms the eaſt boundary of the Gulf of Mexico, and in the very bight of the gulf, in the north-eaſt angle, comes in the ſmall river of St. Mark into Apalachy Bay, which is the limit on the coaſt between Eaſt and Weſt Florida. This extends weſtward to the mouths of the Miſſiſſippi, on the weſt ſide of which is Louiſiana or New Orleans, as far as to Cape North, and to that New Mexico ſucceeds; and on the weſt end of the gulf, new Leon is to the ſouth-weſt and ſouth, and Panuco or Guaſteco to the ſouth of that. The coaſt of Tlaſcala next ſucceeds, near the ſouth-weſt angle of the gulf, and to the eaſtward of it, at the bottom of the bay of Campeachy, are the coaſts of Guaxaca and Tabaſco. The peninſula of Yucatan then ſucceeds to the north-eaſt, ſtretching firſt nearly north to Cape Condecedo, then eaſt to Cape Catoche, and then ſouth-ſouth-weſt into the bight or bay of Guanacos, in the bottom of the great bay of Honduras. Here commences the coaſt of Vera Paz, and of Honduras to the eaſt of it, round the cape of its name to Cape Gratios a Dios. The coaſt of Nicaragua commences a little to the ſouth, in the direction of the land from this cape; to which ſucceeds Coſta Rica, and Veragua to the ſouth-eaſt and eaſt of that. This nearly completes the coaſt of North America on the eaſt ſide, and round the Gulf of Mexico.

COAST OF SOUTH AMERICA.

Having now approached the Iſthmus of Darien, where the limits of North and South America commence, the coaſt falls away from thence to the ſouth-eaſt into the Gulf of Darien. The coaſt of Carthagena then trends from the gulf to the north eaſt to Cape Galera, and of St. Martha from thence eaſt nearly to Coquibacoa, or the weſt point of the entrance into the Gulf of Venezuela, within which, and to the eaſtward from Cape St. Roman, the eaſt point of that entrance, is the coaſt ſo called. To this ſucceed the coaſts of Caraccas and Comana, and to the ſouthward of Trinadad Iſle is Paria. All theſe, from Carthagena hither, are known by the general name of the coaſt of Terra Firma.

New Comana, on the ſouth of the Oroonoko River and Iſlands, next ſucceeds; and to the ſouth-eaſt are Dutch Guiana, French Guiana, and Portugueſe Guiana ſucceſſively, to the north coaſt of the River of the Amazons. From hence eaſtward to Cape St. Roque is called the North Coaſt of Brazil; from Cape St. Roque ſouthward to Cape St. Thome is the Eaſt Coaſt of Brazil; and from Cape St. Thome to the Iſle of St. Catherine, in the direction of ſouth-weſt is the South Coaſt of Brazil. From hence the coaſt of Portugueſe Paraguay ſtretches along to ſouth-ſouth-weſt to the River La Plata. To the ſouthward the coaſt trends a little weſterly, which is called the Deſert Coaſt, as far as to Patagonia, in approaching the Straits of Magellan; on the ſouth of which is the iſland of Terra del Fuego, and on its eaſt is Le Maire Strait and Staten Iſland. The coaſt of Patagonia extends northward on the weſt coaſt or South Pacific Ocean as far as to the Chiloe Iſlands, where the coaſt of Chili begins, and goes north to the River Salada, beyond which on the ſouth of Cobija, in about twenty-three degrees of latitude ſouth, is the limit. Here the coaſt of Peru commences, and extends to about two degrees of north latitude. From hence northward the coaſt of Popayan ſtretches to the eaſt part of Panama Bay, and Darien to the north of that bay; near which is the termination of the South American coaſt.

WEST COASTS OF NORTH AMERICA.

From Panama Bay the coaſt begins to turn weſtward, and is known by the name of the Veragua Coaſt, as on the ſouth coaſt of the Caribbean Sea; to which on the north-weſt is Coſta Rica, Nicaragua, and Guatimala, as far as to the bay of Tecoantepec. Then ſucceed Guaxaca, Tlaſcala, Mexico Proper, Mechoacan, Zaliſco, and Guadalajara. Navarra is to the north-weſt of the laſt, within the Gulf of California; and the peninſula of California is on the weſt ſide of the gulf, parallel to Navarra. To that ſucceeds the coaſt of New Albion; and the coaſt trends to the weſt of north to Cape Flattery and Nootka Sound, without any particular name. It then trends about north-weſt to Nepean's Sound, and ſo on to Prince William's Sound in latitude ſixty degrees north; and then turns ſouth-weſt to the mouth of Cook's River, and ſtretches on in the ſame direction to the point of Oonalaſhka or Oenemac, or the ſouth-eaſt ſide of the peninſula of Alāſka. Briſtol Bay is on

the

the north-weſt ſide of the peninſula, and the coaſt then nearly makes good a northerly direction to a bay between Cape Stephens and Cape Rodney. It turns from thence about north-weſt to Cape Prince of Wales, which is the moſt weſterly point of the whole continent of North America; this, with the Eaſt Cape on the coaſt of Aſia, diſtant only about fourteen leagues from each other, form Beering's Straits, which is the paſſage from the North Pacific Ocean to the Arctic Sea, as was obſerved in concluding our account of Aſia. Thus is completed a connected ſketch of all the ſeas and ſea-coaſts hitherto navigated upon the ſurface of the globe.

With reſpect to the meaſurement or dimenſions of the *dry* land contained in the whole world, M. Mentelle, member of the national inſtitute of France, in his *Geographie Statiſtique*, publiſhed at Paris in 1806, has ſtated it to be nearly as follows:

"It is not poſſible to calculate with *exactneſs* the quantity of dry land which the ſurface of the globe contains; becauſe we are not acquainted with the limits of America towards the pole; becauſe we are not ſure that the interior of Africa does not contain ſome great lakes, and that New Holland is not diminiſhed by Mediterranean ſeas and gulfs; in ſhort, becauſe ſome little tracts of unknown land may exiſt towards the two poles, and a frozen continent near the ſouth pole, though this is not very probable. Let us ſuppoſe the unknown parts to be equal to 1,000,000 of ſquare leagues. However this may be, we may reckon the extent of the *old* continent at 4,160,000 ſquare leagues, of which Europe contains 500,000, Aſia 2,100,000, Africa 1,560,000, and that of the *new* at 2,100,000 ſquare leagues, (and perhaps at 100,000 more,) of which South America contains 960,000, and North America at leaſt 1,240,000; New Holland might meaſure 400,000; and all the iſlands, not compriſed in the five parts of the globe above enumerated, make 300,000 more. So that the ſurface of all the regions of the earth, with which we are acquainted, will by this calculation amount to nearly 6,960,000 ſquare leagues, being about 100,000 ſquare leagues more than a quarter of the whole ſurface of the globe. Thus does the quantity of water ſo greatly ſurpaſs that of the dry land on the earth's ſurface!"

The whole population of the earth, is ſtated by this author at 1,080,000,000. He has alſo preſented us with diſtinct ſtatements of the extent of territory, and comparative population, of the two grand empires of France and Great-Britain, for which ſee the article GREAT BRITAIN in this volume.

GEOGRAPHY is repreſented in painting and ſculpture, by a majeſtic female, crowned with turrets, having a terreſtrial globe ſtanding by her, in her right hand a compaſs, in her left a ſquaring rule.

GEOL'OGY, *ſ.* [from γη, the earth, and λογος, a diſcourſe.] The doctrine of the earth; the knowledge of the ſtate and nature of the earth.

Notwithſtanding the wonderful progreſs made of late years in the analyſis of mineral bodies, and in the knowledge of the different ways in which they are found diſpoſed in ſeveral parts of the globe, the tracts on general geology, which have been given to the public, continue to be rather fanciful hypotheſes, than ſober philoſophical lucubrations. This prevalent fault we rather aſcribe to the haſty impatience of writers, than to the abſtruſeneſs of the ſubject; though it is no doubt one of the moſt complicated of natural ſciences. If the writers of theſe works would confine themſelves to proceeding ſtep by ſtep, drawing only immediate and neceſſary conſequences from accurate obſervations, and leaving to future ages the care of advancing farther in proportion to the knowledge thus acquired, the real progreſs of geology would be greater; and many general facts would be better aſcertained by this ſafe and impartial method, than they now are by the continual attempts of theſe authors to ſquare them to their fanciful ſyſtems. From the impatience to give general theories before ſolid foundations have been laid for them, airy hypotheſes are ſucceſſively obtruded on the public; each deſtroying the former, and itſelf enlarging but little, if at all, the boundaries of real ſcience. The only advantages, perhaps, reſulting from theſe wild attempts, conſiſt chiefly in the objections againſt the preceding ſyſtems, and occaſionally in ſome fortunate obſervation, or conjecture; which deſerves to be kept in ſtore, even after the illuſory viſion, which it is made to prop, has vaniſhed and ſunk into oblivion. Theſe reflections are peculiarly applicable to M. Bertrand's new theory of the earth; which, from the neologic and figurative expreſſions frequently uſed by the author, and from the incoherence of his reaſoning, is in ſome meaſure rather darkened than illuſtrated by his explanations. In order to convey his theory with more clearneſs to our readers, we ſhall divide it into epochs.

1ſt Epoch. Motion, heat, light, and life, are not neceſſary companions of matter, but local temporary accidents: immobility, cold, and darkneſs, are on the contrary the moſt natural ſtate of things throughout the immenſity of ſpace. Beſides thoſe heavenly bodies which now enjoy light and life, an infinite number of other worlds exiſt; reſting inviſible in darkneſs and inactivity, and waiting for ſome favourable circumſtance which may bring to them light and motion. Water, according to this author, is the original ſubſtance of our planetary world, and undoubtedly of any other world: but this water, before motion and heat are communicated to it, is only a ſolid maſs of ice. Gravitation being the only force adherent to matter, when it acts alone, as it does in theſe frozen dead worlds, it tends only to keep the parts of matter united and motionleſs; every other motion, which may ſet them in activity, muſt be aſcribed to mechanic impulſion and projection.

2d Epoch. It is difficult to conceive that a comet, of the order of thoſe which move round our ſun, could be ſtrong enough to impart this principle of motion and life to our globe, and to the others of our planetary ſyſtem. M. Bertrand ſuppoſes the exiſtence of comets of a ſuperior and unknown order; which, wandering about a great many worlds, finally end their career, and fulfil their deſtination, by ſtriking one of the dead and frozen; breaking it in pieces; and mixing their materials with thoſe of the till then lethargic maſs. Theſe fragments acquire, by this impulſion, a common projectile motion in the ſame plane, and in the ſame direction. The light, heat, and life, brought by this energetic comet, mixing with the original ice, form new combinations; afford cauſes of inteſtine motions; and begin by theſe means a new order of things: which M. Bertrand calls vital and organic conſtitution, and which he ſuppoſes to be different in every planet, ſince their denſity is not the ſame.

3d Epoch. The ice, by the medium of heat as a diſſolvent, being reduced to primordial matter, all ancient combinations were deſtroyed, to give room to new combinations of a different order. The firſt, perhaps the *only*, converſion of this regenerated element was the calcareous earth; the ſpecies of earth from which, in his opinion, every other earth is originally formed. This depoſition of calcareous matter, being equal every where, could not but produce a regular nucleus in our globe; and this nucleus being equally covered by water, the ſtructure of our planet was far different from what it now is. No ſpot of ground could be out of the water; no mountains, no valleys, could be formed by ſuch an homogeneous equal depoſition. How, then, were they produced?

4th Epoch. A new comet of high degree approached our globe, near enough to influence its deſtinies; changed and ſlackened both the annual and diurnal motions of the

the planet; diſplaced the axis and the equator; altered likewiſe the points at which the ſpheroid was compreſſed or elevated; and, by theſe means diſplacing the waters, occaſioned the ſudden immerſion of the firſt continents. The ſurface of theſe was already marked by declivities and valleys; the firſt occaſioned by the general change of level; the ſecond by the ſudden retreat of the waters. Theſe continents, however, being all compoſed of calcareous matter, what events cauſed the formation of the other foſſil ſubſtances which now exiſt?

5th Epoch. The firſt action of atmoſpherical powers, and of the ſolar rays on the virgin ſoil, occaſioned a ſudden eruption of all the vital forces, ſo long ſuſpended and concentered. In this exploſion of life, every particle of native ſoil was vivified; and numberleſs races of vegetables and animals were produced, of ſuch ſizes and in ſuch numbers, that putrefaction and fermentation enſued. Some meteoric phenomenon having ſet fire to this monſtrous heap of putrefied bodies, the horrid conflagration extended every where, even under the ſea, and was the cauſe of moſt tremendous earthquakes; which broke all the ſtrata, that till then had been horizontal, and lifted them up in every direction, even perpendicularly: thus giving riſe to the chains of mountains, and all their different forms. The aſhes of this almoſt general combuſtion, being the moſt ſaline of the then exiſting ſubſtances, formed a lixivium; which, filtering through the interſtices of the broken ſtrata that were yet of a ſoft conſiſtence, produced the quartz and other ſimilar ſubſtances which now compoſe them. Wherever this lixivial and quartzeous flux depoſed large quantities of matter, the granite was formed. From the mixture of this flux with looſe aſhes, the gneiſs originated; and, by ſeveral ſuch mixtures, the corneous, micaceous, and other, ſchiſts, were formed. The different ſorts of lixivial fluxes and vitreous ſalts, combined with other ſalts, and with the original calcareous ſubſtances, gave riſe to new earths; which, though generally reckoned primitive, both by chemiſts and mineralogiſts, are nevertheleſs, according to M. Bertrand, ſo many natural amalgams, which defy the preſent powers of chemiſtry; ſuch are magneſia, barytes, argill, &c. The reſiduum of the putrefied organic bodies, not being thoroughly burnt and converted into aſhes, experienced only different degrees of fire and decompoſition, and was turned into coals and bitumens. Such, according to this author, was the proceſs by which nature, from this enormous putrefied maſs, formed nearly all the foſſil ſubſtances, except only the calcareous.

6th Epoch. The general combuſtion, by which in the preceding period ſo many wonders were effected, prepared alſo the way to another revolution. The fire, extending under the ſea to an immenſe depth, conſuming and volatilizing the earths, occaſioned hollows and caverns of incalculable dimenſions; which, being laid open by ſome violent ſhock, were filled by the waters of the ocean; and, by this ſudden retreat of the watery element, vaſt portions of our globe were left dry and expoſed to the atmoſphere, while part of the old continents fell into the hollows, and diſappeared.

M. Bertrand deems it very probable that a ſecond change of the axis of our planet was the cauſe of this cataſtrophe; becauſe the foſſil organized bodies, found in different countries, ſeem to prove that a change of zones and climates has taken place, ſince the moment at which they were firſt inhabited by terreſtrial vegetables and animals. This, according to M. Bertrand, is the epoch in which we now live; and in which Nature, fatigued and haraſſed by her firſt gigantic efforts, has loſt much of her former energy. The organized bodies of this epoch are all new ſpecies, by no means comparable either in ſize, numbers, or prolific quality, to the firſt inhabitants of the globe. The means of deſtruction are likewiſe as much weakened as thoſe of production. Our preſent earthquakes, and our volcanoes, are microſcopic objects in compariſon with thoſe of the former epochs. Thoſe firſt earthquakes ſhook the globe, diſplacing and overthrowing every thing; the firſt conflagrations were, in the author's words, 'bottomleſs and boundleſs ſeas of fire;' while our actual volcanoes he compares to chimneys.

He next aſſerts, that the actual ſtate of the globe has already laſted longer than any other of the former ſtates; and that it is very probable, from the exhauſted condition of nature, that it will continue to decay in peace till the planet is again cold, lifeleſs, and dry: but this is a mere probability, becauſe, if partial nature be liable to decline, univerſal nature is always in full activity; and ſome new change of the axis of the earth may ſink part of the exiſting continents, and may expoſe to the ſolar rays, and to the vivifying action of the atmoſphere, the bottom of the Southern and of the Pacific Oceans.

If M. Bertrand, like his predeceſſors in the ſame career, has been unſucceſsful in eſtabliſhing a plauſible theory of the earth, he has like them furniſhed, in many inſtances, valuable arguments againſt the hypotheſis moſt in vogue when he compoſed his book. M. La Metherie's theory of the earth, which has been the moſt faſhionable, and in many reſpects deſerving the reputation that it enjoyed, is attacked by this author in every point; and indeed the greateſt part of this volume is avowedly intended as a refutation of that learned writer's ſyſtem of the general cryſtallization of mineral ſubſtances in the primitive ocean. The vaſt erudition diſplayed by M. La Metherie, and the air of candour and ſcepticiſm adopted by him in the diſcuſſion of many important queſtions, have perhaps contributed to give more popularity to his ſyſtem, than a ſimple expoſition of it, diveſted from theſe acceſſories, would have acquired. As far as his arguments tend to prove the Neptunian origin of the greateſt part of the known mineral ſubſtances, and the general ſtate of ſubmerſion in which the ſolid part of our globe has exiſted in former periods, they ſeem to us unanſwerable: but the retreat of the waters, the formation of mountains and valleys, and the phenomena which they preſent either in their forms or in the poſition of the materials in or about them, require, in order to be explained, ſome other agent than the primitive ocean; ſome other operations than mere cryſtallization and depoſition. Though M. Bertrand's hypotheſes do not afford any ſatisfactory ideas to account for theſe phenomena, ſtill ſome of the arguments which he employs, to ſhew the inſufficiency of the ſyſtem of general cryſtallization, appear to deſerve the candid attention of the learned on this very intereſting branch of natural philoſophy.

In this view, the ingenious Mr. R. Kirwan, in his Geological Eſſays, publiſhed in 1801, has endeavoured to collect the principal facts and opinions which relate to the ſtructure of the globe, from the beſt writers. He points out the diſtinction between primary and ſecondary mountains, as one of the moſt important events in the progreſs of geological ſcience; he expoſes the futility of the theory of Buffon, which repreſented all the primary mountains to have originated out of a ſtate of igneous fuſion; names with deſerved approbation thoſe philoſophers who have ſubſtituted mineralogical and chemical inveſtigation for haſty conjecture in their attempts to trace the formation of the earth, and the changes which have happened in the arrangement of its ſtrata; and profeſſes the object of his work to be, to vindicate the divine authority of Revelation, by proving the account given by Moſes of the origin of the terreſtrial globe, to agree, in the moſt remarkable manner, with the preſent ſtate and condition of the earth.

In his firſt Eſſay, he obſerves that the earth could not have aſſumed the form of a ſpheroid compreſſed at the poles, if its ſuperficial parts had not originally been, to a certain depth, in a ſoft or liquid ſtate; and that

the lower ſtrata of primitive calcareous rocks being, in proportion to their depth, continually thinner than thoſe which reſt upon them, equally evince the whole to have been formerly in a ſoft ſtate, and to have yielded to compreſſion while they were dried and hardened. He therefore ſuppoſes the ſuperficies of the globe to have been univerſally fluid, its interior compoſition ſolid and cavernous, at the time when the preſent laws began to operate upon it. The ſuperficial fluid he conceives to have been heated at leaſt to 33° Fahr. Diſſolved or ſuſpended in it were portions of the eight generic earths, of all the known metallic ſubſtances, of all the ſimple ſalts, and of all inflammable matters ſolid and liquid. Siliceous earth and iron were of all the ſolid materials in the mixture the moſt copious. Calcareous earth muſt even then have exiſted; for it is a component part in many primitive rocks. As the fluid maſs was moved; as its heat paſſed into new combinations; as the elective attractions of its various materials began reciprocally to operate; the ſolidifiable materials were precipitated in the order of their affinities, ſomewhat diſturbed by the mechanical agency, which at the ſame time neceſſarily affected them. In their precipitation they were univerſally cryſtallized. Where ſiliceous and argillaceous earths chiefly abounded, quartz, feldſpar, and mica, were confuſedly depoſited in ſtrata of granite and gneiſs. One depoſition ſucceeded another till vaſt uniform blocks were formed. Carbon, iron, and others of the ſolidifiable materials of the chaotic flood, were unavoidably involved with the ſubſiding ſtony particles. Where the materials were intermingled in different proportions, other ſorts of primitive rock, ſuch as ſiliceous ſchiſtus, ſiliceous porphyries, jaſpers, &c. were produced. In the confuſed agitation of all parts of the flood, ſulphur and metallic ſubſtances encountering, formed pyrites; while pit-coal was alſo compoſed by the aſſociation of petrol with carbon. After the formation of combuſtible compounds ſo eaſily decompoſable, heat ſufficient for their combuſtion was ſoon afforded from the inceſſant ſolidification of matters which had been hitherto fluid. A decompoſition of water, by means of heated iron, was one of the firſt effects from the riſing intenſity of the general heat. The combuſtible matters were generally inflamed, and many volcanic fires burſt out from the boſom of the abyſs. Gas-azot, gas-oxygen, and afterwards carbonic acid gas, were, in great quantities, evolved from the conflagration, and diffuſed into an atmoſphere ſurrounding the earth and waters. The eruptions of the fires naturally diſordered the depoſitions of the rocky ſtrata, and puſhed up many vertical or inclined elevations through the layers which might otherwiſe have been, in general, nearly horizontal. Such was the origin of the loftieſt primitive mountains, the Alps, the Andes, and thoſe elevated ranges which occupy ſo extenſive a ſpace in the north of Aſia. Plains were formed by the depoſition of ſtony particles from the chaotic flood in the intervals between the mountains, and with a diffuſion too looſe to admit of their being united in cryſtals as they were depoſited. The volcanic eruptions, by which the firſt mountains were elevated, could not but ſcoop out excavations to receive the ſubſiding waters of the ſea. The caverns of the primitive nucleus of the globe were even laid open by thoſe fires; and into them the ſuperficial waters ſhrunk, till a conſiderable extent of dry and ſolid ſurface was left bare under the atmoſphere. At a level of between 8500 and 9000 feet above that at which it now ſtands, the ocean became for a while ſtationary. It was ſoon after furniſhed with fiſhes. The diſintegration of the primary rocks, the depoſition of animal exuviæ, and the continued precipitation of the ſolid matters ſuſpended in the waters of the ſea, then compoſed thoſe ſtrata of rocks which, from their containing animal remains, are denominated *ſecondary*. The earth was about the ſame time clothed with vegetation, and made the reſidence of the ſpecies of animals. The matter of the ſecondary rocks was, by the known laws of gravitation and reſiſtance, rather fixed in ſtrata upon the primary rocks, than precipitated to the bottom of the great abyſs. The retreat of the ſea from the ſurface to the interior caverns of the globe, however, ſtill continued; and the dimenſions of the habitable earth were thus continually enlarged.—Such is the ſubſtance of the firſt of theſe Eſſays, which contains the author's theory of the formation of the earth. He compares this account with that of Moſes, and ſhews that they perfectly coincide.

The Deluge is the ſubject of the ſecond Eſſay. From the ſhells found on the heights of the primitive mountains; from the remains of animals natives of hot climates diſcovered in cold ones, which thoſe animals cannot be ſuppoſed to have ever voluntarily inhabited; from the diſperſion of marine exuviæ on ſhores far remote from the ſeas where we now meet with the ſpecies of living animals to which they muſt have belonged; Mr. Kirwan infers, that the general deluge commemorated in the Holy Scriptures muſt certainly have taken place as Moſes relates. That the axis of the earth was originally parallel to the ecliptic, producing in every latitude perpetual ſpring, is a poſition of which aſtronomy has ſufficiently demonſtrated the falſehood. The nutation of the poles is, every nine years, retrogreſſive, and never exceeds ten degrees; ſo that the equator can never have been, by this cauſe, where the poles are now. The whole ſtrata of this earth are of ſuch nature that they cannot have originally been, as M. de Buffon ſuppoſes, in a ſtate of igneous fuſion, the heat from which might have long kept up a genial warm temperature even in the regions the neareſt to the poles. The phenomena ſufficiently evince that the ſeas and continents of the earth cannot have mutually changed places, as has been ſuppoſed by Mr. Edward King. Mr. Kirwan, therefore, ſuppoſes the ſouthern ocean to have been in the general deluge driven, by ſome unknown means, with mighty force towards the poles. The character of the exotic remains found in the northern regions; the immenſity of waters collected in the ſouthern ocean; the traces which ſo many countries bear of having ſuffered ſome mighty ſhock from the ſouth; and the very figures of the great continents, ſharpened towards the ſouth, where they are waſhed by the ſouthern ocean, are ſo many grand facts concurring to give probability to that ſuppoſition. The waters from the central abyſſes of the globe might burſt forth to complete the cataſtrophe. In their progreſs northward, and in their retroceſſion, the waters of the deluge muſt have greatly broken, ravaged, and tranſpoſed, the ſuperficial ſtrata of the earth: many of the mountains were broken down to powder, and other inconſiderable fragments: the beds of the Euxine and Caſpian ſeas might be then ſcooped out: baſaltic rocks and beds of coal might be formed: a confuſion in the arrangement of the exterior ſtrata of ſecondary and primary rocks would be here and there produced: all terreſtrial animals, ſave ſuch as were preſerved by ſupernatural means, muſt have neceſſarily periſhed. Every rational inference, therefore, from preſent appearances, entirely coincides with the Moſaic hiſtory of the deluge.

In the third Eſſay Mr. Kirwan ſtates, that, beſides effecting ſo many important and immediate changes on the exterior ſtrata of the globe, the deluge, likewiſe, became the remote cauſe of various great convulſions, which were at ſubſequent times to enſue upon its parts at different places of the ſurface: that the total ſeparation of Aſia from America, the coarctation of the Baltic, the opening of the Thracian Boſphorus, and the diſruption of the iſthmus which once divided the Atlantic Ocean from the Mediterranean Sea, the entire ſeparation of Great Britain from the continent, and various other ſimilar alterations, are to be numbered among

thoſe great changes poſterior to the deluge, for which the deluge had, however, prepared the ſuperficial ſtrata of the globe: that all theſe changes muſt have been accompliſhed chiefly by extraordinary agitations of the waters of the ocean, and at the diſtance of at leaſt three thouſand ſix hundred years from the preſent time.

The fourth Eſſay explains the phenomena of *lapidification*. Stones conſiſt of earths conglomerated. A lump of any earth of which the parts, though cohering, are diviſible merely by the nail of the finger, is called but *indurated earth*: if its coheſion firmly reſiſt the action of the nail, it is to be denominated *ſtone*. Stones are *hard* which cannot be eaſily filed, or cut into pieces. Thoſe are *firm* which ſtrongly reſiſt percuſſion. Some ſtones appear to have been formed by cryſtalliſation arranging all their parts, internal and external, in a regular form. It is effected from either aqueous or igneous ſolution. All ſolidifiable matters are ſuſceptible of it. Even thoſe ſiliceous matters, which are now almoſt inſoluble in water, might be eaſily ſoluble in this menſtruum in their original ſtate of extreme diviſion, and were probably cryſtalliſed by depoſition from water. Nay, in ſpite of whatever Dr. Black and others may have affirmed to the contrary, numerous facts may be produced to ſhow that, even ſtill, water may be made to take up a certain proportion of this earth. Some ſtones appear to have been formed by the mere concretion of particles, which, in their primary compoſition, are probably of different figures, and which therefore diſplay not in their coheſion the uniform order of cryſtalliſation. Other ſtones are formed by the cementation of exceedingly ſmall nodules, or even of larger ones, by the depoſition of ſtill particles amongſt them, and the coheſion of whole maſſes, partly by mechanical force, and in part by the reciprocal chemical attractions of the different parts. Many of the ſmaller nodules, which are found imbedded in rocks not of the ſame nature with themſelves, have been formed by an infiltration, in which water or ſome other fluid carried their particles through the ſuperficial ſtrata, but depoſited them after penetrating the interior layers only to a certain depth. Thoſe ſtones which we call *petrifactions*, have been formed by the gradual ſubſtitution of ſtony particles into the places which were occupied by animal or vegetable matters that decay while the lapideous depoſition takes place. Theſe are the different modes of lapidification. They are exemplified in all the different fragments, columns, and ſtrata of rock, which the earth preſents to the obſervation of men.

In the fifth Eſſay, the *diſintegration*, reducing them into ſands and larger fragments, is explained, as having been often produced by the abſorption of water, and by its congelation or rarefaction while it was diffuſed within them. The known external cauſes of the entire decompoſition of ſtony matters are repreſented to be only water, carbon, and carbonic acid gas, which enter into new combinations with the ſaline matters, the ſulphur, the ferruginous oxyds, the manganeſe, the lime, and other conſtituent parts of the ſtones with which they come into contact.

Mountains are the ſubjects of the ſixth of theſe Eſſays. The author deſcribes the *primitive* mountains as containing within them no animal nor vegetable remains; as compoſing all the loftieſt extremities of the earth; as never covering nor leaning upon thoſe which are called *ſecondary*; as exiſting ſometimes in ſtrata, but oftener in huge rocks; as variouſly compoſed, of granite and granitic compounds, gneiſs, ſchiſtoſe mica, ſiliceous ſchiſtus, baſanite, jaſper, pitchſtone, hornblende, hornblende ſlate, indurated lithomarga, argillite, trap, ſerpentine and potſtone, porphyry, hornſlate, ſchiſtoſe porphyry, ſandſtone, rubble-ſtone, farcilite, granular limeſtone, marlite, gypſum, fluor, and topaz-rock. Of each of theſe ſorts of ſtone he gives, in part, the mineralogical geography. The *ſecondary* mountains are next deſcribed, as being either marigenous or alluvial; as containing in their ſtructure various remains of animals and vegetables, terreſtrial and aquatic; as always incumbent on primary rocks, or inveſting them; as ſtratified or columnar, unigenous or polygenous; as variouſly compoſed of limeſtone, ſwineſtone, oviform limeſtone, porous limeſtone, marlites, and calcareous ſandſtones, chalk, gypſum, argillite, indurated clay, ſhale, bituminous ſhale, indurated lithomarga, ſlate, argillaceous ſandſtone, porphyry, trap, and baſalt; hornblende, argillaceous and calcareous breccias, hornſtone, jaſper, ſiliceous breccias, and ſiliceous ſandſtone. By an ample induction of facts it is proved, that all theſe different ſorts of ſtone have been found in circumſtances in which they could not be but of ſecondary formation.

In the ſeventh Eſſay, Mr. Kirwan deſcribes volcanic mountains as being generally of a conical form, of no exceedingly ancient origin, burning with no extraordinary intenſity of internal heat, and not half ſo numerous as ſome theoretic mineralogiſts have ſuppoſed them to be.

In the eighth Eſſay, Mr. Kirwan endeavours to explain the internal arrangement of mountains. He here relates that their materials are diſpoſed either in irregular heaps, or in beds, or ſtrata, horizontal, varying from that poſition by an angle of from five degrees to forty, or ſometimes even almoſt vertical. Sometimes the ſtrata run in the direction of the declivity of the mountains they compoſe, and ſometimes their courſe is directly oppoſite to this. Mountains of primitive limeſtone are often in irregular piles, but often, too, horizontally ſtratified. Of ſecondary calcareous ſtrata, the ſtructure is commonly horizontal. The ſtrata of ſecondary mountains, for the moſt part, aſcend towards the primary.—Theſe are ſome of the leading truths of this curious inveſtigation.

Coal-mines form the ſubject of the ninth Eſſay. Pit-coal is a compound of bitumen with carbon: its ſpecific gravity is from 1·23 1·500. The ſoils within which beds of coal uſually occur, are argillaceous, arenilitic, trappoſe, or calcareous. Theſe are diſpoſed in ſtrata over the coal, or in alternation with the ſtrata. The thickneſs of the ſtrata, or ſeams of coal, varies from half an inch even to eighty feet. Shale, bituminous ſhale, or ſandſtone, are the ſtones which generally form both the *roof* and *floor* to *ſeams* of pit-coal. Sometimes theſe ſeams are in their diſpoſition horizontal. They riſe at times to angles of from twenty-five degrees to forty-five with the horizon. It cannot be true that, as has been ſuppoſed by Genſanne, pit-coal is nothing but argillaceous matter impregnated with petrol or aſphalt; nor that this coal is entirely of vegetable origin; nor that it is formed from the fat and unctuoſity of the animals of the ocean. The ſtrata of this mineral ſeem rather to have been formed in conſequence of the diſintegration of many of the primitive mountains by the homogeneous union of the petrol and carbon which were by that diſintegration liberated out of the compoſition into which they had originally entered. Coal is therefore to be ſought, with probability of ſucceſs, only on the ſides of primitive mountains, in the vicinity of mountains of argillaceous porphyry, amidſt ſandſtone and ſhale bearing the impreſſions of vegetables, under alternating ſtrata of limeſtone and ſandſtone, or amidſt ſtrata of trap, or whin with ſandſtone or clay.

Common ſalt and its mines are made the ſubjects of the tenth Eſſay. The ſea is repreſented as owing its ſaltneſs to ſimple ſaline ſubſtances held in ſolution in it ever ſince the creation. The mines of rock-ſalt which have been in different places diſcovered, are ſaid to have all originated from the detenſion and evaporation of ſea-water. Salt-ſprings and lakes are related to contain and pour forth, from time to time, quantities of ſaline matter, which, when ſubjected to calculation, cannot but, by their magnitude, excite the greateſt aſtoniſhment.

Theſe

Theſe general facts are unfolded by an exceedingly curious and intereſting diſplay of particulars.

The eleventh Eſſay is on the ſubject of metallic mines. It relates, that all the metals muſt have exiſted perfect and uncontaminated in the chaotic flood. Gold is found naturally pure oftener than any of the other metals. Silver is much more frequently mineraliſed by ſulphur, and alloyed with copper, antimony, lead, mercury, tin, or biſmuth. Nature preſents ſtill leſs of pure copper than of pure ſilver: the ores of copper are ſcarcely ever free from ſulphur. Of pure native iron there are few or no ſpecimens, except certain maſſes found in Siberia and Peru, which ſeem to have been originally agglutinated by petrol, and left bare by the diſſolution of the maſſes of other matters which once ſurrounded them. Native biſmuth accompanies the grey and the bright white ores of cobalt. Native arſenic is found only in the veins of primeval mountains: native mercury occurs in clay in mountains of ſecondary formation; ſulphurated ores have been formed at a time when ſulphur, as well as metals, were in a ſtate of extreme ſubdiviſion, in which they were much more ſoluble in fluids than they are at preſent. The cryſtalliſation of metallic ores was the conſequence, in ſome inſtances, of the diminution of the watery menſtruum, in others of ſlow precipitation. The veins of metals ſeem to have been, for the moſt part, formed by depoſition from water among the rifts and amid the ſtrata of the ſofter rocks. It is in oxyds, in mineraliſation by ſulphur, in mixture with different earths, and in amalgamation with one another, that all the metals are the moſt commonly found.

The twelfth Eſſay is profeſſedly to controvert what the late Dr. Hutton, of Edinburgh, had taught, that from eternity, this globe had continued to paſs through a ſeries of revolutions, in which the land was ſtill deſtroyed by external influences, and, in its ruins, propelled into the ocean; while, on the other hand, internal fires were conſtantly elevating new mountains under the ocean, and conglomerating the materials driven into it; till, at laſt, the ocean changed its bed, that which had been dry land became ſea, that which had been ſea became dry land, and the deſtruction of the new continents, and the working of the volcanic fires under the new ſeas, were again renewed. Mr. Kirwan attacks this theory as unphiloſophical. Dr. Hutton defended his own ſyſtem. In this concluding eſſay, however, Mr. Kirwan, in reply to Dr. Hutton's defence, demonſtrates, that igneous fuſion cannot have produced thoſe phenomena which the doctor aſcribes to it; affirms that volcanic fires are comparatively few and weak in their action; and maintains, that the compoſition of the ſuperficial ſtrata of our preſent continents, is ſuch as could not poſſibly be formed at the bottom of the ſea.—See Dr. Hutton's theory refuted, under the article EARTH, vol. vi. p. 177–201.

Upon the whole, it ſeems generally allowed that Mr. Kirwan has exhibited a more conſiſtent ſcheme of the facts, and analogies of geology, than any that has been before preſented to the world. If ſubſequent geologiſts ſhall continue to improve the ſcience as Mr. Kirwan has done, the world may, perhaps, at ſome future period, form a correct and faultleſs theory of the earth.

GE'OMANCER, *ſ.* [γη and μαντις.] A fortuneteller; a caſter of figures, who pretends to foretel futurity by other means than the aſtrologer.—Fortune-tellers, jugglers, *geomancers*, and the incantory impoſtors, though commonly men of inferior rank, daily delude the vulgar. *Brown.*

GE'OMANCY, *ſ.* [γη and μαντια; *geomance*, Fr.] The act of caſting figures; the act of foretelling by figures what ſhall happen.—According to ſome there are four kinds of divination; hydromancy, pyromancy, acromancy, and *geomancy*. *Ayliffe.*

GEOMAN'TIC, *adj.* Pertaining to the act of caſting figures:

Two *geomantic* figures were diſplay'd
Above his head, a warrior, and a maid;
One when direct, and one when retrograde. *Dryden.*

GEO'METER, *ſ.* [γεωμετρης, Gr. *geometre*, Fr.] One ſkilled in geometry; a geometrician.—He became one of the chief *geometers* of his age. *Watts.*

GEO'METRAL, *adj.* [*geometral*, Fr.] Pertaining to geometry.

GEOME'TRIC, or GEOMETRICAL, *adj.* [γεωμετρικος; *geometrique*, Fr.; from *geometry*.] Pertaining to geometry.—A *geometrical* ſcheme is ſet in by the eyes, but the demonſtration is diſcerned by reaſon. *More.*—Preſcribed or laid down by geometry.—Muſt men take the meaſure of God juſt by the ſame *geometrical* proportions that he did, that gathered the height and bigneſs of Hercules by his foot? *Stillingfleet.*

Does not this wiſe philoſopher aſſert,
That the vaſt orb, which caſts ſo fair his beams,
Is ſuch, or not much bigger than he ſeems?
That the dimenſions of his glorious face
Two *geometric* feet do ſcarce ſurpaſs? *Blackmore.*

Diſpoſed according to geometry.—*Geometric* jaſper ſeemeth of affinity with the *lapis ſanguinalis* deſcribed by Boetius; but it is certainly one ſort of *lapis cruciformis*. *Grew.*

GEOMETRICAL CURVE, called alſo *algebraical one*, is that in which the relations between the abſciſſes and ordinates may be expreſſed by a finite algebraical equation. See ALGEBRA.

GEOMETRICAL LINES, as obſerved by Newton, are diſtinguiſhed into claſſes, orders, or genera, according to the number of the dimenſions of the equation that expreſſes the relation between the ordinates and abſciſſes; or, which amounts to the ſame thing, according to the number of points in which they may be cut by a right line.

GEOMETRICAL LOCUS, called alſo ſimply *Locus*, or *Place*, is the path or track of ſome certain geometrical determination, in which it always falls.

GEOMETRICAL METHOD OF THE ANCIENTS. The ancients eſtabliſhed the higher parts of their geometry on the ſame principles as the elements of that ſcience, by demonſtrations of the ſame kind; and they were careful not to ſuppoſe any thing done, till by a previous problem they had ſhewn that it could be done by actually performing it. Much leſs did they ſuppoſe any thing to be done that cannot be conceived; ſuch as a line or ſeries to be actually continued to infinity, or a magnitude diminiſhed till it become infinitely leſs than what it is. The elements into which they reſolved magnitudes were finite, and ſuch as might be conceived to be real. Unbounded ſeries have of late been introduced; by which geometry, which ought to be perfectly clear, is filled with myſteries.

GEOMETRICAL PROGRESSION, a progreſſion in which the terms have all ſucceſſively the ſame ratio: as 1, 2, 4, 8, 16, &c. where the common ratio is 2. The general and common property of a geometrical progreſſion is, that the product of any two terms, or the ſquare of any one ſingle term, is equal to the product of every other two terms that are taken at an equal diſtance on both ſides from the former.

GEOMETRICAL PROPORTION, called alſo ſimply *Proportion*, is the ſimilitude or equality of ratios. Thus, if $a : b :: c : d$, or $a : b = c : d$, the terms a, b, c, d, are in geometrical proportion, alſo 6, 3, 14, 7, are in geometrical proportion, becauſe $6 : 3 :: 14 : 7$, or $6 : 3 = 14 : 7$.

GEOMET'RICALLY, *adv.* According to the laws of geometry.—'Tis poſſible *geometrically* to contrive ſuch an artificial motion as ſhall be of greater ſwiftneſs than the revolutions of the heavens. *Wilkins.*—All the bones, muſcles,

muſcles, and veſſels of the body are contrived moſt *geometrically*, according to the ſtricteſt rules of mechanics. *Ray.*

GEOMETRI'CIAN, *ſ.* [γεωμετρης.] One ſkilled in geometry; a geometer.—How eaſily does an expert *geometrician*, with one glance of his eye, take in a complicated diagram, made up of many lines and circles! *Watts.*

To GEO'METRIZE, *v. a.* [γεωμετρεω.] To faſhion or form according to the laws of geometry.—We obtained good ſtore of cryſtals, whoſe figures were differing enough, though prettily ſhaped, as if nature had at once affected variety in their figuration, and yet confined herſelf to *geometrize*. *Boyle.*

GEO'METRY, *ſ.* [*géometrie*, Fr. *geometria*, Lat. γεωμετρια, Gr. of γη, the earth, and μετρεω, to meaſure.] The art of meaſuring the earth, and of determining any diſtances or dimenſions contained within it; and it is alſo uſed to denote the ſcience of local extenſion, quantity, or magnitude, abſtractedly conſidered, without any regard to matter. Hence to this ſcience might be referred the conſideration not only of lines, ſurfaces, and ſolids; but alſo of time, velocity, number, weight, &c. inſomuch that with the aid of arithmetic or algebra, geometry now forms the chief foundation of the mathematics.

Herodotus, Diodorus, Strabo, and Proclus, aſcribe the invention of geometry to the Egyptians, and aſſert that the annual inundations of the Nile gave occaſion to it; for thoſe waters bearing away the bounds and land-marks of eſtates and farms, covering the face of the ground uniformly with mud, the people, ſay they, were obliged every year to diſtinguiſh and lay out their lands by the conſideration of their figure and quantity; and thus by experience and habit they formed a method or art, which was the origin of geometry. A farther contemplation of the draughts of figures of fields thus laid down, and plotted in proportion, might naturally lead them to the diſcovery of ſome of their excellent and wonderful properties; which ſpeculation continually improving, the art continually gained ground, and made advances more and more towards perfection. Joſephus, however, ſeems to aſcribe the invention to the Hebrews: and others of the ancients make Mercury the inventor. *Polyd. Virgil, de Invent. Rer. lib.* 1, *cap.* 18.

From Egypt this ſcience paſſed into Greece, being carried thither by Thales; where it was much cultivated and improved by himſelf, as alſo by Pythagoras, Anaxagoras of Clazomene, Hippocrates of Chios, and Plato, who teſtified his conviction of the neceſſity and importance of geometry to the ſucceſsful ſtudy of philoſophy, by this inſcription over the door of his academy, *Let no one ignorant of geometry enter here.* Plato thought the word *geometry* too limited a term for this ſcience, and ſubſtituted inſtead of it the more extenſive name of *Menſuration*; and after him others gave it the title of *Pantometry*. But theſe are now become too ſcanty in their import, fully to comprehend its extent; for it not only inquires into, and demonſtrates, the quantities of magnitudes, but alſo their qualities, as the ſpecies, figures, ratios, poſitions, tranſformations, deſcriptions, diviſions, the finding of their centres, diameters, tangents, aſymptotes, curvature, &c. Some again define it as the ſcience of inquiring, inventing, and demonſtrating, all the affections of magnitude. And Proclus calls it the knowledge of magnitudes and figures, with their limitations; as alſo of their ratios, affections, poſitions, and motions of every kind.

About fifty years after Plato, lived Euclid, who collected together all thoſe theorems which had been invented by his predeceſſors in Egypt and Greece, and digeſted them into fifteen books, called the "Elements of Geometry;" demonſtrating and arranging the whole in a very accurate and perfect manner. The next to Euclid, of thoſe ancient writers whoſe works are extant, is Apollonius Pergæus, who flouriſhed in the time of Ptolemy Euergetes, about two hundred and thirty years before Chriſt, and about one hundred years after Euclid. He was author of the firſt and principal work on Conic Sections; on account of which, and his other accurate and ingenious geometrical writings, he acquired from his patron the emphatical appellation of *The Great Geometrician*. Contemporary with Apollonius, or perhaps a few years before him, flouriſhed Archimedes, celebrated for his mechanical inventions at the ſiege of Syracuſe, and not leſs ſo for his very many ingenious geometrical compoſitions.

We can only mention Eudoxus of Cnydus, Archytas of Tarentum, Philolaus, Eratoſthenes, Ariſtarchus of Samos, Dinoſtratus, the inventor of the quadratrix, Menechmus, his brother, and the diſciple of Plato, the two Ariſteus's, Conon, Thracidius, Nicoteles, Leon, Theudius, Hermotimus, Hero, and Nicomedes, the inventor of the conchoid: beſides whom, there are many other ancient geometricians, to whom this ſcience has been indebted.

The Greeks continued their attention to it, even after they were ſubdued by the Romans. Whereas the Romans themſelves were ſo little acquainted with it, even in the moſt flouriſhing time of their republic, that Tacitus informs us they gave the name of mathematicians to thoſe who purſued the chimeras of divination and judicial aſtrology. Nor does it appear they were more diſpoſed to cultivate geometry during the decline, and after the fall, of the Roman empire. But the caſe was different with the Greeks; among whom are found many excellent geometricians ſince the commencement of the Chriſtian era, and after the tranſlation of the Roman empire. Ptolemy lived under Marcus Aurelius; and we have ſtill extant the works of Pappus of Alexandria, who lived in the time of Theodoſius; the commentary of Eutocius the Aſcalonite, who lived about the year of Chriſt 540, on Archimedes's menſuration of the circle; and the commentary on Euclid, by Proclus, who lived under the empire of Anaſtaſius.

The conſequent inundation of ignorance and barbariſm was unfavourable to geometry, as well as to the other ſciences; and the few who applied themſelves to this ſcience, were calumniated as magicians. However, in thoſe times of European darkneſs, the Arabians were diſtinguiſhed as the guardians and promoters of ſcience; and from the ninth to the fourteenth century, they produced many aſtronomers, geometricians, geographers, &c. from whom the mathematical ſciences were again received into Spain, Italy, and the reſt of Europe, ſomewhat before the year 1400. Some of the earlieſt writers after this period are, Leonardus Piſanus, Lucas Paciolus or De Burgo, and others between 1400 and 1500. And after this appeared many editions of Euclid, or commentaries upon him: thus, Orontius Finæus, in 1530, publiſhed a commentary on the firſt ſix books; as did James Peletarius, in 1557; and about the ſame time Nicholas Tartaglia publiſhed a commentary on the whole fifteen books. There have been alſo the editions, or commentaries, of Commandine, Clavius, Billingſly, Scheubelius, Herlinus, Daſypodius, Ramus, Herigon, Stevinus, Saville, Barrow, Taquet, Dechales, Furnier, Scarborough, Keill, Stone, and many others; but the completeſt edition of all the works of Euclid, is that of Dr. Gregory, printed at Oxford 1703, in Greek and Latin: the edition of Euclid by Dr. Robert Simſon of Glaſgow, containing the firſt ſix books, with the eleventh and twelfth, is much eſteemed for its correctneſs. The principal other elementary writers, beſides the editors of Euclid, are, Borelli, Pardies, Marchetti, Wolfius, Simpſon, &c. And among thoſe who have gone beyond Euclid in the nature of the elementary parts of geometry, may be chiefly reckoned, Apollonius, in his Conics, his Loci Plani, De Sectione Determinata, his Tangencies, Inclinations, Section of a Ratio, Section of a Space, &c.; Archimedes, in his treatiſes of the Sphere and Cylinder, the Dimenſion of the Circle, of Conoids and Spheroids, of Spirals, and the Quadrature of the Parabola; Theodoſius, in his Spherics; Serenius, in his Sections of the Cone and Cylinder; Kepler's Nova Stercometria; Cavalerius's Geo-

metria Indiviſibilium; Torricelli's Opera Geometrica; Viviani, in his Divinationes Geometricæ, Exercitatio Mathematica, De Locis Solidis, De Maximis & Minimis, &c.; Vieta, in his Effectio Geometrica, Supplement. Geometriæ, Sectiones Angulares, Reſponſum ad Problema, Apollonius Gallus, &c.; Gregory St. Vincent's Quadratura Circuli; Fermat's Varia Opera Mathematica; Dr. Barrow's Lectiones Geometricæ; Balliald de Lineis Spiralibus; Cavalerius; Schooten and Gregory's Exercitationes Geometricæ, and Gregory's Pars Univerſalis, &c.; De Billy's treatiſe De Proportione Harmonica; La Lovera's Geometria veterum promota; Sluſius's Meſolabium, Problemata Solida, &c.; Wallis, in his treatiſes De Cycloide, Ciſſoide, &c. De Proportionibus, De Sectionibus Conicis, Arithmetica Infinitorum, De Centro Gravitatis, De Sectionibus Angularibus, De Angulo Contactus, Cuno-Cuneus, &c. &c.; Hugo De Omerique, in his Analyſis Geometrica; Paſcal on the Cycloid; Step. Angeli's Problemata Geometrica; Alex. Anderſon's Suppl. Apollonii Redivivi, Variorum Problematum Practice, &c.; Baronius's Geomet. Prob. &c.; Guido Grandi Geometr. Demonſtr. &c.; Ghetaldi Apollonius Redivivus, &c.; Ludolph van Colen or a Ceulen, de Circulo et Adſcriptis, &c.; Snell's Apollonius Batavus, Cyclometricus, &c.; Herberſtein's Diotome Circulorum; Palma's Exercit. in Geometriam; Guldini Centro-Baryca; with ſeveral others equally eminent, of more modern date, as Dr. Rob. Simſon, Dr. Mat. Stewart, Mr. Tho. Simpſon, &c. Since the introduction of the New Geometry, or the Geometry of Curve Lines, as expreſſed by algebraical equations, in this part of geometry, the following names, among many others, are more eſpecially to be reſpected, viz. Des Cartes, Schooten, Newton, Maclaurin, Brackenridge, Cramer, Cotes, Waring, &c. But in Practical Geometry, the chief writers are, Beyer, Kepler, Ramus, Clavius, Mallet, Tacquet, Ozanam, Wolfius, Gregory, with innumerable others.

Geometry is diſtinguiſhed into Theoretical or Speculative, and Practical. *Theoretical* or *Speculative Geometry*, treats of the various properties and relations in magnitudes, demonſtrating the theorems, &c. And *Practical Geometry*, is that which applies thoſe ſpeculations and theorems to particular uſes in the ſolution of problems, and in the meaſurements in the ordinary concerns of life.—Speculative Geometry again may be divided into Elementary and Sublime: *Elementary* or *Common Geometry*, is that which is employed in the conſideration of right lines and plane ſurfaces, with the ſolids generated from them. And the *Higher* or *Sublime Geometry*, is that which is called "the method of *indiviſibles*, or *infiniteſimals*;" and is employed in the conſideration of curve lines, conic ſections, and the bodies formed of them. This part has been chiefly cultivated by the aſſiſtance of the improved ſtate of algebra, and the modern analyſis of fluxions.

Geometry is hence valued for its extenſive uſefulneſs; but it has been moſt admired for its evidence; mathematical demonſtration being ſuch as has been always ſuppoſed to put an end to diſpute, leaving no place for doubt or cavil. It acquired this high character by the great care of the old writers, who admitted no principles but a few ſelf-evident truths, and no demonſtrations but ſuch as were accurately deduced from them. The ſcience being now vaſtly enlarged, and applied with ſucceſs to philoſophy and the arts, it is of greater importance than ever that its evidence be preſerved perfect. But it has been objected on ſeveral occaſions, that the modern improvements have been eſtabliſhed for the moſt part upon new and exceptionable maxims, of too abſtruſe a nature to deſerve a place amongſt the plain principles of the ancient geometry: and ſome have proceeded ſo far as to impute falſe reaſoning to thoſe authors who have contributed moſt to the late diſcoveries, and have at the ſame time been moſt cautious in their manner of deſcribing them.

In the method of indiviſibles, lines were conceived to be made up of points, ſurfaces of lines, and ſolids of ſurfaces; and ſuch ſuppoſitions have been employed by ſeveral ingenious men for proving the old theorems, and diſcovering new ones, in a brief and eaſy manner. But as this doctrine was inconſiſtent with the ſtrict principles of geometry, ſo it ſoon appeared that there was ſome danger of its leading them into falſe concluſions: therefore others, in the place of indiviſible, ſubſtituted infinitely ſmall diviſible elements, of which they ſuppoſed all magnitudes to be formed; and thus endeavoured to retain, and improve, the advantages that were derived from the former method for the advancement of geometry. After theſe came to be reliſhed, an infinite ſcale of infinites and infiniteſimals (aſcending and deſcending always by infinite ſteps) was imagined and propoſed to be received into geometry, as of the greateſt uſe for penetrating into its abſtruſe parts. Some have argued for quantities more than infinite; and others for a kind of quantities that are ſaid to be neither finite nor infinite, but of an intermediate and indeterminate nature.

This way of conſidering what is called the ſublime part of geometry has ſo far prevailed, that it is generally known by no leſs a title than the *Science* or *Geometry of Infinites*. Theſe terms imply ſomething lofty, but myſterious; the contemplation of which may be ſuſpected to amaze and perplex, rather than ſatisfy or enlighten the underſtanding, in the proſecution of this ſcience; and, while it ſeems greatly to elevate geometry, may poſſibly leſſen its true and real excellency, which chiefly conſiſts in its perſpicuity and perfect evidence; for we may be apt to reſt in an obſcure and imperfect knowledge of ſo abſtruſe a doctrine, as better ſuited to its nature, inſtead of ſeeking for that clear and full view we ought to have of geometrical truth; and to this we may aſcribe the inclination which has appeared of late for introducing myſteries into a ſcience wherein there ought to be none.

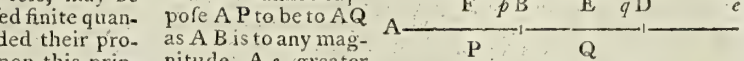
There were ſome, however, who diſliked the making much uſe of *infinites* and *infiniteſimals* in geometry. Of this number was ſir Iſaac Newton (whoſe caution was almoſt as diſtinguiſhing a part of his character as his invention), eſpecially after he ſaw that this liberty was growing to ſo great a height. When the certainty of any part of geometry is brought into queſtion, the moſt effectual way to ſet the truth in a full light, and to prevent diſputes, is to deduce it from axioms or firſt principles of unexceptionable evidence, by demonſtrations of the ſtricteſt kind, after the manner of the ancient geometricians. This is our deſign in the following treatiſe. But, before we proceed, it may be of uſe to conſider the ſteps by which the ancients were able, in ſeveral inſtances, from the menſuration of right-lined figures, to judge of ſuch as were bounded by curve lines; for, as they did not allow themſelves to reſolve curvilineal figures into rectilineal elements, it is worth while to examine by what art they could make a tranſition from the one to the other: and as they were at great pains to finiſh their demonſtrations in the moſt perfect manner, ſo by following their example, as much as poſſible, in demonſtrating a method ſo much more general than their's, we may beſt guard againſt exceptions and cavils, and vary leſs from the original foundations of geometry.

They found, that ſimilar triangles are to each other in the duplicate ratio of their homologous ſides; and, by reſolving ſimilar polygons into ſimilar triangles, the ſame propoſition was extended to theſe polygons alſo. But when they came to compare curvilineal figures, that cannot be reſolved into rectilineal parts, this method failed. Circles are the only curvilineal plane figures conſidered in the elements of geometry. If they could have allowed themſelves to have conſidered theſe as ſimilar polygons of an infinite number of ſides, (as ſome have done who pretend to abridge their demonſtrations,) after proving that any ſimilar polygons inſcribed

ſcribed in circles are in the duplicate ratio of the diameters, they would have immediately extended this to the circles themſelves; and would have conſidered the ſecond propoſition of the twelfth book of the Elements as an eaſy corollary from the firſt. But there is ground to think that they would not have admitted a demonſtration of this kind. It was a fundamental principle with them, that the difference of any two unequal quantities, by which the greater exceeds the leſs, may be added to itſelf till it ſhall exceed any propoſed finite quantity of the ſame kind: and that they founded their propoſitions concerning curvilineal figures upon this principle in a particular manner, is evident from the demonſtrations, and from the expreſs declaration of Archimedes, who acknowledges it to be the foundation upon which he eſtabliſhed his own diſcoveries, and cites it as aſſumed by the ancients in demonſtrating all their propoſitions of this kind. But this principle ſeems to be inconſiſtent with the admitting of an infinitely little quantity or difference, which, added to itſelf any number of times, is never ſuppoſed to become equal to any finite quantity whatſoever.

They proceeded therefore in another manner, leſs direct indeed, but perfectly evident. They found, that the inſcribed ſimilar polygons, by increaſing the number of their ſides, continually approached to the areas of the circles; ſo that the decreaſing differences betwixt each circle and its inſcribed polygon, by ſtill further and further diviſions of the circular arches which the ſides of the polygons ſubtend, could become leſs than any quantity that can be aſſigned: and that all this while the ſimilar polygons obſerved the ſame conſtant invariable proportion to each other, viz. that of the ſquares of the diameters of the circles. Upon this they founded a demonſtration, that the proportion of the circles themſelves could be no other than that ſame invariable ratio of the ſimilar inſcribed polygons; of which we ſhall give a brief abſtract, that it may appear in what manner they were able, in this inſtance, and ſome others of the ſame nature, to form a demonſtration of the proportions of curvilineal figures, from what they had already diſcovered of rectilineal ones. And that the general reaſoning by which they demonſtrated all their theorems of this kind may more eaſily appear, we ſhall repreſent the circles and polygons by right lines, in the ſame manner as all magnitudes are expreſſed in the fifth book of the Elements.

Suppoſe the right lines AB and AD to repreſent the two areas of the circles that are compared together; and let AP, AQ, repreſent any two ſimilar polygons inſcribed in theſe circles. By further continual ſubdiviſions of the circular arches which the ſides of the polygons ſubtend, the areas of the polygons increaſe, and may approach to the circles AB and AD ſo as to differ from them by leſs than any aſſignable meaſure; the triangle which is ſubducted from each ſegment at every new ſubdiviſion being always greater than the half of the ſegment. The polygons inſcribed in the two circles, as they increaſe, are ever in the ſame conſtant proportion to each other; and this invariable ratio of theſe polygons muſt alſo be the ratio of the circles themſelves. For, if it is not, let the ratio of the polygons AP and AQ to each other be, in the firſt place, the ſame as the ratio of the circle AB to any magnitude AE leſs than the circle AD; ſuppoſe the ſubdiviſions of the arches of the circle AD to be continued till the difference betwixt the circle and inſcribed polygon become leſs than ED, ſo that the polygon may be repreſented by Aq, greater than AE; and let Ap repreſent a polygon inſcribed in the circle AB, ſimilar to the polygon Aq. Then, ſince AP is to AQ as AB is to AE by the ſuppoſition, and the polygon Ap is to the ſimilar polygon Aq as AP is to AQ; it follows, that AB is to AE as Ap is to Aq; and that the circle AB being greater than Ap, a polygon inſcribed in it, AE, muſt be greater than Aq. But Aq is ſuppoſed to be greater than AE; and theſe being repugnant, it follows, that the polygon AP is not to the polygon AQ as the circle AB is to any magnitude (as AE) leſs than the circle AD. For the ſame reaſon, AQ is not to AP as AD is to any magnitude (as AF) leſs than AB. From which it follows, that we cannot ſuppoſe AP to be to AQ as AB is to any magnitude Ae greater than AD; becauſe if we take AF to AB as AD is to Ae, AF will be leſs than AB, and AP will be to AQ as AF leſs than AB to AD; againſt what has been demonſtrated. It follows, therefore, that AP is not to AQ as AB is to any magnitude greater or leſs than AD; but that the ratio of the circles AB and AD to each other, muſt be the ſame as the invariable ratio of the ſimilar polygons AP and AQ inſcribed in them, which is the duplicate of the ratio of their diameters.



In the ſame manner the ancients have demonſtrated, that pyramids of the ſame height are to each other as their baſes; that ſpheres are as the cubes of their diameters, and that a cone is the third part of a cylinder on the ſame baſe and of the ſame height. In general, it appears from this demonſtration, that when two variable quantities, AP and AQ, which always are in an invariable ratio to each other, approach at the ſame time to two determined quantities, AB and AD, ſo that they may differ leſs from them than by any aſſignable meaſure, the ratio of theſe limits AB and AD muſt be the ſame as the invariable ratio of the quantities AP and AQ: and this may be conſidered as the moſt ſimple and fundamental propoſition in this doctrine, by which we are enabled to compare curvilineal ſpaces in ſome of the more ſimple caſes.—This general principle may ſerve for demonſtrating many other propoſitions, beſides the elementary theorems already mentioned.

By many other obſervations and demonſtrations, Archimedes has highly diſtinguiſhed himſelf amongſt the geometricians, and has done the greateſt honour to this part of learning. He has not, however, eſcaped the cenſures of ſome writers, who being unable to reconcile their own conceits with his demonſtrations, have repreſented him as in an error, and miſleading mathematicians by his authority. But though mathematicians may be grateful, authority has not any place in this ſcience; and no geometrician ever pretended, from the higheſt veneration for Archimedes, ſir Iſaac Newton, or others, to reſt on their judgment in a matter of geometrical demonſtration. The purſuit of general and eaſy methods may have induced ſome to make uſe of exceptionable principles; and the vaſt extent which the ſcience has of late acquired, may have occaſioned their propoſing incomplete demonſtrations. They may have alſo ſometimes fallen into miſtakes: but it will be found difficult to aſſign one falſe propoſition that has been ever generally received by geometricians; and it is hardly poſſible, that accuſations of this nature can be more miſplaced.

In what Archimedes had demonſtrated of the limits of figures and progreſſions, there were valuable hints towards a general method of conſidering curvilineal figures; ſo as to ſubject them to menſuration by an exact quadrature, an approximation, or by comparing them with others of a more ſimple kind. Such methods have been propoſed of late in various forms, and upon different principles. The firſt eſſays were deduced from a careful attention to his ſteps. But that his method might be more eaſily extended, its old foundation was abandoned, and ſuppoſitions were propoſed which he had avoided. It was thought unneceſſary to conceive the figures circumſcribed or inſcribed in the curvilineal area, or ſolid, as being always aſſignable and finite; and the

precautions

precautions of Archimedes came to be conſidered as a check upon geometricians, that ſerved only to retard their progreſs. Therefore, inſtead of his aſſignable finite figures, indiviſible or infinitely ſmall elements were ſubſtituted; and theſe being imagined indefinite, or infinite, in number, their ſum was ſuppoſed to coincide with the curvilineal area, or ſolid.

It was, however, with caution that theſe ſuppoſitions were at firſt employed in geometry by Cavalerius, the ingenious author of the method of indiviſibles, and by others. He diſcovered a method, which he found to be of a very extenſive uſe, and of an eaſy application, for meaſuring or comparing planes and ſolids; and would not deprive the public of ſo valuable an invention. In propoſing it, he ſtrove to avoid the ſuppoſing magnitude to conſiſt of indiviſible parts, and to abſtract from the contemplation of infinity; but he acknowledged, that there remained ſome difficulties in this matter which he was not able to reſolve. Therefore he ſubjoined more unexceptionable demonſtrations to thoſe he had deduced from his own principles; and the diſputes which enſued (the firſt of any moment that were known between geometricians) juſtified his precautions. Afterwards, infinitely ſmall elements were ſubſtituted in place of his indiviſibles; and various improvements were made in this doctrine. The method of Archimedes, however, was often kept in view, and frequently appealed to as the ſureſt teſt of every new invention. The harmony betwixt the concluſions that aroſe from the old and new methods contributed not a little to the credit which the latter at firſt acquired; till being more and more reliſhed, they came at length to be generally admitted on their own evidence, and ſeemed to merit ſo favourable a reception, by the great advantages that were derived from them for reſolving the moſt difficult problems, and demonſtrating the moſt general theories, in a brief and eaſy manner.

But when the principles and ſtrict method of the ancients, which had hitherto preſerved the evidence of this ſcience entire, were ſo far abandoned, it was difficult for the geometricians to determine where they ſhould ſtop. After they had indulged themſelves in admitting quantities, of various kinds, that were not aſſignable, in ſuppoſing ſuch things to be done as could not be poſſibly effected (againſt the conſtant practice of the ancients), and had involved themſelves in the mazes of infinity; it was not eaſy for them to avoid perplexity, and ſometimes error, or to fix the bounds to theſe liberties when they were once introduced. Curves were not only conſidered as polygons of an infinite number of infinitely little ſides, and their differences deduced from the different angles that were ſuppoſed to be formed by theſe ſides; but infinites and infiniteſimals were admitted of infinite orders, every operation in geometry and arithmetic applied to them with the ſame freedom as to finite real quantities, and ſuppoſitions of this nature multiplied, till the higher parts of geometry (as they were moſt commonly deſcribed) appeared full of myſteries.

From geometry the infinites and infiniteſimals paſſed into philoſophy, carrying with them the obſcurity and perplexity that cannot fail to accompany them. An actual diviſion, as well as a diviſibility, of matter *in infinitum*, is admitted by ſome. Fluids are imagined conſiſting of infinitely ſmall particles, which are compoſed themſelves of others infinitely leſs; and this ſubdiviſion is ſuppoſed to be continued without end. Vortices are propoſed, for ſolving the phenomena of nature, of indefinite or infinite degrees, in imitation of the infiniteſimals in geometry; that, when any higher order is found inſufficient for this purpoſe, or attended with an inſuperable difficulty, a lower order may preſerve ſo favourite a ſcheme. Nature is confined in her operations to act by infinitely ſmall ſteps. Bodies of a perfect hardneſs are rejected, and the old doctrine of atoms treated as imaginary, becauſe in their actions and colliſions they might paſs at once from motion to reſt, or from reſt to motion, in violation of this law. Thus the doctrine of infinites is interwoven with our ſpeculations in geometry and nature. Suppoſitions, that were propoſed at firſt diffidently, as of uſe for diſcovering new theorems in this ſcience with the greater facility, and were ſuffered only on that account, have been indulged, till it has become crowded with objects of an abſtruſe nature, which tend to perplex it and the other ſciences that have a dependence upon it.

They who have made uſe of infinites and infiniteſimals with the greateſt liberty, have not agreed as to the truth and reality they would aſcribe to them. The celebrated Mr. Leibnitz owns them to be no more than fictions. Others place them on a level with finite quantities, and endeavour to demonſtrate their reality from magnitudes being ſuſceptible of augmentation and diminution without end, from the properties of the progreſſions of numbers that may be continued at pleaſure, and from the infinity which ſome geometricians have aſcribed to the hyperbolic area. But in theſe arguments they ſeem to *ſuppoſe* the infinity which they would *demonſtrate*.

It was a principle of the ancient geometricians, that any given line may be produced, and its parts ſubdivided, at pleaſure: but they never ſuppoſed it to be produced till it ſhould become infinitely great; or to be ſubdivided, till its parts ſhould become infinitely ſmall. It does not neceſſarily follow, that, becauſe any given right line may be continued further, it can be produced till it become actually infinite, or that we are able to conceive ſuch a line to be deſcribed, ſo as to admit it in geometry. In general, magnitude is capable of being increaſed without end; that is, no term or limit can be aſſigned or ſuppoſed beyond which it may not be conceived to be further increaſed. But from this it cannot be inferred, that we are able to conceive or ſuppoſe magnitude to be really infinite: or, if we are able to join infinity to any ſuppoſed idea of a determinate quantity, and to reaſon concerning magnitude actually infinite, it is not ſurely with that perſpicuity that is required in geometry. In the ſame manner, no magnitude can be conceived ſo ſmall, but a leſs than it may be ſuppoſed; but we are not therefore able to conceive a quantity infinitely ſmall. A given magnitude may be ſuppoſed to be divided into any aſſignable number of parts; but it cannot therefore be conceived to be divided into a number of parts greater than what is aſſignable. The parts of a given line may be ſuppoſed to be continually biſected till they become leſs than any line that is propoſed; and this is ſufficient for completing the demonſtrations of the ancients. But it is acknowledged by thoſe who have treated the doctrine of infinites in the fulleſt manner, that "there is ſomething inconceivable in ſuppoſing an infinitely great or infinitely ſmall number or figure to be produced or generated; and that the paſſage from finite to infinite is obſcure and incomprehenſible:" and therefore it is better for us, in treating of ſo ſtrict a ſcience as geometry, to abſtract from theſe ſuppoſitions. The abſtruſe conſequences that have been deduced from them by ingenious men, may the rather induce us to beware of admitting them as neceſſary principles in this ſcience, and to adhere to its ancient principles.

Mr. Locke, who wrote his excellent Eſſay, "that we might diſcover how far the powers of the underſtanding reach, to what things they are in any degree proportionate, and where they fail us," obſerves, "that whilſt men talk and diſpute of infinite magnitudes, as if they had as complete and poſitive ideas of them as they have of the names they uſe for them, or as they have of a yard, or an hour, or any other determinate quantity, it is no wonder if the incomprehenſible nature of the thing they diſcourſe of, or reaſon about, leads them into perplexities and contradictions; and their minds be overlaid by an object too large and mighty to be ſurveyed

and managed by them." Mathematicians indeed abridge their computations by the ſuppoſition of infinites; but when they pretend to treat them on a level with finite quantities, they are ſometimes led into ſuch doctrines as verify the obſervation of this judicious author. To mention an inſtance or two: the progreſſion of the numbers 1, 2, 3, 4, 5, &c. in their natural order, is ſuppoſed to be continued to infinity, till by the continual addition of units an infinite number is produced, which is conceived to be the termination of this ſeries. This infinite number is ſuppoſed to be ſtill capable of augmentation and diminution; and yet it is ſaid, "that it is neither increaſed nor diminiſhed by the addition or ſubtraction of the ſame units from which it was ſuppoſed to be generated." In a progreſſion of this kind, the number of terms is always equal to the laſt or greateſt term, and is finite when the laſt term is finite. If the number of terms be ſuppoſed infinite, the laſt term cannot be finite; and yet it is ſaid, "that in ſuch a progreſſion continued to infinity there is an infinite number of finite terms." It is evident, that no finite number can become infinite by the addition of unit, or of any other finite number; and yet "a greateſt finite ſquare number is ſuppoſed in ſuch a progreſſion, the next to which (though it exceed that finite number by an unit only) is ſuppoſed infinite." From theſe ſuppoſitions it is inferred, "that in ſuch a progreſſion continued to infinity there are finite numbers whoſe ſquares become infinite;" though it ſeems very evident, that a finite number taken any finite number of times can never produce more than a finite number. We may perceive from theſe inſtances, that it is not by founding the higher geometry on the doctrine of infinites we can propoſe to avoid the apparent inconſiſtencies that have been objected to it; and ſince an excellent author, who has always diſtinguiſhed himſelf as a clear and acute writer, has had no better ſucceſs in eſtabliſhing it on theſe principles, it is better for us to avoid them. Theſe ſuppoſitions however may be of uſe, when employed with caution, for abridging computations in the inveſtigation of theorems, or even for proving them where a ſcrupulous exactneſs is not required; and we would not be underſtood to affirm, that the methods of indiviſibles and infiniteſimals, by which ſo many unconteſted truths have been diſcovered, are without a foundation. We acknowledge further, that there is ſomething marvellous in the doctrine of infinites, that is apt to pleaſe and tranſport us; and that the method of infiniteſimals has been proſecuted of late with an acuteneſs and ſubtlety not to be paralleled in any other ſcience. But geometry is beſt eſtabliſhed on clear and plain principles; and theſe ſpeculations are ever obnoxious to ſome difficulties. If the greateſt accuracy has been always required in this ſcience, in reaſoning concerning finite quantities, we apprehend that geometricians cannot be too ſcrupulous in admitting or treating of infinites, of which our ideas are ſo imperfect. Philoſophy probably will always have its myſteries. But theſe are to be avoided in geometry: and we ought to guard againſt abating from its ſtrictneſs and evidence, the rather, that an abſurd philoſophy is the natural product of a *vitiated* geometry.

It is juſt at the ſame time to acknowledge, that they who firſt carried geometry beyond its ancient limits, and they who have ſince enlarged it, have done great ſervice, by deſcribing plainly the methods which they found ſo advantageous for this purpoſe (though they might appear exceptionable in ſome reſpects), that others might proceed with the ſame facility to improve it. Some of them have been ſo cautious as to verify their diſcoveries by demonſtrations in the ſtricteſt form; and others were able to have done this, had they not choſe rather to employ their time in extending the ſcience. At firſt, the variation from the ancient method was not ſo conſiderable, but that it was eaſy to have recourſe to it, when it ſhould be thought neceſſary for the ſatisfaction of ſuch as required a ſcrupulous exactneſs. The geometricians in the mean time made great improvements. They had the accurate method and examples of Archimedes before them, by which they might try their diſcoveries. Theſe ſerved to keep them from error, and the new methods facilitated their progreſs. Thus their views enlarged; and problems, that appeared at firſt ſight of an inſuperable difficulty, were afterwards reſolved, and came at length to be deſpiſed as too ſimple and eaſy. The menſuration of parabolas, hyperbolas, ſpirals of all the higher orders, and of the famous cycloid, were amongſt the earlieſt productions of this period; ſome of which ſeem to have been diſcovered by ſeveral geometricians almoſt at the ſame time. It is not neceſſary for our purpoſe to deſcribe more particularly what diſcoveries were made by Torricelli, Meſſrs. de Fermat, and de Roberval, Gregory à Sto. Vincentio, &c. by whom the theorems of Archimedes were continued, and applied to the menſuration of various figures.

The *Arithmetica Infinitorum* of Dr. Wallis was the fulleſt treatiſe of this kind that appeared before the invention of the method of fluxions. Archimedes had conſidered the ſums of the terms in an arithmetical progreſſion, and of their ſquares only, (or rather the limits of theſe ſums deſcribed above,) theſe being ſufficient for the menſuration of the figures he had examined. Dr. Wallis treats this ſubject in a very general manner, and aſſigns like limits for the ſums of any powers of the terms, whether the exponents be integers or fractions, poſitive or negative. Having diſcovered one general theorem that includes all of this kind, he then compounded new progreſſions from various aggregates of theſe terms, and enquired into the ſums of the powers of theſe terms, by which he was enabled to meaſure accurately, or by approximation, the areas of figures without number. But he compoſed this treatiſe (as he tells us) before he had examined the writings of Archimedes, and he propoſes his theorems and demonſtrations in a leſs accurate form. He ſuppoſes the progreſſions to be continued to infinity, and inveſtigates, by a kind of induction, the proportion of the ſum of the powers to the product that would ariſe by taking the greateſt power as often as there are terms. His demonſtrations, and ſome of his expreſſions, (as when he ſpeaks of quantities more than infinite,) have been excepted againſt. But it was not very difficult to demonſtrate the greateſt part of his propoſitions in a ſtricter method; and this was effected afterwards by himſelf and others in various inſtances. He choſe to deſcribe plainly a method which he had found very commodious for diſcovering new theorems; and it muſt be owned, that this valuable treatiſe contributed to produce the great improvements which ſoon followed after. A like apology may be made for others who have promoted his doctrine ſince his time, but have not given us rigid demonſtrations. In general, it muſt be owned, that if the late diſcoveries were deduced at length, in the very ſame method in which the ancients demonſtrated their theorems, the life of man could hardly be ſufficient for conſidering them all: ſo that a general and conciſe method, equivalent to their's in accuracy and evidence, that comprehends innumerable theorems in a few general views, may well be eſteemed a valuable invention.

Cavalerius was ſenſible of the difficulties, as well as the advantages, that attended his method. He ſpeaks as if he foreſaw that it ſhould be afterwards delivered in an unexceptionable form, that might ſatisfy the moſt ſcrupulous geometrician; and leaves this *Gordian knot*, as he expreſſes himſelf, to ſome Alexander. Its form, indeed, was ſoon altered, and many improvements were made by the mathematicians who proſecuted it ſince his time, that deſerve to be mentioned with eſteem. But the method ſtill remained liable to ſome exceptions, and was thought to be leſs perfect than that of the ancients on ſeveral grounds.

Sir Iſaac Newton accompliſhed what Cavalerius wiſhed for,

for, by inventing the method of fluxions, and propoſing it in a way that admits of ſtrict demonſtration, which requires the ſuppoſition of no quantities but ſuch as are finite, and eaſily conceived. The computations in this method are the ſame as in the method of infiniteſimals; but it is founded on accurate principles, agreeable to the ancient geometry. In it, the premiſſes and concluſions are equally accurate; no quantities are rejected as infinitely ſmall, and no part of a curve is ſuppoſed to coincide with a right line. The excellency of this method has not been ſo fully deſcribed, or ſo generally attended to, as it ſeems to deſerve; and it has been ſometimes repreſented as on a level in all theſe reſpects with the method of infiniteſimals. Our deſign has been to ſhow its advantages in a clearer and fuller light, and to promote the object of the great inventor, by eſtabliſhing the higher geometry on plain principles, perfectly conſiſtent with each other, and with thoſe of the ancient geometricians.

In a late treatiſe aſcribed to a celebrated French author, juſtly eſteemed for his various writings, ſeveral arguments are propoſed, for admitting magnitude actually infinite: not that kind which has no limits, comprehends all, and can receive no addition, which he calls *metaphyſical*; but that which he defines to be greater than any finite magnitude, which he diſtinguiſhes from the former, and calls *geometrical*. *Puiſque la grandeur eſt ſuſceptible d'augmentation ſans fin, on la peut concevoir ou ſuppoſer augmentée une infinité de fois, c'eſt-à-dire, qu'elle ſera devenuë infinie. Et, en effet, il eſt impoſſible que la grandeur ſuſceptible d'augmentation ſans fin ſoit dans le même cas que ſi elle n'en etoit pas ſuſceptible ſans fin. Or, ſi elle ne l'etoit pas, elle demeureroit toujours finie; donc etant ſuſceptible d'augmentation ſans fin, elle peut ne demeurer pas toujours finie, ou, ce qui eſt le même, devenir infinie.* Elem. de la Geom. de l'Infini, 83.—Becauſe magnitude is ſuſceptible of augmentation without end, the author concludes, that we may ſuppoſe it augmented an infinite number of times. But, by being ſuſceptible of augmentation without end, we underſtand only, that no magnitude can be aſſigned or conceived ſo great but it may be ſuppoſed to receive further augmentation, and that a greater than it may ſtill be aſſigned or conceived. We eaſily conceive that a finite magnitude may become greater and greater without end, or that no termination or limit can be aſſigned of the increaſe which it may admit: but we do not therefore clearly conceive magnitude increaſed an infinite number of times. Mr. Locke acknowledges, that we eaſily form an idea of the infinity of number, to the end of whoſe addition there is no approach: but he diſtinguiſhes betwixt this and the idea of an infinite number; and ſubjoins, that, how clear ſoever our idea of the infinity of number may be, there is nothing more evident than the abſurdity of the actual idea of an infinite number.

The latter part of the argument amounts to this: "It is impoſſible that magnitude, being ſuſceptible of augmentation without end, can be in the ſame caſe as if it was not ſuſceptible of augmentation without end. But if it was not ſuſceptible of augmentation without end, it would remain always finite. Therefore, ſince it is ſuſceptible of augmentation without end, the contrary muſt be allowed: that is, it may not always remain finite, or it may become infinite." The force of which argument ſeems to be taken off, by conſidering, that, if magnitude was not ſuſceptible of augmentation without end, it would not only remain always finite, but there would neceſſarily be a term, limit, or degree, of magnitude, which could never be exceeded, or there might be a greateſt magnitude. And, by allowing that there is no ſuch term or limit, magnitude is not ſuppoſed to be in the ſame caſe as if it were not ſuſceptible of augmentation without end, though we ſhould refuſe that it may become infinite. What is oppoſite to the ſuppoſing magnitude ſuſceptible of augmentation without end, is not the ſuppoſing it always finite, (for finite magnitude is capable of being increaſed without end,) but the ſuppoſing it ſuſceptible of no augmentation at all, or of an augmentation that has a limit or end.

The ſeries of numbers, 1, 2, 3, 4, &c. in their natural order, may be continued without end; and it is ſaid, that "we never come nearer the end of the progreſſion, how great ſoever the number may be to which we arrive; which is a character that cannot belong to a ſeries of a finite number of terms. Therefore this natural ſeries has an infinite number of terms." And it is added, that "though we can go over a finite number of terms only, yet all the terms of this infinite progreſſion are equally real." But if we can conceive this ſeries to have any end, it ſeems to be evident, that we muſt approach to this end as we proceed from the beginning towards it; and that, while we advance, the diſtance of any term from the end muſt decreaſe (whether this diſtance be called finite or infinite) by the ſame quantity as the diſtance from any ſubſequent term decreaſes, or the diſtance from the beginning of the ſeries increaſes. If we cannot conceive the ſeries to have an end, then we can have no idea of its laſt term. If we ſuppoſe this ſeries to be continued to infinity, it would indeed be abſurd, after ſuch a ſuppoſition, to ſay that the number of its terms is finite. But, in treating this ſcience ſtrictly, it may, perhaps, be better to avoid this ſuppoſition. For if it is only a finite number of terms we can clearly conceive, how ſhall we judge of the reality of the reſt? or wherein ſhall we place the reality of thoſe which it is impoſſible for us to aſſign? of which two kinds are ſaid to be in this ſame ſeries, each infinite in number; the firſt of which are ſaid to be finite, but indeterminable; the latter, actually infinite.

The argument from the infinity of the hyperbolic area is much inſiſted on. "The hyperbolic area (*Elem. de la Geom. de l'Infin. pref.*) is as really infinite, as a determined parabolic area is two-thirds of the circumſcribed parallelogram. It is trifling to ſay, that the one can be actually deſcribed, and the other cannot. Geometry is entirely intellectual, and independent of the actual deſcription and exiſtence of the figures whoſe properties it diſcovers. All that is conceived neceſſary in it has the reality which it ſuppoſes in its object. Therefore the infinite which it demonſtrates is as real as that which is finite," &c. And the learned author, after inſiſting on this ſubject, concludes, that, "not to receive infinity as it is here repreſented, with all its neceſſary conſequences, is to reject a geometrical demonſtration; and that he who rejects one, ought to reject them all." But though the actual deſcription of the figures which are conſidered in geometry be not neceſſary, yet it is requiſite that we ſhould be able clearly to conceive that they may exiſt; and a diſtinct idea of the manner how they may be ſuppoſed to be deſcribed or generated is neceſſary, that they may have a place in this ſcience. Principles that are propoſed as of the moſt extenſive uſe, and as the foundation of all the ſublime geometry, ought to be clear and unexceptionable. If this ſcience is entirely intellectual, or if the reality of its objects is to be conſidered as having a dependence on their being conceived by the mind, it would ſeem, that there muſt be a difference betwixt the reality of finite aſſignable lines or numbers, and the reality we can aſcribe to infinite lines or numbers, which are not aſſignable, and cannot be ſuppoſed to be produced or generated but in a manner that is allowed to be inconceivable. As for what is ſaid of the parabolic and hyperbolic areas, we can conceive any portion of the parabola to be accurately deſcribed, and its area to be determined, though no exact figure of this kind ſhould ever exiſt. We can alſo conceive, that the hyperbola and its aſymptote may be produced to any aſſignable diſtance: but we do not ſo clearly conceive that they may be produced to a diſtance greater than what is aſ-

ſignable;

ſignable; and we may well be allowed to heſitate at ſuch a ſuppoſition in ſtrict geometry. Any finite ſpace being propoſed, the hyperbolic area (terminated by the curve, the aſymptote, and a given ordinate) will exceed it by producing the curve and aſymptote to an aſſignable diſtance; and there is no aſſignable limit in this, as in ſome other caſes, which the area may not ſurpaſs in magnitude. See the article FLUXIONS. Therefore it is ſaid, that this area would be infinite, if the curve and aſymptote could be infinitely produced. But no argument for admitting magnitude actually infinite can be deduced from this, which does not more eaſily appear from hence, that a parallelogram of a given height would be infinite if it could have an infinite baſe; from which it cannot be inferred that ſuch a baſe or parallelogram can actually exiſt. It is often ſaid, that a rectangle of a given height on an imaginary baſe, as the analyſts ſpeak, is imaginary: but we cannot thence infer, that an imaginary line or rectangle can exiſt. It is not, however, our intention to maintain the impoſſibility of infinite magnitude; but to ſhew, that ſuch doctrines are not neceſſary conſequences of the received principles of this ſcience, and not very proper to be admitted as the groundwork of the high geometry.

In the ſame treatiſe (ſect. 196,) a proof is offered, to ſhew that, in the infinite ſeries of numbers proceeding in their natural order, there are finite numbers whoſe ſquares become infinite, which are called indeterminable, and are ſuppoſed to occupy the obſcure paſſage from the numbers that are aſſignable to thoſe that are infinite. A greateſt finite ſquare is ſuppoſed in this progreſſion, and repreſented by nn; all that precede it are finite, and all that follow after it are ſuppoſed infinite. The numbers in this progreſſion between n and nn, being leſs than nn, are finite; but being greater than n, their ſquares are greater than nn, and therefore, by the ſuppoſition, are infinite. But how can we admit the ſuppoſition of a greateſt finite ſquare number, ſuch as is here expreſſed by nn? The number nn, being finite, is not the next to it in the progreſſion (which exceeds it by unit only) alſo finite? Should we allow that a finite number becomes infinite by adding unit to it, or even by ſquaring it, how ſhall we diſtinguiſh finite from infinite? We commonly conceive finite magnitude to be aſſignable, or to be limited by ſuch as are aſſignable, and to be ſuſceptible of further augmentation: and therefore infinite magnitude would ſeem to imply, either that which exceeds all aſſignable magnitude, or that which cannot admit of any further augmentation; theſe being directly oppoſite to what we moſt clearly conceive of finite magnitude. But neither of theſe conſtitute the idea of infinite magnitude, as it muſt be underſtood in that treatiſe. The former is applicable to thoſe numbers which the author calls finite and indeterminable; which, being ſuppoſed to produce infinite ſquares, muſt therefore exceed all aſſignable numbers whoſe ſquares are aſſignable and finite. The latter is aſcribed to that infinite only which he calls *metaphyſical*, and excludes from geometry. We are at a loſs to form a diſtinct idea even of finite itſelf as it is here underſtood; and it would ſeem, that the more art and ingenuity is employed in penetrating into the doctrine of infinites, it becomes the more abſtruſe.

A proof is offered *à poſteriori*, (ſect. 393,) to ſhew, that there are finite fractions in the ſeries, 1, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, &c. whoſe ſquares become infinitely little in the ſeries 1, $\frac{1}{4}$, $\frac{1}{9}$, $\frac{1}{16}$, $\frac{1}{25}$, &c. The ſum of the firſt ſeries correſponds with the area included betwixt the common hyperbola and its aſymptote; and is ſaid to be infinite when the ſeries is ſuppoſed to be continued to infinity. The ſum of the latter ſeries correſponds with the area of an hyperbola of a higher order, and is ſaid to be finite, even when the ſeries is ſuppoſed to be continued to infinity; becauſe there is a limit which this ſum can never equal, to which however it continually approaches, as we have already deſcribed. This being allowed, it is ſuppoſed farther, that there is an infinite number of finite terms in the firſt progreſſion; and it is thence demonſtrated, that there are finite fractions in the firſt ſeries whoſe ſquares become infinitely little in the ſecond, thus: "If it ſhould be pretended, that all the finite terms in the firſt ſeries have their ſquares finite in the ſecond, there would be an infinite number of finite terms in the ſecond as well as in the firſt; and the ſums of both would be infinite; ſo that the contrary of an undoubted truth, that is univerſally received, would be demonſtrated." If we could allow that there is an infinite number of finite terms in the firſt ſeries, this argument might have ſome weight. But this is a ſuppoſition we cannot admit. For the denominator of any fraction in the firſt ſeries is always equal to the number of terms from the beginning, and muſt be ſuppoſed infinite when the number of terms is ſuppoſed infinite; but a fraction that has unit for its numerator, and is ſuppoſed to have an infinite number for its denominator, cannot be ſuppoſed finite, but infinitely little: ſo that we cannot ſuppoſe an infinite number of terms in the firſt ſeries to be finite. It is often ſaid in this treatiſe, that there is an infinite number of finite terms in the natural ſeries 1, 2, 3, 4, 5, &c. continued to infinity. But we are at a loſs to conceive how this can be admitted; ſince, in any ſuch progreſſion, the laſt or greateſt term is always equal to the number of terms from the beginning, and cannot be ſuppoſed finite when the number of terms is ſuppoſed infinite. There is an aſſignable limit which the ſum of the terms of the ſecond ſeries never amounts to; but there is no aſſignable limit which the ſum of the firſt ſeries may not ſurpaſs; and the ſum of the terms of the firſt is greater than the ſum of the correſponding terms of the ſecond, in a ratio that, by continuing the terms, may exceed any aſſignable ratio of a greater magnitude to a leſs: and as this is eaſily underſtood and demonſtrated, ſo there is no neceſſity for having recourſe to ſuch abſtruſe principles in order to account for it.

It is of no uſe to cite authorities on this ſubject, but as they may juſtify us in eſtabliſhing ſo noble a part of geometry for avoiding principles that are ſo much conteſted. What Ariſtotle taught of infinite magnitude is well known. Mr. Leibnitz, who for obvious reaſons cannot be ſuſpected of any prejudice againſt the doctrine of infinites, expreſſes himſelf thus: *On s'embaraſſe dans les ſeries des nombres qui vont à l'infini. On conçoit un dernier terme, un nombre infini, ou infiniment petit; mais tout cela ne ſont que des fictions. Tout nombre eſt fini & aſſignable, toute ligne l'eſt de même.* Eſſai de Theodicée, diſc. prelim. ſect. 70.

We have ſubjoined theſe remarks, in order to ſhow why we have not followed an author who has merited ſo well of mathematicians, and who on every other occaſion has been juſtly applauded for his clear and diſtinct way of explaining the abſtruſe geometry. They who treated of infinites before him proceeded, as he obſerves, with a timorouſneſs which the contemplation of ſuch an object naturally inſpires: *Quand on y etoit arrivé* (ſays he), *on s'arreſtoit avec une eſpece d'effroy & de ſainte horreur—on regardoit l'infini comme un miſtere qu'il falloit reſpecter, & qu'il n'etoit pas permis d'approfondir.* They ſtopped when they came to infinity with a ſort of holy dread, and reſpected it as an incomprehenſible myſtery. He adventures farther, in order to diſcover the ſource, and penetrate into the firſt principles, of geometrical truth. Infinity, according to him, is the great trunk from which its various branches are derived, and to which they all lead. In this great purſuit he diſplays infinite and finite with a freedom that puts us in mind of the ancient poet and his gods, whom he repreſents with the paſſions of men, and mingles in their battles. We doubt not, that, if a full and perfect account of all that is moſt profound in

in the high geometry could have been deduced from the doctrine of infinites, it might have been expected from this author: but our ideas of infinites are too obſcure and inadequate to anſwer this end; and there are many things advanced by all thoſe who have applied them with great freedom in geometry, that give ground to a remark like to Mr. de St. Evremond's, when he obſerves, that "it is ſurpriſing to find the ancient poets ſo ſcrupulous to preſerve probability in actions purely human, and ſo ready to violate it in repreſenting the actions of the gods." Some have not only admitted infinites and infiniteſimals of infinite orders, but have diſtinguiſhed even nothings into various kinds: and if ſuch liberties continue, it is not eaſy to foreſee what abſurdities may be advanced as diſcoveries in what is called the "ſublime geometry."

Of the ELEMENTS of GEOMETRY.

Definitions and Principles.

1. Geometry is a ſcience which treats of the deſcriptions, properties, and relations, of magnitudes in general: that is, of things in which length, or length and breadth, or length, breadth, and thickneſs, are conſidered.

2. A *point* is that which has neither parts nor dimenſions. It has been objected to this definition, that it contains only a negative, and that it is not convertible, as every good definition ought certainly to be. That it is not convertible is evident, for though every point is unextended, or without magnitude, yet every thing unextended, or without magnitude, is not a point. To this it is impoſſible to reply; and therefore it becomes neceſſary to change the definition altogether, which is accordingly done by Playfair; a point being defined to be, "that which has poſition, but not magnitude." Here the affirmative part includes all that is eſſential to a point, and the negative part excludes every thing that is not eſſential to it.

3. A *line* is length without breadth: it is called a *right line*, when it lies in the ſame direction, as A——B: or a *curved line*, when it does not lie in the ſame direction, but as C⌒D.—(A line is uſually denoted by two letters; viz. one at each end, as A B or C D).—After this definition, Euclid has introduced the following, "the extremities of a line are points." Now this is certainly not a definition, but an *inference*, from the definitions of a point and of a line. That which terminates a line can have no breadth, as the line in which it is has none; and it can have no length, as it would not then be a termination, but a part of that which it is ſuppoſed to terminate. The termination of a line can therefore have no magnitude, and having neceſſarily poſition, it is a point. Euclid has defined a ſtraight line to be a line which "lies evenly between its extreme points." This definition is obviouſly faulty, the word *evenly* ſtanding as much in need of an explanation as the word *ſtraight*, which it is intended to define. In the original, however, it muſt be confeſſed, that this inaccuracy is at leaſt leſs ſtriking than in our tranſlation; for the word which we render *evenly* is εξισου, *equally*, and is accordingly tranſlated *ex æquo*, and *equaliter*, by Commandine and Gregory. The definition, therefore, is, that a ſtraight line is one which lies *equally* between its extreme points; and if by this we underſtand a line that lies between its extreme points, ſo as to be related exactly alike to the ſpace on the one ſide of it, and to the ſpace on the other, we have a definition that is perhaps too metaphyſical, but which certainly contains in it the eſſential character of a ſtraight line.

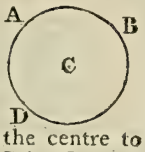
4. A *ſuperficies*, or *ſurface*, is that magnitude which has only length and breadth, and is bounded by lines.

5. A *ſolid*, is that magnitude which has length, breadth, and thickneſs.

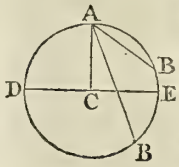
6. A *figure*, is a bounded ſpace, the limits or bounds of which may be either lines or ſurfaces.

7. A *plane*, or a *plane figure*, is a ſuperficies which lies evenly, or perfectly flat, between its limits, and may be bounded by one curve line; but not with leſs than three right lines.

8. A *circle* is a plain figure, bounded by an uniformly curved line, called the circumference, as A B D, which is every where equally diſtant from one point, as C within the figure called the *centre*.



9. A *radius* is a right line drawn from the centre to the circumference, as C A, C D, or C E.—All the radii of the ſame circle are equal.



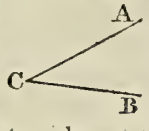
10. An *arc* is any part of the circumference.—As the arc A B, or the arc A D.

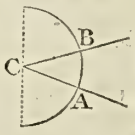
11. A *chord* is a right line joining the ends of an arc, as A B, and is ſaid to ſubtend that arc; it divides the circle into two parts, called *ſegments*.

12. A *diameter* is a chord paſſing through the centre, as D E, and divides the circle into two equal parts, called *ſemicircles*.

13. The *circumference* of every circle is ſuppoſed to be divided into three hundred and ſixty equal parts, called *degrees*; each degree into ſixty equal parts, called *minutes*; each minute into ſixty equal parts, called *ſeconds*, &c.

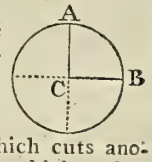
14. A *plane angle*, is the inclination of two lines on the ſame plane meeting in a point, as A C B.—A right-lined angle is formed by two right lines. The point where the lines meet is called the *angular point*, as C.—The lines which form the angle are called *legs*.—Thus C A and C B are the legs of the angle A C B.—(An angle is uſually marked by three letters, viz. one at the angular point, and one at the other end of each leg; but that at the angular point is always to be read the middle letter, as A C B, or B C A.)



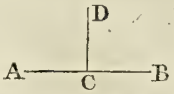


15. The meaſure of a right-lined angle is an arc, as B A, contained between the legs C B, C A, including the angle, the angular point C being the centre of that arc.

16. A *right angle* is that, the meaſure of which is a fourth part of the circumference of a circle, or ninety degrees. Thus the angle A C B is a right angle.



17. A *perpendicular* is that right line which cuts another at right angles; or which makes equal angles on both ſides. Thus D C is perpendicular to A B, when the angles D C A and D C B are equal, or are right angles.



18. An *acute angle*, is that which is leſs than a right angle.

19. An *obtuſe angle*, is that which is greater than a right angle.—Acute and obtuſe angles are called *oblique angles*.

20. *Parallel lines*, are right lines in the ſame plane, which do not incline to one another.

21. A *triangle* is a plane figure bounded by three lines.

22. An *equilateral triangle*, is that in which the three ſides are equal.

23. An *iſoſceles triangle*, is that which has two equal ſides.

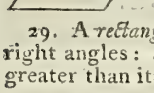
24. A *right-angled triangle*, is that which has one right angle.

25. An *obtuſe-angled triangle*, has one obtuſe angle.

26. An

26. An *acute-angled triangle*, has all its angles acute.

27. A *quadrangle*, or *quadrilateral*, is a plane figure bounded by four right lines, or ſides.—A quadrangle is uſually expreſſed by letters at the oppoſite angles.

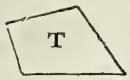


28. A *parallelogram*, is a quadrangle, the oppoſite ſides of which are parallel and equal, as P.

29. A *rectangle*, is a parallelogram with right angles: and in which the length is greater than its breadth, as R.

30. A *ſquare*, is a parallelogram having four equal ſides and right angles, as S.

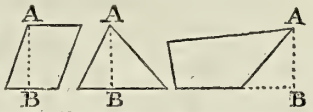
31. A *trapezium*, is a quadrangle, the oppoſite ſides of which are not parallel, as T.



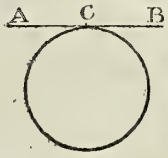
32. The *diagonal* of a quadrangle, is a line, as A B, drawn from one angle, to its oppoſite angle.

33. The *baſe* of a figure, is the line it is ſuppoſed to ſtand on.

34. The *altitude* or *height* of a figure, is the perpendicular diſtance A B, between the baſe and the vertex, or part moſt remote from the baſe.

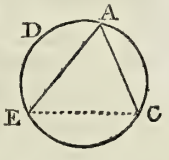


35. *Congruous figures*, are thoſe which agree, or correſpond, with one another, in every reſpect.



36. A *tangent* to a circle, is a right line, as A B, touching its circumference, but not cutting; and the point C, where it touches, is called the *point of contact*.

37. An *angle*, E A C, *in a ſegment*, C A D E, is, when the angular point is in the circumference of the ſegment, and the legs including the angle paſs through the ends E and C, of the chord of the ſegment.—Such an angle is ſaid to be in a circumference; and to ſtand on the arc E C, included between the legs A E and A C, of the angle.



38. Right-lined figures, having more than four ſides, are called *polygons*; and have their names from the number of their angles, or ſides; as thoſe of five ſides are called *pentagons*; of ſix ſides, *hexagons*; of ſeven ſides, *heptagons*; of eight ſides, *octagons*, &c.

39. A *regular* polygon is a figure with equal ſides and equal angles.

40. A *figure* is ſaid to be *inſcribed* in a circle, when all the angles of that figure are in the circumference of the circle.

41. A *figure* is ſaid to *circumſcribe* a circle, when every ſide of the figure is touched by the circumference of the circle.

42. A *propoſition*, is ſomething propoſed to be conſidered; and requires either a ſolution or anſwer, or that ſomething be made out, or proved.

A *problem* is a practical propoſition, in which ſomething is propoſed to be done, or effected.

A *theorem*, is a ſpeculative propoſition, or rule, in which ſomething is affirmed to be true, and requires demonſtration.

A *corollary*, is ſome concluſion gained from a preceding propoſition.

A *ſcholium*, is a remark on ſome propoſition; or an exemplification of the matter which it contains.

An *axiom*, is a ſelf-evident truth, or principle, that every one aſſents to upon hearing it propoſed.

A *poſtulate*, is a principle, or condition, requeſted; the ſimplicity or reaſonableneſs of which cannot be denied.

In mathematics, the following poſtulates and axioms are ſome of the principal ones that are generally taken for granted.—When a propoſition, from ſuppoſed premiſes, aſſerts ſuch and ſuch conſequences; and ſubjoins, *And the contrary*: it is to be underſtood, that if the conſequences be aſſumed as premiſes; then what were firſt taken as premiſes, would become conſequences. Thus, in article 95, it is premiſed, "that if two parallel right lines are cut by another right line," there reſults this conſequence; "the alternate angles are equal." And the contrary means, that "where equal alternate angles are made by a right line cutting two other right lines, the right lines ſo cut are parallel lines."

POSTULATES.

43. A right line may be drawn from any given point to another given point.

44. A given right line may be continued, or lengthened, at pleaſure.

45. From a given point, and with any radius, a circle may be deſcribed.

Theſe Poſtulates muſt be granted, at leaſt in idea, or all geometry falls at once to the ground; for, if there cannot be a plane, a right line, and a circle, the whole elements of geometry are to no purpoſe; as it will be impoſſible to form a conſtruction, whereby we may demonſtrate the eſſential properties of figures in general; conſequently, if no demonſtration can be given, there is an end of the ſcience, having no data to build on.

In every mathematical or phyſical ſcience, there is a neceſſity for ſome data or firſt principles to be given, whereon to frame hypotheſes, in order to demonſtrate the Theorems; and the more ſimple thoſe principles are, the better; becauſe there is leſs cauſe to diſpute them. But, nevertheleſs, if they are diſputed, they are more difficult to demonſtrate, for being the moſt ſimple; becauſe, there is no reverting back to any thing more ſo; and conſequently, no demonſtration can be given. That the thing is ſo, of itſelf, is arbitrary, notwithſtanding there is no poſſibility of denying it; therefore, the more ſimple the firſt principles are, the readier the aſſent will be given; and demonſtration of the moſt complex propoſition will be eaſier obtained, more firmly ſupported, and, conſequently, the whole ſcience, which is built on thoſe principles, more ſolid and permanent, and more ſecurely eſtabliſhed.

AXIOMS.

46. Things equal to the ſame thing, are equal to one another.

47. If equal things are added to equal things, the ſums or wholes will be equal. But if unequals be added, the ſums are unequal.

48. If equal things are taken from equal things, the remainders, or differences, are equal: but are unequal, when unequals are taken.

49. Things are equal which are double, triple, quadruple, &c. or half, third part, &c. of one and the ſame thing, or of equal things.

50. Things which have equal meaſures, are equal. And the contrary.

51. Equal circles have equal radii.

52. Equal arcs in equal circles have equal chords, and are the meaſures of equal angles. And the contrary.

53. Parallel right lines have each the ſame inclination to a right line cutting them.

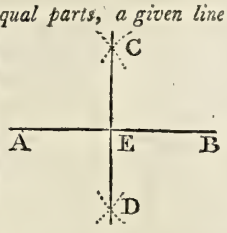
In what follows it is to be underſtood, that right lines (viz. ſtraight lines) are drawn by the edge of a ſtraight ruler: circles or arcs, are deſcribed with one

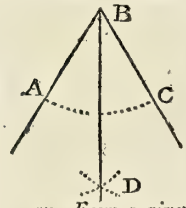
foot of a pair of compaſſes, the other foot reſting on the point which is taken for the centre; and the diſtance of the feet, or points, of the compaſſes is taken as the radius: alſo, that the point marked out by a letter is to be underſtood, when the reference is made to that letter.

54. It is alſo taken for granted, that a line or diſtance can be taken between the compaſſes, and may be tranſferred or applied from one place to another. Alſo, that one figure can be applied to or laid upon another, or conceived to be ſo applied.—In any problem, when a line, angle, or figure, is ſaid to be given; that line, angle, or figure, muſt be made, before any part of the operation is performed.

PROBLEMS.

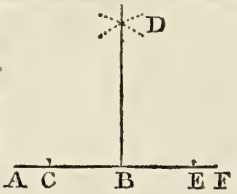
55. *To biſect, or divide into two equal parts, a given line* A B.—Operation. From the ends A and B, with one and the ſame radius, greater than half A B, deſcribe arcs cutting in C and D, as in article 45.—Then a line drawn from C to D, gives E, the middle of A B, as required.— The proof of this operation depends on articles 101, 99.



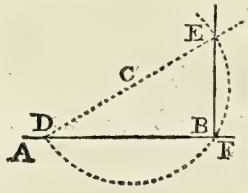


56. *To biſect a given right-lined angle* A B C.—From B, deſcribe an arc A C. From A and C, with one and the ſame radius, deſcribe arcs cutting in D. Then a right line drawn from B to D will divide the angle into two equal parts, as required.— The proof depends on article 101.

57. *From a given point* B, *in a given right line* A F, *to draw a right line perpendicular to the given line, when* B *is near the middle of the line.*—On each ſide of B, take the equal diſtances B C and B E. On C and E deſcribe, with the ſame radius, arcs cutting in D. Then a right line drawn through B and D will be the perpendicular required.—The proof depends on article 103.

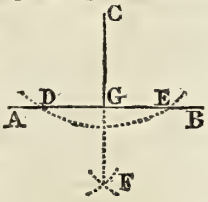


58. *When* B *is at or near the end of the given line.*—On any convenient point C, taken at pleaſure, with the diſtance, or radius, C B, deſcribe an arc D B E, cutting A F in D and B. A line drawn through D and C will cut this arc in E. Then a right line drawn through B and E will be the perpendicular required.—This depends on article 130.

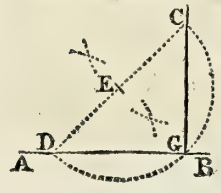


59. *To draw a line perpendicular to a given right line* A B, *from a point* C *without that line.*

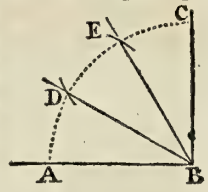
Caſe I. *When the point is nearly oppoſite to the middle of the given line.*—On C, with one radius, cut A B in D and E. On D and E, with one radius, deſcribe arcs cutting in F. Then a line drawn from C to F will be the perpendicular required.—This depends on articles 101, 99.



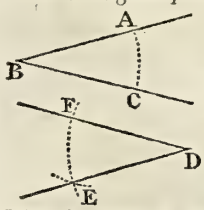
60. Caſe II. *When* C *is nearly oppoſite to one end of the given line* A B.—To any point D in A B, draw the line C D. Biſect the line C D in E. On E, with the radius E C, cut A B in G. Then C G being drawn, will be the perpendicular required. This depends on article 130.



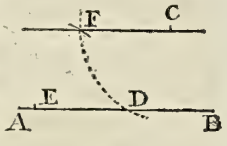
61. *To triſect, or divide into three equal parts, a right angle* A B C.—From B, with any radius B A, deſcribe the arc A C, cutting the legs B A, B C, in A, C. From A, with the radius A B, cut the arc A C in E, and from C, with the ſame radius, cut A C in D. Draw B E, B D, and the angle A B C will be divided into three equal parts.—This depends on article 193.



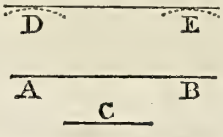
62. *At a given point* D, *to make a right-lined angle equal to a given right-lined angle* A B C.—From D and B, with the ſame radius, deſcribe the arcs E F and A C, cutting the legs of the given angle in the points A, C. Transfer the diſtance A C to the arc E F, from F to E. Then lines drawn from D, through E and F, will form the angle E D F equal to the angle A B C.—This depends on article 101.



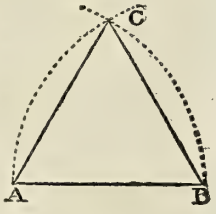
63. *To draw a line parallel to a given right line* A B.—Caſe I. *When the parallel line is to paſs through a given point,* C.—From C, with any convenient radius, deſcribe an arc D F, cutting A B in D. Apply the radius C D from D to E; and from E, with the ſame radius, cut the arc D F. Then a line drawn through F and C will be parallel to A B.—This depends on articles 101, 95.

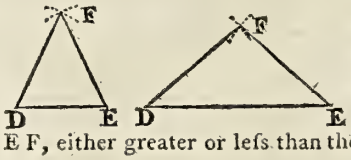


64. Caſe II. *When the parallel line is to be at the given diſtance* C *from* A B.—From the points A and B, with the radius C, deſcribes arcs D and E. Then lay a ruler to touch the arcs D and E, and a line drawn in that poſition is the parallel required.—This operation is mechanical.



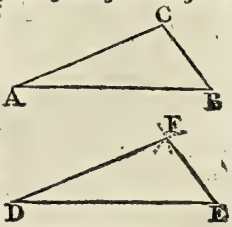
65. *Upon a given line* A B, *to make an equilateral triangle.*—From the points A and B, with the radius A B, deſcribe arcs cutting in C. Draw C A, C B, and the figure A B C is the triangle required.—The truth of this operation is ſelf evident; for the ſides are radii of equal circles.



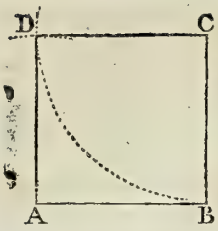


66. By a like operation, an iſoſceles triangle D E F may be conſtructed on a given baſe D E, with the given equal legs D F, E F, either greater or leſs than the baſe D E.

67. *To make a right lined triangle, the ſides of which ſhall be reſpectively equal, either to thoſe of a given triangle* A B C, *or to three given lines, provided any two of them taken together are greater than the third.*—Draw a line D E equal to the line A B. On D, with a radius equal to A C, deſcribe an arc F. On E, with a radius equal to B C, deſcribe another arc, cutting the former arc in F. Then draw F D, F E, and the triangle D F E will be that required.

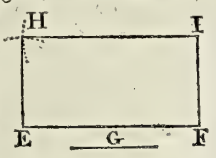


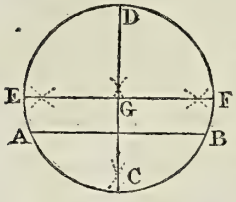
68. *Upon*



68. *Upon a given line* A B, *to describe a square.*—Draw B C perpendicular, and equal, to A B. On A and C, with the radius A B, describe arcs cutting in D. Then draw D C, D A; and the figure A B C D is the square required.—This depends on articles 101, 104, 95, 30.

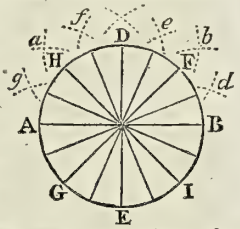
69. *To describe a rectangle whose length shall be equal to a given line,* E F, *and breadth equal to another given line* G.—At E and F erect two perpendiculars, E H and F I, each equal to the given line G. Draw H I, and the figure E F I H will be the rectangle required.—This depends on articles 29, 101, 104, 95.



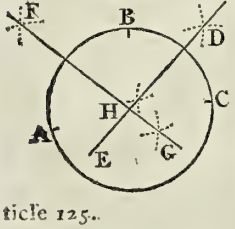


70. *To find the centre of a circle.*—Draw any chord A B. Bisect A B with the chord C D. Bisect C D with the chord E F, and their intersection G will be the centre required.—This depends on article 105.

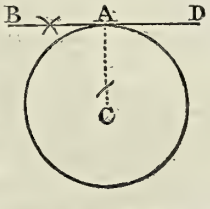
71. *To divide the circumference of a circle into two, four, eight, sixteen, thirty-two, &c. equal parts.*—A diameter A B divides the circle into two equal parts. A diameter D E, perpendicular to A B, divides the circumference into four equal parts. On A, D, B, describe arcs cutting in *a*, *b*; then by the intersections *a*, *b*, and the centre, the diameters F G, H I, being drawn, divide the circumference into eight equal parts; and so on by continual bisection.—For at each operation, the intercepted arcs are bisected, and the parts doubled.

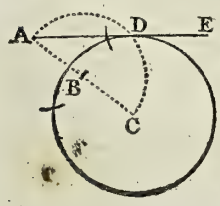


72. *To describe a circle, the circumference of which shall pass through three given points* A B C, *provided they do not lie in one right line.*—Bisect the distance C B with the line D E. Bisect the distance A B with the line F G. On H, the intersection of these lines, with the distance to either of the given points, describe the circle required. This depends on article 125.



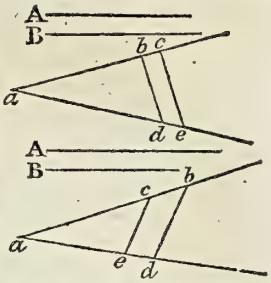
73. *To draw a tangent to a given circle, that shall pass through a given point* A.—Case I. *When* A *is in the circumference of the circle.* From the centre C, draw the radius C A. Through A draw B D perpendicular to C A, (58,) and B D is the tangent required.—This depends on article 126.



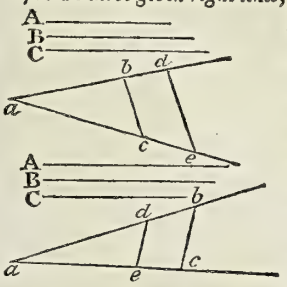


74. Case II. *When the given point* A *is without the given circle.*—From the centre C, draw C A, which bisect in B. On B, with the radius B A, cut the given circumference in D. Through D, the line A E being drawn, will be the tangent required.—This depends on articles 130, 126.

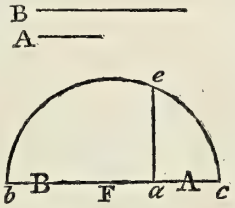
75. *To two given right lines,* A, B, *to find a third proportional.*—Draw two right lines making any angle, and meeting in *a*. In these lines, take *a b* = first term, and *ac*, *a d*, each equal to the second term. Draw *b d*, and through *c*, draw *c e*, parallel to *b d*; then *a e* is the third proportional sought. And *ab* : *ac* : : *ad* : *ae*.—This depends on article 165.



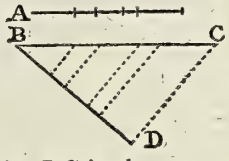
76. *To three given right lines,* A, B, C, *to find a fourth proportional.*—Draw two right lines making any angle, and meeting in *a*. In these lines take *a b* = first term, *ac* = second term, and *a d* = third term. Draw *b c*, and parallel to it, through *d*, draw *d e*; then *a e* is the fourth proportional required. And *ab* : *ac* : : *ad* : *ae*.—This depends on article 165.



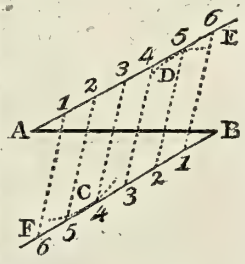
77. *Between two given right lines,* A, B, *to find a mean proportional.*—Draw a right line, in which take *ac* = A, *ab* = B. Bisect *b c* in F (55); and on F, with the radius F *b*, describe a semicircle *b e c*. From *a* draw *a e* perpendicular to *b c* (57); then *a e* is the mean proportional required. And *ac* : *ae* : : *ae* : *ab*.—This depends on article 171.



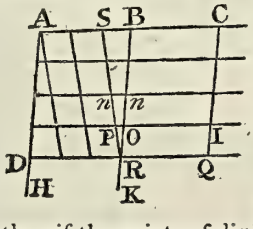
78. *To divide a given line* B C, *in the same proportion as a given line* A *is divided.*—From one end B of B C draw B D, making any angle with B C. In B D apply from B the several divisions of A; so B D will be equal to A, and alike divided. Draw C D; then lines drawn parallel to C D through the several divisions of B D, will divide the line B C in the manner required.—This depends on article 165.



79. *To divide a given right line* A B *into a proposed number of equal parts, (suppose* 7.)—From A, one end of A B, draw A E to make any angle with A B; and from B, the other end, draw B F, making the angle A B F equal to the angle B A E. Begin at A and B, and set off, on these lines, as many equal parts, except one, as A B is to be divided into, viz. 1, 2, 3, 4, 5, 6. Then lines drawn from 1 to 6, 2 to 5, 3 to 4, &c. will divide A B, as was required.—This depends on article 165.



80. Hence is derived the method of making diagonal scales. Let a scale be constructed to 12ths of the line A B.—Having divided A B into three equal parts, draw two parallel lines A H, B K, making any convenient angles with A B: in those lines take four equal distances, suppose from A to D, and from B to R; and through the points of division draw four lines parallel to A B; next divide D R into three equal parts: then if the points of division in A B and D R are joined diagonally,

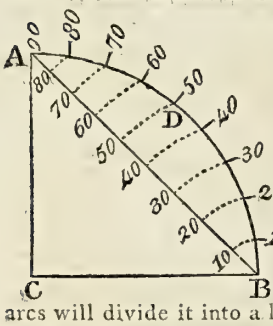


diagonally, the ſcale is conſtructed.—For by ſimilar triangles, R B : B S :: R O : O P; therefore R O being $\frac{1}{4}$ of R B; O P will be $\frac{1}{4}$ of B S, or $\frac{1}{4}$ of $\frac{1}{3}$ (or $\frac{1}{12}$) of B A: and the next diviſion *n n* is $\frac{2}{12}$, &c.

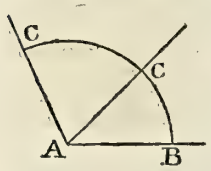
If Q R = C B = B A is the ſcale for a foot, O P is an inch, *n n* = 2 inches, I P = 13 inches, &c. But if we divide A B into four equal parts, only three muſt be taken in A H and B K to make 12ths of A B (becauſe 4 × 3 = 12).

Generally, reſolve the number to which the diviſions are to be extended, into two factors, then divide the given line (A B) into as many equal parts as there are units in one factor, and take as many equal parts in the other lines (A H, B K,) as there are units in the other. Thus if A B is divided into three equal parts, and five are taken in A H, B K; or if A B is divided into five, and three are taken in A H, B K, in either caſe the ſcale gives 15ths of A B. On the common plain ſcales, the equal parts in each line are ten, which give the diviſions in 100ths.—A line divided into equal parts, and one of the parts ſubdivided, is called a *line* or *ſcale of equal parts*. A variety are to be found on the common plain ſcale belonging to a caſe of inſtruments.

81. A line of chords is made by transferring the diviſions on the arc of a quadrant to its chord. Thus, ſuppoſe A B C is a quadrant, and the right line B A the chord of its arc B D A. Let this arc be divided into 90 equal parts or degrees: then if one foot of a pair of compaſſes be kept on the point B, and arcs ſucceſſively deſcribed with the other, from each of the 90 diviſions in B D A to meet B A, thoſe arcs will divide it into a line of chords.

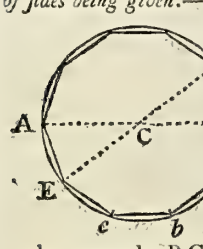


82. *To make an angle of a propoſed number of degrees.*—Take the firſt 60° from the ſcale of chords, and with this radius deſcribe an arc B C, the centre of which is A. Take the chord of the propoſed number of degrees from the ſcale, reckoning from its beginning, and apply this diſtance to the arc B C, from B to C. Then lines drawn from A, through the points B and C, will form an angle B A C, the meaſure of which is the degrees propoſed.—If the angle exceed 90°, take half the number of degrees, and ſet it off twice, from B to C, and from C to C.



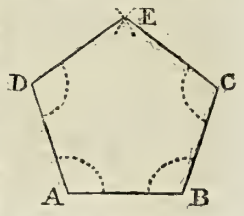
83. *To meaſure a given angle* B A C.—From the angular point A, with the chord of 60°, deſcribe the arc B C, cutting the legs in the points B and C. Then the diſtance B C being applied to the chords, from the beginning, will ſhew the degrees which meaſure the angle B A C.

84. *In a given circle to inſcribe a regular polygon, the number of ſides being given.*—Divide 360° by the number of ſides, and the quotient will be the degrees which meaſure the angle at the centre of the circle ſubtended by a ſide of the polygon. For there will be as many equal angles at the centre as there are equal ſides. And the whole circumference meaſures the ſum of all the angles at the centre.—Draw the radius C B, make an angle B C D equal to thoſe degrees, and draw the chord D B; then will D B be the ſide of the polygon required; which applied to the circumference from B to *a*, *a* to *b*, *b* to *c*, &c. will give the points to which the ſides of the polygon are to be drawn.

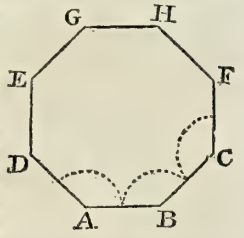


85. If the polygon has an even number of ſides, draw the diameter A B; and divide half the circumference, as before; then lines drawn from theſe points through the centre, as E D, will give the remaining points, in the other ſemicircumference.

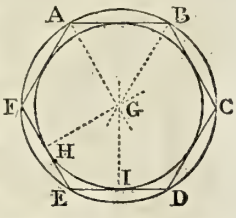
86. *On a given right line* A B, *to conſtruct a regular polygon of any aſſigned number of ſides.*—Divide 360° by the number of ſides; ſubtract the quotient from 180°, the remainder will be the degrees which meaſure the angle made by any two adjoining ſides of that polygon, and is called the angle of the polygon. For each ſide of the polygon, with radii drawn to its ends, form an iſoceles triangle. Then the angle of the polygon is derived from articles 85, 96, 104.—At the ends A, B, of the line A B, make angles A B C, B A D, equal to the angle of the polygon. Make A D, B C, each equal to A B. Then at the points C, D, make angles equal to that of the polygon as before; and let the ſides including thoſe angles be each equal to A B; and thus proceed until the polygon is conſtructed.



In figures of any number of ſides, the two laſt ſides D E, C E; or E G, H G; are readieſt found by deſcribing arcs from C and D, or from E and H, with the radius A B, interſected in E, or in G.—Or, in figures of an even number of ſides, having drawn half the number, A D, A B, B C, C F, by means of the angles; the remaining ſides may be found, by drawing through the points D and F the lines D F, F H, parallel and equal to their oppoſite ſides C F, A D; and ſo of the reſt.

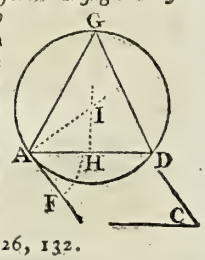


87. *About a given regular polygon, to circumſcribe a circle: or within that polygon to inſcribe a circle.*—Biſect any two angles F A B, C B A, with the lines A G, B G; and the point G, where they interſect one another, will be the centre of the polygon. A circle deſcribed from G, with the radius G A, will circumſcribe the given polygon.—This depends on articles 85, 96, 104.



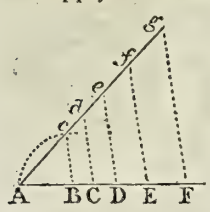
88. Again, biſect any two ſides, F E, E D, in the points H and I; and draw H G, I G, at right angles to F E, E D; then the point G, where they interſect each other, will be the centre of the polygon.—A circle deſcribed from G, with the radius G H, will be inſcribed in the given polygon.—This depends on article 126.

89. *On a given right line* A D, *to deſcribe a ſegment of a circle, that ſhall contain an angle equal to a given right-lined angle* C.—Make an angle D A F equal to the given angle C. From H, the middle of A D, draw H I at right angles to A B, and from A draw A I at right angles to A F, cutting H I in I. From I, with the radius I A, deſcribe a circle. Then will the ſegment A G D contain an angle A G D equal to the given angle C.—This depends on articles 125, 126, 132.



90. *To divide a right line in continued proportion, in the ratio of two given right lines* A B, A C.—From B, with the radius A B (the antecedent) deſcribe an arc A *c*. In that arc

arc apply (the consequent) A C from A to c; draw A c, and apply c A from c to D. Apply the following lines in the order directed, viz. A D from A to d, and from d to E; A E from A to e, and from e to F; A F from A to f, and from f to G; A G from A to g, and from g to H, &c. Then will the proportional lines be A B, AC, AD, AE, AF, AG, &c. And

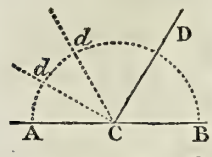


AB:AC::(Ac=)AC:(Ad=)AD.
AB:AC::(Ad=)AD:(Ae=)AE.
AB:AC::(Ae=)AE:(Af=)AF,
&c.—This depends on articles 104, 95, 165.

THEOREMS.

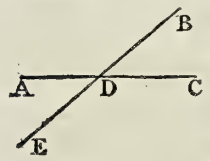
Of Right Lines and Planes.

91. *When one right line* C D *ſtands upon another right line* A B, *they make two angles* B C D, A C D, *which together are equal to two right angles.—Demonſtration.* For, deſcribing a ſemicircle A D B, on C (45); then the arc D B meaſures the angle B C D (15); and the arc D A meaſures the angle A C D (15); but the arcs D B and A D together meaſure two right angles (13, 16); therefore B C D and A C D together, are equal to two right angles (50).



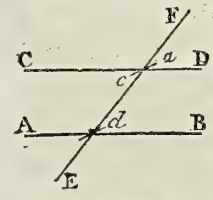
92. *Corollary.* Hence if any number of right lines C d ſtands on one point C, on the ſame ſide of another right line A B; the ſum of all the angles are equal to two right angles; or are meaſured by 180°.

93. *If two right lines,* AC, EB, *interſect each other in* D, *the oppoſite angles are equal, viz.* ∠ C D B = ∠ A D E, and ∠ C D E = ∠ A D B. For the angles A D E and A D B together make two right angles (91); and the angles C D B and A D B together make two right angles (91); therefore the ſum of A D E and A D B = ſum of C D B and A D B (46); conſequently the ∠ C D B is equal to the ∠ A D E (48).

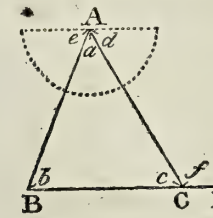


94. *Corol.* Hence if any number of right lines croſs each other in one point, the ſum of all the angles which they make about that point, is equal to four right angles; or is meaſured by 360°.

95. *If a right line* F E *cut two parallel right lines,* A B, C D; *then is the outward angle a equal to the inward and oppoſite angle d; and the alternate angles, c, d, are equal: and the contrary.*—Becauſe C D and A B are parallel by ſuppoſition; then F E has the ſame inclination to C D and A B; and this inclination is expreſſed by the ∠ a or ∠ d; therefore the outward ∠ a is equal to the inward and oppoſite ∠ d. Now the ∠ a is equal to the ∠ c. And ſince the ∠ a is equal to the ∠ d; therefore the alternate angles c and d are equal.



96. *In any right-lined triangle* A B C, *the ſum of the three angles a, b, c, is equal to two right angles: And if one ſide* B C *be continued, the outward angle f is equal to the ſum of the two inward and oppoſite angles a, b.*—Through A, draw a right line parallel to B C, making with A B the ∠ e, and with A C the ∠ d.

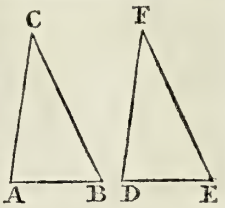


Now ∠ e = ∠ b; and ∠ d = ∠ c, being alternate.
And two right angles meaſure the ∠ e + ∠ a + ∠ d.
Therefore ∠ b + ∠ a + ∠ c = ∠ e + ∠ a + ∠ d.
Conſequently ∠ b + ∠ a + ∠ c = two right angles.
Moreover ∠ c + ∠ f = two right angles.
Therefore ∠ b + ∠ a = ∠ f.

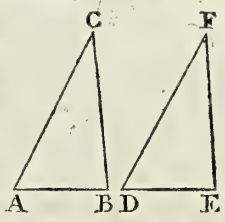
97. Hence, if one angle is right or obtuſe, each of the other is acute.

98. If two angles of one triangle are equal to two angles of another triangle, the remaining angles are equal. And if one angle in one triangle is equal to one angle in another triangle, then is the ſum of the remaining angles in one, equal to the ſum of the remaining angles in the other.

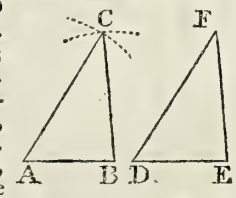
99. *If two ſides* A B, A C, *and the included angle* A, *in one triangle* A B C, *are reſpectively equal to two ſides* D E, D F, *and the included angle* D, *of another* D E F, *each to each; then are thoſe triangles congruous.*—Apply the point D to the point A, and the line D E to A B. Now as D E = A B (by ſuppoſition); therefore the point E falls on B. But ∠ D = ∠ A (by ſup.); therefore D F will fall on A C. And ſince D F = A C (by ſup.); therefore the point F falls on C. Conſequently F E will fall on C B; therefore the triangles A C B, D F E, are congruous, ſince every part agrees.



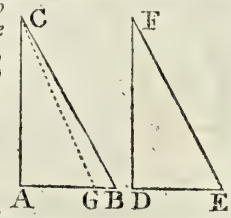
100. *If two triangles* A B C, D E F, *have two angles* A, B, *and the included ſide* A B, *in one, reſpectively equal to two angles* D, E, *and the included ſide* D E, *in the other, each to each; then are thoſe triangles congruous.*—Apply the point D to A, and the line D E to A B. Now as D E = A B (by ſup.); therefore the point E falls on B. And as ∠ D = ∠ A (by ſup.); therefore the line D F falls on A C. Now if the line A C is leſs or greater than the line D F; then the line F E not falling on C B, makes the ∠ B leſs or greater than ∠ E. But ∠ B = ∠ E (by ſup.); therefore A C is neither leſs nor greater than D F. Or the line A C = D F; conſequently F E = C B; therefore the triangles are congruous.



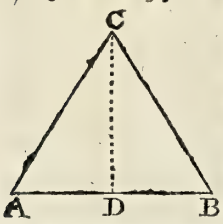
101. *Two triangles,* A B C, D E F, *are congruous, when the three ſides in the one are equal to the three ſides in the other, each to each.*—Apply the point D to A, and the line D E to A B. Now as D E = A B (by ſup.); therefore the point E falls on B. On A, with the radius A C, deſcribe an arc. Then as D F = A C, the point F will fall in that arc. Alſo on B, with the radius B C, deſcribe another arc, cutting the former in C. And ſince E F = B C, the point F will fall in this arc alſo. But if the point F can fall in both theſe arcs, it can be only where they interſect, as in C. Conſequently the triangles are congruous, or identical.



102. *Two triangles* A B C, D E F, *are congruous, when two angles* A, B, *and a ſide* A C *oppoſite to one of them, in one triangle, are reſpectively equal to two angles* D, E, *and a ſide* D F *oppoſite to a like angle in the other triangle, each to each.*—Apply the point D to A, and the line D F to A C. Now as D F = A C (by ſup.); therefore the point F falls on C. And as ∠ D = ∠ A (by ſup.); the line D E will fall on the line A B. And if the point E does not fall on B, it muſt fall on ſome other point G. Draw C G. Then the angle A G C is equal to the angle D E F. And the angle A B C = (D E F =) A G C, which is not poſſible; therefore the point E can fall no where but on the point B. Conſequently the triangles are congruous.



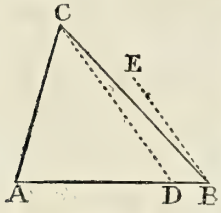
103. *In the iſoſceles or equilateral triangle* ACB; *a line drawn from the vertex* C *to the middle of the baſe* AB *is perpendicular to the baſe, and biſects the vertical angle: and the contrary:* that is, if a line drawn perpendicular to the baſe of a triangle biſects the vertical angle; then that triangle muſt be iſoſceles, and the perpendicular is drawn from the middle of the baſe.—The triangles ADC, BDC,



are congruous; ſince CA=CB (23); CD=CD, and AD=DB by ſuppoſition: therefore ∠A=∠B, ∠ACD =∠BCD, ∠ADC=BDC (101); conſequently CD is at right angles to AB.

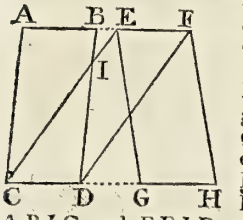
104. *Corol.* Hence in any right-lined triangle where there are equal ſides, or angles; the angles A, B, oppoſite to equal ſides BC, AC, are equal; and the ſides BC, AC, oppoſite to equal angles, A, B, are equal.

105. *In every right-lined triangle* ABC, *the greater angle* C *is oppoſite to the greater ſide* AB. —In the greater ſide AB, take AD=AC; draw CD, and through B draw BE parallel to CD; then the angles ADC, ACD, are equal, (104); and ∠ADC=∠ABE; therefore ∠ACD = ∠ABE; that is, a part of the angle ACB is greater than the angle ABC: conſequently the ∠C is greater than the ∠B; and in the ſame manner it may be proved to be greater than the ∠A, if the ſide AB be greater than CB.

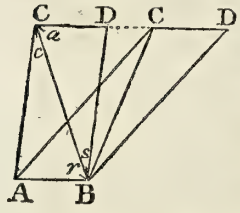


106. *Corol.* Hence in every right-lined triangle, the greater ſide is oppoſite to the greater angle.

107. *Parallelograms* ACDB, ECDF, EGHF, *ſtanding on the ſame baſe* CD, *or on equal baſes* CD, GH, *and between the ſame parallels,* CH, AF, *are equal.*—For AB=EF, being each equal to CD; to each add BE, and AE=BF; now AC= BD, and CE=DF; the triangles ACE, BDF, are therefore congruous, (101). Now if from each of the triangles, ACE and BDF, be taken the triangle BIE, the remaining trapeziums ABIC and FEID, are equal: then if to each of the trapeziums ABIC, FEID, be added the triangle CID, their ſum will be the parallelograms AD and DE, which are equal. And in like manner it may be ſhewn, that the parallelogram EH is equal to the parallelogram ED=AD.



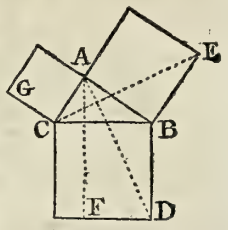
108. *A triangle* ABC *is the half of a parallelogram* AD, *when they ſtand on the ſame baſe* AB, *and are between the ſame parallels* AB, CD.—AC is equal to DB, and AB to DC; alſo BC is a ſide common to both the triangles ABC and DCB: theſe triangles are therefore congruous, (101.) Conſequently the triangle ABC is half the parallelogram AD.



109. *Corol.* 1. Hence every parallelogram is biſected by its diagonal.

110. *Corol.* 2. Alſo, triangles ſtanding on the ſame baſe, or on equal baſes, and between the ſame parallels, are equal; they being the halves of equal parallelograms under like circumſtances.

111. *In every right-angled triangle* BAC, *the ſquare on the ſide* BC *oppoſite to the right angle* A *is equal to the ſum of the ſquares of the two ſides* AB, AC, *containing the right angle.*—On the ſides AB, AC, BC, conſtruct the ſquares AG, AE, CD, (68;) draw AD, CE; and draw AF parallel to BD; then the triangles ABD, EBC, are congruous. For the ∠ABE = ∠CBD, being right angles; to each add the angle ABC, then ∠EBC and ∠ABD are equal; therefore EB, BC, ∠EBC, are reſpectively equal to AB, BD, ∠ABD. Alſo the triangle EBC is half the parallelogram AE, (108;) for they ſtand upon the ſame baſe EB, and are between the ſame parallels EB and AC; BA making right angles with BE and CA continued. Likewiſe the triangle ABD is half the parallelogram BF; for they ſtand upon the ſame baſe BD, and are between the ſame parallels BD, AF; therefore, as the halves of the parallelograms FA and BF are equal, conſequently the parallelogram BF is equal to the ſquare AE.



In the ſame manner may it be ſhewn, that the parallelogram CF is equal to the ſquare AG: but the parallelograms BF and CF together, make the ſquare CD; therefore, the ſquare CD is equal to the ſquares EA and AG.

112. *Corol.* 1. Hence if any two ſides of a right angled triangle are known, the other ſide is alſo known.—For BC = ſquare root of the ſum of the ſquares of AC and AB.

AC = ſquare root of the difference of the ſquares of BC and AB.

AB = ſquare root of the difference of the ſquares of BC and AC.

113. Or thus, making the quantities $\overline{BC}^2$, $\overline{AB}^2$, $\overline{AC}^2$, to ſtand for the ſquares made on thoſe lines. And the mark $\surd$ to ſtand for the ſquare root of ſuch quantities as ſtand under the line joined to the top of this mark.

Then $BC = \surd\overline{AC}^2 + \overline{AB}^2$;

$AC = \surd\overline{BC}^2 - \overline{AB}^2$;

$AB = \surd\overline{BC}^2 - \overline{AC}^2$;

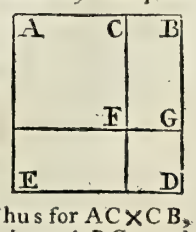
Scholium. The lines of the lengths 5, 4, 3, (or their doubles, triples, &c.) will form a right-angled triangle. For $5^2 = 4^2 + 3^2$; or $25 = 16 + 9$.

114. *Corol.* 2. Of all the lines drawn from a given point to a given line, the perpendicular is the ſhorteſt.

115. *Corol.* 3. The ſhorteſt diſtance between two parallel right lines, is a right line drawn from one to the other perpendicular to both.

116. *Corol.* 4. Parallel right lines are equidiſtant; and the contrary: for two oppoſite ſides of a rectangular parallelogram are equal (28); and each is the ſhorteſt diſtance between the other ſides.

117. *If a right line* AB, *be divided into any two parts* AC, CB; *then will the ſquare on the whole line be equal to the ſum of the ſquares on the parts, together with two rectangles under the two parts.*—That is,



$\overline{AB}^2 = \overline{AC}^2 + \overline{CB}^2 + 2 \times AC \times CB$.

The rectangle under two lines is generally expreſſed by three letters; the firſt two letters ſtand for one line, and the laſt two for the other line. Thus for AC×CB, is written ACB: for AB×BC, is written ABC; and for 2×AC×CB, is written 2ACB.—Let AD, AF, be

be ſquares on AB, AC; then will FG, and GD, be each equal to CB; hence FD is a ſquare on a line equal to CB; alſo FB and FE are rectangles on lines equal to C, CB; but the ſquares AF, FD, and the rectangles FB, FE, fill up the ſquare AD, or are equal to AD.

118. *Corol.* 1. Hence the ſquare of AC, the difference between two lines AB, CB, is equal to the ſquare of the greater AB, leſſened by the ſquare of the leſs CB, and by two rectangles under the ſmaller line CB, and the ſaid difference:

That is, $\overline{AB-BC}^2=\overline{AB}^2-\overline{BC}^2-2BC\times AC$.

For $AB-BC=AC$.

Then $\overline{AC}^2=\overline{AB}^2-\overline{BC}^2-2BC\times AC$.

119. *Corol.* 2. The difference between the ſquares on two lines AB, AC, is equal to the rectangle under the ſum AB+BC and difference AB—BC of thoſe lines.

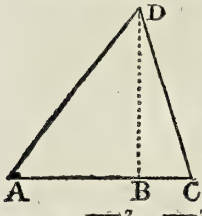
That is, $\overline{AB}^2-\overline{AC}^2=\overline{AB+BC}\times\overline{AB-AC}$.

For $\overline{AB}^2-\overline{AC}^2=\overline{CB}^2+2\overline{AC}\times\overline{CB}$.

$=\overline{CB+AC}+\overline{AC}\times\overline{CB}$.

$=\overline{AB+AC}\times(CB=)\overline{AB-AC}$.

120. *In every triangle* ADC, *the ſquare of a ſide* CD *ſubtending an acute angle* A, *is equal to the ſquares of the ſides* AD, AC, *about that angle, leſſened by two rectangles under one of thoſe ſides* AC, *and that part* AB *contained between the acute angle and the perpendicular* DB *drawn to that ſide* AC *from its oppoſite angle* D.



That is, $\overline{DC}^2=\overline{AD}^2+\overline{AC}^2-2CAB$.

$\overline{DC}^2-\overline{BC}^2=(\overline{DB}^2=)\overline{AD}^2-\overline{AB}^2$ (111).

And $\overline{AC}^2=2ABC+\overline{BC}^2+\overline{AB}^2$ (117).

Then $\overline{DC}^2-\overline{BC}^2-\overline{AC}^2=\overline{AD}^2-\overline{BC}^2-2\overline{AB}^2-2ABC$.

And $\overline{DC}^2=\overline{AD}^2+\overline{AC}^2-2\overline{AB}^2-2ABC$, by adding $\overline{BC}^2+\overline{AC}^2$.

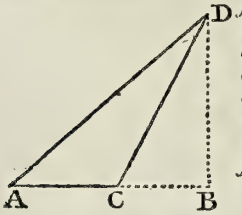
$(-AB\times 2AB-BC\times 2AB)$

$(-\overline{AC+BC}\times 2AB\quad)$

Then $\overline{DC}^2=\overline{AD}^2+\overline{AC}^2-(AC\times 2AB=)2CAB$.

121. *Corol.* Hence $AB=\dfrac{\overline{AD}^2+\overline{AC}^2-\overline{DC}^2}{2CA}$.

122. *In an obtuſe-angled triangle* ACD, *the ſquare of the ſide* AD *oppoſite to the obtuſe angle* C *is equal to the ſum of the ſquares of the ſides* AC, CD, *about the obtuſe angle; together with two rectangles under one ſide* AC, *and the continuation* CB *of that ſide to meet a perpendicular* DB *drawn to it from the oppoſite angle* D.



That is, $\overline{AD}^2=\overline{AC}^2+\overline{CD}^2+2AC\times CB$.

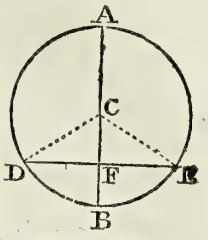
For $\overline{AD}^2-\overline{AB}^2=(\overline{DB}^2=)\overline{CD}^2-\overline{CB}^2$.

And $\overline{AB}^2=2ACB+\overline{AC}^2+\overline{CB}^2$.

Then $\overline{AD}^2=\overline{AC}^2+\overline{CD}^2+2ACB$.

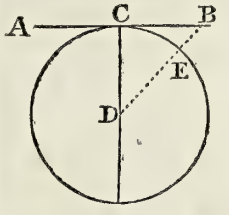
123. *Corol.* Hence $CB=\dfrac{\overline{AD}^2-\overline{AC}^2-\overline{CD}^2}{2AC}$.

124. *In any circle, a diameter,* AB, *drawn perpendicular to a chord* DE, *biſects that chord and its ſubtended arc* DBE.—From the centre C, draw the radii CD, CE, to the extremities of the chord DE; then the triangles CFE, CFD, are congruous (102). For CF being at right angles to DE, the $\angle CFD=\angle CFE$; and the triangle CDE being iſoſceles (23), the $\angle D=\angle E$ (104). Alſo CF is common; therefore DE=FE, and the arc DB=BE; for thoſe arcs meaſure the equal angles FCE, FCD.

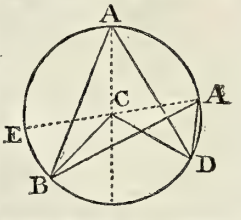


125. *Corol.* Hence, in a circle, a right line drawn through the middle of a chord at right angles to it, paſſes through the centre of that circle; and the contrary.

126. *A tangent* AB, *to a circle, is perpendicular to a diameter* DC, *drawn to the point of contact* C.—If it be denied that DC is perpendicular to AB, then from the centre D, let ſome other line DB, cutting the circle in F, be drawn perpendicular to AB. Now the angle DBC being right, the angle DCB is acute; conſequently DC is greater than DB. But DC=DE (9); therefore DE is greater than DB, which is abſurd. Therefore no other line paſſing through the centre can be perpendicular to the tangent, but that which meets it at the point of contact.



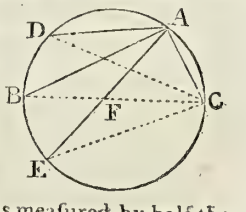
127. *An angle* BCD, *at the centre of a circle, is double of the angle* BAD, *at the circumference, when thoſe angles ſtand on the ſame arc* BD.—Through the point A draw the diameter AE; then the angle $ECD=\angle CAD+\angle CDA$; but the $\angle CAD=\angle CDA$; therefore the $\angle ECD$ is equal to twice the angle CAD. In the ſame manner it may be ſhewn, that the angle BCE is equal to twice the angle BAE; conſequently the angle BCD ($=\angle ECD+\angle BCE$) is equal to twice the angle BAD ($=\angle EAD+\angle BAE$).



128. *Corol.* 1. Hence an angle, BAD, at the circumference, is meaſured by half the arc, BD, on which it ſtands; for the angle at the centre BCD is meaſured by the arc BD; conſequently the angle BAD = half the angle BCD, is meaſured by half the arc DB.

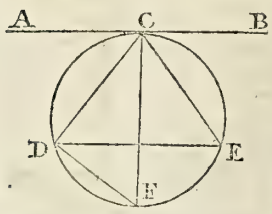
129. *Corol.* 2. All angles in the circumference, and ſtanding on the ſame arc, are equal.

130. *An angle,* BAC, *in a ſemicircle, is a right one. An angle,* DAC, *in a ſegment leſs than a ſemicircle, is obtuſe. An angle,* EAC, *in a ſegment greater than a ſemicircle, is acute.*—For the angle BAC is meaſured by half the ſemicircle arc BEC, or is meaſured by half of 180°; that is, by 90°. And $\angle DAC$ is meaſured by half the arc DEC, greater than 180°; alſo $\angle EAC$ is meaſured by half the arc EC, leſs than 180°; therefore theſe angles are reſpectively equal to, greater, or leſs, than 90°.

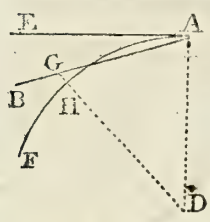


131. *Cor.* Hence in a right-angled triangle BAC, the angular point A of the right angle, and the ends B, C, of the oppoſite ſide, are equally diſtant from F, the middle of that ſide; that is, a circle will always paſs through the right angle, and the ends of its oppoſite ſide taken as a diameter.

132. *The angle* ACD, *formed by a tangent* AB, *to a circle* CDE, *and a chord* CD, *drawn from the point of contact* C, *is equal to an angle* CED *in the alternate segment; and is measured by half the arc* DC *of the included segment.*—Draw the diameter FC, and join DF. The $\angle^s$AFC and CDF are both right; therefore the $\angle^s$DCF and DFC are together = a right $\angle$. But the $\angle^s$ACD and DCF are together = a right $\angle$; consequently the $\angle$ DCF and DFC = the $\angle^s$ ACD and DCF. Take the $\angle$ DCF from each, and the $\angle$ DFC = the $\angle$ ACD; but the $\angle^s$DFC and DEC are equal; consequently the $\angle^s$ DEC and ACD are equal alſo.



133. *Between a circular arc* AHF, *and its tangent* AE, *no right line can be drawn from the point of contact* A.—For if any other right line can be drawn, let it be the right line AB. From D, the centre of AHF, draw DG perpendicular to AB, cutting AB in G, and the arc in H. Now as $\angle$DGA is right, therefore DA is greater than DG; but DA = DH (9); therefore DH is greater than DG, which is abſurd; conſequently no right line can be drawn between the tangent AE and the arc AHF.

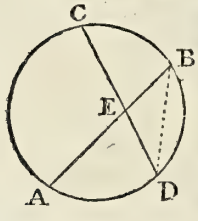


134. *Corol.* 1. Hence the angle DAH, contained between the radius DA and an arc AH, is greater than any right-lined acute angle; for a right line AB muſt be drawn from A, between the tangent AE and radius AD, to make an acute angle. But no ſuch right line can be drawn between AE and the arc AH (133).

135. *Corol.* 2. Hence the angle EAH, between the tangent EA and arc AH, is leſs then any right-lined acute angle.

136. *Corol.* 3. Hence it follows, that at the point of contact the arc has the ſame direction as the tangent, and is at right angles to the radius drawn to that point.

137. *If two right lines* AB, CD, *interſect any how* (*in* E) *within a circle; their inclination,* AED, *or* CEB, *is meaſured by half the ſum of the intercepted arcs,* AD, CB.—For, drawing DB (43); the $\angle$AED = $\angle$EDB + $\angle$EBD, (90.) But the $\angle$EDB is meaſured by $\frac{1}{2}$ arc CB (128); and the $\angle$EBD is meaſured by $\frac{1}{2}$ arc AD (128); conſequently the $\angle$AED is meaſured by half the arc CB, together with half the arc AD.



Of GEOMETRICAL PROPORTION.

Definitions and Principles.

138. One quantity A, is ſaid to be meaſured or divided by another quantity B, when A contains B ſome number of times, exactly.—Thus, if A = 20, and B = 5; then A contains B four times. A is called a multiple of B; and B is ſaid to be a part of A.

139. If a quantity A (= 20) contains another B (= 5) as many times as a quantity C (= 24) contains another D (= 6); then A and C are called like multiples of B and D. B and D are called like parts of A and C; and A is ſaid to have the ſame relation to B, as C has to D. Or, like multiples of quantities are produced, by taking their rectangle, or product, by the ſame quantity, or by equal quantities. The rectangle or product of quantities, A and B, is expreſſed by writing this mark × between them. Thus, A×B, or B×A, expreſſes the rectangle contained by A and B.

140. *When two quantities of a like kind are compared together, the relation which one of them has to the other, in reſpect to quantity, is called* ratio.—The firſt term of a ratio, or the quantity compared, is called the *antecedent*; and the ſecond term, or the quantity compared to, is called the *conſequent*. A ratio is uſually denoted by ſetting the antecedent above the conſequent, with a line drawn between them. Thus $\frac{A}{B}$ ſignifies, and is thus to be read, the ratio of A to B. The multiple of a ratio $\frac{A}{B}$, is the product of each of its terms by the ſame quantity, or by equal quantities. Thus $\frac{A \times C}{B \times C}$ is the ratio $\frac{A}{B}$ taken C times. The product of two or more ratios, $\frac{A}{B}, \frac{C}{D}$, is expreſſed by taking the product of the antecedents for a new antecedent, and the product of the conſequents for a new conſequent. Thus $\frac{A \times C}{B \times D} = \frac{A}{B} \times \frac{C}{D}$.

141. *Equal ratios are thoſe where the antecedents are like multiples or parts of their reſpective conſequents.*—Thus in the quantities A, B, C, D; or 20, 5, 24, 6. In the ratio of A to B, or of 20 to 5, the antecedent is a multiple of its conſequent four times. And in the ratio of C to D, or 24 to 6, the antecedent is a multiple of its conſequent four times. That is, the ratio of A to B is the ſame as the ratio of C to D. And this equality of ratio is thus expreſſed, $\frac{A}{B} = \frac{C}{D}$.

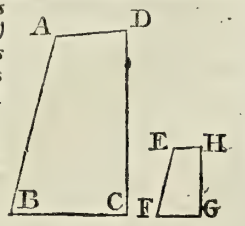
142. *Ratio of equality is, when the antecedent is equal to the conſequent.*—Thus when A = B, then $\frac{A}{B}$, or $\frac{A}{A}$, or $\frac{B}{B}$, is a ratio of equality.

143. *Four quantities are ſaid to be proportional, which, when compared together by two and two, are found to have equal ratios.*—Thus, let the quantities to be compared be A, B, C, D; or 20, 5, 24, 6. Now in the ratio of A to B, or of 20 to 5; A contains B four times. And in the ratio of C to D, or of 24 to 6; C contains D four times. Then the ratios of A to B, and of C to D, are equal; or $\frac{A}{B} = \frac{C}{D}$ (141). And their proportionality is thus expreſſed, A : B :: C : D (75). Alſo in the ratio of A to C, or of 20 to 24; C contains A, once and $\frac{4}{5}$. And in the ratio of B to D, or of 5 to 6; D contains B, once and $\frac{4}{5}$. Where the ratios are likewiſe equal, viz. $\frac{A}{C} = \frac{B}{D}$. And theſe are alſo proportional, A : C :: B : D.

144. So that when four quantities of the ſame kind are proportional, the ratio between the firſt and ſecond is equal to the ratio between the third and fourth; and this proportionality is called *direct*.

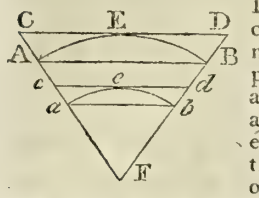
145. Alſo the ratio between the firſt and third is equal to the ratio between the ſecond and fourth; and this proportionality is called *alternate*.

146. *Similar, or like, right-lined figures, are thoſe which are equiangular, (that is, the ſeveral angles of which are equal one to the other;) and alſo the ſides about the equal angles proportional.*—Thus if the figures AC and EG are equiangular, and AB : BC :: EF : FG; or BC : CD :: FG : GH; then are thoſe figures called ſimilar, or like, figures. And the like in triangles, or other figures.



147. *Like*

147. *Like arcs, chords, or tangents, in different circles, are thoſe which ſubtend, or are oppoſite to, equal angles at the centre.*—



Let F be the centre of two concentric arcs A E B, *a e b*, terminated by the radii F *a* A, F *b* B, produced; A B, *a b*, their chords, and C D, *c d*, their tangents. Then as the angle C F D is meaſured either by the arc A E B, or *a e b*, thoſe arcs are ſaid to be alike, or ſimilar; that is, the arc *a e b* is the ſame part of its whole circumference, as the arc A E B is of its whole circumference.

148. *Quantities, and their like multiples, have the ſame ratio.*—That is, the ratio of A to B is equal to the ratio of twice A to twice B, or thrice A to thrice B, &c. Or thus, $\frac{A}{B}=\frac{2A}{2B}=\frac{3A}{3B}$, &c. $=\frac{C\times A}{C\times B}$; that is, equal to the ratio of C times A to C times B.

Demonſtration.—For the ratio of A to B muſt either be equal to the ratio of like multiples of A and B, or to the ratio of unlike multiples of them. Now ſuppoſe the ratio of A to B is equal to the ratio of their unlike multiples, C times A, D times B; that is, $\frac{A}{B}=\frac{C\times A}{D\times B}$. Then A : B :: C×A : D×B (143). And A : C×A :: B : D×B (145). Therefore $\frac{A}{C\times A}=\frac{B}{D\times B}$. Where the conſequents are unequal multiples of their antecedents, by ſuppoſition. But $\frac{A}{C\times A}=$ is not equal to $\frac{B}{D\times B}$. Then A : C×A :: B : D×B is not true. Alſo A : B :: C×A : D×B is not true. Conſequently $\frac{A}{B}$ is unequal to $\frac{C\times A}{D\times B}$. Therefore the ratio of unlike multiples of two quantities, is not equal to the ratio of thoſe quantities. Conſequently the ratio of two quantities, and the ratio of their multiples, are the ſame. Or $\frac{A}{B}=\frac{C\times A}{C\times D}$.

149. *Cor.* 1. In any ratio, if both terms contain the ſame quantity or quantities; the value of the ratio will not be altered by omitting or taking away thoſe quantities. For $\frac{C\times A}{C\times B}=\frac{A}{B}$, by taking away C.

150. *Cor.* 2. Quantities, and their like parts, have equal ratios. For A and B are like parts of C×A and C×B.

151. *Cor.* 3. Quantities, and their like multiples, or like parts, are proportional. For A : B :: C×A : C×B. And C×A : C×B :: A : B (148).

152. *Cor.* 4. If quantities are equal, their like multiples, or like parts, are alſo equal. For if A = B; and $\frac{A}{B}=\frac{C\times A}{C\times B}$; then are the antecedents and conſequents in a ratio of equality.

153. *Cor.* 5. If the parts of one quantity are proportional to the parts of another quantity, they are like parts of their reſpective quantities. For only like parts are proportional to their wholes.

154. *Cor.* 6. Ratios, which are equal to the ſame ratio, are equal to one another. For the ratio of $\frac{A}{B}=\frac{C\times A}{C\times B}=\frac{D\times A}{D\times B}$, &c.

155. *Cor.* 7. Proportions, which are the ſame to the ſame proportion, are the ſame to one another. If A : B :: C : D; and A : B :: E : F; then C : D :: E : F. For $\frac{A}{B}=\frac{D}{C}$; and $\frac{A}{B}=\frac{E}{F}$ (144). Then $\frac{C}{D}=\frac{E}{F}$.

156. *Cor.* 8. If two ratios or products are equal, their like multiples, either by the ſame or by equal quantities, or by equal ratios, are alſo equal.

That is, if $\frac{A}{B}=\frac{C}{D}$: Then $\frac{A\times E}{B\times E}=\frac{C\times E}{D\times E}$.

And if E = F: Then $\frac{A\times E}{B\times E}=\frac{C\times F}{D\times F}$.

And if $\frac{E}{F}=\frac{G}{H}$: Then $\frac{A\times E}{B\times F}=\frac{C\times G}{D\times H}$.

For in either caſe, the ratios may be conſidered as quantities.

157. *Equal quantities,* A *and* B, *have the ſame ratio or proportion to another quantity* C. *And any quantity has the ſame ratio to equal quantities.*—That is, if A = B: Then A : C :: B : C. And C : A :: C : B. Since A = B; then C is the like multiple, or part, of B, as it is of A. And A : B :: C : C (151). Therefore A : C :: B : C. Alſo C : C :: A : B (151). Therefore C : A :: C : B.

158. *Cor.* 1. Hence, when the antecedents are equal, the conſequents are equal; and the contrary.

159. *Cor.* 2. Quantities are equal, which have the ſame ratio to another quantity: or to like multiples or parts of another quantity. Thus, if A : C :: B : C. Then A = B.

160. *Cor.* 3. Since A : C :: B : C; and C : A :: C : B. Therefore, when four quantities are in proportion, As antecedent is to conſequent, ſo is antecedent to conſequent. Then ſhall the firſt conſequent be to its antecedent, as the ſecond conſequent to its antecedent: and this is called *the inverſion of ratios.*

161. *In two, or more, ſets of proportional quantities, the rectangles under the like terms are proportional.*—That is, If A : B :: C : D; and E : F :: G : H.
Then A×E : B×F :: C×G : D×H.

Since $\frac{A}{B}=\frac{C}{D}$; and $\frac{E}{F}=\frac{G}{H}$.

Therefore $\frac{A\times E}{B\times F}=\frac{C\times G}{D\times H}$.

Conſequently A×E : B×F :: C×G : D×H.

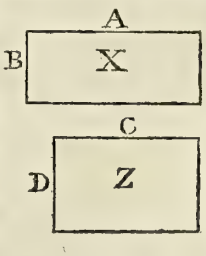
162. *In four proportional quantities* A : B :: C : D. *Then the rectangle or product of the two extremes is equal to the rectangle or product of the two means.*—That is, A×D = B×C.
Since A : B :: C : D, by ſuppoſition;

Therefore $\frac{A}{B}=\frac{C}{D}$ (144).

And $\frac{A}{B}=\frac{A\times D}{B\times D}$ (156). Alſo $\frac{C}{D}=\frac{C\times B}{D\times B}$ (156).

Therefore $\frac{A\times D}{B\times D}=\frac{C\times B}{D\times B}$ (46), where the conſequents are equal. Conſequently A×D = C×B (158).

163. Hence, if the rectangle or product of two quantities is equal to the rectangle or product of other two quantities; thoſe four quantities are proportional. Thus, ſuppoſe the two rectangles, X, Z, are equal; where A, C, are their lengths, and B, D, their breadths. Then A×B = C×D by ſuppoſition. Therefore A : C :: D : B. That is, As the length of X is to the length of Z, ſo the breadth of Z is to the breadth of X. In ſuch caſes the lengths are ſaid to be to one another reciprocally, as their breadths. Or that proportion A : C :: D : B is reciprocal, when A×B = C×D.



164. *If four quantities are proportional, then will either of the extremes, and the ratio of the product of the means to the other extreme,*

extreme, be in the ratio of equality: and either mean, and the ratio of the product of the extremes to the other mean, will be also in a ratio of equality.—That is, if A : B :: C : D;

Then $A=\frac{B\times C}{D}$. And $B=\frac{A\times D}{C}$.

Since A : B :: C : D, by supposition;

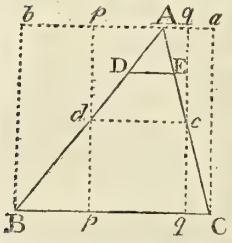
Therefore $A\times D=B\times C$ (162).

And $\frac{A\times D}{C}=\frac{B\times C}{C}$ (157). Also $\frac{B\times C}{D}=\frac{A\times D}{D}$ (157).

But $B=\frac{B\times C}{C}$ (149). And $A=\frac{A\times D}{D}$ (149).

Therefore $\frac{A\times D}{C}=B$. And $\frac{B\times C}{D}=A$ (46).

165. *In any plane triangle,* ABC, *any two adjoining sides,* AB, AC, *are cut proportionally by a line* DE, *drawn parallel to the other side* BC, *viz.* AD : DB :: AE : EC.



Through B and C draw B*b*, C*a*, at right angles to BC, meeting *ba*, drawn through A, parallel to BC: Through *p*, *q*, the middles of A*b*, A*a*, draw *pp*, *qq*, parallel to B*b* or C*a*, meeting AB, AC, in the points *d*, *c*, and join *dc*. Now the triangles A*dp*, B*dp*, and A*cq*, C*cq*, are congruous.

Therefore A*d*=B*d*, A*c*=C*c*, *pd*=*pd*, *qc*=*qc*.

But *pp*=*qq* (116). Therefore *pd*=*qc*.

And *dc* is parallel to BC.

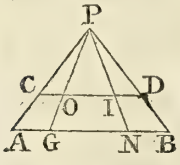
In the same manner it may be shewn, that lines parallel to B*b*, drawn through the middles of A*p*, *pb*; A*q*, *qa*; will also bisect A*d*, B*d*; A*c*, C*c*; and that lines joining these points of bisection will also be parallel to BC. And the same may be proved at any other bisections of the segments of the lines AB, AC. Also the like may be readily inferred at any other divisions of the lines A*b*, A*a*. Therefore lines parallel to BC, cut off like parts from the lines AB, AC.

Then AB:AC::AD:AE. And AB:AC:BD:CE (151).

Therefore AD : AE :: BD : CE (155).

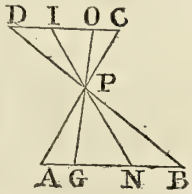
And by alternation, AD : BD :: AE : CE (145).

Cor. Hence, when the sides AB, AC, of a triangle are cut proportionally in D, E, the segments AD, AE; DB, EC; of those sides, are proportional to the sides. And the line DE, drawn to those sections, is parallel to the other side BC.

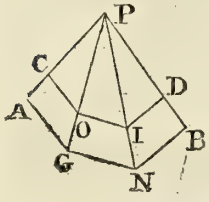


166. *If several right lines meeting, or intersecting each other in a point* P, *are cut by two parallel lines* AB, CD; *the intercepted segments will be respectively proportional.*

AG : CO :: GN : OI :: NB : ID, &c.

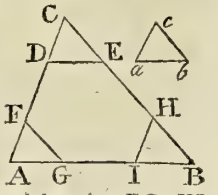


For the triangles APG, CPO; GPN, OPI; NPB, IPD, are respectively equi-angular, and therefore similar; hence AG : CO :: GP : OP :: GN : OI :: NP : IP :: NB : ID, &c. therefore AG : CO :: GN : OI :: NB : ID, &c.



Corol. Hence it is evident, if AG, GN, &c. and CO, OI, &c. are not in the same continued right lines, but respectively parallel as before, that CO, OI, ID, &c. will be in the same proportion as AG, GN, NB, &c.

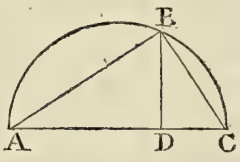
167. *In equiangular triangles,* ABC, *abc, the sides about the equal angles are proportional; and the sides opposite to equal angles are also proportional.*—In CA, CB, take CD=*ca*, CE=*cb*; and draw DE; then the triangles CDE, *cab*, being congruous (99), the ∠CDE=(∠*a*=)∠A. Therefore DE is parallel to AB (95). In the same manner, taking AF=*ac*, AG=*ab*; also BH=*bc*, BI=*ba*; and drawing FG, HI, the triangles AGF, IBH, *abc*, are congruous; therefore FG is parallel to CB, and HI is parallel to CA.



Then (CD=) *ca* : CA :: (CD=) *cb* : CB.
(AF=) *ca* : CA :: (AG=) *ab* : AB.
(BH=) *bc* : BC :: (BI=) *ab* : AB.

168. *Cor.* Hence, triangles having one angle in each equal, and the sides about those equal angles proportional, those triangles are equiangular and similar.

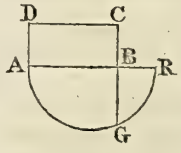
169. *In a right-angled triangle,* ABC, *if a line* BD, *be drawn from the right angle* B, *perpendicular to the opposite side,* AC; *then will the triangles* ABD, BCD, *on each side the perpendicular, be similar to the whole* ABC, *and to one another.*—For in the triangles ABC, ADB, the ∠A is common; and the right angle ABC = right angle ADB. Therefore the remaining ∠C=∠ABD. In the same manner it will appear, that the triangles ABC, BDC, are like; therefore the triangles ABD, BCD, are also similar.



170. *Cor.* 1. Hence, AC : AB :: AB : AD.
AC : BC :: BC : DC.
AD : DB :: DB : DC.

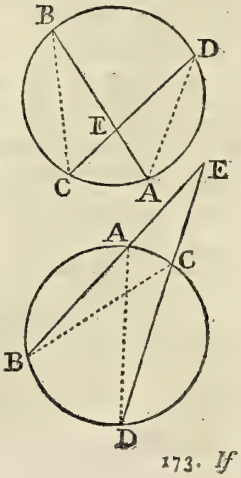
Cor. 2. Hence a right line BD, drawn from a circumference of a circle perpendicular to the diameter AC, is a mean proportional between the segments AD, DC, of the diameter; and AD × DC = DB²; for a circle, the diameter of which is AC, will pass through A, B, C. (131.)

Scholium. This corollary includes what is usually called one of the chief properties of the circle, namely:—The square of the ordinate is equal to the rectangle under the two abscissas.—Here, the ordinate is the perpendicular BD; and the two abscisses are the two segments AD, DC, of the diameter AC.



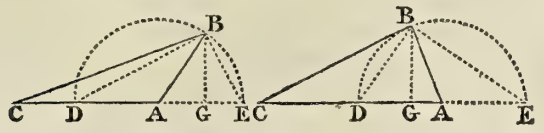
171. *To make a square equal to a given rectangle* ABCD.—Extend AB till BR=BC, and on AR describe a semicircle; then produce CB to G; and the square on BG will be equal to the rectangle under AB, BR, or BC.

172. *In a circle, if two chords,* AB, CD, *intersect each other in* E, *either within the circle, or without, by prolonging them; then the rectangle under the segments, terminated by the circumference and their intersection, will be equal.*—That is, AE×EB=CE×ED. Draw the lines BC, DA; then the triangles DEA, BEC, are similar; for the angle at E is equal (93), or common; and the ∠D=∠B, as standing on the same arc AC (129); then the other angles are equal (98). Therefore AE : CE :: ED : EB (167); consequently AE×EB=CE×ED (162).



173. *If*

173. *If with the leaſt ſide* AB *of a given triangle* ABC, *a ſemicircle be deſcribed from the angular point* A; *meeting the ſide* AC, *produced in the points* D, E; *and from* B, *the lines* BE, BD, *be drawn, and alſo* BG *perpendicular to* DE: *then the values of the ſeveral lines* AG, CG, GE, GD, BE, BD, BG, *may be expreſſed in terms of the ſides of the triangle* ABC, *as follow.*



174. $AG=\frac{\overline{BC}^2-\overline{AC}^2-\overline{AB}^2}{2AC}$.

Or $AG=\frac{\overline{AC}^2+\overline{AB}^2-\overline{BC}^2}{2AC}$.

175. $CG=\frac{\overline{AC}^2-\overline{AB}^2+\overline{BC}^2}{2AC}$. For $CG=AC+AG$, or to $AC-AG$.

And $AC+AG=AC\pm\frac{\overline{BC}^2-\overline{AC}^2-\overline{AB}^2}{2AC}$.

$$=\frac{2\overline{AC}^2+\overline{BC}^2-\overline{AC}^2-\overline{AB}^2}{2AC}.$$

176. $GE=\frac{2H\times H-CB}{2AC}$; here $2H=AC+AB-BC$.

For $GE=AB(AE)\pm AG=AB+\frac{\overline{AC}^2+\overline{AB}^2-\overline{BC}^2}{2AC}$.

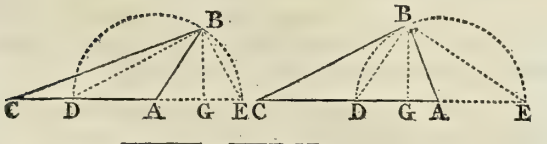
$$=\frac{2AC\times AB+\overline{AC}^2+\overline{AB}^2-\overline{AC}^2}{2AC}.$$

But $2AC\times AB+\overline{AC}^2+\overline{AB}^2=(\overline{AC+AB}^2=)\overline{CE}^2$.

Then $GE\left(=\frac{\overline{CE}^2-\overline{BC}^2}{2AC}\right)=\frac{\overline{CE+BC}\times\overline{CE-BC}}{2AC}$.

$$=\frac{\overline{CA+AB+BC}\times\overline{CA+AB-BC}}{2AC}.$$

$$=\frac{2H\times\overline{2H-2BC}}{2AC}=\frac{2H\times\overline{H-BC}}{AC}.$$



177. $GD=\frac{\overline{H-AC}\times\overline{2H-2AB}}{AC}$. Here $2H=AC+AB+BC$.

For $GD=AD\mp AG=AB\mp AG=AB-\frac{\overline{AC}^2-\overline{AB}^2+\overline{BC}^2}{2AC}$.

$$=\frac{2AC\times AB-\overline{AC}^2-\overline{AB}^2+\overline{BC}^2}{2AC}.$$

$$=\frac{\overline{AC-AB}^2+\overline{BC}^2}{2AC}=\frac{\overline{BC}^2-\overline{CD}^2}{2AC}.$$

$$=\frac{\overline{BC-CD}\times\overline{BC+CD}}{2AC}\ (119).$$

$$=\frac{\overline{BC+AB-AC}\times\overline{BC+AC-AB}}{2AC}.$$

$$=\frac{\overline{2H-2AC}\times\overline{2H-2AB}}{2AC}.$$

178. $BE=\sqrt{\frac{AB}{AC}\times 2H\times\overline{H-CB}}$.

For $\overline{BE}^2=DE\times GE$ (170).

$$=2AB\times\frac{\overline{CE}^2-\overline{BC}^2}{2AC}\ (176).\ \text{Therefore}$$

$$BE=\sqrt{\frac{2AB}{2AC}\times\overline{\overline{CE}^2-\overline{BC}^2}}=\sqrt{\frac{AB}{AC}\times 2H\times\overline{H-CB}}.$$

179. $BD=\sqrt{\frac{AB}{AC}\times\overline{H-AC}\times\overline{2H-2AC}}$.

For $\overline{BD}^2=DE\times GD$ (170).

$$=2AB\times\frac{\overline{BC}^2-\overline{CD}^2}{2AC}\ (177).$$

Therefore $BD=\sqrt{\frac{2AB}{2AC}\times\overline{\overline{BC}^2-\overline{CD}^2}}$ (177).

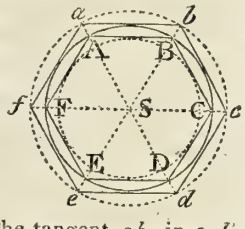
180. $BG=\frac{2}{AC}\times\sqrt{H\times\overline{H-CB}\times\overline{H-AC}\times\overline{H-AB}}$.

For $\overline{BG}^2=GE\times GD$. Therefore $BG=\sqrt{GE}\times\sqrt{GD}$.

And $GE=\frac{2}{AC}\times H\times\overline{H-CB}$. $GD=\frac{2}{AC}\times\overline{H-AC}\times\overline{H-AB}$.

181. *Corol.* Hence is derived the rule uſually given for finding the area, or ſuperficial content, of a triangle, the three ſides being known.—1ſt. From half the ſum of the three ſides, ſubtract each ſide ſeverally, noting the three remainders. 2d. Multiply the ſaid half ſum, and the three noted remainders continually. 3d. The ſquare root of the product is the area of the triangle.

182. *If a regular polygon,* ABCDEF, *be inſcribed in a circle; and parallel to theſe ſides if tangents to the circle be drawn, meeting one another in the points* a, b, c, d, e, f; *then ſhall the figure formed by theſe tangents circumſcribe the circle, and be ſimilar to the inſcribed figure.*—Since the circle touches every ſide of the figure *abcdef*, by conſtruction; therefore the circle is circumſcribed by that figure. Through A and B, draw the radii SA, SB, prolonged till they meet the tangent *ab*, in *a*, *b*; then the triangles ASB, *a*S*b*, are equiangular; for the ∠ at S is common; and the other angles are equal, becauſe AB and *ab* are parallel, by ſuppoſition. Alſo S*a*=S*b*; for the triangles ASB, *a*S*b*, are iſoſceles (104). And the ſame may be proved of the other triangles; and alſo, that they are equal to one another; therefore the figure *abcdef* has equal ſides, and is equiangular to the figure ABCDEF. Now SA : S*a* :: AB : *ab*; and SA : S*a* :: AF : *af* (167); therefore AB : *ab* :: AF : *af*; and the like of the other ſides (155); conſequently the figures ABCDEF, *abcdef*, are ſimilar (145).



183. *Cor.* 1. If two figures are compoſed of like ſets of ſimilar triangles, thoſe figures are ſimilar.

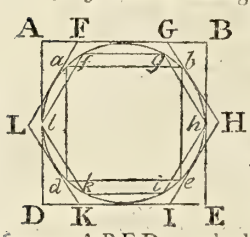
184. *Cor.* 2. Hence, if from the angles *a*, *b*, of a regular polygon circumſcribing a circle, lines *a*S, *b*S, be drawn to the centre S; the chord AB of the intercepted arc will be one ſide of a ſimilar polygon, inſcribed in the

the circle; and the ſides AB, *ab*, of the inſcribed and circumſcribing polygons will be parallel.

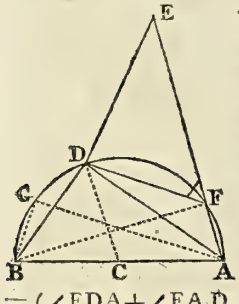
185. *Cor.* 3. The chords or tangents of like arcs in different circles, are in the ſame proportion as the radii of thoſe circles. For if a circle circumſcribe the polygon *abcdef*; then the ſides of the polygon *abcdef*, ABCDEF, are chords of like arcs in their reſpective circumſcribing circles. And if a circle be inſcribed in the polygon ABCDEF, the ſides AB, *ab*, &c. are tangents of like arcs alſo: and theſe have been ſhewn to be proportional to their radii SA, S*a*.

186. *Cor.* 4. The perimeters of like polygons (or the ſum of their ſides) are to one another as the radii of their inſcribed or circumſcribed circles; for SA : S*a* :: AB : *ab* (182); and AB, *ab*, are like parts of the perimeters of their polygons; therefore SA : S*a* :: perimeter ABCDEF : perimeter *abcdef* (151).

187. *If there be two regular and like polygons applied to the ſame circle, the one inſcribed and the other circumſcribed: then will the circumference of that circle, and half the ſum of the perimeters of thoſe polygons, approach nearer to equality, as the number of ſides in the polygons increaſe.*—It is evident at ſight, that the circumſcribing hexagon FGHIKL is leſs than the circumſcribing ſquare ABED; and alſo that the inſcribed hexagon *fghikl* is greater than the inſcribed ſquare *abcd*. And in both caſes, the difference between the hexagon and the circle is leſs than the difference between the circle and the ſquare; therefore the polygon, whether inſcribed or circumſcribed, differs leſs from the circle, as the number of its ſides is increaſed. And when the number of ſides in both is very great, the perimeters of the polygons will nearly coincide with the circumference of the circle; for then the difference of the polygonal perimeters becomes ſo very ſmall, that they may be eſteemed as equal. And yet ſo long as there is any difference between theſe polygons, though ever ſo ſmall, the circle is greater than the inſcribed, and leſs than the circumſcribed, polygons: therefore half their ſums may be taken for the circumference of the circle, when the number of thoſe ſides is very great. Hence, the circumferences of circles are in proportion to one another, as the radii of thoſe circles, or as their diameters. For the perimeters of the inſcribed and circumſcribing polygons are to one another, as the radii of the circles (186). And theſe perimeters and circumferences continually approach to equality.



189. *In a circle* AFB, *if lines*, BA, DA, FA, *be drawn from the extremities of two equal arcs*, BD, DF, *to meet in that point* A *of the circumference determined by one of them*, BA, *paſſing through the centre; then ſhall the middle line* AD, *be a mean proportional between the the ſum* AB+AF *of the extreme lines, and the radius* BC *of that circle.*—On D, with the diſtance DA, cut AF produced in E. Then drawing DE, DF, DB, the triangles ADB, EDF, are congruous (102). For ∠EFD = (∠FDA+∠FAD (96) =) ∠DBA (128). Becauſe the arc DFA = DF+FA. And ∠E = ∠FAD (104) = ∠DAB, by conſtruction; and DE = DA. Therefore EF = AB; and AE = AB+AF. Draw CD; then the triangles ACD, ADE, are ſimilar. For they are iſoſceles and equiangular. Therefore AC : AD :: AD : (AE =) AB+AF.



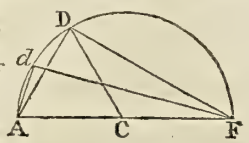
190. Hence, whence the radius of the circle is expreſſed by 1, and one of the extreme lines, or chords, paſſes through the centre; then if the number 2 be added to the other extreme chord, the ſquare root of that ſum will be equal to the length of the mean chord. For ſince AC : AD :: AD : AB+AF (189). Therefore $\overline{AD}^2 = AC \times \overline{AB \times AF}$ (162). Now if AC = 1, then AB = 2; and $\overline{AD}^2 = 2 + AF$; becauſe multiplying by 1 is uſeleſs here. Therefore $AD = \sqrt{2+AF}$.

As the arcs BD and DFA make a ſemicircle, they are called the ſupplements of one another; therefore if the arc BD is any part (as, $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{15}$, &c.) of the ſemicircumference; then is the line DA called the ſupplemental chord of that part.

191. *Remark.* In the poſthumous works of the marquis de l'Hôpital, (page 319, Engliſh edition,) this principle is applied to the doctrine of angular ſections; that is, to the dividing of a given arc into any propoſed number of equal parts; or the finding of the chord of any propoſed arc. For if BF was any aſſumed arc, the chord of which had a known ratio to the given radius BC; then as BFA is a right-angled triangle (130), the ſide $AF = \sqrt{\overline{AB}^2 - \overline{BF}^2}$ (113) will alſo be known. And by this theorem the mean chord AD will be known; and alſo DB ($= \sqrt{\overline{AB}^2 - \overline{AD}^2}$) the chord of half the arc BF will alſo be known.

And by biſecting the arc DB in G, and drawing AG, GB, the mean chord AG is known (189); and GB ($= \sqrt{\overline{AB}^2 - \overline{AG}^2}$) is alſo given. And in this manner, by a continual biſection, the chord of a very ſmall arc may be obtained; the practice of which is facilitated by our article 190, deduced from page 330 of the ſaid work.

192. *Required the chord of the* $\frac{1}{3072}$ *part of the circumference of a circle, the radius of which is* 1; *or, required the ſide of a regular polygon of* 3072 *ſides, inſcribed in a circle, the diameter of which is* 2.—Let ADF be a ſemicircle, the diameter AF = 2, and centre C. Take the arc AD = $\frac{1}{3}$ of the ſemicircumference, or equal to 60°; and draw DC, DA, DF. Let *d* repreſent the point where the arc is biſected; *d*F the ſupplemental chord to that biſection: and let the marks *d*, *d*″, *d*‴, *d*ᵛ, &c. expreſs the biſected points agreeable to the number of biſections.



193. Now ſince ∠ACD = 60°,
Therefore ∠CAD+∠ADC = (180°−60° =) 120° (98).
But ∠CAD = ∠ADC (104); then ∠CAD = ($\frac{120}{2}$ =) 60°.
Therefore DA = (DC = AC =) 1. And as the triangle ADF is right-angled at D (130), then DF = $(\sqrt{\overline{AF}^2 - \overline{AD}^2}$ (113) $= \sqrt{4-1} =) \sqrt{3} = 1{,}7320508075688773$
Therefore the ſupplemental chord of the arc AD, or of

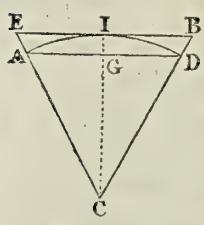
$\frac{1}{3}$ of the ſemicircumference is	F*d* $= \sqrt{3}$	$= 1{,}7320508075688773$
$\frac{1}{6}$ of the ſame (190) is	F*d*′ $= \sqrt{2+Fd}$	$= 1{,}9318516525781366$
$\frac{1}{12}$	F*d*″ $= \sqrt{2+Fd'}$	$= 1{,}9828897227476208$
$\frac{1}{24}$	F*d*‴ $= \sqrt{2+Fd''}$	$= 1{,}9957178464772070$
$\frac{1}{48}$	F*d*ᵛ $= \sqrt{2+Fd'''}$	$= 1{,}9989291749527313$
$\frac{1}{96}$	F*d*ᵛ $= \sqrt{2+Fd^{iv}}$	$= 1{,}9997322758191236$
$\frac{1}{192}$	F*d*ᵛⁱ $= \sqrt{2+Fd^{v}}$	$= 1{,}9999330678348022$
$\frac{1}{384}$	F*d*ᵛⁱⁱ $= \sqrt{2+Fd^{vi}}$	$= 1{,}9999832668887013$
$\frac{1}{768}$	F*d*ᵛⁱⁱⁱ $= \sqrt{2+Fd^{vii}}$	$= 1{,}9999958167178004$
$\frac{1}{1536}$	F*d*ⁱˣ $= \sqrt{2+Fd^{viii}}$	$= 1{,}9999989541791767$

Now

Now Fd^{ix}, the ſupplemental chord of $\frac{1}{1536}$, being known, the chord Ad^{ix} of $\frac{1}{1536}$, part of the ſemicircumference, or of $\frac{1}{3072}$, part of the whole circumference, is alſo known. That is, $Ad^{ix}=$

$$(\sqrt{AF^2-Fd^{ix}{}^2}=)\sqrt{4-2+Fd^{viii}}=0,0020453073606764$$

194. Conſequently, the ſide of a regular polygon of 3072 ſides, inſcribed in a circle whoſe diameter is 2, is 0,0020453073606764



195. *The ſide of a ſimilar polygon circumſcribing the ſame circle, the centre of which is* C, *may be thus found.*—Let BE be the ſide of the circumſcribed polygon; and draw BC, EC, cutting the circle in D and A. Draw DA, and it will be the ſide of the inſcribed polygon; and is parallel to BE (184). Draw CI biſecting the angle BCE, and it will biſect BE and DA at right angles (103). And $DG=(\frac{1}{2}DA=)\frac{1}{2}Ad^{ix}$.

Then $CG=\sqrt{CD^2-DG^2}=\sqrt{1-Ad^{ix}{}^2}$.

But $\frac{1}{2}Ad^{ix}=$	0,00102265368033 8
And its ſquare is	0,00000104582055
Which ſubtracted from 1, leaves	0,99999895417945
Whoſe ſquare root, or CG, is equal to	0,99999947708959

Now the triangles CBI, CDG, are ſimilar.
Then CG : CI :: 2DG : 2BI. Therefore

$$(2BI=)\ BE=(\frac{2DG\times CI}{CG}(164)=)\frac{DA}{CG};\ \text{for IC}=1.$$

$$\text{Or BE}=\frac{0,0020453073606764}{0,9999994770895883}=0,0020453084301895,$$

which is the ſide of a regular polygon of 3072 ſides, circumſcribing a circle the diameter of which is 2.

196. *Scholium.* The ſide of a regular polygon of 3072 ſides, inſcribed in a circle, the diameter of which is 2, is 0,0020453073606764,
Which multiplied by 3072, will give the perimeter of that polygon, which is 6,2831842119979622.
The ſide of a ſimilar polygon, circumſcribing the ſame circle, is 0,0020453084301895.
Which multiplied by 3072, will give for the perimeter of that polygon 6,2831874973420925.
The ſum of theſe perimeters is 12,5663717093400547.
The half ſum is 6,28318585, &c.

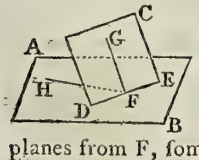
Which is very nearly equal to the circumference of a circle, the diameter of which is 2 (187), the difference between it
and the inſcribed polygon being only 0,00000164, &c.
and the circumſcribed polygon being only 0,00000164, &c.

197. Now the circumferences of circles being in the ſame proportion as their diameters (188);
Therefore the diameter of a circle being 1,
The circumference will be 3,141592, &c. which agrees with the circumference as found by other methods.

Of PLANES and SOLIDS.

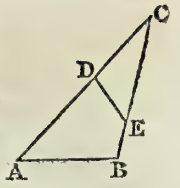
Definitions and Principles.

198. A line is ſaid to be in a plane, when it paſſes through two or more points in that plane, and the common ſection of two planes is a line which is in both of them.

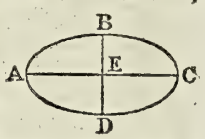


199. The inclination of two meeting planes AB, CD, is meaſured by an acute angle GFH, made by two right lines FG, FH, one in each plane, and both drawn perpendicular to the common ſection DE, of theſe planes from F, ſome point in it.

200. A right line DE interſecting two ſides AC, BC, of a triangle ABC, ſo as to make angles CDE, CED, within the figure, equal to the angles CBA, CAB, at the baſe AB, but with contrary ſides of the triangle, is ſaid to be in a ſubcontrary poſition to the baſe.

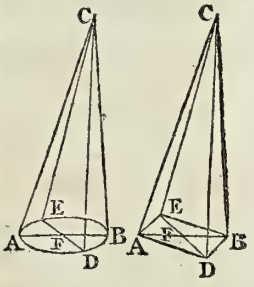


201. If a circle in an oblique poſition be viewed, it will appear of an oval form, as ABCD; that is, it will ſeem to be longer one way, as AC, than another, as DB; nevertheleſs the radii EA, EB, are to be eſteemed as equal. And the ſame muſt be underſtood in viewing any regular figure, when placed obliquely to the eye.



202. If a line be fixed to any point C above the plane of a circle ADBE, and this line while ſtretched be moved round the circle, ſo as always to touch it; then a ſolid which would fill the ſpace paſſed over by the line, between the circle and the point C, is called a *cone*.

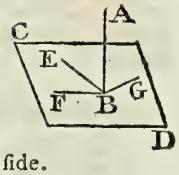
203. If the figure ADBE had been a polygon, and the ſtretched line had moved along its ſides, the figure which would then have been deſcribed, is called a *pyramid*. So that cones and pyramids are ſolids which regularly taper from a circle, or polygon, to a point. The circle or polygon is called the *baſe*; and the point C the *vertex*.



When the vertex is perpendicularly over the middle or centre of the baſe, then the ſolid is called a *right cone*, or a *right pyramid*; otherwiſe an *oblique cone*, or *oblique pyramid*.

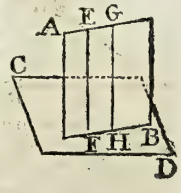
204. If a cone or pyramid be cut by a plane paſſing through the vertex C, and centre of the baſe F, the ſection ABC, or EDC, is a triangle.

205. A right line AB, is perpendicular to a plane CD, when it makes right angles ABE, ABF, ABG, with all the right lines BE, BF, BG, drawn in that plane to touch the ſaid right line AB.



206. So that from the ſame point B, in a plane, only one perpendicular can be drawn to that plane on the ſame ſide.

207. A plane AB, is perpendicular to a plane CD, when the right lines EF, GH, drawn in one plane AB, at right angles to FB, the common ſection of the two planes, are alſo at right angles to the other plane CD.

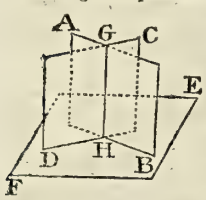


208. So that a line EF, perpendicular to a plane CD, is in another plane AB, and at right angles to BF, the common ſection of the two planes.

209. *If two planes* AB, BC, *cut each other, their common ſection* BD *will be a right line.*—For if it be not, draw a right line DEB in the plane AB, from the point D to the point B; alſo draw a right line DFB in the plane BC. Then two right lines DEB and DFB, have the ſame terms,

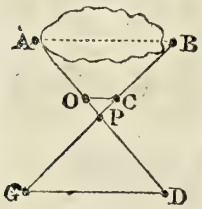
terms, and include a ſpace or figure, which is abſurd. Therefore D E B and D F B are not right lines; neither can any other lines drawn from D to B, beſides B D, be right lines. Conſequently the line D B, the common ſection of the planes, is a right line.

210. *If two planes* A B, C D, *which are both perpendicular to a third plane* E F, *cut one another; their interſection* H G *is at right angles to that third plane* E F.—For the common ſection of A B and C D is a right line G H (209). Alſo H B, H D are the common ſections of AB, CD, with the plane E F. Now from the point H, a line HG drawn perpendicular to the plane E F, muſt be at right angles to HB, HD (205). But H G muſt be in both planes AB, C D (208). Therefore it muſt be in the common ſection of thoſe planes. Conſequently the ſection HG of the planes A B, C D, is at right angles to the plane E F.



METHODS of determining DISTANCES by means of ſimilar TRIANGLES traced on the GROUND.

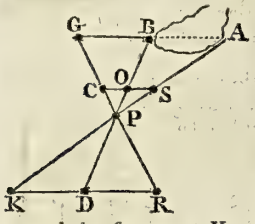
211. *To find the length of the line* AB *acceſſible only at both ends.*—Having fixed on ſome convenient point P, meaſure BP and AP; and prolong thoſe lines till PG=PB, and PD=PA; then the diſtance between the points D and G will be equal to AB. For the ſides of the triangles GPD, BPA, about the equal angles at P, are reſpectively equal, therefore the third ſides GD, BA, will alſo be equal.



Or thus:—Having meaſured PB, PA, (as before,) take PC ſome convenient aliquot part of PB, and PO the ſame aliquot part of PA; then meaſure the croſs diſtance OC, which will be the like aliquot part of the required diſtance AB. For the ſides PO, PA; PC, PB, being proportional, the triangles OPC, APB, will be ſimilar; hence PO : PA :: OC : AB; therefore whatever part PO is of PA, the like OC will be of AB.

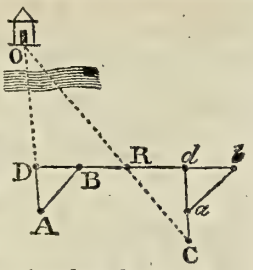
Suppoſe PA=392, and PB=414 feet; and let PO, PC, be $\frac{1}{5}$ of PA, PB, or equal to 78f. 5in. and 82f. $9\frac{1}{2}$in. And ſuppoſe OC meaſures $93\frac{1}{2}$ feet; then AB=$93\frac{1}{2}\times 5$ =$467\frac{1}{2}$ feet.

212. *When the line* (AB) *is acceſſible at one end* (B) *only.*—We ſuppoſe ſome object at the inacceſſible end A: and let a mark be ſet up at B; then in the direction AB take BG (the longer the better), and through a convenient point P, as in the preceding problem, let the diſtances BD, GR, be meaſured ſo that PD =PB, and PR=PG; then if a mark be ſet up at K, the interſection of AP, and RD, when produced, DK will be equal to AB. For the triangles PBG, PDR, being ſimilar and equal in all reſpects, the triangles PBA, PDK, will alſo be ſimilar and equal. Or, BA may be found without the diſtances PD, PR, thus: take PC, PO, like aliquot parts of PG, PB; then SO will be the ſame aliquot part of BA. For PO : PB :: OS : BA.



Suppoſe PB=442, PG=464 feet; and that PO= $110\frac{1}{2}$, PC=116 feet ($\frac{1}{4}$ of PB and PG); alſo, ſuppoſe OS meaſures 113 feet; then BA=452 feet; for $110\frac{1}{2}$: 442 :: 113 : 452.

213. *Let* O *be an object on the oppoſite ſide of a river; to find the diſtance* DO.—Lay down an iſoſceles triangle DBA, the ſide DB being in any convenient direction; then having meaſured a baſe DR, ſet up a mark at R; and in the ſame direction take another baſe R*d*, and make the triangle *dba* ſimilar and equal to DBA (*da* being parallel and equal to DA); then find the concourſe (C) of the lines ORC, *da*C, and meaſure *d*C. By ſimilar triangles, R*d* : *d*C :: RD : DO.



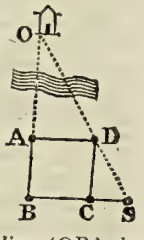
Suppoſe DR=300, R*d*=80, and *d*C=$273\frac{1}{3}$ feet, then 80 : $273\frac{1}{3}$ :: 300 : 1014 feet nearly = DO.

214. But the moſt expeditious method of finding the diſtance to an inacceſſible object, is by means of a rhombus, as follows:

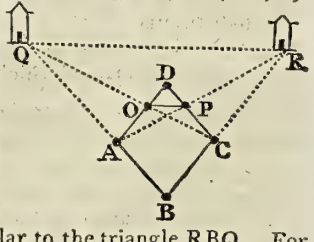
Suppoſe O *the object, and* OB *the required diſtance.*—With a line or meaſuring tape, whoſe length is equal to the ſide of the intended rhombus, lay down one ſide BA in the direction BO, and let BC, another ſide, be in any convenient direction: faſten two ends of two of thoſe lines at C and A, then the other ends (at D) being kept together, and the lines ſtretched on the ground, thoſe lines AD, CD, will form the other two ſides of the rhombus. Set up a mark at R where CO, AD, interſect; and meaſure RD. Then the ſides of the triangles RDC, CBO, being reſpectively parallel, the triangles will be ſimilar; hence, RD : DC :: CB : BO. Suppoſe the ſide of the rhombus is 100 feet, and RD=11f. 7in. then $11\frac{7}{12}$: 100 :: 100 : 863 feet nearly = BO.

Or thus: Having laid down the rhombus, mark the concourſe of the lines ODS, BCS, and meaſure CS; then CS : CD :: AD : AO.

If the ground be nearly level, a rhombus whoſe ſide is 100 feet, will determine diſtances to the extent of 300 yards, within a very few feet of the truth.



215. *To find the length of an inacceſſible line* (QR) *by means of a rhombus.*—At ſome convenient point B, lay down the rhombus (BADC) ſo that two of its ſides BA, BC are directed to the extremities of the line. Mark the interſections O and P, (as in the firſt caſe of the preceding problem;) then the triangle ODP will be ſimilar to the triangle RBQ. For each of the rectangles DO×BQ, DP×BR, being equal to the ſquare on the ſide of the rhombus (as in the preceding prob.) they muſt therefore be equal to each other, or DO×BQ=DP×BR; therefore DO : DP :: BR : BQ; and ſince the angles at D and B are equal, the triangles ODP, RBQ will be ſimilar. Therefore OD : OP :: RB : RQ.



Suppoſe OD=9f. 5in. PD=11f. 10in. OP=13f. 7in. and the ſide of the rhombus = 100 feet;

then $11\frac{10}{12}$: 100 :: 100 : $\frac{10000}{11\frac{10}{12}}$ = RB; therefore

$9\frac{5}{12}$(OD) : $13\frac{7}{12}$(OP) :: $\frac{10000}{11\frac{10}{12}}$(RB) : $\frac{10000\times 13\frac{7}{12}}{9\frac{5}{12}\times 11\frac{10}{12}}$ = 1219 feet = RQ.

Therefore

Therefore the inacceſſible diſtance RQ, is found by multiplying the ſquare of the ſide of the rhombus by OP, and dividing that product by the product of OD and PD.

APPLICATION OF ALGEBRA TO GEOMETRY.

If it be propoſed to reſolve a geometrical problem algebraically, or by algebra, it is proper, in the firſt place, to draw a figure that ſhall repreſent the ſeveral parts or conditions of the problem, and to ſuppoſe that figure to be the true one. Then, having conſidered attentively the nature of the problem, the figure is next to be prepared for a ſolution, if neceſſary, by producing or drawing ſuch lines in it, as appear moſt conducive to that end. This done, the uſual ſymbols or letters for known and unknown quantities, are employed to denote the given parts of the figure, or as many of them as neceſſary, as alſo ſuch unknown line or lines as may be eaſieſt found, whether required or not. Then proceed to the operation, by obſerving the relations that the ſeveral parts of the figure have to each other; from which, and the proper theorems in the foregoing elements of geometry, make out as many equations, independent of each other, as there are unknown quantities employed in them; the reſolution of which equations, in the ſame manner as in arithmetical problems, will determine the unknown quantities, and reſolve the problem propoſed.

As no general rule can be given for drawing the lines, and ſelecting the fitteſt quantities to ſubſtitute for, ſo as always to bring out the moſt ſimple concluſions, becauſe different problems require different methods of ſolution; the beſt way to gain experience in this matter is, to try the ſolution of the ſame problem in different ways, and then apply that which ſucceeds beſt to other caſes of the ſame kind, when they afterwards occur. The following inſtructions, however, may be of ſome uſe to the learner, viz.

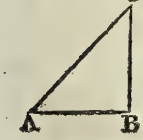
In preparing the figure, by drawing lines, let them be either parallel or perpendicular to other lines in the figure, or ſo as to form ſimilar triangles. And if an angle be given, it will be proper to let the perpendicular be oppoſite to that angle, and to fall from one end of a given line, if poſſible.

In ſelecting the quantities proper to ſubſtitute for, thoſe are to be choſen, whether required or not, which lie neareſt the known or given parts of the figure, and by means of which, the next adjacent parts may be expreſſed by addition and ſubtraction only, without the intervention of ſurds.

When two lines or quantities are alike related to other parts of the figure or problem, the beſt way is, not to make uſe of either of them ſeparately, but to ſubſtitute for their ſum, or difference, or rectangle, or the ſum of their alternate quotients, or for ſome line or lines, in the figure, to which they have both the ſame relation.

When the area, or the perimeter, of a figure, is given, or ſuch parts of it as have only a remote relation to the parts required; it is ſometimes of uſe to aſſume another figure ſimilar to the propoſed one, having one ſide equal to unity, or ſome other known quantity. For, from hence the other parts of the figure may be found, by the known proportions of the like ſides, or parts, and ſo an equation be obtained.—The following problems may ſerve to illuſtrate what has been ſtated above.

216. *In a right-angled triangle, having given the baſe, and the ſum of the hypothenuſe and perpendicular; to find both theſe two ſides.*—Let ABC repreſent the propoſed triangle, right-angled at B. Put the baſe AB=3=*b*, and the ſum AC+BC of the hypothenuſe and perpendicular =9=*s*; alſo, let *x* denote the perpendicular BC; hence it follows that the hypothenuſe AC will be expreſſed by *s*—*x*.



But $AC^2=AB^2+BC^2$ (by theor. 34, Geom.); that is, $(s-x)^2=b^2+x^2$, or $s^2-2sx+x^2=b^2+x^2$, or $s^2-b^2=2sx$; hence $x=\frac{s^2-b^2}{2s}=4=BC$, and $s-x=\frac{s^2+b^2}{2s}=5=AC$, the perpendicular and hypothenuſe as required.

217. *In a right-angled triangle, having given the hypothenuſe, and the ſum of the baſe and perpendicular; to find both theſe two ſides.*—Let ABC repreſent the propoſed triangle, right-angled at B. Put the given hypothenuſe AC=5=*a*, and the ſum AB+BC of the baſe and perpendicular =7=*s*; alſo, let *x* denote the baſe AB; hence it follows that the perpendicular BC will be expreſſed by *s*—*x*.

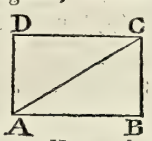
But $AC^2=AB^2+BC^2$ by the nature of right-angled triangles; that is, $a^2=x^2+(s-x)^2=x^2+s^2-2sx+x^2$, or $2x^2-2sx=a^2-s^2$, or $x^2-sx=\frac{1}{2}a^2-\frac{1}{2}s^2$; hence, by completing the ſquare, &c. is found $x=\frac{1}{2}s-\frac{1}{2}\sqrt{2a^2-s^2}=3=AB$; and $s-x=\frac{1}{2}s+\frac{1}{2}\sqrt{2a^2-s^2}=4=BC$; the baſe and perpendicular required.

Or, let *z* denote the difference of the baſe and perpendicular, the ſum being denoted by *s*, as above. Then, becauſe that in any two quantities half their difference added to half the ſum gives the greater quantity, and the ſame ſubtracted gives the leſs quantity, it follows, that $\frac{1}{2}s+\frac{1}{2}z$ and $\frac{1}{2}s-\frac{1}{2}z$ will denote the two legs, or the perpendicular and baſe. Hence then $a^2=(\frac{1}{2}s+\frac{1}{2}z)^2+(\frac{1}{2}s-\frac{1}{2}z)^2=\frac{1}{2}s^2+\frac{1}{2}z^2$; or $z^2=2a^2-s^2$, and $z=\sqrt{2a^2-s^2}$. Then the half of this being added and ſubtracted with $\frac{1}{2}s$ the half ſum, gives

$\frac{1}{2}s+\frac{1}{2}z=\frac{1}{2}s+\frac{1}{2}\sqrt{2a^2-s^2}$, and

$\frac{1}{2}s-\frac{1}{2}z=\frac{1}{2}s-\frac{1}{2}\sqrt{2a^2-s^2}$, the ſame as before.

218. *In a rectangle, having given the diagonal, and the perimeter, or ſum of all the four ſides; to find each of the ſides ſeverally.*—Let ABCD be the propoſed rectangle; and put the diagonal AC=10=*d*, and half the perimeter AB+BC or AD+DC=14=*a*; alſo put one ſide AB=*x*; then the other ſide BC will be denoted by *a*—*x*. Hence, by right-angled triangles, $AC^2=AB^2+BC^2$, that is, $d^2=x^2+(a-x)^2=2x^2-2ax+a^2$; conſequently $x^2-ax=\frac{1}{2}d^2-\frac{1}{2}a^2$, and by completing the ſquare, &c. $x=\frac{1}{2}a+\frac{1}{2}\sqrt{2d^2-a^2}=8=AB$, and $a-x=\frac{1}{2}a-\frac{1}{2}\sqrt{2d^2-a^2}=6=BC$, the two ſides; and the ſame for the other two, AD, DC.

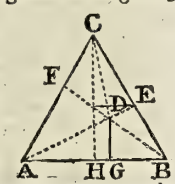


Or, by ſubſtituting for the ſum and difference of the two ſides, AB, BC, this problem may be reſolved, like the latter method of the foregoing one, by a ſimple quadratic, and conſequently without completing the ſquare.

219. *Having given the baſe and perpendicular of any triangle; to find the ſide of a ſquare inſcribed in the ſame.*—Let ABC repreſent the given triangle, and EFGH its inſcribed ſquare. Put the baſe AB=*b*, the perpendicular CD=*a*, and the ſide of the ſquare GF or GH=DI=*x*; then will CI=CD—DI=*a*—*x*.

Then, becauſe the like lines in the ſimilar triangles ABC, GFC, are proportional, AB : CD :: GF : CI, that is, $b:a::x:a-x$. Hence $ab-bx=ax$, or $ab=ax+bx$, and conſequently $x=\frac{ab}{a+b}=$GF or GH, the ſide of the inſcribed ſquare; which therefore is of the ſame magnitude, whatever the ſpecies or the angles of the triangle may be.

220. *In an equilateral triangle, having given the lengths of the three perpendiculars, drawn from a certain point within, on the three ſides; to determine the ſides.*—Let ABC repreſent the equilateral triangle, and DE, DF, DG, the given perpendiculars from the point D. Draw the lines DA, DB, DC, to the three angular points; and let fall the perpendicular CH on the



the base AB. Put the three given perpendiculars DE=a, DF=b, DG=c, and put x=AH or BH, half the side of the equilateral triangle. Then is AC or BC=$2x$, and by right-angled triangles the perpendicular $CH=\sqrt{AC^2-AH^2}=\sqrt{4x^2-x^2}=\sqrt{3x^2}=x\sqrt{3}$.

Now, since the area or space of a rectangle is expressed by the product of the base and height, and that a triangle is equal to half a rectangle of equal base and height, it follows that, the

whole triangle ABC is $=\frac{1}{2}AB\times CH=x\times x\sqrt{3}=x^2\sqrt{3}$,
the triangle ABD $=\frac{1}{2}AB\times DG=x\times c=cx$,
the triangle BCD $=\frac{1}{2}BC\times DE=x\times a=ax$,
the triangle ACD $=\frac{1}{2}AC\times DF=x\times b=bx$.

But the three last triangles make up, or are equal to, the whole former or great triangle; that is, $x^2\sqrt{3}=ax+bx+cx$; hence then $x=\frac{a+b+c}{\sqrt{3}}$, half the side of the triangle sought.

Also, since the whole perpendicular CH is $=x\sqrt{3}$, it is therefore $=a+b+c$; that is, the whole perpendicular CH, is just equal to the sum of all the three smaller perpendiculars DE+DF+DG, taken together, wherever the point D is situated.

Having thus given the elements of common geometry, we proceed now to give some instances of a higher species of geometry, upon the nature of Cycloidal Curves.

CYCLOIDAL CURVES.

On the subject of Cycloidal Curves, an ingenious French writer has made the following remark: *Il semble qu'une destinée particuliere attachée à la cycloide, lui donne préferablement aux autres courbes un plus grand nombre de propriétés remarquables.* "The cycloid seems to be peculiarly favoured in possessing more remarkable properties than any other curve."

Definitions.

1. When a circle is made to rotate on a rectilinear basis, the figure described on the plane of the basis by any point in the plane of the circle is called a trochoid. A circle concentric with the generating circle, and passing through the describing point, may be called the describing circle.

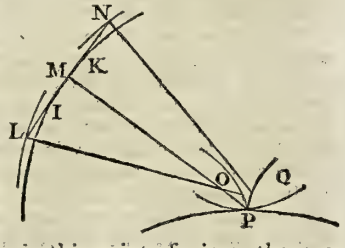
2. If the describing point is in the circumference of the rotating circle, the two circles coincide, and the curve is called a cycloid.

3. If a circular basis be substituted for a rectilinear one, the trochoid will become an epitrochoid, and the cycloid an epicycloid.

Scholium 1. The terms have hitherto been too promiscuously employed; the terms cycloid and trochoid have been used indifferently; and the term epicycloid has comprehended the epitrochoid, the terms prolate and contracted being sometimes added to imply that the describing point is within or without the generating circle. The interior epicycloid and epitrochoid may very properly be distinguished by the names hypocycloid and hypotrochoid, whenever they are the separate objects of consideration. The different species of epicycloids may be denominated according to the number of their cusps, combined with that of the entire revolutions which they comprehend; for instance, the epicycloid described by a circle on an equal basis is a simple unicuspidate epicycloid; and if the diameter of the generating circle be to that of the basis as 5 to 2, the figure will be a quintuple bicuspidate epicycloid. If the describing circle of a trochoid or cycloid be so placed as to touch the middle of the basis, and each of the ordinates parallel to the basis be diminished by the corresponding ordinate of the circle, the curve thus generated has been denominated the companion of the trochoid, the figure of the sines, and the harmonic curve.

Scholium 2. The invention of the cycloid has been attributed by Wallis, Phil. Tr. for 1697, No. 229, to cardinal Cusanus, who wrote about the year 1450; but it seems to be at least as probable that the curve which appears in Cusanus's figure was meant for the semicircle employed in finding a mean proportional. Bovillus, in 1501, has a juster claim to the merit of the invention of the cycloid and trochoid, if it can be any merit to have merely imagined such curves to exist. In 1599, Galileo gave a name to the common cycloid, and attempted its quadrature; but having been accidentally misled by repeated experiments on the weight of a flat substance cut into a cycloidal form, he fancied that the area bore an incommensurable ratio to that of the circle, and desisted from the investigation. Mersennus described the cycloid, in 1615, under the name of *la trochoide*, or *la roulette*, but he went no further. Roberval seems to have first discovered the comparative quadrature and rectification of the cycloid, and the content of a cycloidal solid, about the year 1635, but his treatise was not printed until 1695. Torricelli, in 1644, first published the quadrature and the method of drawing a tangent. Wallis gave, in 1670, a perfect quadrature of a portion of the cycloid. The epicycloid is said to have been invented by Rœmer; its rectification and evolute were investigated by Newton in the *Principia*, published in 1687. In 1695, Mr. Caswell shewed the perfect quadrability of a portion of the epicycloid, and Dr. Halley immediately published an extension of Caswell's discovery, together with a comparison of all epitrochoidal with circular areas. M. Varignon is also said to have reduced the rectification of the epitrochoid to that of the ellipsis, in the same year. Nicole, Delahire, Pascal, Reaumur, Maclaurin, the Bernoullis, the commentators on Newton, and many others, have contributed to the examination of cycloidal curves, both in planes and in curved surfaces; and Waring, the most profound of modern algebraists, has considerably extended his researches upon the nature of those lines which are generated by a rotatory progression of other curves. In the present essay, the most remarkable properties of cycloidal curves are deduced in a simpler and more general manner than appears to have been hitherto done, the equations of several species are investigated, a singular property of the quadricuspidate hypocycloid is demonstrated, and the peculiarities of the spiral of Archimedes are derived from its generation as an epitrochoid.

Prop. I. *Theorem.*—In any curve generated by the rotation of another on any basis, the right line joining the describing point, and the point of contact of the generating curve and the basis, is always perpendicular to the curve described.

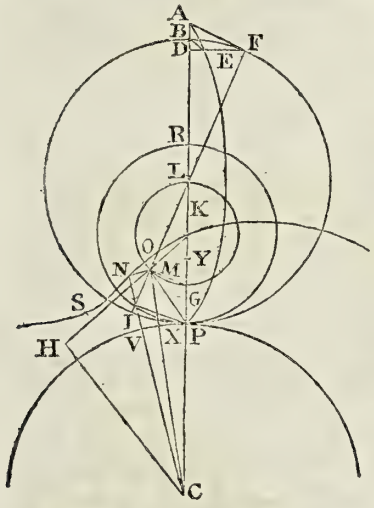


It may by some be deemed sufficient to consider the generating curve as a rectilinear polygon of an infinite number of sides; since, in this point of view, the proposition requires no further demonstration; and, indeed, Newton and others have not scrupled to take it for granted: but it is presumed that a more rigid proof will not be considered as superfluous. Let M be the describing point, and P the point of contact; and let LO, MP, and NQ, be successive positions of the same chord of the generating curve at infinitely small distances; then it is obvious, and easily demonstrable, that the arcs OP and PQ, described by the point P of the generating curve in its passage from O to P, and from P to Q, will be perpendicular to the basis at P, and will therefore touch each other. Let the arcs L, IMK, and N, be described with the radius PM, on the centres O, P, and Q. Then the curve described by M will touch IMK; for since O and Q lie ultimately in the same direction from P, if L be above IMK, N will

alſo be above it, ſince theſe points muſt be in the circles L and N, and infinitely near to M; and if L is below IMK, N, for the ſame reaſon, muſt be below it; and M is common to the circle and the curve; therefore the curve touches the circle IMK at M, and is perpendicular to the radius PM.

PROP. II. *Problem.—To draw a tangent to a cycloidal curve at any given point.*—On the given point as a centre, deſcribe a circle equal to the deſcribing circle of the curve, and from the interſection of this circle, with the line deſcribed by the centre of the generating circle, let fall a perpendicular on the baſis; the point thus found will be the point of contact, and the tangent will be perpendicular to the right line joining this point of contact and the given point, by the firſt propoſition. It will be obvious, from inſpection, which of the two interſections of the circle to be deſcribed, with the tract of the centre, is to be taken as the place of that centre correſponding to the given point.

PROP. III. *Problem.—To find the length of an epitrochoid.*—

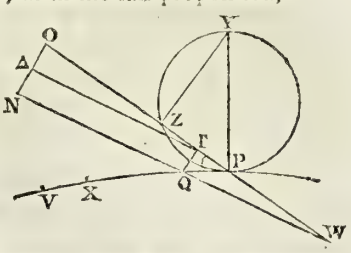


Let C be the centre of the baſis VP, K that of the rotating circle PR, and of the deſcribing circle GL, P the point of contact, and M the deſcribing point. Then joining MXC, and ſuppoſing VX to be an element repreſenting the motion of the point P in either the baſis or the generating circle, draw the arc MN on the centre C, and join CVN, then NM will repreſent the motion of the point M as far as it is produced by the revolution round the centre C: take MO to VX as GK to PK, then MO will be the motion of M ariſing from the revolution round K, and NO will be the element of the curve produced by the joint motion. Let CH be parallel to PM, then CX or CP : CM :: VX : MN, and PK : MK :: CP : HM :: VX : MO, therefore CM : HM :: MN : MO, and theſe lines being perpendicular to CM, HM, the triangle NMO is ſimilar to CMH, and MN : NO :: CM : CH, hence CP : CH :: VX : NO. Take PY to CP as PK to CK, then CH : CP :: PM : PY :: NO : VX. On L deſcribe the circle PFB, and draw IMLF: let FD be perpendicular to PRB, take DE to DF, as PL, and E will be always in the ellipſis BEP: let AE and AF be tangents to the ellipſis and circle at E and F; then the increment of the arc BF will be to MO as PL to GL, and to VX as PL to PR. Join GM, and parallel to it draw PI; then PIL is a right angle, and ILP = AED, and IM : IL :: PG : PL :: DE : DF, by conſtruction; therefore the figure IPML is ſimilar to DAEF, as PL to PM ſo is AF to AE, and ſo is the increment of the arc BF to that of BE; but the increment of BF is to VX as PL to PR, therefore the increment of BE is to VX as PM to PR. Now, it was proved that NO : VX :: PM : PY; therefore the increment of BE is to NO as PY to PR, or as CP to 2CK: and the whole elliptic arc BE is to the whole SM as the radius of the baſis to twice the diſtance of the centres.

Corollary 1. The fluxion of every cycloidal arc is proportional to the diſtance of the deſcribing point from the point of contact.

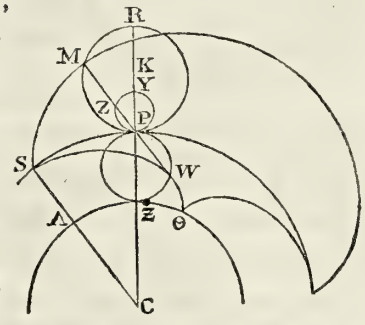
Corollary 2. In the epicycloid the ellipſis coincides with its axis BP, and the arc BE with BD, which is double the verſed ſine of half the arc GM, in the deſcribing or generating circle: therefore the length of the curve is to this verſed ſine as four times the diſtance of the centres to the radius of the baſis.

PROP. IV. *Problem.—To find the centre of curvature of an epitrochoid.*—Let PY be, as in the laſt propoſition, to CP as PK to CK, and on the diameter PY deſcribe the circle PZY, cutting PO in Z: take OW a third proportional to OZ and OP, and W will be the centre of curvature. For, let QP = VX be the ſpace deſcribed by P, while NO is deſcribed by O; it is obvious from Prop. 1, that the interſection of NQ and OP muſt be the centre of curvature. Let QΓ be perpendicular to ΓΔ parallel to QN; then, by Prop. 3, NO : VX or QP :: PO : PY, but by ſimilar triangles QP : CΓ :: PY : PZ; therefore NO : QΓ :: PO : PZ, and by diviſion, NO : ΔO :: OP : OZ, and by ſimilar triangles :: OW : OΓ or OP.

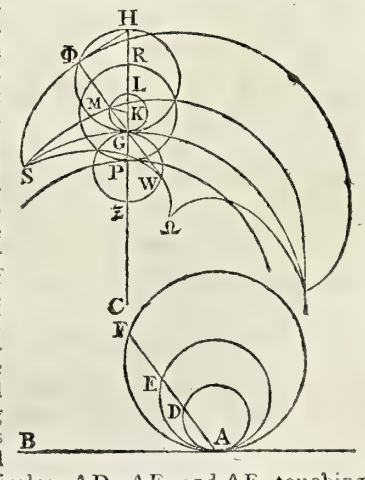


Corollary. When Z coincides with O or M, OW is infinite; therefore whenever PZY interſects the deſcribing circle, the epitrochoid will have a point of contrary flexure at the ſame diſtance from C as this interſection: and the circle PZY is given when the baſis and generating circle are given, whatever the magnitude of the deſcribing circle may be.

PROP. V. *Problem.—To find the evolute of an epicycloid.*—In the epicycloid SM, the point M being in the circumference of PMR, PZ will be to PM in the conſtant ratio of PY to PR, and MZ to PM as RY to PR; and PM to MW in the ſame ratio; hence PM : PW :: RY : PY :: CR : CP, therefore the point W is always in a circle PWΞ of which the radius is to PK in that proportion, and which touches SP in P. On the centre C deſcribe a circle ΛΞΘ touching PWΞ in Ξ; then, ſince CR : CP :: PR : PΞ, we have by diviſion CR : CP :: CP : PΞ, and the circle PWΞ being to ΛΞΘ as PMR to SP, the arc PM being equal to SP, the ſimilar arc PW will be equal to ΛΞ, and, taking ΛΞΘ = PWΞ, ΞΘ will be always equal to ΞW, and W in a curve ΘWS ſimilar to SM, of which it is the evolute.



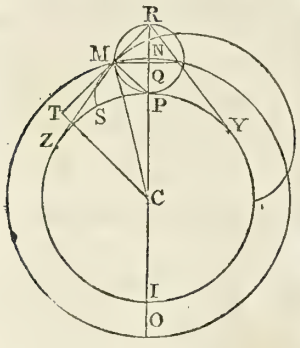
PROP. VI. *Problem.—To find the area of an epitrochoid.*—On the centre C deſcribe a circle touching the epitrochoid in S, take GH to GC as PR to PC, and let the circle GΦH deſcribe on the baſis SG the epicycloid SΦ. Then taking GM always to GΦ as GL to GH, M will be in the epitrochoid SM; for the angular motion of the chord GΦ, is the ſame as that of GM in the primary epitrochoid. Let SΩ be the evolute of SΦ, and GWΞ its generating circle. On diameters equal to ΞG, ΞL, and ΞH, deſcribe three circles, AD, AE, and AF, touching



the right line AB in A; let the angle BAD be always equal to GHΦ, and it is evident that AD, AE, and AF, will be equal respectively to WG, WM, and WΦ. But the angular motion of WG on W being equal to the sum of the angular motions of GM on G, and CG on C, is to that of AF, or of GM, or half that of KM, in the ratio of CH to CG, or CR to CP; therefore the fluxions of the areas SWG, SWM, and SWΦ, are to those of the segments AD, AE, and AF, in the same ratio; and that ratio being constant, the whole areas, and their differences, are also respectively to each other as CR to CP.

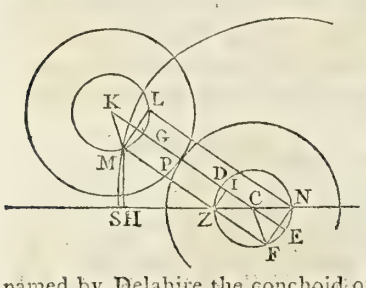
Scholium. The quadrable spaces of Halley are those which are comprehended between the arc of the epitrochoid, that of the describing circle, and that of a circle concentric with the basis, and cutting the describing circle at the extremities of its diameter.

PROP. VII. *Problem.—To find a central equation for the epicycloid.*—Let CT be perpendicular to RT, the tangent at the point M, then PMR will be a right angle, and PM parallel to CT. On the centre C describe through M the circle MNO, and let MQ be perpendicular to RO. Then the rectangle OQN = PQR, OQ : PQ :: QR : QN, by addition OQ : PQ :: OR : PN; hence, by division, OP : PQ :: IR : PN, and $PQ=\frac{OPN \text{ or } INP}{IR}$. But



$PMq = PR \times PQ = \frac{PR}{IR} \times INP$; and by similar triangles CT : CR :: PM : PR, whence $CTq=\frac{CRq}{PRq}\times PMq=CRq\times\frac{INP}{IRP}$. Let MZ and RY be tangents to SP, then INP = MZq, and IRP = RYq, $CT=CR\times\frac{MZ}{RY}$, and CT will be to MZ in the constant ratio of CR to RY. Putting CP = a, CR = b, CM = s, CT = u, then $uu=bb\frac{ss-aa}{bb-aa}$.

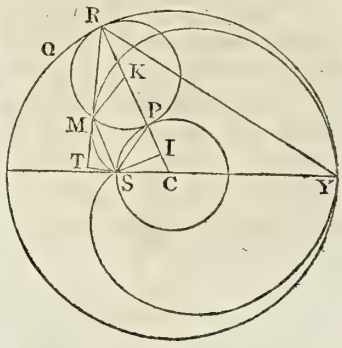
PROP. VIII. *Problem.—To find a geometrical equation for the conchoidal epitrochoid.*—Let CP = PK. On the centre C describe a circle equal to GM, cutting SC in Z. Join MZF, then the arc DZ = GM, and MZ is parallel to CK; therefore EF is also equal to DZ or GM, CF is parallel to KM, and MF = CK: therefore this epitrochoid is the curve named by Delahire the conchoid of a circular basis, as was first observed by Reaumur in 1708, and afterwards by Maclaurin, in 1720. Call CK, a; DE, b; ZH, x; HM, y; ZM, s; and let ZI be perpendicular to CK; then $FZ=a-s$, $CI=\frac{a-s}{2}$, and, CIZ and ZHM being



similar, CZ : CI :: ZM : ZH, or $\frac{b}{2} : \frac{a-s}{2} :: s : x$; hence $bx=as-ss$, $bx+ss=as$, $b^2x^2+2bxs^2+s^4=a^2s^2$, and by substituting for s^2, $x^4+2bx^3-a^2x^2+b^2x^2+2x^2y^2+2bxy^2+y^4-a^2y^2=0$.

Corollary 1. Join FN, and complete the parallelogram MPNL, then since EF = DZ = EN, FN is perpendicular to EK, and ML to NL; and, NL being always equal to FM or CK, L is always in a circle described on the centre N, LM a tangent to that circle, and ZM a perpendicular to that tangent drawn from the point Z.

Corollary 2. The unicuspidate epicycloid admits of a peculiar central equation, with respect to the point S. Call SM, s, and let ST = u be perpendicular to the tangent MT, then $u=\sqrt{\frac{s^5}{2a}}$. For the triangles SIP and MTS being similar, and IP being half of SM,



or s, $SP=\sqrt{\frac{as}{2}}$, SPq : SMq :: IPq : STq, or $\frac{as}{2} : s^2 :: \frac{ss}{4} : u^2$, and $2au^2=s^3$.

Corollary 3. The unicuspidate epicycloid is one of the caustics of a circle. For making the angle CRY = MRC = ½SCP, the triangle CRY is isosceles, and CY is constant; so that all rays in the direction of the tangent MR will be reflected by the circle QR towards Y, and consequently SM will be the caustic of a radiant point at Y.

PROP. IX. *Problem.—To find a geometrical equation for the tricuspidate hypocycloid.*—Let PA and MF be perpendicular to CS. Join PMB, KM, RMG, and PD. Then the angle APB is equal to the difference of APC and MPR, or to that of their complements PRM, PCA; but PRM = ½PKM = ½PCA, therefore APB = ½PCA = ADP = APS, and the triangles APS and APB are similar and equal. Let SC = a, SF = x, FM = y, and SB = r. Then

SA : SP :: SP : SD, and $SP=\sqrt{ar}$. Draw PE perpendicular to BP; then BE = SD = 2a, BC = $a-r$, EC = $3a-r$, and by similar triangles, CP : CR :: EC : CG = ½EC = $a-\frac{1}{3}r$; therefore GB = $\frac{2}{3}r$; but BE : BG :: BP : BM, or $2a : \frac{2}{3}r :: \sqrt{ar} : \frac{r}{3a}\sqrt{ar}=BM$; again,

BP : BM :: BA : BF, or $\sqrt{ar} : \frac{r}{3a}\sqrt{ar} :: \frac{r}{2} : \frac{rr}{6a}$, and

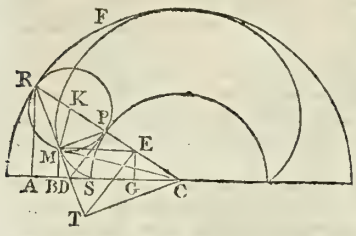
$SF=x$, $=r-\frac{rr}{6a}$, $6ax=6ar-rr$, and $r=3a\pm\sqrt{9aa-6ax}$.

But MFq = BMq − BFq, or $y^2=\frac{r^3}{9a}-\frac{r^4}{36aa}$, and $36a^2y^2=4ar^3-r^4$. By adding to this the square of the former equation, and proceeding in the same manner to exterminate r, we obtain an equation of the value of x and y, which, when the surds are brought to the same side, and the square of the whole is taken, is at last reduced to $x^4-\frac{4}{3}ax^3+2x^2y^2-12axy^2+y^4+12a^2y^2=0$, a regular equation of the fourth order.

Scholium. The equation of the corresponding hypotrochoids may be investigated nearly in the same manner, by dividing PR and PM in a given ratio, but the process will be somewhat more tedious.

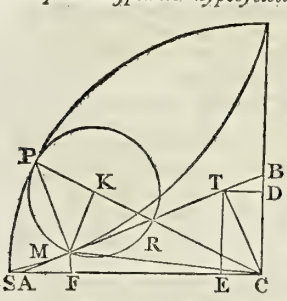
PROP.

PROP. X. *Problem.—To find a geometrical equation for the bicuſpidate epicycloid.*—Let CP=PR. Join RMS, PM, PD; draw CT perpendicular to RT, TE to CR, and EG, MB, RA, to SC. Then the angle DRP $=\frac{1}{2}$MKP=SCP, and by equal triangles, RA=CT, and RD=CD, and by ſimilar triangles RM : RP :: RE : RT, and RP : RD :: RT : RC; therefore RM : RD :: RE : RC, and ME is parallel to SC, and EG=BM. Put CP=a, BC=x, BM=y, CM=s, CT=u; then by Prop. 7, $u^2=\frac{4}{3}s^2-a^2$; or $\frac{3}{4}u^2=s^2-a^2$; but RC : CT :: CT : CE :: CE : EG, or y; hence $y=\frac{u^3}{4aa}$ $u^6=16a^4y^2$, $\frac{27}{64}u^6=\frac{27}{4}a^4y^2=\overline{ss-aa^3}=\overline{xx+yy-aa^3}$; whence by involution the equation of the ſixth order may be had at length.



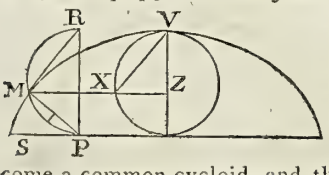
Corollary. Since CRM=SCR, a ray in the direction of the tangent MR will be reflected by a circle FR always parallel to SC: therefore SM is the cauſtic of the circle FR when the incident rays are parallel to CS.

PROP. XI. *Problem.—To find a geometrical equation for the quadricuſpidate hypocycloid.*—Let CR=PR, then the angle PRM $=\frac{1}{2}$PKM=2PCS, RAC=ACR, RA=RC=RB=RP, AB=SC, and drawing the perpendiculars CT, TD, TE, and MF, RM=RT, AM=BT, AF=EC, FC=AE, and FM=BD. Let SC=a, FC=x, FM=y, CM=s, CT=u; then AB : AC :: AC : AT :: AT : AE, whence AT=$\overline{axx}^{\frac{1}{3}}$, and in the ſame manner BT=$\overline{ayy}^{\frac{1}{3}}$; and CT being a mean proportional between AT and TB, $u^2=\overline{a^2x^2y^2}^{\frac{1}{3}}$, and $u^6=a^2x^2y^2$. But by Prop. 7, $3u^2=a^2-s^2$, therefore $27a^2x^2y^2=\overline{a^2-s^2}^3=\overline{a^2-x^2-y^2}^3$; whence the equation may be had at length by involution. The ſame reſult may be obtained by Dr. Waring's method of reduction, from $\overline{axx}^{\frac{1}{3}}+\overline{ayy}^{\frac{1}{3}}=a$.

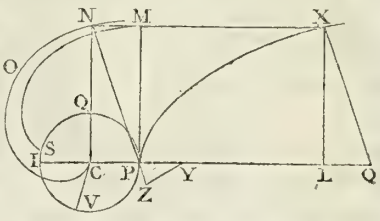


Corollary. Since the portion of the tangent AB intercepted between the perpendiculars AC, BC, is a conſtant quantity, this hypocycloid may in that ſenſe be called an equitangential curve; and the rectangular corner of a paſſage muſt be rounded off into the form of this curve in order to admit a beam of a given length to be carried round it.

PROP. XII. *Problem.—To inveſtigate thoſe caſes in which the general propoſitions either fail or require peculiar modifications.*—Caſe 1. If the generating circle be conſidered as infinitely ſmall, or the baſis as infinitely large, ſo as to become a ſtraight line, the epicycloid will become a common cycloid, and the ratio of CP to CK in Prop. 3, cor. 2, becoming that of equality, the length of the arc SM will be four times the verſed ſine of half PM, and VM twice the chord RM or VX, therefore the ſquare of the arc VM is always as the abſciſs VZ. The evolute is an equal cycloid, and the circles in Prop. 6, being as 1 to 4, the area of the cycloid is to that of its generating circle as 3 to 1. The properties of the cycloid as an iſochronous, and as a brachiſtochronous, curve, belong to mechanics; and it is demonſtrated by writers on optics that its cauſtic is compoſed of two cycloids.



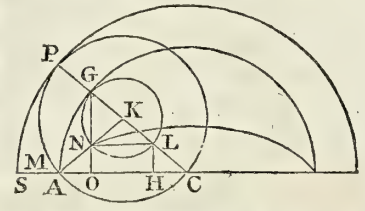
Caſe 2. If the generating circle be ſuppoſed to become infinite while the baſe remains finite, the epicycloid will become the involute of a circle; and the fluxion of the curve being always, by Prop. 3, cor. 1, to that of PM as PM to CP, its length SM will be a third proportional to IP and PM. Call CP, a, and PM, x, then the fluxion of SM is $\frac{xx}{a}$; but the rectangle contained by half PM and the fluxion of SM is the fluxion of the area PSM, or PSM=$\int\frac{xx\dot{x}}{2a}=\frac{x^3}{6a}$. The epitrochoid deſcribed by the point C of the generating plane will be the ſpiral of Archimedes, ſince CN is always equal to PM=PS=QV; and ſince the angular motion of CN and PM are alſo equal, the area CON=PSM=$\frac{x^3}{6a}$. Inſtead of the ellipſis of Prop. 3, let PX be a parabola of which IP is the parameter, and continuing NM to X, the arc PX will be equal to CON. For making LQ=CP, it is well known that the fluxion of PX varies as XQ, or as PN, which repreſents the fluxion of CON. For the curvature, PY in Prop. 4, becomes =CP, and the radius is a third proportional to NZ and NP.



Caſe 3. Suppoſing now the generating circle to become again finite, but to have its concavity turned towards the baſis, the ſame curve will be deſcribed as would be deſcribed by the rotation of a third circle on the ſame baſis in a contrary direction, equal in diameter to the difference of thoſe of the two firſt circles.

Caſe 4. If the circles be of the ſame ſize, with their concavities turned the ſame way, no curve can be deſcribed; but if the generating circle be ſtill further leſſened, a hypocycloid will be produced, if the ſame figure as that which would be deſcribed by a third circle equal in diameter to the difference of the two firſt. All the general propoſitions are equally applicable to hypocycloids with other epicycloids, as might eaſily have been underſtood from an inſpection of the figures, if there had been room for a double ſeries.

Caſe 5. If the diameter of the generating circle be half that of the baſis, the hypocycloid will become a right line, and the hypotrochoid an ellipſis. For ſince the angle PKM=2PCS, PCM, being half PKM, coincides with PCS, and M is always in CS. Let GNL be the deſcribing circle of the hypotrochoid, and join GNO, then NL is parallel, and ON perpendicular to SC, and ON=HL, which is always to GO as CL to CG; therefore AN is an ellipſis: and the centre C will evidently deſcribe a circle.



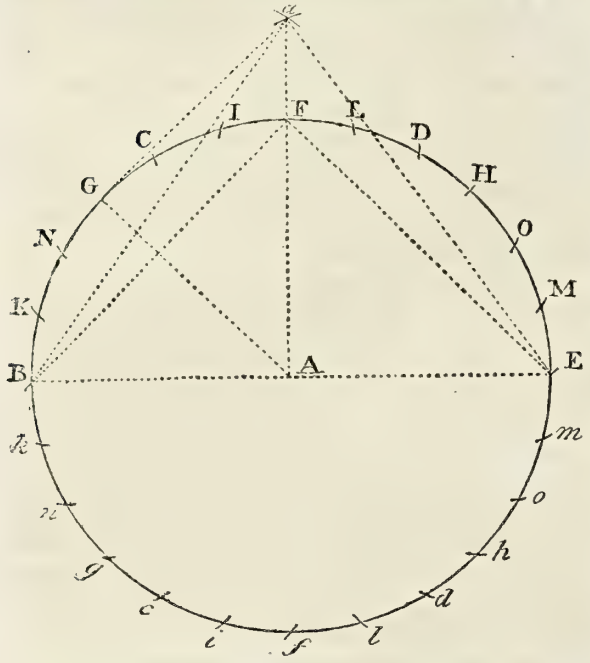
GEOMETRY OF THE COMPASS.

This ingenious department of geometry, for which we are indebted to ſignor L. Maſcheroni, ſeems not only well calculated to exerciſe the powers of invention in young

young mathematicians, but promiſes to afford very conſiderable aſſiſtance to architects and military engineers, by facilitating the method of drawing plans and elevations, in ſtriking lines of circumvallation, projecting the form of outworks, and conſtructing the angles and breaſtworks in regular fortifications. But the principal utility of this ſpecies of geometry is in its application to the diviſion of aſtronomical inſtruments.

The method here laid down, is defined by the inventor, to be that by which, with the *compaſs* only, without the uſe of the *rule*, we can more correctly determine the poſition of points. And it is recommended to the artiſt, or mathematician, in order to inſure preciſion, to have as many pair of good compaſſes as there are diſtances to be taken in the ſolution of the problem; becauſe he will often have occaſion to uſe the ſame opening, or diſtance, ſeveral times after having intermediately uſed other diſtances. In ſuch caſe, without ſhutting or opening his compaſſes, he may recur to the diſtance he wants. In ſolving a few problems, we ſhall ſuppoſe this method to be purſued, and ſhall accordingly denominate theſe inſtruments, the firſt, ſecond, or third, pair of compaſſes.

1. *To divide the circumference of the circle* B D *d, into four equal parts.*—Let A be the centre, and equal to A B, as



chords, ſet off upon the circumference, A B = B *c* = B C = C D = D E = E *d*, with the firſt pair of compaſſes; and you will have *d c* = *c* B = B A (Euclid, Prop. 15. b. 4.) Then ſet off B D = B *a* = E *a* with the ſecond pair of compaſſes, and A *a* = B F = B *f* with the third pair; and the circumference will then be divided into four equal parts, B F, F E, E *f*, *f* B.

Demonſtration. B A E being a diameter, and the triangles *a* A B, *a* A E, having all their ſides equal, and conſequently the angles *a* A B, *a* A E, alſo equal (Euclid 8. b. 1.), theſe two angles will be right ones (Euclid 13. b. 1.); therefore $(a\,B)^2 = (A\,B)^2 + (a\,A)^2$ (Euclid 47. b. 1.), and, ſubtracting from each ſide $(A\,B)^2$, we have $(a\,B)^2 - (A\,B)^2 = (a\,A)^2$. In order to ſhorten the work, let A B = 1; and we ſhall have $(a\,B)^2 = (B\,D)^2 = 3$; hence, $(a\,A)^2 = 3 - 1 = 2$; and $(B\,F)^2 = (a\,A)^2 = 2 = 1 + 1 = (A\,B)^2 + (A\,F)^2$. Therefore, in the triangle F A B, the angle F A B will be a right one (Euclid 48. b. 1), and conſequently F A E alſo (Euclid 13. b. 1); therefore the arcs B F, F E, will be equal to each other, and fourth parts of the circle; as alſo the arcs B *f*, *f* E.

2. *Corollary.* The angles B A *a*, B A F, being right angles, the three points, A, F, *a*, will be in the ſame right line.

3. Thus we have the circumference already divided, in two equal parts at the points B and E; in three parts, at the points B, D, *d*, (E. 15. b. 4.) in four parts, at the points B, F, E, *f*; and in ſix parts, at the points B, C, D, E, *d*, *c*.

4. *To divide a circumference into eight equal parts.*—In the ſame figure, let A B = *a* G = *a* H with the firſt pair of compaſſes; and A *a* = G *g* = H *h* with the third pair; then we ſhall have *g h* = A *a*, and the circumference will be divided into eight equal parts at the points B, G, F, H, E, *h*, *f*, *g*.

Demonſtration. As $(A\,a)^2 = 2$, we have $(A\,a)^2 = (AG)^2 + (a\,G)^2$, therefore the angle *a* G A is a right angle (E. 48. b. 1.); and as *a* G A is an iſoceles triangle, the angle G A *a* = G *a* A, and each equal to half a right angle; hence, G A F (= E A *a*) = half a right angle = half B A F; and G F = B *g*. But by conſtr. G *g* = B F; hence, taking B G from each, we have G F = B *g*. Thus we prove it for the other arc, and the circumference is divided into eight equal parts.

5. *To divide the circumference into* 12 *equal parts.*—Things being as at No. 1. draw (ſame figure) A B = F N = N *n* = F O = O *o*; and the circumference will be divided into 12 equal parts at the points B, N, C, F, D, O, E, *o*, *d*, *f*, *c*, *n*.

Demonſtration. As B F = F E, ſubtract from them B C = D E, and we have C F = F D; but C D is the ſixth part of the circumference; therefore C F is the twelfth part. Thus we go on to prove the other parts.

6. *To divide the ſame circumference into* 24 *equal parts.*—Things being as at No. 4 and 5. draw (ſame figure) A B = G L = L M = G *k* = *ki* = H I = I K = H *m* = *ml*, with the firſt pair of compaſſes, and the problem is ſolved.

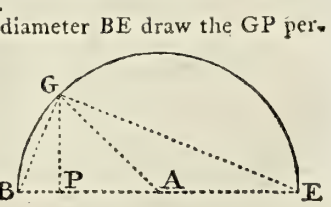
Demonſtration. From G F = G B ſubtract C F = N B, and we get G C = G N. But C N is the twelfth part; therefore G C, G N, are the twenty-fourth parts of the circumference.

7. The ancients, by means of the centre A and the radius A B, divided, by the compaſs only, the circumference into ſix equal parts. Other diviſions they effected with the rule and compaſs, by taking ſeveral points out of the circumference. We have been able to determine one ſingle point *a*, with which alone we can divide it into 24 parts with the compaſs alone; which is more expeditious, more convenient, and at the ſame time much more exact, than the method uſed by the ancients.

8. Let us alſo notice the elegant law which guides the three openings of compaſſes neceſſary for this diviſion: The opening of the firſt pair = $\sqrt{1}$, of the third = $\sqrt{2}$, and of the ſecond = $\sqrt{3}$.

9. *Lemma.* If in the circle BGE, there be a radius A B = 1, while the arc BG is the eighth part of the circumference, we ſhall have the ſquare of its chord BG, that is $(BG)^2 = 2 - \sqrt{2}$.

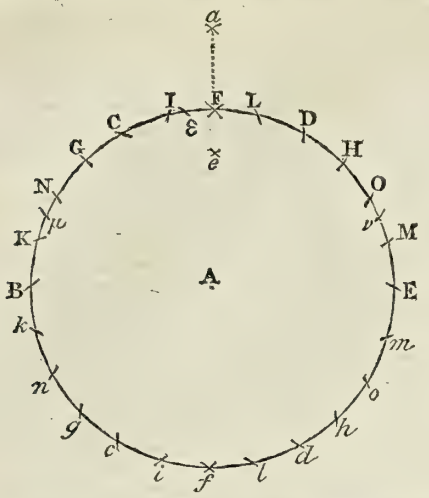
Demonſtration. On the diameter BE draw the GP perpendicular to EB, G being found as before. Then as the angle G A B = 45°, A G P = 45°, and A P = P G; hence, $(AG)^2 = (PG)^2 + (AP)^2 = 2(AP)^2$, or $2(AG)^2 = 4(AP)^2$, or $2 = (2AP)^2$,



and $\sqrt{2} = 2AP$; hence, AP = $\frac{1}{2}\sqrt{2}$, and BP = AB − AP = $1 - \frac{1}{2}\sqrt{2}$. But BP : BG :: BG : BE; hence, $BG^2 = BP \times BE = 2BP$, and $BG = 2 - \sqrt{2}$.

In like manner GE = $2 + \sqrt{2}$.

10. *The circumference being divided into* 24 *equal parts,* (No. 6.) *to ſubdivide it into* 48.—Draw $aN = Be = Ee$,



with a fourth pair of compaſſes, and $AB = e\mu = e\nu$ with the firſt pair. The arcs $K\mu$, μN, $M\nu$, νO, will be the forty-eighth parts of the circumference.

The demonſtration eaſily follows from the foregoing.

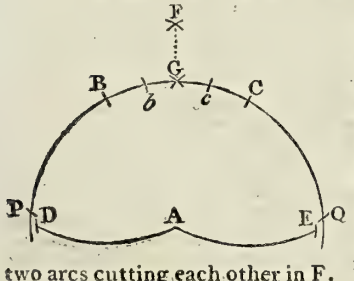
It is to be obſerved, that, in order to keep the diagram or figures clear, the lines mentioned are not drawn upon them, nor even dotted; but the points being marked on the circle, no miſtake can take place.

A circumference, then, by means of four pair of compaſſes, or four openings of the compaſſes, may be divided into 48 equal parts. With the firſt pair, with an aperture $= AB$, divide the circumference into 6 parts, beginning at the point μ; and the arcs IF, HO, mo, fl, ng, will be divided in two equal parts; then, by dividing the circumference into ſix parts beginning at the point ν, the arcs oh, fi, nk, NG, FL, will be divided into two equal parts. Then, dividing the circumference into four parts with the third pair of compaſſes opening $= Aa$, and ſetting out from the point μ, the remaining arcs, LD, ic, will be divided in two equal parts; and, by ſtarting from the point ν, the arcs IC, ld, will be divided in like manner. Laſtly, dividing the circumference again into ſix equal parts with the firſt pair of compaſſes, but beginning from the laſt points found by the third pair, all the reſt of the arcs will be divided into two equal parts.

The demonſtration is the ſame as in No. 6.

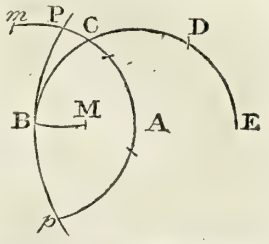
Beſides the propoſitions and demonſtrations here given, it may not be amiſs to add ſome other problems with their ſolutions, omitting their demonſtrations, as they depend upon ſuch problems as have not been introduced, and therefore could not be here given; ſince they will ſhew to what extent this uſeful ſpecies of geometry may be carried.

11. *To divide an arc,* as BC, *into two equal parts at* G.—

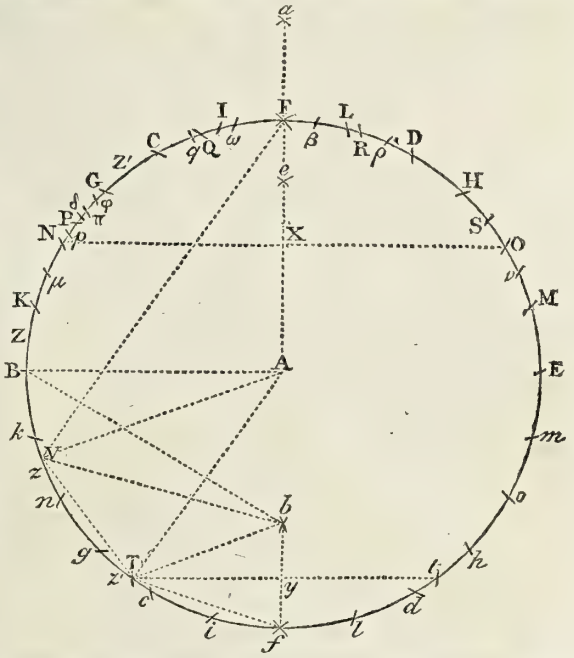


With the radius AB, (by which the arc BC to be divided was drawn,) and from the centres B and C, which are the two extremities of the arc, deſcribe the arcs AD and AE; ſet off $BC = AD = AE$; then, from the centres D and E, with a radius $DC = BE$, deſcribe two arcs cutting each other in F. Then, with the radius AF and the ſame centres D and E, draw two other arcs interſecting in G; the point G will be on the circumference, and the arc BG will be equal to the arc GC; conſequently BC is equally divided.

12. *To divide the diſtance* AB *in two equal parts*; i.e. *to find the point* M *which ſhall be in the middle of the right line* AB.—Deſcribe the ſemicircle BCDE; from the centre E, with a radius EB, draw an indefinite arc PBp; from the centre B, with a radius BA, draw another ſemicircle $pAPm$; then, from the centre P with the radius PB, deſcribe the arc BM; and from P ſet off $Pm = BM$: M will be the point ſought, midway between A and B.

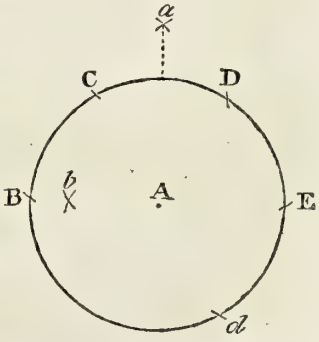


13. *To divide the circumference* B D *d into five equal parts.*—Things being as in Art. 5. from A as a centre ſet off



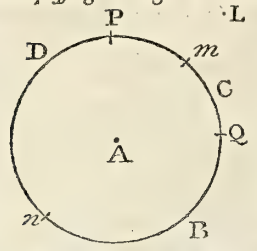
$Aa = Nb = Ob$, with the third pair of compaſſes; from B ſet off $Bb = BQ$; and the arc BQ will be the fifth part of the circumference.—The other letters placed round this diagram ſhew the diviſions or interſections of the circumference, as demonſtrated in the preceding articles.

14. *To find a mean and extreme proportional on the line* AB.—From the centre A, with the radius AB, deſcribe the circle BDd; and in its circumference ſet off $AB = BC = CD = DE = Ed$. From B as a centre, make $BD = Ba = Ea$; and from A make $Aa = Eb = db$. The right line AB will be divided in mean and extreme proportion at the point b; and we have $BA : Ab :: Ab : bB$.



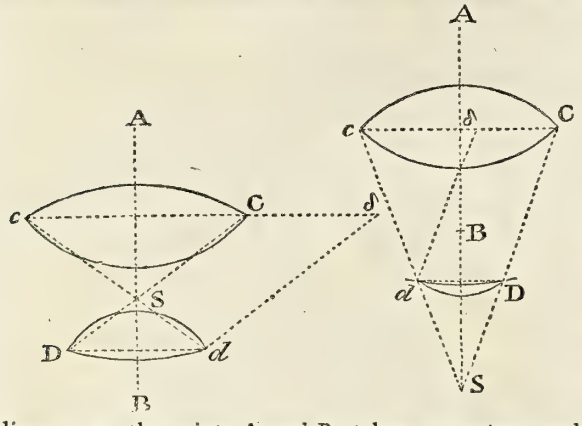
15. *The arc* BCD, *deſcribed from the centre* A, *being given, to find the two points where the circumference is cut by the right*

line passing through A *and through another given point* L.—



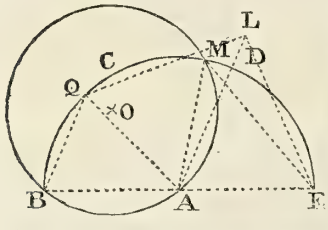
From L as a centre, with an arbitrary radius, as LP, describe an arc which shall intersect the arc BCD in P and in Q. Divide the arc PQ in two equal parts, at the point *m* (Art. 12); find the semi-circumference in D*n*; and the points *m* and *n* are the two points sought.

16. *Two points*, A, B, *on a right line, and two points* C, D, *on another right line, being given, to find the point* S *where they will cut each other.*—From two points on one of the right

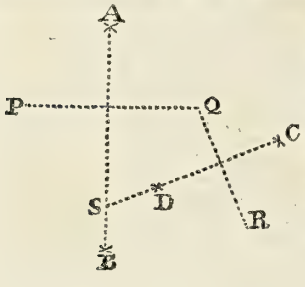


lines, e. g. the points A and B, taken as centres, and with the respective distances, AC, AD, from those points; and BC, BD, of the two points C and D on the other right line, taken as radii, describe four arcs, two of which shall intersect at the points C and *c*, and the other two at the points D and *d*. Find the fourth point δ of the parallelogram C D *d* δ, by making D*d* = C δ, and DC = *d* δ. Find the fourth proportional to the three lines *c* δ, CD, C*c*. With this distance taken for a radius, and from the centres C and *c*, describe two arcs cutting one another in S; and S will be the point of intersection of the two right lines AB, CD.

17. *To find the centre of a given circle* MAB.—Take for a centre any point on the circumference, as A, and with a radius at pleasure, AB, but less than the diameter of the given circle, and greater than the fourth part of that diameter, describe the semicircle BCDE, and make AB = BC = CD = DE; let M be the point where it cuts the given circle. From the centres E and A, with the radius EM, describe two arcs intersecting in L; from the centre L, with same radius LA, cut the semicircle BMC in Q. From B and A as centres, with a radius BQ, describe two arcs, which shall cut each other at O; the point O will be the point sought.



18. *To find the centre* S, *of a circle which goes through three given points*, P, Q, R. From the points P and Q as centres, with a radius at pleasure, describe two arcs intersecting in C and D. The point S, where the lines AB, CD, cross each other, (Art. 16.) will be the centre required.



GE'ON, the name of a place celebrated on account of its excellent vintage. *Ecclus*, xxiv. 27.

GEOPON'ICAL, *adj.* [*geoponique*, Fr. γεωπονικὸς, of γῆ, the earth, and πονος, Gr. labour.] Relating to agriculture; relating to the cultivation of the ground.—Such expressions are frequent in authors *geoponical*, or such as have treated *de re rustica*. *Brown*.

GEOPON'ICS, *f.* [γῆ and πονος, Gr.] The science of cultivating the ground; the doctrine of agriculture.

GEORGE, a proper name of men.

GEORGE, surnamed *the Cappadocian*, a famous bishop of Alexandria. He was born at Epiphania in Cilicia, where his father pursued the employment of a fuller. From this obscure and servile situation, George withdrew to Alexandria, where he professed great zeal for the principles of Arius, and acquired considerable influence with his disciples in that city. He likewise, either from the love or ostentation of learning, collected a large and valuable library of history, rhetoric, philosophy, and theology, which the emperor Julian afterwards made the foundation of the noble library established by him in the temple erected in honour of the emperor Trajan at Antioch, but which, to the great loss of the republic of letters, was malignantly permitted to be burnt by the emperor Jovian. When about the year 356 Athanasius was obliged to abscond from the fury of the savage military, who had received directions from the emperor Constantius to expel him from his see, George was elected bishop by the prevailing party. His conduct in this station was in the highest degree oppressive and cruel. The catholics he persecuted with unrelenting rage; the merchants of Alexandria were impoverished by an unjust, and almost universal, monopoly; and he incensed the inhabitants in general, by suggesting an invidious tax upon all the houses of that city. The resentment of the people at length rose to fury, and he was for a time expelled from the city; nor was it without a violent struggle that the civil and military powers were able to restore his authority. When, however, in 362, information arrived at Alexandria of the accession of Julian to the empire, the public rage against the bishop again broke forth, and after he had been seized, together with two of the ministers of his atrocities, they were ignominiously dragged in chains to the public prison. When they had been confined for some days, the pagan populace, fearful lest they should escape their vengeance, forced open the prison doors, and with cruel insults massacred them. After their lifeless bodies had been carried in triumph through the streets, according to some accounts they were burnt, but according to others, thrown into the sea; "and the popular leaders of the tumult (says Gibbon) declared their resolution to disappoint the devotion of the Christians, and to intercept the future honours of these martyrs, who had been punished, like their predecessors, by the enemies of their religion. The fears of the pagans were just, and their precautions ineffectual. The cruel death of the archbishop obliterated the memory of his life. The memory of the rival of Athanasius became sacred to the Arians, and the seeming conversion of those sectaries introduced his worship into the bosom of the catholic church. The odious stranger, disguising every circumstance of time and place, assumed the mask of a martyr, a saint, a Christian hero; and hence the famous George of Cappadocia has been transformed into the renowned St. George of England, the patron of arms, of chivalry, and of the Garter."

GEORGE, called also *Amira*, a learned Maronite, who flourished towards the latter end of the sixteenth and the beginning of the seventeenth century, came to Rome under the pontificate of Clement VIII. He there published A Syriac and Chaldee Grammar, 1596, 4to. which is much esteemed in the learned world. On his return to his native country, he was elected patri-

arch

arch of the Maronites, among whom he introduced the uſe of the Gregorian calendar, and died about the year 1641.

GEORGE OF TREBISOND (in Latin *Trapezuntius*), a learned Greek, born in 1395 in the iſle of Crete, of a family originally from Trebiſond, whence he choſe to take his deſignation. He came to Italy about the year 1420, and learned the Latin language under Vittorino da Feltre. His patron was Francis Barbaro, a noble of Venice, and a great promoter of letters, through whoſe means he was invited to a profeſſorſhip of Greek at Vicenza. Thence he removed to Venice, where he acquired great reputation as a grammarian and inſtructor in Grecian eloquence. In 1437, he obtained an invitation from pope Eugenius IV. to ſettle at Rome. During the time of that pontiff he was occupied in teaching rhetoric and philoſophy, and alſo in tranſlating ſeveral ancient Greek authors into Latin. Pope Nicholas V. continued to employ him for ſome time; but falling under the diſpleaſure of the pope, he was obliged to depart from Rome. He took refuge in 1452 at Naples, where he was graciouſly received by king Alphonſo. In 1459 he was at Venice, where he preſented to the doge his verſion of Plato's book on Laws, and was engaged as a profeſſor of belles-lettres. From that city he ſailed, in 1464, to his native iſland of Crete, and thence paſſed to Conſtantinople. Upon his return to Italy, he found his ſcholar Paul II. in the pontifical chair, which induced him again to viſit Rome. From ſome unknown cauſe, however, he incurred the diſpleaſure of the pope, who impriſoned him for four months in the caſtle of St. Angelo. He was at that time much debilitated by age, yet he lived many years longer, and ſurvived his faculties. The year of his deceaſe was probably about 1480. He was a very voluminous writer, and contributed largely towards the introduction of Greek literature in the weſt. He tranſlated into Latin, Euſebius's Evangelic Preparation; ſeveral works of Cyril of Alexandria, of Gregory Nyſſen, of Nazianzen, and of John Chryſoſtom; many pieces of Ariſtotle, Plato on Laws, Ptolemy's Almageſt and Centiloquium, and an Oration of Demoſthenes. His tranſlations were at firſt in great eſteem; but ſince a more accurate knowledge of the Greek has obtained, they have been found very deficient in exactneſs and fidelity. He alſo compoſed many works; of which are, *De Arte Rhetorica, Lib.* V. firſt printed at Venice in 1470; Reflections and Commentaries on ſome Orations of Cicero; Letters; Orations; and, many pieces in controverſy. Many of his writings ſtill remain in manuſcript.

GEORGE, I. II. and III. illuſtrious kings of England. See the article ENGLAND, vol. vi. p. 713, 726, 727, &c.

GEORGE LAKE, or LAKE GEORGE, in Eaſt Florida, is a dilation of the river St. Juan, or St. John, and called alſo Great Lake. It is about fifteen miles wide, and generally about fifteen or twenty feet deep, excepting at the entrance of the river, where lies a bar, which carries eight or nine feet water. The lake is beautified with two or three fertile iſlands. The largeſt is about two miles broad, and commands a moſt delightful and extenſive proſpect of the waters, iſlands, eaſt and weſt ſhores of the lake, the capes, the bay and Mount Royal; and to the ſouth the view is very extenſive. Here are evident marks of a large town of the aborigines, and the iſland appears to have been once the choſen reſidence of an Indian prince. On the ſcite of this ancient town ſtands a very pompous Indian mount, or conical pyramid of earth, from which runs in a ſtraight line a grand avenue or Indian highway, through a magnificent grove of magnolias, live oaks, palms, and orange trees, terminating at the verge of a large, green, level, ſavanna. From fragments dug up, it appears to have been a thickly-inhabited town.

GEORGE LAKE, or LAKE GEORGE, ſituated in to the ſouthward of Lake Champlain, and its waters lie about one hundred feet higher. The portage between the two lakes is a mile and a half; but with a ſmall expence might be reduced to ſixty yards; and with one or two locks might be made navigable through for batteux. It is a moſt beautiful collection of water; thirty-ſix miles long, and from one to ſeven wide. It emboſoms more than 200 iſlands, ſome ſay 365; very few of which are any thing more than barren rocks, covered with heath, and a few cedar, ſpruce, and hemlock, trees, and ſhrubs, and abundance of rattle-ſnakes. On each ſide it is ſkirted by prodigious mountains; from which large quantities of red cedar are annually carried to New York for ſhip-timber. The lake is full of fiſhes, and ſome of the beſt kind, as the black or Oſwego baſs, alſo large ſpeckled trouts. It was called Lake Sacrament by the French, who, in former times, were at the pains to procure this water for ſacramental uſes in all their churches in Canada: hence probably it derived its name. The remains of Fort George ſtand at the ſouth end of the lake, about fourteen miles north by weſt of Fort Edward, on Hudſon river. The famous fort of Ticonderoga, which ſtood at the north ſide of the outlet of the lake, where it diſcharged its waters into lake Champlain, is now in ruins. See TICONDEROGA.

GEORGE-NO'BLE, *ſ.* A gold coin of Hen. VIII. —*George-nobles* at ſix ſhillings and eight-pence. *Leake.*— The gold coins of Henry the Eighth were ſovereigns, half-ſovereigns, rials, half and quarter rials, angels, angelets, and quarter-angels, *George-nobles*, forty-penny pieces, crowns of the double roſe, and half-crowns. *Leake.*

GEORGE's (ST.), and other places thus named, ſee SAINT GEORGE.

GEORGE's TOWN, a town of Scotland, in the county of Inverneſs: thirty-ſix miles north-north-eaſt of Inverary, and thirty-ſeven north-weſt of Stirling.

GEOR'GENBERG, a town of Sileſia, in the principality of Oppeln: nine miles north of Beuthen.

GEOR'GENBURG, a town of Pruſſian Lithuania: two miles ſouth of Inſterburg.

GEOR'GENTHAL, a town of Germany, in the circle of Upper Saxony, and principality of Gotha: ſix miles ſouth of Gotha.

GEOR'GETOWN, a town of the American States, in Suſſex county, Delaware, ſituated ſixteen miles weſt-ſouth-weſt of Lewiſtown, and one hundred and three ſouth of Philadelphia. It has lately been made the ſeat of the county courts.

GEOR'GETOWN, a poſt-town of the American States, in Maryland, ſituated in Kent county, on the eaſt ſide of Cheſapeak bay. It is nine miles from the mouth of the river Saſſafras, being ſeated on the ſouth ſide oppoſite to Frederic: ſixty miles north-eaſt of Cheſter, and ſixty-five ſouth-weſt of Philadelphia.

GEOR'GETOWN, a town of the American States, in Fayette county, Pennſylvania, ſituated on the ſouth-eaſt ſide of Monongahela river, at the mouth of George's creek. Here a number of veſſels are annually built for the trade to the weſtern country. It lies ſixteen miles ſouth-weſt of Union.

GEOR'GETOWN, a poſt-town and port of entry of the American States, in Montgomery county, Maryland, in the territory of Columbia. It is pleaſantly ſituated on a number of ſmall hills, upon the northern bank of Potowmack river; bounded eaſtward by Rock creek, which ſeparates it from Waſhington city, and lies four miles from the capitol, and eight north of Alexandria. The Roman catholics have eſtabliſhed a college here for the promotion of general literature, which is at preſent in a very flouriſhing ſtate. The building being found inadequate to contain the number of ſtudents that applied, a large addition has been made to it. Georgetown carries on a conſiderable trade with Europe and the Weſt Indies. It is forty-ſix miles ſouth-weſt by

by weſt of Baltimore, and one hundred and forty-eight ſouth-weſt of Philadelphia.

GEOR'GETOWN, a town of the American States, in Lincoln county, diſtrict of Maine, ſituated on both ſides of Kennebeck river. It was incorporated in 1716, is the oldeſt town in the county, and contains 1333 inhabitants. It is bounded ſoutherly by the ocean, weſterly by the towns of Harpſwell and Brunſwick, north-weſterly by Bath, and eaſterly by Woolwich; being entirely ſurrounded by navigable waters, excepting about two miles of land, which divides the waters of Winnagance creek, a part of the Kennebeck, from an arm or influx of Caſco bay, called Stephen's river.

The entrance at the mouth of Kennebeck river, is guided on the eaſt by Parker's iſland, belonging to this townſhip. It contains about twenty-eight thouſand acres of arable land and ſalt marſh, and is inhabited by more than one third part of the people of the townſhip. This was the ſpot on which the Europeans firſt attempted to colonize New England, in the year 1607. It is a part of what was called Sagadahock; and the patentees of the Plymouth company began here to lay the foundation of a great ſtate. They ſent over a number of civil and military officers, and about one hundred people. By various misfortunes they were forced to give up the ſettlement, and in 1608, the whole number who ſurvived the winter returned to England. There was a tradition among the Norridge-walk Indians, that theſe planters invited a number of the natives, who had come to trade with them, to draw a ſmall cannon by a rope, and that when they were ranged in a line, the white people diſcharged the piece, and thereby killed and wounded ſeveral of them. The reſentment of the natives at this treacherous murder, obliged the Europeans to reimbark the next ſummer. Georgetown is fifteen miles ſouth of Pownalborough, and one hundred and ſeventy north by eaſt of Boſton.

GEOR'GETOWN, a poſt-town of the American States, in Georgia, in the county of Oglethorpe, fifty miles ſouth-weſt of Auguſta, ſurrounded by a poor country: but nevertheleſs exhibits marks of growing proſperity.

GEOR'GETOWN, a large maritime diſtrict of the American States, in the lower country of South Carolina, ſituated in the ſouth-eaſt corner of the ſtate; bounded north-eaſt by the ſtate of North Carolina; ſouth-eaſt by the ocean; ſouth-weſt by Santee river, which divides it from Charleſtown diſtrict; and north-weſt by Camden and Cheraw diſtricts. It is about one hundred and twelve miles from north to ſouth, and ſixty-three from eaſt to weſt, and is divided into the pariſhes of All Saints, Prince George, and Prince Frederic. It contains, according to the cenſus of 1790, twenty-two thouſand one hundred and twenty-two inhabitants. It ſends to the ſtate legiſlature ten repreſentatives and three ſenators.

GEOR'GETOWN, a poſt-town of the American States, and capital of the above diſtrict, ſituated on a ſpot near which ſeveral ſtreams unite their waters, and form a broad ſtream called Winyaw bay, twelve miles from the ſea. Its ſituation connects it with an extenſive back country of both the Carolinas, and would be a place of vaſt importance, were it not for a bar at the entrance of Winyaw bay, which interrupts the entrance of veſſels drawing above eleven feet water, and is in many reſpects a dangerous harbour. The public buildings are a court-houſe, gaol, and academy; three churches, of which the epiſcopalians, baptiſts, and methodiſts, have one each. It carries on a ſmall trade to the Weſt Indies: ſixty miles north-eaſt by north of Charleſton, one hundred and twenty-ſeven ſouth-weſt of Wilmington, North Carolina, and ſix hundred and eighty-one from Philadelphia. Lat. 33. 24. N. lon. 79. 35. W.

GEOR'GIA, a country of Aſia, called by ſome geographers *Gurgiſtan*, and by others *Kurgiſtan*, ſituated between the Caſpian and the Black Seas; but now particularly applied to a country between the Caſpian Sea and Mingrelia, anciently known by the name of IBERIA, which ſee. The air is dry, very warm in ſummer, and very cold in winter. Fine weather commences in the month of May, and continues till the end of November. The ſoil is exceedingly fertile, provided the ground be watered. The bread and fruits are excellent, and the paſtures maintain a great number of cattle. The game is in abundance, and of excellent flavour; and the wild hogs delicate. The inhabitants make wine, which they ſend into Armenia and Perſia, eſpecially to Iſpahan, for the king's table. Silk forms a conſiderable branch of trade to Erzerum; but the inhabitants are not acquainted with the beſt method of winding it. Georgia was formerly in one kingdom, of which the inhabitants were Chriſtians; but ſince the year 1639, they have become a mixture of Mahometans; and the king of Perſia having conquered the country, has divided it between two native princes, by themſelves called kings, but by the ſophi ſtyled only governors, or viceroys. See PERSIA. The moſt powerful of the two is that of Teflis, called, in the language of the country, the king of Cartela. Each of theſe princes has generally a guard of Mahometan horſe in pay. The king of Perſia obliges them to embrace the Mahometan religion, to preſerve the dignity in the family. The Chriſtians of the country in part follow the rites of the Armenians, and in part that of the Greek church, and are repreſented as the moſt tractable of all the Chriſtians of the eaſt. Their money bears the name of the kings of Perſia, but juſtice is adminiſtered by Chriſtian magiſtrates. The Georgians have wonderful ſkill in the uſe of the bow, and have the reputation of being the beſt ſoldiers of any in Aſia. The women have been always celebrated for their beauty. As the country produces ſtrong wine, the Georgians are great drunkards, and are particularly fond of brandy, the women as well as the men. The manners and cuſtoms of the Georgians are a mixture of thoſe nations which are ſituated about them. The men have no virtue, but courage; fathers ſell their children, and ſometimes their wives: the daughters ſupply the harems of the grand ſeignor and Turkiſh noblemen; and the ſons are bought by the beys of Egypt, to keep in full force their choſen cavalry of mamalukes. See the article EGYPT, vol. vi.

GEOR'GIA, one of the United States of North America, ſituated between 30. 37. and 35. 0. N. lat. and between 80. 8. and 91. 8. W. lon. being about ſix hundred miles in length, and, on an average, two hundred and fifty in breadth. It is bounded eaſt by the Atlantic ocean; on the ſouth by Eaſt and Weſt Florida; on the weſt by the river Miſſiſſippi; and, on the north-eaſt and north by South Carolina and the Tenneſſee ſtate. It was formerly divided into pariſhes, afterwards into three diſtricts, but lately into two diſtricts, viz. Upper and Lower, which are ſubdivided into twenty-four counties, as follow:—In the Lower diſtrict are, Camden, Glynn, Liberty, Chatham, Bryan, M'Intoſh, Effingham, Scriven, and Burke. The counties in the Upper diſtrict are, Montgomery, Waſhington, Hancock, Greene, Franklin, Oglethorpe, Elbert, Wilkes, Lincoln, Warren, Jefferſon, Jackſon, Bullock, Columbia, and Richmond. The principal towns are Auguſta, formerly the ſeat of government, Savannah, the former capital of the ſtate, Sunbury, Brunſwick, Frederica, Waſhington, and Louiſville, which is the metropolis of the ſtate; and here are depoſited the records of the ſtate.

The principal rivers that fertilize Georgia are, Savannah, which ſeparates it from South Carolina; Ogeechee river, which runs parallel with the former, and Alatamaha, which runs parallel with the others. Beſides theſe and their numerous branches, there is Turtle river, Little Sitilla, Great Sitilla, Crooked river, and St.

St. Mary's, which forms a part of the ſouthern boundary of the United States. The rivers in the middle and weſtern parts belong more properly to *Georgia Weſtern Territory*. All theſe are ſtored with a great variety of fiſh, as rock, mullet, whiting, ſhad, trout, drum, baſs, catfiſh, white, brim, and ſturgeon; and the bays and lagoons are ſupplied with oyſters, and other ſhell-fiſh, crabs, ſhrimps, &c. The clams, in particular, are large, their meat white, tender, and delicate. The ſhark and great black ſting-ray are inſatiable cannibals, and very troubleſome to the fiſhermen. The chief lake or marſh is Ekanſanoka, by ſome called Ouaquaphenogaw, which is three hundred miles in circumference.

The eaſtern part of the ſtate, between the mountains and the ocean, and the rivers Savannah and St. Mary's, a tract of country more than one hundred and twenty miles from north to ſouth, and from fifty to eighty eaſt and weſt, is level, without a hill or ſtone. At the diſtance of about forty or fifty miles from the ſea board, or ſalt marſh, the lands begin to be more or leſs uneven, until they gradually riſe to mountains. The vaſt chain of the Alleghany or Appalachian mountains, which commence with the Kaats Kill, near Hudſon river, in the ſtate of New York, terminate in Georgia, ſixty miles ſouth of its northern boundary. From the foot of this mountain ſpreads a wide extended plain, of the richeſt ſoil, and in a latitude and climate well adapted to the cultivation of moſt of the productions of the ſouth of Europe, and of the Eaſt Indies. In the low country, near the rice ſwamps, bilious complaints and fevers of various kinds prevail during the months of July, Auguſt, and September; but the fertility of the ſoil, and the eaſe with which it is improved, are a ſufficient inducement to ſettlers, and an unfailing ſource of wealth. Before the ſickly ſeaſon approaches, the rich planters, with their families, remove to the ſea iſlands, or ſome elevated ſituation, for the benefit of the freſh air. In the winter and ſpring, pleuriſies, peripneumonies, and other inflammatory diſorders, occaſioned by violent and ſudden colds, are very common, and frequently fatal. Conſumptions, epilepſies, cancers, palſies, and apoplexies, are not ſo common among the inhabitants of the ſouthern as northern climates. Yet the winters in Georgia are very mild and pleaſant. Snow is ſeldom ſeen; nor is vegetation often prevented by ſevere froſts. Cattle ſubſiſt well during the winter, feeding in the woods and ſavannas, and are fatter in that ſeaſon than in any other. In the hilly country, which begins about fifty, and in ſome places one hundred, miles, from the ſea, the air is pure and ſalubrious, and the water plentiful and good. From June to September, the mercury in Fahrenheit's thermometer commonly fluctuates from 76 to 90; in winter from 40 to 60. The moſt prevailing winds are ſouth-weſt and eaſt; in winter north-weſt. The eaſt wind is warmeſt in winter, and cooleſt in ſummer. The ſouth wind, in ſummer and fall particularly, is damp, ſultry, unelaſtic, and of courſe unhealthy. In the ſouth-eaſt parts of this ſtate, which lie within a few degrees of the torrid zone, the atmoſphere is kept in motion by impreſſions from the trade winds. This purifies the air; ſo that it is found to have ſalutary effects on conſumptive habits.

In the low lands are the rice fields. In the interior and hilly parts, wheat, Indian corn, and the other productions more common to the northern ſtates. Rice is at preſent the ſtaple commodity of the ſtate; tobacco, wheat, and indigo, are the other great articles of produce. Beſides theſe, the ſtate yields cotton, ſilk, corn, potatoes, oranges, figs, olives, pomegranates, &c. The foreſts conſiſt of oak, hickory, mulberry, pine, cedar, &c. The whole coaſt is bordered with iſlands; the principal of which are Skidaway, Waſſaw, Oſſabaw, St. Catharine's, Sapelo, Frederica, Jekyl, Cumberland, &c. Theſe iſlands are ſurrounded by navigable creeks, between which and the main land is a large extent of ſalt marſh, fronting the whole ſtate, not leſs, on an average, than four or five miles in breadth; interſected with creeks in various directions, admitting, through the whole, an inland navigation, between the iſlands and the main land, from the north-eaſt to the ſouth-eaſt corners of the ſtate. The eaſt ſides of theſe iſlands are, for the moſt part, clean ſandy beaches, expoſed to the waſh of the ocean. Between theſe iſlands are the entrances of the rivers from the interior country, winding through the low ſalt marſhes, and delivering their waters into the ſounds, which form capacious harbours of from three to eight miles over, and which communicate with each other by parallel creeks.

The ſoil and its fertility are various, according to ſituation and different improvement. The iſlands in their natural ſtate are covered with a plentiful growth of pine, oak, hickory, live oak, (an uncommonly hard and very valuable wood,) and ſome red cedar. The ſoil is a mixture of ſand and black mould, making what is commonly called a grey ſoil. A conſiderable part of it, particularly that whereon grow the oak, hickory, and live oak, is very rich, and yields on cultivation good crops of indigo, cotton, corn, and potatoes. The ſoil of the main land, adjoining the marſhes and creeks, is nearly of the ſame quality with that of the iſlands; except that which borders on thoſe rivers and creeks which ſtretch far back into the country. On theſe commence the valuable rice ſwamps, which, on cultivation, afford the preſent chief ſtaple of Georgian commerce. The ſoil between the rivers and the edge of the ſwamps, at the diſtance of twenty or thirty miles, changes from a grey to a red colour, on which grows plenty of oak and hickory, with a conſiderable intermixture of pine. In ſome places it is gravelly, but fertile, and ſo continues for a number of miles, gradually deepening the reddiſh colour of the earth, till it changes into what is called the Mulatto ſoil, conſiſting of a black and red earth. The Mulatto lands are generally ſtrong, and yield large crops of wheat, tobacco, corn, &c. To this kind of land ſucceeds by turns a ſoil nearly black, and very rich, on which grow large quantities of walnut, mulberry, &c. This ſucceſſion of different ſoils continues uniform and regular, though there are ſome large veins of all the different ſoils intermixed; and what is more remarkable, this ſucceſſion, in the order mentioned, ſtretches acroſs this ſtate nearly parallel with the ſea-coaſt, and extends through the ſeveral ſtates, nearly in the ſame direction, to the banks of Hudſon-river.

Cotton was formerly planted here only by the poorer claſs of people, and that for family uſe. They planted two kinds, the annual, and the Weſt Indian; the former is low, and planted every year; the balls are large, and the flocks ſtrong, and perfectly white. The latter is a tall perennial plant, the ſtalk ſomewhat ſhrubby, ſeveral of which riſe up from the root for ſeveral years ſucceſſively; the ſtems of the former year being killed by the winter froſts. The balls of the Weſt-India cotton are not quite ſo large as the other, but the flock or wool is long, extremely fine, ſilky, and white. A plantation of this kind will laſt ſeveral years, with moderate labour and care. The culture of cotton in Georgia is now much more attended to; ſeveral indigo planters have converted their plantations into cotton fields; and it is expected that the ſtates of South Carolina and Georgia will be able to raiſe more than ten millions of pounds of cotton annually for exportation.

Moſt of the tropical fruits would flouriſh in this ſtate, with proper attention. The ſouth-weſtern part of Georgia, and the parts of Eaſt and Weſt Florida, which lie adjoining, will, probably, in ſome future time, become the vineyard of America. The chief articles of export are rice, tobacco, indigo, ſago, lumber, naval ſtores, leather, deer-ſkins, ſnake-root, myrtle, bees-wax, corn, and live ſtock. The planters and farmers raiſe large ſtocks of cattle, from 1,000 to 1,500 head, and

ſome more. The value in ſterling money of the exports of Georgia, in the year 1755, was 15,744l.—in 1772, 121,677l.—in 1791, value in dollars 491,472—in 1792, 458,973—in 1794, 501,383—in 1795, 676,154; and in 1796, 950,158. In 1790, the tonnage employed in this ſtate was 28,540, and the number of American ſeamen 11,225. In return for her exports Georgia receives Weſt-India goods, teas, wines, clothing, and dry goods of all kinds. From the northern ſtates, cheeſe, fiſh, potatoes, apples, cider, and ſhoes. The imports and exports are principally to and from Savannah, which has a fine harbour, and is the place where the principal commercial buſineſs of the ſtate is tranſacted.

According to the cenſus of 1790, the number of inhabitants amounted to 82,548; and the increaſe has been very conſiderable ſince. The different religious ſects are Preſbyterians, Epiſcopalians, Baptiſts, and Methodiſts. The literature of this ſtate is conducted on a plan which will be very advantageous to the riſing generation. A college, with ample and liberal endowments, is inſtituted in Louiſville, a high and healthy part of the country, near the centre of the ſtate. There is alſo proviſion made for the inſtitution of an academy in each county of the ſtate, ſupported by the ſame funds, and conſidered as parts and members of the ſame inſtitution, under the general ſuperintendance and direction of a preſident and board of truſtees, ſelected for their literary accompliſhments from the different parts of the ſtate, and inveſted with the cuſtomary powers of corporations. This inſtitution is denominated *The Univerſity of Georgia.* The funds for the ſupport of literary inſtitutions are principally in lands, amounting in the whole to fifty thouſand acres, a great part of which is of the beſt quality, and very valuable; together with nearly ſix thouſand pounds ſterling in bonds, houſes, and town lots in Auguſta. Other public property, to the amount of one thouſand pounds in each county, has been ſet apart for the purpoſes of building and furniſhing their reſpective academies. The funds originally deſigned to ſupport the literary orphan-houſe, founded by the Rev. George Whitefield, are chiefly in rice-plantations and negroes. On the death of the counteſs of Huntingdon, to whom Mr. Whitefield bequeathed this property, as truſtee, the legiſlature, in 1792, paſſed a law veſting it in thirteen commiſſioners, with powers to carry the original intention of Mr. Whitefield into execution; and in compliment to the counteſs, the ſeminary is ſtyled Huntingdon College.—This ſtate was firſt colonized in the year 1732, and was the only colony ſettled at the expence of the king of England.

GEORGIA WESTERN TERRITORY.—Under this name is included all that part of the ſtate of Georgia which lies weſt of the head waters of thoſe rivers which fall into the Atlantic Ocean. This extenſive tract of country embraces ſome of the fineſt land in the United States, is interſected with a great number of noble rivers, and is inhabited (except ſuch parts wherein the Indian title has been extinguiſhed) by three nations of Indians, viz. the Muſkogulge or Creek, the Chactaws, and Chickaſaws. The Cherokees alſo have a title to a ſmall portion of the northern part of this territory, on the Tenneſſee river. Theſe nations together can furniſh between eight and nine thouſand warriors. About two thouſand families of white people inhabit thoſe parts of this territory where the Indian title has been extinguiſhed, chiefly at the Natchez; and the Yazoo river, on the banks of the Miſſiſſippi, and a conſiderable number on the Tombigbee river, and ſcattered among the Creek Indians. This territory, lying between the thirty-firſt and thirty-fifth degrees of north latitude, is not ſubject to the extremes of heat or cold: the climate is temperate and delightful through the year; and except in low grounds, and in the neighbourhood of ſtagnant waters, is very healthful. White froſts, and ſometimes thin ice, have been ſeen as far ſouth as the thirty-firſt degree of latitude; but ſnow is very uncommon in any part of this territory. Mr. Hutchins, ſpeaking of this tract of country, in his Hiſtorical Narrative of Louiſiana, &c. ſays, "the climate is healthy and temperate, the country delightful and well watered, and the proſpects beautiful and extenſive; variegated by many inequalities and fine meadows, ſeparated by innumerable copſes, the trees of which are of different kinds, but moſtly of walnut and oak. The elevated, open, and airy, ſituation of this country, renders it leſs liable to fevers and agues (the only diſorders ever known in its neighbourhood) than ſome other parts bordering on the Miſſiſſippi, where the want of a ſufficient deſcent to convey the waters off occaſions numbers of ſtagnant ponds, whoſe exhalations infect the air."

To give a juſt view of the rivers, and to aſcertain the advantages derived from them to this part of Georgia, it is neceſſary to trace them from their mouths in the Gulf of Mexico. The Miſſiſſippi bounds this territory on the weſt. The free navigation of this noble river is now fully enjoyed by the inhabitants of the United States. It empties, by ſeveral mouths of different depths from nine to ſixteen feet, into the Gulf of Mexico, in about lat. 29. N. The bars at the mouth of this river frequently ſhift; after paſſing them into the river, there is from three to ten fathoms of water, as far as the ſouth-weſt paſs; and thence to the Miſſouri, a diſtance of 1,142 computed miles, twelve, fifteen, twenty, and thirty, fathoms, is the general depth. On both ſides the Miſſiſſippi there are extenſive natural meadows, with a proſpect of the Gulf of Mexico on each ſide, the diſtance of thirty-two miles, to a place called Detour-aux-Plaquemines, in Weſt Florida. Thence twenty miles to the ſettlements, the banks are low and marſhy, generally overflowed and covered with thick wood, palmetto buſhes, &c. apparently impenetrable by man or beaſt. Thence to Detour-des-Anglois, at the bend of the river, the banks are well inhabited; as alſo from hence to New Orleans, eighteen miles, which diſtance there is a good road for carriages. Veſſels paſs from the mouth of this river to New Orleans, 105 miles, in ſeven or eight days, commonly; ſometimes in three or four.

From New Orleans, the capital of Louiſiana, there is an eaſy communication with Weſt Florida by Bayouk Creek, which is a water of lake Ponchartrain, navigable for veſſels drawing four feet water, ſix miles up from the lake, to a landing-place two miles from New Orleans. For nearly fifty miles up the river, both its banks are ſettled and highly cultivated, in part by emigrants from Germany, who furniſh the market with indigo of a ſuperior quality, cotton, rice, beans, myrtle, wax, and lumber. In 1762, ſome rich planters attempted the cultivation of canes and the making of ſugar, and erected mills for the purpoſe. This ſugar was of an excellent quality, and ſome of the crops were large; but ſome winters proving ſo ſevere as to kill the canes, no dependence can be placed in the culture of that article.

The ſettlements of the Acadians, which were begun in 1763, extend on both ſides of the river, from the Germans to the river Ibberville, which is ninety-nine miles above New Orleans, and two hundred and ſeventy from Penſacola, by way of lakes Ponchartrain and Maurepas. At Point Coupee, thirty-five miles above the Ibberville, are ſettlements extending twenty miles on the weſt ſide of the river, which thirty years ago had two thouſand white inhabitants, and ſeven thouſand ſlaves, who were employed in the cultivation of tobacco, indigo, Indian corn, &c. for the New Orleans market, which they furniſhed alſo with poultry, and abundance of ſquared timber, ſtaves, &c.

Mr. Hutchins, from his perſonal knowledge, deſcribes the country on both ſides of the Miſſiſſippi, between the latitudes 30 and 31, bordering on Georgia, as follows: "Although this country might produce all the valuable

valuable articles raiſed in other parts of the globe ſituated in the ſame latitudes, yet the inhabitants principally cultivate indigo, rice, tobacco, Indian corn, and ſome wheat; and they raiſe large ſtocks of black cattle, horſes, mules, hogs, ſheep, and poultry. The ſheep are ſaid to make the ſweeteſt mutton in the world. The black cattle, when fat enough for ſale, which they commonly are the year round, are driven acroſs the country to New Orleans, where there is always a good market. The woods are principally timbered with all the different kinds of oak, but moſtly with live oak of the largeſt and beſt quality, uncommonly large cypreſs, black walnut, hickory, white aſh, cherry, plum, poplar trees, and grape vines; here is found alſo a great variety of ſhrubs and medicinal roots. The lands bordering the rivers and lakes are generally well wooded, but at a ſmall diſtance from them are very extenſive natural meadows, or ſavannas, of the moſt luxuriant ſoil, compoſed of a black mould, about a foot and a half deep, very looſe and rich, occaſioned in part by the frequent burning of the ſavannas; below the black mould is a ſtiff clay of different colours. It is ſaid this clay, after being expoſed ſome time to the ſun, becomes ſo hard that it is difficult either to break or bend, but when wet by a light ſhower of rain, it ſlackens in the ſame manner as lime does when expoſed to moiſture, and becomes looſe and moulders away, after which it is found excellent for vegetation."

After paſſing the thirty-firſt degree of north latitude from Weſt Florida into Georgia, we enter what is called the *Natchez Country*, bordering on the Miſſiſſippi. Fort Roſailie, in this country, is in lat. 31.40. two hundred and forty-three miles above New Orleans. "The ſoil of this country is ſuperior to any of the lands on the borders of the river Miſſiſſippi, for the production of many articles. Its ſituation being higher, affords a greater variety of ſoil, and is in a more favourable climate for the growth of wheat, rye, barley, oats, &c. than the country lower down, and nearer to the ſea. The ſoil alſo produces in equal abundance Indian corn, rice, hemp, flax, indigo, cotton, pot-herbs, pulſe of every kind, and paſturage; and the tobacco made here is eſteemed preferable to any cultivated in other parts of America. Hops grow wild; all kinds of European fruits arrive to great perfection, and no part of the known world is more favourable for the raiſing of every kind of ſtock. The riſing grounds, which are clothed with graſs and other herbs of the fineſt verdure, are well adapted to the culture of vines; the mulberry trees are very numerous, and the winters ſufficiently moderate for the breed of ſilk worms. Clay of different colours, fit for glaſs-works and pottery, is found here in great abundance; and alſo a variety of ſtately timber, fit for houſe and ſhip building, &c."

This country was once famous for its inhabitants, the Natchez Indians; who, from their great number, and the improved ſtate of ſociety among them, were conſidered as the moſt civilized Indians on the continent of America. Nothing now remains of this nation but their name, by which their country continues to be called. The diſtrict of the Natchez, as well as all along the eaſtern bank of the Miſſiſſippi to the river Ibberville, was ſettling very faſt by emigrations from the northern ſtates, till the capture of the Britiſh troops on the Miſſiſſippi, in 1779, put an entire ſtop to it.

From Fort Roſailie to the Petit Goufre is thirty-one miles and a half. There is a firm rock on the eaſt ſide of the Miſſiſſippi for near a mile, which ſeems to be of the nature of lime-ſtone. The land near the river is much broken and very high, with a good ſoil, and ſeveral plantations on it. From the Petit Goufre to Stoney river is four miles and a quarter. From the mouth to what is called the fork of this river, is computed to be twenty-one miles. In this diſtance there are ſeveral quarries of ſtone, and the land has a clay ſoil, with gravel on the ſurface of the ground. On the north ſide of this river, the land in general is low and rich; that on the ſouth ſide is much higher, but broken into hills and vales; but here the low lands are not often overflowed: both ſides are ſhaded with a variety of uſeful timber. At the fork, the river parts almoſt at right angles, and the lands between and on each ſide of them are ſaid to be clay and marl ſoil, not ſo uneven as the lands on this river lower down. From Stoney river to Louſa Chitto, or Big Black river, is ten miles. This river, at the mouth, is about thirty yards wide, but within from thirty to fifty yards, and is ſaid to be navigable for canoes thirty or forty leagues. About a mile and a half up this river, the high lands are cloſe on the right, and are much broken. A mile and a half further, the high lands appear again on the right, where there are ſeveral ſprings of water, but none as yet have been diſcovered on the left. At about eight miles further, the high lands are near the river on the left, and appear to be the ſame range that comes from the Yaxoo cliffs. At ſix miles further, the high lands are near the river on both ſides, and continue for two or three miles, but broken and full of ſprings of water. This land on the left was choſen by general Putnam, captain Enos, Mr. Lyman, and other New-England adventurers, as a proper place for a town; and, by order of the governor and council of Weſt Florida, in 1773, it was reſerved for the capital. The country round is very fit for ſettlements. For four or five miles above this place, on both ſides of the river, the land is rich, and not ſo much drowned, nor ſo uneven, as ſome parts lower down. About ſix miles and a half further, there is a rapid water, ſtones and gravel bottom, 160 yards in length; and in one place a firm rock almoſt acroſs the river, and as much of it bare when the water is at a moderate height, as confines the ſtream to nearly twenty feet; and the channel is about four feet deep.

From the Louſa Chitto to the Yazoo Cliffs, is forty miles. From this cliff the high lands lie north-eaſtward and ſouth-ſouth-eaſtward, bearing off from the river, full of cane and rich ſoil, even on the very higheſt ridges. Juſt at the ſouth-end of the cliffs, the bank is low, where the water of the Miſſiſſippi, when high, flows back, and runs between the bank and high land, which ranges nearly northerly and ſouth-ſouth-eaſterly to the Louſa Chitto, occaſioning much wet ground, cypreſs ſwamp, and ſtagnant ponds. From the cliffs, is ſeven miles and a half to the river Yazoo. The mouth of this river is upwards of one hundred yards in width, and was found by Mr. Gaul to be in lat. 32. 37. and by Mr. Purcell in 32. 28. N. The water of the Miſſiſſippi, when the river is high, runs up the Yazoo ſeveral miles, and empties itſelf again by a number of channels, which direct their courſe acroſs the country, and fall in above the Walnut Hills. The Yazoo runs from the north-eaſt, and glides through a healthy, fertile, and pleaſant, country, greatly reſembling that about the Natchez, particularly in the luxuriance and diverſity of its ſoil, variety of timber, temperature of climate, and delightful ſituation. It is remarkably well watered by ſprings and brooks; many of the latter afford convenient ſeats for mills. Further up this river the canes are leſs frequent, and ſmaller in ſize, and at the diſtance of twenty miles there are ſcarcely any. Here the country is clear of under-wood, and well watered, and the ſoil very rich, which continues to the Chactaw and Chickaſaw towns, on the eaſtern and north-weſtern branches of Yazoo river. Theſe branches unite fifty miles from the Miſſiſſippi, following the courſe of the river; the navigation to their junction, commonly called the Fork, is practicable with very large boats in the ſpring ſeaſon, and with ſmaller ones a conſiderable way further, with the interruption of but one fall, where they are obliged to make a ſhort portage, twenty miles up the north-weſtern branch, and ſeventy miles from

the Miſſiſſippi. The country in which the Chactaw and Chickaſaw towns are ſituated, is ſaid to be as healthy as any part of the continent, the natives ſcarcely ever being ſick. Such of them as frequent the Miſſiſſippi, leave its banks as the ſummer approaches, leſt they might partake of the fevers that ſometimes viſit the low ſwampy lands bordering upon that river. Wheat, it is ſaid, yields better at the Yazoo than at the Natchez, owing probably to its more northern ſituation. Though the quantity of good land on the Miſſiſſippi and its branches, from the Bay of Mexico to the river Ohio, a diſtance of nearly one thouſand miles, is vaſtly great, and the conveniences attending it; ſo likewiſe we may eſteem that in the neighbourhood of the Natchez, and of the river Yazoo, the prime of it all.

About a mile and a half up the Yazoo river, on the north ſide, there is a large creek, which communicates with the Miſſiſſippi above the river St. Francis, about one hundred leagues higher up by the courſe of the river. It paſſes through ſeveral lakes by the way. At the diſtance of ſeveral miles from the mouth of the river Yazoo, on the ſouth ſide, are the Yazoo hills. There is a cliff of ſolid rock at the landing place, on which are a variety of broken pieces of ſea-ſhells, and ſome entire. Four miles further up, is the place called the Ball Ground, near which a church, fort St. Peter, and a French ſettlement, formerly ſtood. They were deſtroyed by the Yazoo Indians in 1729. That nation is now entirely extinct.

From about twenty miles eaſtward of the Miſſiſſippi, to Halfway or Pearl river, the diſtance of about ſixty miles, is "a fine level country, very fertile, and better watered than nearer the Miſſiſſippi. There is ſome mixture of ſand with loam; the timber the ſame, with the addition of black-jack, and poſt-oak. This tract is interſperſed with what the French call *prairies*, or ſavannas, which are extenſive intervals of one and two thouſand acres of excellent land, of a deep black ſoil, free of all timber and trees. It is this kind of land which the Indians cultivate. From the Miſſiſſippi to this river there are no Indians. To a tract of this country, extending along the Miſſiſſippi from the thirty-firſt degree of latitude to the Yazoo river, at the ſouth end, thirty miles wide, and narrowing as we proceed northerly to the width of fifteen miles, the Indian title has been extinguiſhed. It was firſt purchaſed by the Engliſh; but they not having completed the payment of the purchaſe money before it fell into the hands of the Spaniards, they, (the Spaniards,) in the year 1792, paid the balance. At Walnut Hills the Spaniards had a fort, ſince given up to the United States. To the country north of the Yazoo, the Indian title is not yet extinguiſhed. About one half of the ſouthern part, a diſtance of about fifty miles up the Yazoo, is owned by the Chactaws; the northern half by the Chickaſaws." The gentleman who gives the above information, and who was in this country in the year 1792, ſays, "that the Yazoo is about ninety yards wide; is navigable one hundred miles; that he croſſed the country by different routes three or four times from the Miſſiſſippi to the Tombigbee; paſſed over the Yazoo ſeveral times; went up and down the river on the ſhore; and ſays that the lands to the eaſt of the Yazoo (the diſtance of about one hundred miles) are very excellent."

Pearl river is about forty yards wide; a branch of it, paſſing eaſt of the Natchez and neareſt, bears the name of Buffalo river. On the eaſt ſide of Pearl river commence the Chactaw ſettlements, and extend to the Chickaſaw Hay river; thence, about forty miles eaſtward, the ſettlements extend near to the Tombigbee. This is a numerous nation, containing about three thouſand hunters, who are a peaceable and friendly people. The ſtreams on which the Chactaws are ſettled, are laid down by Coxe as proceeding from weſt to eaſt; the Homachitta, (called by Purcell, Hoſtaphatcha,) Chactaw, and Souhawtee, which unite, and the main ſtream, retains the name of Homachitta till it empties into the Gulf of Mexico. This is probably the ſame river that Hutchins calls Paſcagoula. The head branches of this river ſpread extenſively through the northern part of this territory, chiefly weſtward of the Chactaw nation. White or Bluff river, appears to riſe in about lat. 33. N. takes a courſe to the eaſt of the Chactaws, and empties into the Tombigbee ſome diſtance below the head of the tide water, and is laid down as about the ſize of Pearl river.

From the compact ſettlements of the Chactaws eaſtward, to the weſtern branches of the Tombigbee, the land is tolerably good: the timber generally oak and pine, with ſome hickory, well watered and level. Of this kind is the country a diſtance of about forty miles weſtward of the weſtern branches of the Tombigbee; afterwards the land is more uneven, interſperſed with large ſavannas, and the whole generally good land, and pretty well watered; the water, however, has a limy taſte. The natural growth much the ſame as on the Miſſiſſippi. The intervals, or, as they call it in this country, the *bottom lands*, are generally about a mile wide on the river, extremely rich, and thickly overgrown with canes. This general deſcription will apply to the whole tract belonging to the Georgia Miſſiſſippi Company.

We have now arrived eaſtward to the Mobile, the principal river in this territory. "On the bar at the entrance of the bay of Mobile, there is only about fifteen or ſixteen feet water; two-thirds of the way through the bay, towards the town of Mobile, there is from two to three fathoms; and the deepeſt water to be depended on in the upper part of the bay is only ten or twelve feet, and in many places not ſo much. Large veſſels cannot go within ſeven miles of the town. This bay is about thirty miles long, and from ten to twelve wide. The tide flows ſixty or ſeventy miles above this bay, and is ſo far navigable for ſea-veſſels. Thence 150 or 200 miles north, is good boat navigation, ſmooth water, generally 100 or 150 yards wide, and eight to ten feet deep. The bay of Mobile terminates a little to the north-eaſtward of the town, in a number of marſhes and lagoons; which ſubject the people to fevers and agues in the hot ſeaſon. The river Mobile divides into two principal branches, about forty miles above the town; one of which, called the Tanſaw, falls into the eaſt part of the bay; the other empties itſelf cloſe by the town, where it has a bar of ſeven feet; but there is a branch a little to the eaſtward of this, called Spaniſh river, where there is a channel of nine or ten feet when the water is high: this joins Mobile river about two leagues above the town. Two or three leagues above the Tanſaw branch, the Alabama river falls into the Mobile, after running from the north-eaſt a courſe of about 130 miles; that is, from Alabama fort, ſituated at the confluence of the Cooſa, and Talipoſee, both very conſiderable rivers; on which and their branches are the chief ſettlements of the Upper Creek Indians. The French fort at Alabama was evacuated in 1763, and has not ſince been garriſoned. Above the confluence of Alabama and Mobile, the latter is called the Tombigbee river, from the fort of Tombigbee, ſituated on the weſt ſide of it, about ninety-ſix leagues above the town of Mobile. The ſource of this river is reckoned to be about forty leagues higher up, in the country of the Chickaſaws. The fort of Tombigbee was taken poſſeſſion of by the Engliſh, but abandoned again in 1767, by order of the commandant of Penſacola. The river is navigable for ſloops and ſchooners about thirty-five leagues above the town of Mobile. The banks, where low, are partly overflowed in the rainy ſeaſons, which adds greatly to the ſoil, and adapts it particularly to the cultivation of rice. The ſides of the river are covered in many places with large canes, ſo thick that they are

almoſt

almoſt impenetrable; there is alſo plenty of remarkable large red and white cedar, cypreſs, elm, aſh, hickory, and various kinds of oak. Several people have ſettled on this river, who find the ſoil to anſwer beyond expectation. The lands near the mouth of the Mobile are generally low; as we proceed upwards, the land grows higher, and may with propriety be divided into three ſtages. Firſt, low rice lands, on or near the banks of the river, of a moſt excellent quality. Secondly, what are called by the people of the country, ſecond low lands, or level flat cane lands, about four or five feet higher than the low rice lands. And, thirdly, the high upland or open country. The firſt, or low lands, extend about an half or three-quarters of a mile from the river, and may almoſt every where be eaſily drained and turned into moſt excellent rice fields, and are capable of being laid under water at almoſt all ſeaſons of the year. They are a deep black mud or ſlime, which have in a ſucceſſion of time been accumulated, or formed by the overflowing of the river. The ſecond low grounds being, in general, formed by a regular riſing of about four or five feet higher than the low lands, appear to have been originally the edge of the river. The ſecond claſs or kind of land is in general extremely rich, and covered with large timber and thick ſtrong canes, extending in width upon an average three-quarters of a mile, and in general a perfect level. It is excellent for all kinds of grain, and well calculated for the culture of indigo, hemp, flax, or tobacco. At the extremity of theſe ſecond grounds, we come to what is called the uplands, which is covered with pine, oak, and hickory, and other kinds of large timber. The ſoil is of a good quality, but much inferior to the ſecond or low land. It anſwers well for raiſing Indian corn, potatoes, and every thing elſe that delights in a dry ſoil. Further out in the country again, on the weſt ſide of this river, we come to a pine barren, with extenſive reed ſwamps and natural meadows or ſavannas, which afford excellent ranges for innumerable herds of cattle. On the eaſt of the Mobile, towards the river Alabama, is one entire extended rich cane-country, not inferior, perhaps, to any in America. Whenever portages are made between the Mobile and Tenneſſee, or their branches, which are probably but a few miles apart, the Mobile will be the firſt river for commerce (the Miſſiſſippi excepted) in this part of the world, as it affords the ſhorteſt and moſt direct communication to the ſea."

The principal rivers which meander through this tract of country, are Seprey's and Cane-Brake rivers, both which fall into the Tombigbee, and are navigable for boats as high as the thirty-third degree of latitude; and the Cawhawbon river, which falls into the Alabama, below the junction of Cooſa and Oatfuſkee, are boatable as far north as the rivers laſt mentioned. The ſoil on the eaſt ſide of Tombigbee, according to colonel Hammond, ſurveyor-general of Georgia, is of a reddiſh caſt, producing naturally oak, hickory, and abundance of very high graſs. The country appears well calculated for the culture of wheat, corn, rye, oats, and barley. The bottoms or intervales on the rivers are not ſubject to inundations, and are exceedingly rich. The country is well watered with good wholeſome water. Further north, the country becomes uneven and ſomewhat hilly, that part particularly which divides the waters of Tombigbee from Tenneſſee river; but as you deſcend to a lower latitude, the country is more level; and down about the mouth of Cane Brake river, and thence acroſs to the Alabama, is almoſt one entire cane brake.

The ridge which divides the Tombigbee and Alabama rivers is ſtony, and the ſoil inferior to that on the rivers; of this deſcription alſo is the country lying between the Cawhawbon and Alabama rivers; but the bottom lands on the water-courſes are exceedingly rich. The country is pleaſant and healthy, being generally overgrown with high graſs, well calculated for farming, particularly for raiſing cattle. There are many extenſive and rich bottoms of cane-land on the Alabama. The river which falls into the Tombigbee next above Seprey's river, has much rich land on its banks, and is boatable ſome diſtance in ſmall boats, and ſpreads into many branches, through a pleaſant, healthy, and well-watered, country. As we advance eaſtward of the Alabama, we come firſt to the Eſcambia river, and then to the Chatta Hatcha, or Pea river, which Capt. Hutchins thus deſcribes:—The river Eſcambia is the moſt conſiderable that falls into the Bay of Penſacola. The Chatta Hatcha or Pea river, which alſo heads in the Georgia Weſtern Territory, empties from the north-eaſt into Roſe Bay, which is thirty miles long, and from four to ſix broad. The bar at the entrance into the bay has only ſeven or eight feet water at deepeſt; but, after croſſing the bar, has ſixteen or ſeventeen feet. The mouths of the river (for almoſt all the ſouthern rivers have ſeveral mouths) are ſo ſhoal, that only a ſmall boat or canoe can paſs them. Mr. Hutchins aſcended this river about ſeventy-five miles, and found that its banks very much reſembled thoſe of Eſcambia. Further to the eaſt are the Appalachicola, Flint, and Alabaha, rivers, which the reader will find deſcribed under their reſpective heads.

The northern parts of this territory are watered by the great bend of the Tenneſſee, and its tributary ſtreams. This noble river bends ſouthward as far as latitude 34. 15. and divides, into nearly equal parts, the purchaſe of the Tenneſſee company. North of the Tenneſſee, in this purchaſe, there is not an Indian inhabitant. From the ſouth, the Tenneſſee, in its courſe through Georgia, receives, beſides ſmaller ſtreams, the Hiwaſſee, Chiccamauga, and Occochappo or Bear creek. Travellers ſpeak of the lands on the bend of the Tenneſſee, in terms of the higheſt commendation.

Of the territory deſcribed above, the ſtate of Georgia, by act of their legiſlature, paſſed Jan. 7, 1795, ſold about twenty-two millions of acres to four different companies, whoſe names and the limits of their reſpective purchaſes, as defined by the act, as follow:

1. "All that tract or parcel of land, including iſlands, beginning on Mobile bay, where the lat. 31. N. of the equator interſects the ſame, running thence up the ſaid bay to the mouth of the lake Tenſaw; thence up the ſaid lake Tenſaw to the Alabama river, including Currey's and all other iſlands therein; thence up the ſaid river Alabama to the junction of the Cooſa and Oakfuſkee rivers; thence up the Cooſa river, above the Big Shoals, to where it interſects the latitude of 34. N. of the equator; thence a due weſt courſe to the Miſſiſſippi river; thence down the middle of the ſaid river to the latitude of 32. 40. thence a due eaſt courſe to the Dan or Tombigbee river; thence down the middle of the ſaid river to its junction with the Alabama river; thence down the middle of the ſaid river to Mobile bay; thence down the ſaid Mobile bay, to the place of beginning; ſhall be ſold unto James Gun, Matthew M'Alliſter, and George Walker, and their aſſociates, called *The Georgia Company*."

2. "All that tract of country, including iſlands, within the following boundaries, viz. beginning on the river Miſſiſſippi, at 31. 18. N. lat. thence a due eaſt courſe to the middle of Dan or Tombigbee river; thence up the middle of the ſaid river to N. lat. 32. 40. thence a due weſt courſe along the Georgia Company line, to the river Miſſiſſippi; thence down the middle of the ſame to the place of beginning; ſhall be ſold to Nicholas Long, Thomas Glaſcock, Ambroſe Gordon, and Thomas Cummings, and their aſſociates, called, *The Georgia Miſſiſſippi Company*."

3. "All that tract of country, including iſlands,

within the following boundaries, viz. beginning at the Miſſiſſippi river, where the northern boundary line of the ſtate ſtrikes the ſame; thence along the ſaid northern boundary line, due eaſt to the Tenneſſee river; thence along the ſaid Tenneſſee river to the mouth of Bear creek; thence up Bear creek to where the parallel of latitude, twenty-five Britiſh ſtatute miles ſouth of the northern boundary line of the ſtate, interſects the ſame; thence along the laſt-mentioned parallel of latitude, acroſs Tombigbee or Twenty Mile creek, due weſt to the Miſſiſſippi river; thence up the middle of the ſaid river, to the beginning; ſhall be ſold to John B. Scott, John C. Nightingale, and Wade Hampton, called *The Upper Miſſiſſippi Company.*"

4. "All that tract of land, including iſlands, within the following boundaries, viz. beginning at the mouth of Bear creek, on the ſouth ſide of Tenneſſee river; thence up the ſaid creek to the moſt ſouthern ſource thereof; thence due ſouth to lat. 34. 10. N. thence due eaſt 120 miles; thence a due north courſe to the Great Tenneſſee river; thence up the middle of the ſaid river to the northern boundary line of the ſtate; thence a due weſt courſe along the ſaid line to where it interſects the Great Tenneſſee river, below the Muſcle Shoals; thence up the ſaid river to the place of beginning; ſhall be ſold to Zachariah Cox, Mathias Maher, and their aſſociates, called *The Tenneſſee Company.*"

The ſame law enacts alſo, "that all lands lying weſtward and ſouthward of the eaſtern boundary of the ſeveral companies' purchaſes, and not included therein, eſtimated at one-fourth of the whole lands lying weſtward and ſouthward of the eaſtern boundary of the ſaid purchaſes, and ſuppoſed to contain 7,250,000 acres, ſhall be, and the ſame is hereby declared to be, reſerved and ſet apart to and for the uſe and benefit of this ſtate, to be granted out, or otherwiſe diſpoſed of, as future legiſlators may direct."

GEOR'GIA, a townſhip of the American States, in Franklin county, Vermont. It is ſituated on lake Champlain, oppoſite to the north end of South Hero iſland, and joins Milton on the ſouth, and St. Alban's on the north. La Moille river croſſes the extremity of the ſouth eaſt corner of this townſhip.

GEOR'GIA (New), or SOUTH GEORGIA, an iſland in the South Atlantic Ocean, about thirty leagues in length, and ten in breadth. It abounds in bays and harbours; but the prodigious quantity of ice on the coaſt renders it inacceſſible during a great part of the year, and even at other times the floating maſſes of ice render the anchorage dangerous. The appearance of the land is the ſame throughout; the lofty mountains towards the ſouth are divided into numberleſs parts, and appear like flames of fire. The coaſts are bounded with high perpendicular rocks of ice, large portions of which frequently break off and fall into the vallies or into the ſea, where they are moved about by the waves, and reſemble ſmall detached iſlands. The interior country is not leſs ſavage; the ſummits of the rocks are loſt in the clouds, and the vallies are covered with eternal ſnow: there is neither tree nor ſhrub. The only vegetables diſcovered were a kind of coarſe graſs, a ſpecies of burnet, and a plant like moſs. The rocks are compoſed of a kind of ſlate, of a blueiſh-grey colour, diſpoſed in horizontal beds; many ſhining fragments of which cover the ſtrand, and appear to have no mineral in the compoſition. In all the coaſt there was found neither river, nor freſh-water ſpring. A great number of ſea-calves and ſea-bears were found, and flocks of penguins, ſome of which weighed thirty-eight pounds, and meaſured three feet three inches long. The only birds ſeen on the land appeared to be a ſpecies of the lark: no quadruped was found, but the dung of one was ſeen, ſuppoſed to have belonged to a fox, or animal of that kind. Lat. 54. 30. S. lon. 37. W. Greenwich.

GEORGIA'NA, a proper name for women.

GEORGIA'NA, the name originally given in the charter to a large tract of country in the province of Maine, in the American States.

GEOR'GIANS, a ſect of heretics, ſo called from one *David George*, born at Delft in Holland, who held that the law and goſpel were unprofitable for the attaining heaven, and that himſelf was the true Chriſt and Meſſiah.

GEOR'GIC, *ſ.* [γεωργικον, Gr. *georgique*, Fr.] Some part of the ſcience of huſbandry put into a pleaſing dreſs, and ſet off with all the beauties and embelliſhments of poetry. Heſiod and Virgil are the two greateſt maſters in this kind of poetry.

GEOR'GIC, *adj.* Relating to the doctrine of agriculture:

Here I peruſe the Mantuan's *georgic* ſtrains,
And learn the labours of Italian ſwains. *Gay.*

GEORGIEV', a town of Ruſſia, in the government of Caucaſus: thirty-two miles weſt-north-weſt of Ekaterinograd.

GEORGI'NA, *ſ.* in botany, a genus of the claſs ſyngeneſia, order polygamia ſuperflua. Generic character—Receptacle chaffy; down o; calyx double, the outer many-leaved; inner one-leafed, eight-parted.

Species. 1. Georgina purpurea: midrib of the leaves winged; leaflets obovate, pointed, ſerrate, ſhining glabrous underneath; outer calyx reflected. 2. G. roſea: midrib of the leaves naked; leaflets ovate, rather obtuſe, obtuſely ſerrate, glabrous; outer calyx ſpreading. 3. G. coccinea: midrib of the leaves naked; leaflets ovate, pointed, ſerrate, roughiſh underneath; outer calyx ſpreading. All natives of Mexico.

GEOR'GITZ, a town of Walachia: eighteen miles north-north-eaſt of Buchoreſt, and twenty-four ſouth-eaſt of Tergoviſto.

GEOR'GIUM SI'DUS, the GEORGIAN PLANET. See the article ASTRONOMY, vol. ii. p. 391.

GEOS'COPY, *ſ.* [from γη, the earth, and σκοπεω, Gr. to view.] An obſervation of the different qualities of the earth. *Scott.*

GEOT'IC, *adj.* [from γη, Gr.] Belonging to the earth; terreſtrial. *Not much uſed.*

GEOT'IC, or GE'OTY, *ſ.* A kind of magic; geomancy. *Scott.*

GEPHY'RA, one of the cities of the Seleucidæ in Syria. *Strabo.*

GEPHYRÆ'I, a people of Phœnicia, who paſſed with Cadmus into Bœotia, and from thence into Attica. *Herodot.* 5. c. 57.

GEP'IDÆ, or GEP'IDI, in ancient geography, a Gothic people, who ſettled in an iſland at the mouth of the Viſtula, which they called *Gepidos. Procopius.*

GE'RA, [Heb. a pilgrimage.] A man's name.

GE'RA, a town of Germany, in the circle of Upper Saxony, and county of Reus, on the Elſter. It was ravaged by the Bohemians, in 1449: thirty miles ſouth-ſouth-weſt of Leipſic, and ſixty-eight weſt of Dreſden. Lat. 50. 49. N. lon. 29. 44. E. Ferro.

GERÆ'STUS, in ancient geography, a port of Eubœa. *Livy.*

GE'RAH, *ſ.* [Hebrew.] The twentieth part of a ſhekel; near three-halfpence Engliſh.

GE'RANGER, a town of Norway, in the dioceſe of Drontheim: twenty-two miles ſouth-ſouth-weſt of Romſdal.

GERA'NIA, a mountain between Megara and Corinth.

GE'RANIS, *ſ.* [from γερανος, Gr. a crane.] In ſurgery, a bandage for a fractured clavicle; ſo called becauſe it is ſhaped like an extended crane.

GERANI'TES, *ſ.* [from γερανος, a crane.] In natural hiſtory, an appellation given to ſuch of the ſemi-

pellucid gems as are marked with a ſpot reſembling a crane's eye.

GERA'NIUM, *ſ.* [from γερανος, Gr. a crane, the fruit having the form of a crane's head and neck.] Crane's Bill; in botany, a genus of the claſs monadelphia, order decandria, nat ural of gruinales, (gerania, *Juſſ.*) The generic characters are—Calyx: five-leaved; leaflets ovate, acute, concave, permanent. Corolla: petals five, obcordate or ovate, ſpreading, regular; nectary five honied glands, faſtened to the baſe of the longer filaments. Stamina: filaments ten, awl-ſhaped, connected ſlightly at the baſe, ſpreading at the top, ſhorter than the corolla; antheræ oblong, verſatile. Piſtillum: germ five-cornered, beaked; ſtyle awl-ſhaped, longer than the ſtamens, permanent; ſtigmas five, reflex. Pericarpium: capſule five-grained, beaked, the cells opening inwards, each having a ſimple naked tail fixed to it. Seeds: ſolitary, ovate-oblong.—*Eſſential Character.* Calyx five-leaved; corolla five-petalled, regular; nectary five honied glands, faſtened to the baſe of the longer filaments; fruit five-grained, beaked; beaks ſimple, naked, neither ſpiral nor bearded.

The genus of Geranium, as conſtituted by Linnæus, having become very unwieldy by modern diſcoveries, it is found very convenient to divide it; and a diviſion is commodiouſly made from this remarkable circumſtance; namely, that in ſome ſpecies all the ten filaments are fertile, whilſt in others three or even five of them are caſtrated, that is, are deſtitute of antheræ. Hence three genera are now conſtituted out of one: *Erodium*, with five fertile ſtamens only; *Pelargonium*, with ſeven; and this, retaining the old name, with all the ten fertile. There are alſo other marks of diſcrimination recited in their reſpective eſſential characters. Theſe three artificial genera or families, however, form but one natural family, agreeing in their five-leaved calyxes, their five-petalled corollas, their pentacoccous roſtrated fruits, and their general habit and ſtructure. They alſo agree in their inflorescence, the peduncles being curved downwards before flowering time; but when the flowers are about to open, the general peduncle firſt, and then each pedicel becoming erect. The fructification of Geranium is ſhewn on the Botany Plate XII. fig. 26–27; ſee alſo Plate IV. fig. 16, 23, 67; and Plate VIII. fig. 31, 37.

Species. I. Peduncles one-flowered. 1. Geranium Sibiricum, or Siberian crane's-bill: peduncles commonly one-flowered; leaves five-parted, acute; leaflets pinnatifid. Root perennial; ſtems herbaceous, annual, diffuſely dichotomous, jointed, almoſt round and ſmooth. Native of Siberia. Cultivated before 1768 by Mr. Miller, who received the ſeeds from Linnæus. It flowers in June.

2. Geranium ſanguineum, or bloody crane's-bill: peduncles one-flowered; leaves five-parted, trifid, orbiculate. Root perennial, ſomewhat woody; the whole plant ſet with white ſpreading hairs; ſtems a foot or more in height, ſpreading, branched, round, jointed, ſwelling at the joints. The whole plant frequently turns red or purple after flowering. Native of many parts of Europe, in thickets and rocky paſtures, flowering moſt part of the ſummer, and often introduced into gardens as an ornamental plant.

β. Miller inſiſts that the "Lancaſhire bloody crane's-bill" is a diſtinct ſpecies, the plants which he raiſed from ſeeds having always continued the ſame. The ſtalks are ſhorter, and flat on the ground; the leaves are much leſs, and not ſo deeply divided; and the flowers are much ſmaller, of a pale colour, marked with purple. It grows naturally in Lancaſhire and Weſtmoreland. There are other varieties of this ſpecies. One is mentioned by Ray, with larger paler leaves, more deeply divided. And a ſecond, in Engliſh Botany, ſent by Mr. Davall from Swiſſerland, which has two flowers and four bractes from each joint; the ſtem, flower-ſtalks, calyx, and back of the leaves, clothed with white ſlender ſpreading hairs, the upper ſide and margin of the leaves with ſhort depreſſed briſtles.

3. Geranium ſpinoſum, or ſpiny crane's-bill: peduncles one-flowered; ſtem fleſhy, knobbed; ſpines ſolitary, ſtrict. This is a low ſucculent plant. Root ſimple, ſcarcely fibrous. Stem ſuffruticoſe, erect, branched, fenced all round with broad, ſmooth, irregular, knots or tubercles, from the centre of which ariſes a very long, ſharp, black, ſpine. Native of the Cape of Good Hope.

4. Geranium emarginatum, or emarginated crane's-bill: peduncles one-flowered; leaves ovate, emarginate, crenate. This is a native of the Cape of Good Hope; obſerved by Thunberg.

II. Peduncles two-flowered, ſhrubby. 5. Geranium anemonefolium, or ſmooth crane's-bill: leaves palmate; leaflets pinnatifid; ſtem ſhrubby. The whole plant is remarkably ſmooth, whence it had originally the name of *lævigatum*. From a thick root ariſes a very ſhort ſtem, the thickneſs of a finger, and ſucculent, whence ſpring branches two feet long, with very long leafleſs internodes. Native of Madeira; introduced by Maſſon in 1778; flowers from May to September.

6. Geranium macrorhizum, or long-rooted crane's-bill: calyxes inflated; petals entire; piſtil very long; ſcape dichotomous. Root perennial, the thickneſs of a finger, becoming woody, dark purple on the outſide, round, ſingle, or branched, having many long, round, thickiſh fibres. Hence ſprings a bundle of leaves, and ſeveral almoſt upright ſtems or rather ſcapes. Theſe are all very ſoft and ſmooth, like the leaves of marſhmallow, with a very ſhort cloſe down. Flowers large, elegant, deep red, or bright purple. The whole plant, when rubbed, emits an agreeable odour. Native of Italy. Cultivated in the botanic garden at Oxford in 1658. It flowers in May and June.

III. Peduncles two-flowered, perennial. 7. Geranium caneſcens, or ſilky-leaved crane's-bill: leaves ſubpeltate, five-parted, caneſcent underneath, lobes gaſhed; petals emarginate. Native of the Cape, where it was obſerved by Maſſon; flowers in May and June.

8. Geranium incanum, or hoary crane's-bill: calyxes awned; petals entire; arils hirſute; leaves ſubdigitate, pinnatifid. Native of the Cape of Good Hope; cultivated in 1704, by the ducheſs of Beaufort.

9. Geranium tuberoſum, or tuberous-rooted crane's-bill: leaves many-parted; ſegments linear, ſubdivided, obtuſe. Native of Italy and Sileſia; cultivated in 1596, by Gerarde; flowers in May.

10. Geranium phæum, or dark-flowered crane's-bill: peduncles ſolitary, oppoſite to the leaves; calyxes ſlightly awned; ſtem erect; petals waved. Stems upright, nearly cylindrical, from eighteen inches to two and even three feet in height, below woolly, and having a few long ſhining hairs on them; joints large, commonly tinged with red. Leaves ſoft, the younger ones ſilky, ribbed; the lower on long petioles in pairs, the upper ſolitary; lobes moſtly five, unequally toothed, the lateral ones lobed; the lower leaves have frequently ſix or ſeven lobes, and the uppermoſt only three or four. Native of Swiſſerland, Hungary, Styria, and England, about Clapham, and Ingleton in Yorkſhire, and Tovel near Maidſtone.

11. Geranium fuſcum, or brown crane's-bill: peduncles two-flowered, oppoſite to the leaves, in pairs; ſtem patulous; petals quite entire. Linnæus ſeparates this unwillingly from the preceding, with which it agrees in many circumſtances, and particularly in having the whole corolla ſpread out, and dark-coloured. It differs, however, in having the leaves rigid, the corolla more reflex and ſmaller, the petals ſuborbiculate, mucronate, quite entire, flat, the peduncles not ſolitary, two-flowered, but two diſtinct. Native of the South of Europe.

12. Geranium reflexum, or purple-flowered crane's-bill: peduncles and leaves alternate; petals reflex, laciniated,

ciniated, the length of the calyx, which is awnleſs. Stem a foot high, dichotomous or bifid, patulous, pubeſcent; upper leaves alternate, five-lobed, wrinkled, tomentoſe, not ſpotted. Native of Italy.

13. Geranium lividum, or wrinkled-leaved crane's-bill: leaves half-ſeven-lobed, gaſhed; calyxes ſimple, hairy; petals flat, ſomewhat waved. This is allied to the two laſt. The ſtem is the ſame; the lower leaves are conjugate, the upper ones ſolitary, narrower, deeply ſeven-cleft, with trifid ſerrate lobes. It is a native of Swiſſerland, about Aigle, &c.

14. Geranium nodoſum, or knotty crane's-bill: petals emarginate; ſtem-leaves three-lobed, entire, ſerrate, lucid underneath. This is an herbaceous plant, having knobs like little bulbs at the origin of the branches and peduncles, whence the name. Stems ſmooth, ſhining, ſwelled at the joints. Native of Dauphiné, and the mountains of Cumberland; flowering in July and Auguſt.

15. Geranium ſtriatum, or ſtreaked crane's-bill: leaves five-lobed, lobes widened in the middle; petals two-lobed, netted-veined. Root perennial, ſending up many branching ſtalks a foot and a half high; leaves light green, thoſe on the lower part of the ſtalk have five lobes, and ſtand upon long foot-ſtalks; thoſe on the upper part have but three lobes, ſit cloſer to the ſtalks, and are ſharply indented on the edges. Native of Italy; cultivated in 1629; flowers in May and June.

16. Geranium argenteum, or ſilvery-leaved crane's-bill: petals emarginate; leaves ſubpeltate, ſeven-parted, trifid, tomentoſe-ſilky. Root perennial, thick; leaves on long petioles, ſilvery, and ſhining; flower-ſtalks four or five inches high, with one or two ſmall leaves on them, like thoſe below, but ſeſſile; and terminated by two pretty large pale flowers, with entire petals that ſpread open flat. It flowers in June. Native of Monte Baldo, and Dauphiné.

17. Geranium maculatum, or ſpotted crane's-bill: ſtem dichotomous, erect; leaves five-parted, gaſhed, the uppermoſt ſeſſile. Root perennial; ſtems ſeveral, about a foot high, or more, dividing by pairs; from the middle of the diviſions come out the peduncles, which are pretty long and naked, each ſuſtaining two pale purple flowers, with entire petals. It flowers in June. Native of Carolina and Virginia.

18. Geranium pratenſe, or meadow crane's-bill: leaves ſubpeltate, many-parted, wrinkled, acute; petals entire. Root perennial, ſending up many ſtalks, which riſe near three feet high, forked, tinged more or leſs with red; hairs on the upper branches white, terminated by minute dark red globules. The flowers appear in May and June. Native of meadows, in moſt parts of Europe.

19. Geranium paluſtre, or marſh crane's-bill: peduncles very long, declined; leaves five-lobed, gaſhed; petals entire. The branches of this are extremely divaricated, bifariouſly and obtuſely angular. It may be diſtinguiſhed from G. ſylvaticum, No. 21, which it reſembles very much in the leaves, by the ſuperior length of the peduncles, which are alſo recurved before the flowers open, and are not erect, but declined; the petals likewiſe are entire, not emarginate. Native of Germany, Ruſſia, and Denmark.

20. Geranium aconitifolium, or aconite-leaved crane's-bill: leaves ſubpeltate, ſeven-parted; petals entire, veiny-lined. Native of Swiſſerland and Dauphiné; flowers in May.

21. Geranium ſylvaticum, or wood crane's-bill: leaves ſubpeltate, five-lobed, gaſh-ſerrate; ſtem erect; petals emarginate. Stem two or three feet high, covered with reflexed hairs, much branched. Native of mountainous woods and thickets in many, particularly the northern, parts of Europe. With us, in Durham, Weſtmoreland, Cumberland, Lancaſhire, and Yorkſhire. About Ayſgarth Force, Wenſly-dale; near Hales Owen in Shropſhire; Holt-wood in Leziate, near Lynn, Norfolk, &c. It flowers in June and July.

22. Geranium pyrenaicum, or mountain crane's-bill: leaves rounded, five-lobed or three-lobed, gaſhed; petals two-lobed. This ſpecies is twice as large as the common ſort, No. 23. and always nearly upright. Stem hairy, forked twice or thrice. Leaves hairy, the lower generally ſeven-lobed, theſe again trifid, with rounded or blunt diviſions, the middle one frequently crenate. The upper leaves are frequently three-lobed, the lobes trifid, entire, the ſegments more acute than in the lower leaves, and the lobes more patent; they are often red at the edge. Native of the South of France, the Pyrenees, and England; near London, about Chelſea, Brompton, and Batterſea; near Enfield, Oxford, Bingley, and Keighley in Yorkſhire.

IV. Peduncles two-flowered, annual. 23. Geranium molle, common crane's-bill, or dove's-foot: peduncles and floral leaves alternate; petals bifid; calyxes awnleſs; ſtem ſomewhat erect. Stems procumbent, round, reddiſh, from nine inches to a foot in length, villoſe, branched. Root-leaves roundiſh, hoary, and veiny underneath, deeply divided into ſeven ſegments, which are jagged; ſtem-leaves alternate, divided into fewer, narrower, and more pointed, ſegments. Petals purple, obcordate, a little longer than the calyx; antheræ blue; ſtyle with glandular hairs; ſeeds ſmooth, covered with a wrinkled aril. G. molle when growing detached is procumbent, but among other plants it is drawn upright. It varies much in ſize, and the flowers vary in colour through many gradations of purple to pale red and white. It is the moſt common of all our geraniums, on dry banks, under walls, in corn-fields, and in paſtures; beginning to flower in April, and continuing through the ſummer.

24. Geranium rotundifolium, or round-leaved crane's-bill: petals almoſt entire, equal to the calyx, which is ſomewhat awned; leaves kidney-ſhaped, lobed, gaſhed, ſinuſes glandular. Stems much branched, ſtraggling, but ſcarcely proſtrate; ſtem and branches covered with a very ſhort down, which feels extremely ſoft like velvet, when drawn through the fingers. The leaves are rounder, and of a paler colour; the ſeeds are dotted, ſo as to appear reticulated. Hairs on the aril ſpreading. Theſe marks diſtinguiſh it from the foregoing. The filaments are clearly diſtinct at the baſe. The petals are fleſh-coloured or purple, varying to white, emarginate or obcordate; Mr. Woodward does not think that the diviſion of the petals is to be at all depended on. When freſh gathered it has a pretty ſtrong ſcent of muſk, but it ſoon goes off. Found on walls, roofs, banks, and in ſandy paſtures, about Iſlington, Hackney, Batterſea, Wandſworth, Mortlake, Kew, &c. near London; Church Brampton in Northamptonſhire; about Bath and Briſtol; in Suffolk, common.

25. Geranium puſillum, or ſmall-flowered crane's-bill: petals emarginate; arils even, with hairs preſſed cloſe; ſtem ſubpubeſcent. This differs from the *molle* in having the leaves more divided, of a paler and more yellow colour; the flowers much ſmaller, of a bluer and leſs brilliant hue; the ſtems ſcarce perceptibly hairy, or but ſlightly pubeſcent: the leaves in general grow oppoſite, but frequently not ſo towards the top of the ſtem, and are more open behind: the fertile ſtamina are never more than five; and the aril is not tranſverſely wrinkled as in the molle, but comparatively ſmooth. It forms a larger tuft than the molle, and ſometimes varies with white flowers, as that does. It is alſo equally common in many places; particularly on the weſt ſide of London, in neglected gardens and fallow fields; flowering in June and July.

26. Geranium lucidum, ſhining crane's-bill or dove's-foot: calyxes pyramidal, angular, raiſed in wrinkles; leaves five-lobed, rounded. Stems and leaves ſmooth and ſhining as if varniſhed, whence its ſignificant trivial name; they are, however, ſlightly hairy. Leaves kidney-ſhaped, moſtly five-lobed, theſe again divided half-way into

into three lobes, the middle one having usually three notches, the side ones entire. It varies, however, from this disposition; in rocky situations the leaves are only half an inch broad, and not so much divided. The whole plant is sometimes red. Native of most parts of Europe, on walls, roofs, banks, in rocky and shady places, and in a chalky soil among corn; it flowers from June till August.

27. Geranium columbinum, or long-streaked crane's-bill: peduncles longer than the leaf; leaves five-parted, multifid; calyxes five-cornered, awned; arils smooth. Slender, mostly procumbent, with small, rigid, close-pressed, hairs. Leaves a little hairy on both surfaces, divided to the foot-stalk into several lobes, these again divided with linear segments. Native of most parts of Europe, in corn-fields and pastures, and under hedges. It flowers from June till August.

28. Geranium incanum, or hoary crane's-bill: peduncles two-flowered; calyxes awned; petals entire; arils hirsute; leaves subdigitate, pinnatifid. Native of the Cape of Good Hope.

29. Geranium dissectum, or jagged crane's-bill: peduncles shorter than the leaf; leaves five-parted, trifid, and multifid; petals emarginate; arils villose. This species can scarcely be mistaken for any other; it is, however, not only distinguished by its finely divided leaves, whence its trivial name, but by the flowers, which are usually of a bright colour. It varies greatly in size; also with flesh-coloured and white flowers. Native of most parts of Europe, by road sides, on banks, in fallow fields, and on the borders of pastures, flowering in May and June, till August.

30. Geranium Carolinianum, or Carolina crane's-bill: leaves five-parted, gashed; calyxes awned; petals emarginate; arils hirsute. This greatly resembles common dove's-foot or crane's-bill, No. 23. but is smaller, and the branches are shorter: the flowers are very small, of a pale blue colour; seeds black, with short erect beaks. Native of Carolina.

31. Geranium Bohemicum, or Bohemian crane's-bill: petals emarginate; arils rough with hairs; cotyledons trifid, with the middle cleft truncate. Stems many, branched. Flowers of a fine blue colour. Said to be a native of Bohemia; flowers from June till August.

32. Geranium Robertianum, stinking crane's-bill, or herb Robert: leaves quinate and ternate, gashed; calyxes ten-angled. Stems spreading, branched, blood-red, hairy, particularly in young plants. The whole is beset with pellucid hairs, but becomes smoother as the plant grows older. It is commonly red at the joints, and the whole plant is frequently red. It has a disagreeable rank smell when bruised. A decoction of herb Robert has been known to give relief in calculous cases; it is considerably astringent, and is given to cattle when they make bloody water, or have the bloody flux. Native of all Europe, in woods, under hedges, in hollow trees, on walls and the roofs of houses, among rubbish, and in stony places, flowering from April through the whole summer.

β. In the variety which occurs near Swanning in Dorsetshire, and on the shore of Selsey island, the whole plant is shining, the leaves smaller, and more deeply divided.

Propagation and Culture. The annual sorts of geranium may be increased by seeds; and, if these be permitted to scatter, the plants will come up without any farther care. The perennial sorts, which are more numerous, may be increased the same way, or by parting the roots in autumn. They may be planted in almost any soil or situation, and require no other culture but to keep them clean from weeds. Many of them, indeed, are common weeds, but even some of these have beauty enough to recommend them to a place in a garden, particularly the second, eighteenth, twenty-first, and twenty-second, species. See ERODIUM, GRIELUM, MONSONIA, and PELARGONIUM.

GERANOM'ACHY, *s.* [from γερανος, a crane, and μαχομαι, Gr. to fight.] The fabulous war between the cranes and pigmies. *Scott.*

GERAN'THRÆ, in ancient geography, a town of Laconia. *Pausanias.*

GE'RAR, [Heb. a pilgrimage.] A man's name.

GE'RAR, the name of a place situated in the land of the Philistines; noted in scripture as the temporary residence of the patriarchs Abraham and Isaac; and where each of them practised the same expedient of denying his wife. Asa king of Judah gained a decisive victory over Zerah the Ethiopian near this place. *Gen.* xx. xxvi. 2 *Chron.* xiv. 13, 14.

GER'ARD, surnamed THOM, or according to others TUNG, or TENQUE, the founder and first grand-master of the order of St. John of Jerusalem, was a native of the isle of Martigues, on the coast of Provence. While Jerusalem was in the hands of the Saracens, some merchants of Amalfi, a town in the Neapolitan territory, obtained permission from the sultan of Egypt and Syria, to erect a benedictine monastery near the holy sepulchre, for the convenience of the numerous pilgrims who came to visit it. Among others, Gerard arrived to pay his devotions in the holy city, where he acquired a high character with the Christians for his piety and prudence. The fanaticism of the times occasioning the number of pilgrims to increase every year, by which means the treasury of the monastery received considerable supplies, the abbot was enabled, in 1080, to build a hospital for the reception of the poorer pilgrims, and with accommodations for the relief of the sick, the management of which he gave to Gerard. The chapel of that hospital was consecrated to St. John, because of a tradition among the inhabitants of Jerusalem, that Zecharias, the father of St. John, had lived on the spot where it was built. After the conquest of Jerusalem by the Christians, under Godfrey of Bouillon, Gerard projected the foundation of a new religious order, in which the ecclesiastical and military characters were to be blended. This design he began to carry into execution in 1100, when numbers of persons associated with him under the denomination of "Hospitalers of St. John of Jerusalem," who, besides the three vows of chastity, poverty, and obedience, took a particular vow to devote themselves to the relief of all Christians in distress. This order, and the rules drawn up for its government, were approved and confirmed by pope Paschal II. who, by a bull which he issued, granted it considerable privileges, and recognised Gerard as the first grand-master. Gerard died in 1120. Thus commenced that order, which, in succeeding times, became so celebrated in history, when its members were commonly known by the name of "Knights of Rhodes," and afterwards by that of "Knights of Malta."

GER'ARD (John), a learned German lutheran divine, born at Quedlinburg in Saxony, in 1582. He filled the chair of theological professor at the university of Jena for many years with distinguished reputation, and died in 1637. He was the author of a great number of works, the principal of which were: 1. Commentaries on Genesis, Deuteronomy, the Epistles of St. Peter, and the Apocalypse. 2. The Catholic Confession. 3. A Harmony of the Four Evangelists, in three vols. folio, left by him in an unfinished state, and completed by MM. Chemnitz and Lyserus, who published it in 1646. 4. A Collection of Common Places in Theology; a work in which he has treated of the lives and writings of the authors of the primitive church, &c.

GER'ARD (John), a learned German professor, born at Jena, in 1621. He was educated in his native place, where he went through the usual course of academic

ſtudies, and then went to Altdorf, in 1640, for the ſake of receiving inſtructions in the oriental languages. In 1646, he was appointed aſſiſtant profeſſor of philoſophy at Wittemberg; and in 1652, nominated profeſſor of hiſtory at Jena. In the following year he was created doctor of divinity; and in 1655, preferred to the rectorſhip of the univerſity of Jena. He died in 1668, when no more than forty-ſeven years of age. He was the author of, 1. *Harmonia Linguarum Orientalium.* 2. *Diſputationum Theologicarum Faſciculus.* 3. *Locorum Theologicorum Epitome.* 4. *De Sepultura Moſis Diſſ.* 5. *Conſenſus & Diſſenſus religionum profanarum.* 6. *De Eccleſiæ Copticæ Ortu, Progreſſu, & Doctrina*; and other works of great erudition and merit.

GER'ARD (Alexander), a Scottiſh divine and profeſſor, born at Garioch, in the county of Aberdeen, in 1728. After the uſual preparatory education, he entered a ſtudent in Mariſchal-college, Aberdeen. Here, after devoting four years to the ſtudy of Greek, Latin, the mathematics, and philoſophy, he was admitted to the degree of maſter of arts, and then commenced his theological ſtudies, which he proſecuted in the univerſities of Aberdeen and Edinburgh. In 1748, juſt after he had completed his twentieth year, he was licenſed to preach in the church of Scotland; and in 1750, was choſen aſſiſtant to Mr. David Fordyce, profeſſor of philoſophy in the Mariſchal college. In this capacity he diſcharged the duties of profeſſor during Mr. Fordyce's abſence on his continental tour; and upon the death of that gentleman, in 1752, was appointed his ſucceſſor. Mr. Gerard's department was confined to moral philoſophy and logic, the duties of which he diſcharged with unwearied diligence, and with equal ſucceſs and reputation. In 1759, he was ordained a miniſter of the church of Scotland; and in the following year he was appointed profeſſor of divinity in the Mariſchal college, and miniſter of the Greyfriars church, in Aberdeen. About the ſame time he was created doctor of divinity. He continued to diſcharge the duties of his profeſſorſhip, and to proſecute his ſtudies, until the year 1795, when he died on his birth-day, juſt as he had completed his ſixty-ſeventh year. Beſides ſeveral ſingle ſermons preached on occaſional ſubjects, he was the author of, 1. An Eſſay on Taſte, 1759, 8vo. to which the philoſophical ſociety of Edinburgh adjudged, in 1756, the prize of a gold medal, offered for the beſt piece on that ſubject, and which appeared in a conſiderably enlarged form in 1780. 2. Diſſertations on the Genius and Evidences of Chriſtianity, 1766, 8vo. 3. An Eſſay on Genius, 1774, 8vo. and two volumes of excellent Sermons, publiſhed in 1780 and 1782, 8vo. In 1799, the author's ſon and ſucceſſor in the divinity profeſſorſhip, Dr. Gilbert Gerard, publiſhed from his father's manuſcripts a part of his theological courſe under the title of The Paſtoral Care, &c. 8vo. which is a work of very conſiderable merit in that claſs of compoſitions.

GER'ARD (John), a celebrated Engliſh botaniſt, born in 1545, at Namptwich in Cheſhire. He was educated as a ſurgeon, and appears to have ſpent ſome time in foreign travel. At length he ſettled in London, where he was patroniſed by lord Burleigh, whoſe large and curious garden he ſuperintended for twenty years. He had alſo, at his reſidence in Holborn, a phyſic-garden of his own, which was probably more richly ſupplied than any other in England. He ſeems to have enjoyed the favour of the college of phyſicians, and is ſpoken of with great commendation by ſome of his contemporaries. He arrived at the rank of maſter of his company, and died about 1607. Gerard's firſt publication was a catalogue of the plants in his own garden, entitled *Catalogus Arborum, Fruticum & Plantarum, tam indigenarum quam exoticarum, in horto Joh. Gerardi, civis & chirurgi Londin. naſcentium*, 4to. 1596 and 1599. The number of ſpecies contained in it is 1033, and an atteſtation of its fidelity is ſubjoined by the botaniſt Lobel. His great work, entitled Herbal, or General Hiſtory of Plants, folio, was publiſhed in 1597. Its foundation was a tranſlation into Engliſh of the herbal of Dodoens, made, according to Lobel, by Dr. Prieſt, which after his death came into the hands of Gerard, who was not enough ſkilled in Latin to have undertaken it himſelf. Its diſtribution, however, is altered, and many new plants are added from Lobel and Cluſius. The figures were procured from Frankfort, being from the blocks uſed in the Dutch Herbal of Tabernæmontanus. Though, from this account, Gerard's ſhare in the work appears to have been inconſiderable, yet he has the merit of having contributed to diffuſe a more general taſte for botany throughout the kingdom, and to have furniſhed herbaliſts with an uſeful book of plants. The greatly-improved edition by Thomas Johnſon, in 1633, long continued to be a ſtandard work, and is ſtill valued.

GERAR'DIA, *ſ.* [ſo named by Plumier in honour of *John Gerard*, our old Engliſh botaniſt.] In botany, a genus of the claſs didynamia, order angioſperma, natural order of perſonatæ, (ſcrophulariæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, five-cleft, upright, ſharp, permanent. Corolla: one-petalled, ringent; tube round, longer than the calyx: upper lip upright, blunt, flat, broader, emarginate; lower lip reflex, three-parted; diviſions lateral, emarginate; middle ſhorter, two-parted. Stamina: filaments four, ſcarcely the length of the tube, two a little ſhorter; antheræ ſmall. Piſtillum: germ ovate, ſmall; ſtyle ſimple, ſhort; ſtigma blunt. Pericarpium: capſule ovate, two-celled, two-valved, gaping at the baſe; partition contrary. Seeds: ovate, ſolitary.—*Eſſential Character.* Calyx five-cleft; corolla two-lipped, lower lip three-parted, the lobes emarginate, the middle ſegment two-parted; capſule two-celled, gaping.

Species. 1. Gerardia tuberoſa, or tuberous Gerardia: leaves ſubovate, tomentoſe, repand, the length of the ſtalk. It may be doubted whether it be not of another genus. Linnæus recommends a farther examination of the fructification. Native of South America.

2. Gerardia Japonica, or Japoneſe Gerardia: leaves ovate, gaſh-pinnatifid, petioled; ſtalk ſimple. Differs from G. pedicularia, No. 8, in having a ſimple ſtalk, peduncle ſhorter than the leaf, and gaſh-pinnatifid leaves, with ſerrate pinnas. Native of Japan.

3. Gerardia delphinifolia, or larkſpur-leaved Gerardia: leaves linear, pinnatifid; ſtalk ſomewhat branched. Stem a foot high, obtuſely four-cornered, upright, even, with a few alternate branches. Native of the Eaſt Indies.

4. Gerardia ſcabra, or rough Gerardia: hiſpid, ſcabrous; leaves oblong, pinnatifid. Found at the Cape of Good Hope by Thunberg.

5. Gerardia purpurea, or purple Gerardia: leaves linear. Root annual; ſtalks a foot high, filiform, either very ſimple, or brachiate, ſmooth. Native of North America. It is the only ſpecies of this genus yet cultivated among us, and was introduced in 1772 by Dr. Samuel Martin; it flowers in July and Auguſt.

6. Gerardia tubuloſa, or long-tubed Gerardia: ſmooth; leaves linear, entire, ſharp; tube of the flower longer than the calyx. Found at the Cape of Good Hope by Thunberg.

7. Gerardia flava, or yellow Gerardia: leaves lanceolate, pinnate-toothed; ſtalk extremely ſimple; a foot high, or more. Native of North America.

8. Gerardia pedicularia: leaves oblong, doubly-ſerrate; ſtalk panicled; calyxes crenate. It dries black, like a pedicularis, and is allied to P. triſtis. Native of North America.

9. Gerardia glutinoſa, or clammy Gerardia: leaves ovate, ſerrate; bractes linear, hiſpid. Native of China.

10. Gerardia Nigrina: ſcabrous; leaves lanceolate, ſerrate at the bottom; ſtalk four-cornered. This was formerly made a diſtinct genus by Linnæus, under the name

name of *Nigrina*; but he was afterwards of opinion that it could not be ſeparated from the Gerardias. Native of the Cape of Good Hope.

GERARDMER', a town of France, in the department of the Voſges, and chief place of a canton, in the diſtrict of Bruyères: three leagues and a half ſouth-eaſt of Bruyères, and three and three-quarters eaſt of Remiremont.

GER'ARDSTOWN, a town of the American States, in Berkely county, Virginia: ten miles from Martinſburg, and 254 from Philadelphia.

GERASCAN'THUS, *ſ.* in botany. See CORDIA.

GER'ASTORFF, a town of Germany, in the archduchy of Auſtria: ſeven miles eaſt of Korn-Neuburg.

GERAU', a ſmall country of Germany, ſituated near the conflux of the Maine and the Rhine, in the circle of the Upper Rhine. It takes its name from Gerau; but Darmſtadt is the capital.

GERAU' (Groſs), a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe Darmſtadt: eight miles weſt-north-weſt of Darmſtadt, and ten ſouth-eaſt of Mentz.

GER'BA, or JERBA, a ſmall iſland in the Mediterranean, near the coaſt of Tripoli. Its principal produce is barley and fruit. Lat. 33. 30. N. lon. 11. 30. E. Greenwich.

GER'BEL (Nicholas), a learned juriſt, born at Pfortzheim. He was brought up to the ſtudy of the law, and became a profeſſor of it at Vienna, and afterwards at Straſburg. He applied to the ſtudy of hiſtory and antiquities, and obtained great reputation by his writings. De Thou characterizes him as one equally eſtimable for his erudition and humanity. He died at a very advanced age in 1560. His works are: 1. *Iſagoge in Tabulam Græciæ Nicolai Sophiani*, 1545, afterwards augmented into ſeven books, comprehending a complete deſcription of all Greece, and printed at Baſil, fol. 1550. 2. *De Anabaptiſtarum Ortu et Progreſſu.* 3. *Vita Joannis Cuſpiniani.* He corrected Cuſpinian's Chronicle of the Cæſars, and Arrian's Hiſtory of Alexander.

GER'BERA, *ſ.* in botany. See ARNICA.

GER'BERON (Gabriel), a French eccleſiaſtic, and controverſial writer in ſupport of the Janſeniſt principles, born at Saint-Calais, in 1628. He taught theology for ſome years with conſiderable ſucceſs, and was appointed ſub-prior of the abbey of Corbie. When the controverſy on the ſubject of grace raged between the Janſeniſts and the Jeſuits, he wrote with much zeal and ability in ſupport of the ſide of the queſtion embraced by the former; whence the Jeſuits became his determined enemies, and found means to prejudice Louis XIV. ſo ſtrongly againſt him, that in 1682, the king gave orders for his being put under arreſt. Gerberon, however, having obtained information of the approach of the officers, found means to eſcape, and retired into Holland, where, under the name of Auguſtine Kergré, he exerciſed the paſtoral functions for ſeveral years, and wrote a great variety of books on the queſtions agitated in the controverſies concerning free-will and grace. The air of Holland at length proving injurious to his health, he removed into Flanders, where, in 1703, he was taken into cuſtody by the archbiſhop of Mechlin, and committed to the caſtle of Vincennes. In that priſon he continued ſhut up until the year 1710, retaining his natural vivacity and zeal for what appeared to him to be truth, undiminiſhed by his ſufferings. The king now ordered him to be delivered into the care of his ſuperiors, by whom he was ſent to the abbey of St. Denys, where he died in 1711, when nearly eighty-three years of age. He ſuperintended an edition of The Works of Marius Mercator, to which he added notes, and printed it at Bruſſels in 1673, 12mo. under the aſſumed name of Rigberius; a new edition of The Works of St. Anſelm; and a new edition of The Works of Baius, 1696, 4to. He was the author of, A General Hiſtory of Janſeniſm, publiſhed at Amſterdam in 1700, 3 vols. 12mo. a tranſlation of father Gabriel's *Specimina moralis Chriſtianæ & moralis Diabolicæ*, under the title of Eſſays on Moral Theology, 1680, 12mo. and a vaſt number of devotional pieces, and controverſial tracts.

GERBEROY', a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Beauvais; fortified in the ninth century to ſtop the incurſion of the Normans. It was taken by the Engliſh in the years 1160 and 1437; but, in 1449, the troops left in garriſon were put to death by the Picards: four leagues north-weſt of Beauvais, and two north-eaſt of Gournay. Lat. 49. 32. N. lon. 19. 32. E. Ferro.

GERBEVIL'LER, a town of France, in the department of the Meurte, and chief place of a canton, in the diſtrict of Luneville: one league and three quarters ſouth of Luneville, and five and a quarter eaſt of Vezelize.

GERBILLO'N (John Francis), a diſtinguiſhed Jeſuit miſſionary, born at Verdun in 1654. He entered into the ſociety of Jeſuits in 1670; and having conſtantly the miſſion to China in view, he qualified himſelf for it by the ſtudy of mathematics, in which he became very ſkilful. His wiſhes were accompliſhed in 1685, when he embarked for China, in company with ſix mathematicians of the ſame ſociety. At the deſire of the emperor, he remained at Pekin, ſtudying the Tartarian language; and he ſo much ingratiated himſelf with that monarch, as to be appointed to join an embaſſy ſent to regulate the boundaries with the court of Muſcovy. By his addreſs and knowledge of languages, he greatly contributed to the ſucceſs of this negociation; and on his return to China was treated with great reſpect by the emperor, who choſe him for his inſtructor in mathematics and philoſophy, and kept him about his perſon in ſeveral journeys which he made into Tartary. He obtained free permiſſion to preach the Chriſtian religion in China, and had the direction of the French college in Pekin, and finally was made ſuperior-general of all the Jeſuit miſſionaries ſent from France. He died at Pekin in 1707. He wrote, in the Chineſe and Tartar languages, Elements of Geometry, extracted from Euclid and Archimedes; and, Geometry, practical and ſpeculative; both ſplendidly printed at Pekin. The curious accounts of his eight journeys into Tartary are printed in father Du Halde's *Deſcription de la Chine.* He left in manuſcript, A Voyage to Siam, of which extracts are given in Michault's *Melanges Hiſtoriques.*

GERB'STADT, a town of Germany, in the circle of Upper Saxony, and county of Mansfeld: thirty miles ſouth-weſt of Deſſau, and thirty-ſix ſouth of Magdeburg.

GERDAVAN', a town of Pruſſia, in the province of Natangen, built in 1325, and defended by two caſtles; ſituated on the Omer, near a conſiderable lake, which is called the *Calendar of Gerdavan*, as prognoſticating weather: thirty miles ſouth-eaſt of Konigſberg.

GER'DEN, a town of Germany, in the circle of Weſtphalia, and biſhopric of Paderburn: two miles ſouth-eaſt of Dringenberg.

GER'DES (Daniel), a learned profeſſor of theology at Groningen, born in 1698 at Bremen, where his father was engaged in commerce. His parents obſerving, at an early period, that he was endowed with a happy genius, ſpared neither pains nor expence to give him a good education. Having gone through the uſual courſe of ſchool inſtruction, he was placed for ſix years at the gymnaſium of his native town, where he applied with ſuch diligence, that in 1714 he gave a public and honourable teſtimony of the progreſs he had made, by explaining a paſſage in the Plutus of Ariſtophanes. He at firſt propoſed to ſtudy the law; but he afterwards altered his plan, and devoted himſelf to theology. He therefore attended the lectures of Dr. Gerrard Buſch on philoſophy and philology, and thoſe of Schumacher

and Juſt on theology, and gave a double proof of his knowledge by two publications; for in 1717 he wrote his learned diſſertation, *De Larium & Penatium origine*, which Maſſon thought worthy of being inſerted in the fifteenth part of his *Hiſtoire critique de la République des Lettres*; and two years after he defended, under Schumacher, his theſis *De Opera Miniſterii Evangelici adumbrata ſub emblemate Collectionis quæ ſit tempore miſſis*. In 1719 he went to Utrecht, where he diligently attended the lectures of Burman, Alphen, and Lampen; and before the end of that year defended a theological theſis, *Ad Hiſtoriam Pauli Apoſtoli*. In 1722 he finiſhed his academical ſtudies and repaired to the Hague, where in the ſame year he was admitted a candidate for holy orders. He then viſited the moſt celebrated academies of Germany, as well as the principal towns in Swiſſerland, Holland, and France, and formed an acquaintance with the moſt learned men of that period. In 1726 he was invited to Duiſburg to be profeſſor of theology; he therefore took the degree of doctor in that faculty at Utrecht, and entered on his academic office with an oration, *De Docta in Theologia ignorantia*. Two years after, he obtained the profeſſorſhip of church hiſtory; and on this occaſion publiſhed a diſſertation, *De Uſu Euchariſtiæ medico*. Having now attained a conſiderable degree of celebrity, the curators of the univerſity of Groningen, on the tranſlation of Voigt to Utrecht, in 1735, were induced to invite him to the theological chair, which he accepted; and on the 11th of June the following year, he delivered his introductory oration, *De Unctione quæ Fideles omnia docet*. The ſame year he was elected a member of the royal academy of ſciences at Berlin. Gerdes continued to diſcharge his duty, both as a profeſſor and preacher, till the year 1752; when a diſorder in the breaſt, with which he had been affected in his youth, obliged him to give over preaching, and to attend only to the profeſſorſhip of church-hiſtory: but his weakneſs increaſing, he died on the 11th of February, 1765. His principal works are: 1. *Veſperæ Vadenſes, ſive Diatribæ Theologico-philologicæ de Hyperbolis ex Scriptoribus ſacris eliminandis*. Utrecht, 1727, 4to. 2. *Obſervationes Miſcellaneæ ad quædam loca SS. in quibus Hiſtoriæ Patriarcharum illuſtratur, Diſ.* III. Duiſburg, 1729–1733, 4to. 3. *Miſcellanea Duiſburgenſia, ad incrementum Rei Literariæ omnis præcipue vero Eruditionis Theologicæ publicata*. Amſt. & Duiſb. 1732–1738, 4 vols. 8vo. 4. *Miſcellanea Groningiana*, vol. i. Duiſb. 1736; vol. ii. iii. iv. Groning. 1737–1745, 8vo. This is a continuation of the preceding work. 5. *Florilegium Hiſtorico-criticum librorum variorum, cui multa ſimul ſcitu jucunda interſperguntur, Hiſtoriam omnem Literarium & cum primis Reformationis eccleſiaſticum illuſtrantia*. This *Florilegium* appeared firſt in his *Miſcellanea Groningiana*, vol. ii. and iii. but was ſoon after printed by itſelf, at Groningen, 1740, in 8vo. and enlarged and improved, in 1747, 8vo. It forms an excellent ſupplement to Voigt's *Catalogus Librorum rariorum*. 6. *Compendium Theologiæ dogmaticæ*, ibid. 1734, 8vo. 7. *Exercitationum Academicarum, Libri* iii. *quibus varia ſacra, tum ad Hiſtoriam Patriarcharum tum ad Juadaias Antiquitates, &c. ſpectantia illuſtrantur*. Amſt. 1738, 4to. with a head of the author. 8. *Introductio in Hiſtoriam Evangelii ſeculi* XVI. *paſſim per Europam renovati, &c.* Groningen, 1744–1752, 4 vols. 4to. 9. *Meletemata ſacra ſive Exegeſis & Iſagoge, in Cap.* xv. *Ep.* i, *ad Corinthios*. Groning. 1759, 4to.

GER'DIN, a town of Ruſſia, in the government of Perm, on the Colva: 152 miles north of Perm. Lat. 59. 40. N. lon. 74. E. Ferro.

GEREMSCHANGKAI'A, a town of Ruſſia, in the government of Upha: thirty-ſix miles weſt-north-weſt of Bugulma.

GERENSCHANG'SKOI, a fortreſs of Ruſſian Siberia, in the government of Kolivan: 240 miles ſouth-ſouth-weſt of Kolivan. Lat. 50. 45. N. lon. 97. E. Ferro.

GE'RENT, *adj.* [*gerens*, Lat.] Carrying; bearing.

GEREN'ZA. See CERENZA.

GE'RERSDORF, a town of Germany, in the archduchy of Auſtria: three miles eaſt-ſouth-eaſt of Crems.

GE'RESTADT, a town of Norway, in the biſhopric of Aggerhuus: thirty-two miles ſouth-weſt of Tonſberg.

GERES'TICUS, a harbour of Teios in Ionia. *Livy*.

GERESTO', a town of the iſland of Negropont: fifteen miles ſouth of Cariſto.

GER'FALCON, *ſ.* the brown and the white. See the article FALCO, vol. vii. p. 189.

GER'GAR, a town of Spain, in the province of Grenada: ten miles ſouth-ſouth-weſt of Purchena.

GERGEFAL'VA, a town of Tranſilvania: ſixteen miles weſt-north-weſt of Hermenſtadt.

GERGE'SA, in ancient geography, a Transjordan town, no otherwiſe known than by the *Gergeſeni* of St. Matthew, and *Gergeſæi* of Moſes; ſuppoſed to have ſtood in the neighbourhood of Gadara and near the Sea of Tiberias. The *Gergeſæi*, one of the ſeven ancient people of Canaan, leſs frequently mentioned than the reſt, appear to have been leſs conſiderable and more obſcure: their name is from *Girgaſi*, one of Canaan's ſons. See GADARENES.

GERGESE'NES, (country of). See GADARENES.

GER'GITHUM, in ancient geography, a town near Cumæ in Æolia. *Pliny*.

GERGO'BIA, a town of Gaul. *Cæſar*.

GER'HARD (Ephraim), a German lawyer and philoſopher, born at Gierſdorf, in the duchy of Brieg, in Sileſia, in 1682. He became advocate to the court and regency of Weimar, and afterwards filled the chair of profeſſor of law in the univerſity of Altdorf, where he died, in 1718, when only thirty-ſeven years of age. He was the author of ſeveral treatiſes on juriſprudence and philoſophy, of which the moſt important is entitled, *Delineatio Philoſophiæ rationalis*; to which is ſubjoined an excellent diſſertation, *De præcipuis Sapientiæ Impedimentis*, &c.

GER'HARDSBRON, a town of Germany, in the circle of Franconia, and principality of Anſpach: twenty-eight miles weſt of Anſpach.

GE'RINGSWALDE, a town of Germany, in the circle of Upper Saxony, and circle of Leipſic: four miles north-eaſt of Rochlitz.

GER'IZIM, or GARIZIM, a mountain of Paleſtine, ſituated in Samaria near the plain of Moreh. This mountain and Ebal were appointed by Moſes for the firſt promulgation of the law, upon the Iſraelites' entrance into Canaan; whereon the bleſſings for obedience and the curſes for diſobedience were ſeverally pronounced. The *bleſſing* was attached to Gerizim, which from that circumſtance ſeems to have gained a kind of religious veneration from that period; for it is ſaid the temple of the Samaritans was afterwards erected upon it, which by order of Antiochus was dedicated to Jupiter, in the days of the Maccabees, when it is mentioned by the name of *Garizim*. *Deut.* xi. & xxvii. *Joſh.* viii. 30, &c. 2 *Macc.* vi. 2.

GER'KIN, *ſ.* A ſmall cucumber.

GER'LACH (Stephen), a learned German lutheran divine, born at Knitlingen, in Swabia, in 1546. His early education he received in his native place; and, in 1563, he was ſent to the univerſity of Tubingen, where he diſtinguiſhed himſelf by his diligence in his ſtudies, and in 1566 proceeded to his degree of bachelor of arts with great applauſe. Being ſoon afterwards obliged to withdraw from this univerſity, on account of its being viſited with the plague, he went to Eſſingen, where, in 1567, he was admitted to the degree of doctor in philoſophy. In 1573, the emperor Maximilian II. having appointed baron Urgrad his ambaſſador to the Turkiſh court, Gerlach was made choice of for his chaplain; and accompanied the ambaſſador to Conſtantinople. In this city he continued upwards of five years, acquainting himſelf with the manners and religion of the Turks and of the Greeks, and cultivating the friendſhip of the moſt

moſt eminent men in the latter communion, to whom he recommended himſelf by his learning, piety, and amiable manners. In 1578, Gerlach took his leave of the ambaſſador, and returned to Tubingen, where he was made profeſſor in ordinary of the prophetic Scriptures, dean of the church of Tubingen, and colleague of the academic ſenate. In 1590, he was appointed to deliver a courſe of lectures explanatory of the Epiſtles of St. Paul; and was made inſpector and ſuperintendant of the theological college at Tubingen. The duties of theſe reſpective appointments he diſcharged with exemplary diligence, until incapacitated by diſorders which brought on a ſudden decay of his faculties. He died in 1612, in the ſixty-ſixth year of his age. He was the author of An Epitome of Eccleſiaſtical Hiſtory, written in Latin; A Journal of the Embaſſy ſent to the Porte by the Emperors Maximilian II. and Rodolf II. in the German language, and abounding in curious and intereſting particulars, hiſtorical, eccleſiaſtical, and theological; and numerous theological Diſſertations, Theſes, and Diſputations, in controverſy with the Catholics, Calviniſts, &c.

GERLATZ'KOI, a fortreſs of Ruſſian Siberia, on the eaſt ſide of the Irtiſch, in the government of Kolivan: 212 miles weſt of Kolivan. Lat. 54. 20. N. lon. 93. 10. W. Greenwich.

GERM, *ſ.* [*germen*, Lat.] A ſprout or ſhoot; that part which grows and ſpreads.—Whether it be not made out of the *germ*, or treadle of the egg, doth ſeem of leſſer doubt. *Brown.*

GERMA'IN (Thomas), a celebrated artiſt, born at Paris in 1674. His father was the king's goldſmith, alſo a workman of great ſkill. His father dying while he was a child, his mother ſent him to the ſchool of the painter Boullongne. Thence, under the protection of Louvois, he went to Italy; but his progreſs was interrupted by the death of his protector, which deprived him of ſupport. With the true ſpirit of one devoted to improvement, he bound himſelf apprentice to a goldſmith for ſix years, on condition that he ſhould be allowed two hours a-day to draw at the Vatican. He well knew that all the departments of art are connected, and that it is impoſſible to excel in one without poſſeſſing the baſis of the whole. His great application, therefore, made him a maſter in his profeſſion. During his reſidence at Rome he became known by many fine ſculptures in metal, and upon his return to France he took the lead in all works of that kind. Plate richly chaſed was then greatly in vogue, and Germain was employed for all the ſplendid ornaments of the toilets of queens and the buffets of kings which were ſent as preſents from that magnificent court, or ordered from Paris, the ſeat of taſte and elegance. Apartments were given him in the Louvre, and in 1738 he was created echevin or ſheriff of Paris. He was ſkilled in architecture, and from his deſigns were conſtructed a fine church at Leghorn, and that of St. Louis in the Louvre. He died in 1748, and was interred in the latter edifice.

GER'MAN, *ſ.* [*germain*, Fr. *germanus*, Lat.] Brother; one approaching to a brother in proximity of blood: thus the children of brothers or ſiſters are called couſins-*german*.—Wert thou a bear, thou wouldſt be killed by the horſe; wert thou a horſe, thou wouldſt be ſeized by the leopard; wert thou a leopard, thou wert *german* to the lion, and the ſpots of thy kindred were juries on thy life. *Shakeſpeare.*—The German language.—Do you learn *German* yet, to read, write, and ſpeak it. *Cheſterfield.*

GER'MAN, *adj.* [*germanus*, Lat.] Related. *Obſolete.*—Not he alone ſhall ſuffer what wit can make heavy, and vengeance bitter; but thoſe that are *german* to him. *Shakeſpeare.*—Spoken in Germany.—I alſo expect that you make yourſelf perfect maſter of the *German* language. *Cheſterfield.*—Any thing belonging to Germany; as the German empire, German flute, German legion, &c.

GER'MAN, a townſhip of the American States, in Fayette county, Pennſylvania.

GER'MAN FLATS, the chief townſhip of Herkemer county, in the American States, taken from that of Montgomery, in New-York. By the cenſus of 1790, it contained 1307 inhabitants; and by the ſtate cenſus of 1796, 4194 inhabitants. It lies on the ſouth ſide of Mohawk river, oppoſite Herkemer: twenty-four miles eaſt of Whiteſtown, and ſixty weſt of Schenectady.

GERMAN'DER, *ſ.* in botany. See TEUCRIUM.

GERMAN'ICUS (Cæſar), a ſon of Druſus and Antonia the niece of Auguſtus. He was adopted by his uncle Tiberius, and raiſed to the moſt important offices of the ſtate. When his grandfather Auguſtus died, he was employed in a war in Germany, and the affection of the ſoldiers unanimouſly ſaluted him emperor. He refuſed the unſeaſonable honour, and appeaſed the tumult which his indifference occaſioned. He continued his wars in Germany, and defeated the celebrated Arminius, and was rewarded with a triumph at his return in Rome. Tiberius declared him emperor of the eaſt, and ſent him to appeaſe the ſeditions of the Armenians. But the ſucceſs of Germanicus in the eaſt was ſoon looked upon with an envious eye by Tiberius, and his death was meditated. He was ſecretly poiſoned at Daphne, near Antioch, by Piſo, A. D. 19, in the thirty-fourth year of his age. The news of his death was received with the greateſt grief, and the moſt bitter lamentations, and Tiberius ſeemed to be the only one who rejoiced in the fall of Germanicus. He had married Agrippina, by whom he had nine children, one of whom, Caligula, diſgraced the name of his illuſtrious father. Germanicus has been commended, not only for his military accompliſhments, but alſo for his learning, humanity, and extenſive benevolence. In the midſt of war, he devoted ſome moments to ſtudy, and he favoured the world with two Greek comedies, ſome epigrams, and a tranſlation of Aratus in Latin verſe.

GER'MANISM, *ſ.* An idiom of the German language.—It is full of Latiniſms, Galliciſms, *Germaniſms*, and all *iſms* but Angliciſms. *Cheſterfield.*

GERMAN'ITY, *ſ.* [*germinatas*, Lat.] Brotherhood.

GER'MANTOWN, a town of the American States, in Columbia county, containing 516 inhabitants. In 1796 it had ſeventy-five qualified voters.

GER'MANTOWN, a town of the American States, in Philadelphia county, Pennſylvania; ſeven miles north of Philadelphia, and eſteemed the ſecond town in the country, until ſeveral inland towns eclipſed it by ſuperior eſtabliſhments and number of inhabitants. It is a corporation, conſiſting chiefly of High and Low Dutch, and contains about 250 houſes, chiefly of ſtone, ſome of which are large, elegant, and commodious, built chiefly in one ſtreet, about two miles in length. The public buildings are a German Calviniſt and Lutheran church, a Friends' meeting-houſe, and an academy. Knit ſtockings, of cotton, thread, and worſted, are manufactured here to a conſiderable extent, and of an excellent quality. It is an ancient town, pleaſantly ſituated, and by its vicinity to the metropolis, well adapted for manufactures. Here is the principal congregation of the Mennoniſts, and the mother of that ſect in America. They derive their name from Menno Simon, a learned man of Witmars in Germany, one of the reformers, born in 1505. Some of his followers came into Pennſylvania from New-York, in 1692. There are about four thouſand of them in the ſtate. They do not, like the Tunkers, believe in general ſalvation; yet, like them, they will neither ſwear nor fight, nor bear any civil office, nor go to law, nor take intereſt for money. They uſe great plainneſs in their dreſs, and practiſe many of the rites of the primitive Chriſtian church.

This town is alſo rendered famous by the battle fought in it, on the 4th of October, 1777.

GER'MANTOWN, a poſt-town of the American States, and capital of Stokes county, North Carolina. It is ſituated near the Town Fork of Dan river, and contains a court-houſe and gaol: 528 miles ſouth-weſt by ſouth of Philadelphia.

GER'MANTOWN, a town of the American States, in Hyde county, Newbern diſtrict, North Carolina.

GER'MANY, one of the moſt celebrated countries of Europe, ſituated nearly in its centre, and famed for having originally peopled, and given its laws, manners, and cuſtoms, to moſt of the other nations in its vicinity. Yet, notwithſtanding this pre-eminent celebrity, it is the moſt perplexed, in its government and ſubordination, of any region on the ſurface of the globe; the grand ſtates, or *circles*, being now interwoven and almoſt antiquated, while no modern or rational diviſion has ſince taken place. Its ancient extent was much more conſiderable than it is at preſent; which the reader will readily perceive, by referring to the article GEOGRAPHY, p. 373, and 395, of this volume.

Germany, conſidered in its modern limits, extends about ſix hundred Britiſh miles in length, from the iſle of Rugen in the north, to the ſouthern limits of the circle of Auſtria. The modern breadth, from the Rhine to the eaſtern boundary of Sileſia, is about five hundred Britiſh miles: anciently the breadth extended beyond the Viſtula, about two hundred miles more to the eaſt; a ſpace filled by the Poles, a Slavonic nation; and ſince divided between Auſtria, Ruſſia, and Pruſſia.

This country appears to have been full of extenſive foreſts, even in the Roman period; and of courſe to have been in many parts thinly peopled; yet there are faint indications that the Cimbri, or Celts, poſſeſſed ſeveral tracts in the ſouth, as they certainly held a large portion of the north-weſt. On the north-eaſt of Germany, the Finniſh nations long preceded the incurſions of the Goths and Slavonians. It alſo appears that the central parts of Germany were very little known to the ancients. The ſouthern and weſtern diſtricts, as bordering on the Roman empire, had been partially explored. Roman ſhips had navigated the Baltic, and Roman armies had viſited the northern courſe of the Elbe; but the centre and the eaſt long remained unknown. The Roman arms had penetrated nearly in a direction due eaſt, to the neareſt circuit of the Elbe near Magdeburg, in which quarter the trophies of the Roman general Druſus were erected. On the ſouth, the Sudetic mountains, and perhaps the Erzgeberg, ſeem to bound the knowledge of the ancients; while through the centre of Germany, from the Rhine to the Viſtula, extended the vaſt Hercynian foreſt, by Heſſia, Thuringia, and the north of the Sudetic and Carpathian mountains. The mountain Melebocus of Ptolemy ſeems to be the ſame with the Bructerus of other writers, repreſenting the moſt northern mountains of Germany; thoſe of the Hartz, and the Semana Sylva, may alſo be ſought near the courſe of the Roman army towards Magdeburg. The interior of the country certainly remained in a great meaſure unexplored, till the age of Charlemagne; and the northern parts for ſeveral centuries after that period.

The ſupreme authority in Germany has been long that of an elective monarch; but its future deſtination in this reſpect can only be unboſomed by time. The manners, cuſtoms, and dialects, vary according to the different ſtates. The Saxon is accounted the pureſt and moſt claſſical idiom of the German tongue; and the ſouthern dialects of Swabia, Bavaria, and Auſtria, are the moſt uncouth.

The Auſtrian and Pruſſian dominions include moſt of the eaſtern provinces of Germany. The weſtern part is naturally divided into two portions by the river Maine. To the north of the Maine, Germany chiefly preſents wide ſandy plains, which ſeem as if they had been, in the firſt ages of the world, overwhelmed by the ſea. A few hills firſt begin to appear in the neighbourhood of Minden; and in the ſouth of the Hanoverian dominions ariſe the moſt northern mountains of Germany, thoſe of Blockſberg, and others in the Hartz. To the ſouth-weſt are the mountains of Heſſia, extending towards the Rhine; while on the eaſt the rich and variegated country of Saxony, one of the moſt beautiful and fertile in the empire, extends to the ſouthern limits of the mountains of Erzgeberg, abundant in mines and rich foſſils.

The regions to the ſouth of the Maine are for the moſt part mountainous. Both portions are watered by numerous and important rivers. In the north the Elbe is the moſt diſtinguiſhed, riſing in the Sudetic mountains of Sileſia; and, after running ſouth for about fifty miles, it ſuddenly aſſumes its deſtination of north-weſt, receives the Bohemian Mulda and Eger, the Mulda and Sala of Saxony, and the large river Havel from the eaſt, and enters the ſea near Cuxhaven, after a comparative courſe of more than five hundred Britiſh miles. The chief cities on the banks of the Elbe are Dreſden, Meiſſen, Wittenberg, Magdeburg, from which it runs almoſt a ſolitary ſtream to Hamburgh. The tide is viſible to the height of twenty-two miles; and, when raiſed by the north wind, middle-ſized veſſels may work up to Hamburgh; but they are in general obliged to anchor a mile below the city.

Not far to the weſt is the mouth of the Weſer, which firſt receives that name when its two ſources, the Werra and the Fulda, join near Munden in the principality of Calenburg, about ſixteen Britiſh miles ſouth-weſt of Gottingen. The Werra ſprings in the principality of Hildburghauſen; and the Fulda in the territories of the biſhopric ſo called; the former having the longeſt courſe, and being juſtly conſidered as the chief ſource of the Weſer, which thus flows about 270 Britiſh miles. The principal towns on this river are Bevern, Minden, and Bremen; the Rhine alone boaſting of numerous cities on its banks. The chief tributary ſtream is the Aller, from the duchy of Brunſwic. The inundations of the Weſer are often terrible, the adjacent towns and villages ſeeming to form iſlands in the ſea; hence the ſhores are eſteemed unhealthy.

The Ems is an unimportant river, which riſes in the biſhopric of Munſter. The ſources and mouths of the Rhine have in all ages been celebrious. This noble river forms the grand ancient barrier between France and Germany; and its courſe may be computed at about ſix hundred Britiſh miles. On the German ſide it is diverſified with mountains and rocks; but from Baſel to Spire the ſhores are flat and unintereſting. Near Mentz they become rich, variegated, and grand; and on the confluence with the Maine the waters are diſtinguiſhable for many leagues. The Rhinegaw is not only celebrated for its wines, but for the romantic appearance of the country, the river running through ſpiral rocks, crowned with majeſtic caſtles. Hence as far as Bonn the ſhores abound with beautiful and ſtriking objects, the Rhine not ſeeming to aſſume its rugged grandeur till after its junction with the Maine.

In the ſouthern part of Germany the moſt important river is the Danube, which according to ſome geographers riſes near the little town of Doneſchingen in Swabia; but others place the ſources a little further to the north. This noble ſtream becomes navigable a little above Ulm, where it receives the Iller. The next tributary ſtream is the Lech, which comes from the Tyrol, diſtinguiſhed in the annals of the revolutionary war; as is the Iſer, proceeding from Upper Bavaria. The Danube runs about 250 miles through this part of Germany, paſſing by Ulm, Ratiſbon, and Paſſau. To Or-

ſova

BALTIC SEA
GERMAN OCEAN
DENMARK
Holstein
Lubeck
Rostock
Wismar
Hamburg
Altona
Lanenburg
Luneburg
Bremen
Verden
Hanover
Brunswick
Halberstadt
Magdeburg
Brandenburg
Berlin
Potsdam
Spandau
Frankfort
Stettin
Stargard
Dramburg
Neuwedel
Konigsberg
Landsberg
Driesen
Colberg
Rugenwalde
Lauenburg
Belgrade
Stolpe
Dantzic
Elbing
Marienburg
Graudentz
Thorn
Culmsee
Gollub
Strasburg
Neidenburg
Soldau
Mlawa
Plock
Rawa
Sochaczew
Warsaw
Pultusk
Ostrolenka
Lomza
Prasnysz
Ciechanow
Przasnysz
Makow
Novogrodek
Grodno
Bielsk
Brzesc
Kobrin
Pinsk
Slonim
Nowogrodek
Minsk
Mozyr
Rzeczica
Bobruisk
Mohilow
Orsha
Smolensko
Dnieper R.
Vistula R.
Oder R.
Elbe R.
Weser R.
Rhine R.
Danube R.
Main R.
Neckar R.
Moselle R.
Lahn R.
Ems R.
Aller R.
Leine R.
Ocker R.
Saale R.
Havel R.
Spree R.
Warta R.
Netze R.
Brahe R.
Pregel R.
Niemen R.
Narew R.
Bug R.
Pripet R.
Berezina R.
Sozh R.
Desna R.
Oka R.
Volga R.
Don R.
Tanais R.
Wolga R.
Kama R.
Tobol R.
Irtish R.
Ob R.
Yenisei R.
Lena R.
Amur R.
Kamtschatka
Behring's Straits
Japan
China
Tartary
Siberia
Mongul Tartary
Chinese Empire
Persia
Caspian Sea
Aral Sea
Lake Baikal
Lake Ladoga
Lake Onega
Lake Peipus
Lake Ilmen
Lake Wenern
Lake Wetter
Lake Wener
Lake Mälar
Lake Hielmar
Lake Constance
Lake Geneva
Lake Neufchatel
Lake Zurich
Lake Lucerne
Lake Thun
Lake Brienz
Lake Wallenstadt
Lake Zug
Lake Lugano
Lake Maggiore
Lake Como
Lake Garda
Lake Iseo
Lake Idro
Lake Balaton
Lake Neusiedler
Lake Platten
Lake Peipus
Lake Ilmen
Lake Onega
Lake Ladoga
Lake Wenern
Lake Wetter
Lake Wener
Lake Mälar
Lake Hielmar
Lake Constance
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Lake Thun
Lake Brienz
Lake Wallenstadt
Lake Zug
Lake Lugano
Lake Maggiore
Lake Como
Lake Garda
Lake Iseo
Lake Idro
Lake Balaton
Lake Neusiedler
Lake Platten
Texel
Groningen
Embden
Oldenburg
Munster
Deventer
Zuyder Zee
Amsterdam
Utrecht
Batavian Republic
Cleves
Bois le Duc
Maestricht
Cobleutz
Mayence
Worms
Manheim
Heidelberg
Mergentheim
Aschaffenburg
Wurtzburg
Schweinfurt
Bamberg
Cumbach
Hof
Eger
Plauen
Zwickau
Zeitz
Altenburg
Leipzig
Dessau
Wittenberg
Torgau
Duben
Merseburg
Halle
Zerbst
Barutli
Guben
Peitz
Sagan
Glogau
Wohlau
Breslau
Brieg
Oppeln
Ratibor
Troppau
Olmutz
Brinn
Iglau
Znaim
Hradisch
Tirnau
Feldsburg
Presburg
Vienna
Linz
Passau
Landshut
Ratisbon
Straubing
Neuburg
Donauwerth
Augsburg
Ulm
Munich
Landau
Oettingen
Nuremberg
Anspach
Hall
Rothenburg
Hilda
Meinungen
Gotha
Erfurt
Weymar
Jena
Naumburg
Weyda
Glaucha
Freyburg
Ausig
Leutmeritz
Bunstau
Saas
Prague
Futtenberg
Elbe R.
Pilsen
Neustadel
Klattau
Pisek
Tabor
Budweis
Rudmau
Rabi
Wadnian
Retz
Zwittary
Olmutz
Jablunka
Teschen
Schumberg
Troppau
Jagerndorf
Neisse
Glatz
Landeck
Kosel
Munsterber

ſova it may be conſidered as an Auſtrian river for about 550 miles; thence it is Turkiſh for 480 to the Euxine.

The Necker is a tributary ſtream of the Rhine, riſing in the Black Foreſt, not far from the Danube, and running a picturesque courſe of about 150 Britiſh miles, through a country enriched with vineyards. Another and grander tributary ſtream of the Rhine ſprings from the lake of Fichtel See, on the mountain of Fichtelberg, eſteemed among the moſt elevated parts of Germany, as it gives ſource to four rivers running in various directions, the Maine to the weſt, the Eger to the eaſt, the Sala to the north, and the Nab to the ſouth. This ſource is called the White Maine; while another ſource, the Red Maine, ſo called from the red clay through which it flows, riſes near Hærnleinſreuth, in the principality of Bareuth. The Maine, after receiving the Rednitz and other conſiderable ſtreams, joins the Rhine to the ſouth of Mentz. The Maine is a muddy ſtream, but abounds with trout, carp, and other fiſh. After pervading the rich biſhoprics of Bamberg and Wurtzburg, and ſome territories of the ſee of Mentz, it waſhes the walls of Frankfort.

To the north of the Maine, Germany preſents but few lakes; the largeſt being in the duchy of Mecklenburg, where the lake of Plau extends under various names about twenty-five Britiſh miles in length, by ſix in breadth: that of Schwerin is about eighteen miles in length, while that of Ratzburg is only fifteen. There is alſo one in the county of Diepholtz, and another in the county of Mansfeldt, in Upper Saxony. In the more ſouthern and Alpine regions the Boden See, or lake of Conſtance, is the moſt diſtinguiſhed expanſe of water in that diſtrict. Next is the Chiem See, in Upper Bavaria, about fourteen Britiſh miles in length by five in breadth, ſometimes ſtyled the ſea of Bavaria. That circle, like moſt mountainous countries, alſo contains many other lakes of ſmaller note.

Of the mountains of Germany, the moſt northern are thoſe of the Hartz, called the Brocken or Blockſberg. Theſe riſe in the form of an amphitheatre, the higheſt being what is called the Great Blockſberg; which, (while the others are covered with pines and birch, thus uniting the primeval confuſion of foreſt and mountain,) only preſents white ſtinted bruſhwood: and the ſnow ſometimes remains till midſummer, and even longer in the northern cavities. On the ſummit is a ſmall hovel, a retreat for thoſe who aſcend. The river Ilſe riſes from the bottom; and other ſtreams ſpring from the hills to the north-weſt and to the eaſt. The height of the Great Brocken is by the barometer 3021 feet; and the Little Brocken 2713.

In Weſtphalia there are ſome lofty hills near Minden; and in the duchy of the ſame name, bordering on Heſſia, are the mountains of Winterberg, Aſtenberg, Schloſsberg, and others. The Heſſian territories may be regarded as generally mountainous, eſpecially towards the north. The range of Meiſner contains a coal mine, under which is a bed of petrified wood. To the north of Caſſel are many high mountains, as the Stauffenberg, the ſummit of which is called Bartelſpopf; and the Gameberg towards Munden. In the Heſſian territories are alſo the *bergs* of Doern, Behren, Schrecklen, Guden, Valken, all in the diſtrict of Zieremberg, with many in the ſouth-eaſt of Felſberg; not to mention the hilly foreſt of Habichtſwald. Thence ſouth-weſt towards the Rhine are ſeveral conſiderable hills, among which may be mentioned thoſe in the weſt of Wetterau, and the ſeven hills near the Rhine, almoſt oppoſite to Andernach; with the ridge of Heyrich, which protects the vines of Rhinegau. To the eaſt of Frankfort on the Maine are the hilly foreſts of Speſſart, with the metallic heights of Fulda and Henneberg; and that river ſprings from the remarkable mountain of Fichtelberg, or the mountain of pines, near twenty-two geographical miles in length, and ſixteen in breadth, diverſified with deſerts, precipices, high rocks, and marſhes. The ſummits have various names, the Ochſenkopf being reputed the higheſt. The lake called Fichtel See is in a cavity of this mountain, called the See Loh; but is of little extent, being only remarkable as the ſource of the White Maine. Other parts of this memorable mountain give riſe to the Eger, which runs to the eaſt; and the Sala and Nab flowing to the north and ſouth.

But the moſt celebrated mountains in that part of Germany which lies to the north of the Maine, are the Erzgeberg, or Metallic Mountains, which riſe to the north-eaſt of the Fichtelberg, running between Bohemia and Saxony, but ſupplying both countries with ſilver, tin, and other metals. The Erzgeberg are not of remarkable height, yet contain much granite, like thoſe of the Hartz and Heſſia; with gneiſs, in which moſt of the Saxon and Bohemian mines are found. Granular limeſtone alſo appears; and in Upper Luſatia an entire mountain is found of ſiliceous ſchiſtus, while Flinzberg conſiſts almoſt entirely of milk-white quartz. Miſnia contains mountains of pitchſtone; and that ſtrong primæval ſubſtance called hornblende, which approaches to the nature of iron, is found in immenſe ſtrata. In Voigtland, near Averbach, appears the famous topaz rock, conſiſting of pale topazes in hard lithomarga. Micaceous ſchiſtus and ſlate alſo form portions of the Saxon mountains, with large maſſes of trap and baſalt, often imbedded in the gneiſs, which likewiſe contains ſtrata of ſerpentine. Hornblende, ſlate, and ſandſtone, both calcareous and ſiliceous, alſo contribute their ſhare to this noted chain. Thoſe of Heſſia preſent nearly the ſame kinds of primary and ſecondary ſubſtances; and a ſummit of the Meiſner, as already mentioned, conſiſts of baſalt reſting on coal. In the Hartz, granite alſo abounds; with porphyry, ſlate, and other primitive ſubſtances.

Among the German mountains to the ſouth of the Maine, may firſt be named the Bergſtraſs, a ridge paſſing from near Manheim to the vicinity of Frankfort, and accompanied by a high-way commanding proſpects of prodigious extent. On the eaſt are the high hills of Odenwald. Further to the ſouth are the mountains of Wirtemberg, riſing both on the eaſt and weſt of that new kingdom. On the weſt the mountains form a continuation of thoſe of the Black Foreſt, which hence proceeds ſouth to the Rhine, being the Mount Abnoba of Tacitus, whence he juſtly derives the ſource of the Danube; and the Helvetian foreſt of Ptolemy. The mountains of the Black Foreſt, in German Schwarzwald, extend from near Neuenburg, in the territories of Wirtemburg, ſouth to the four foreſt towns on the Rhine. The ſouthern part is called the High, and the northern the Lower, foreſt: the length being about eighty Britiſh miles. To the eaſt the Necker may be conſidered as a boundary; and the breadth may be computed at about twenty Britiſh miles. The eaſtern part, as uſual, preſents a gradual elevation; while the weſtern ſhows precipitous ſummits to the inhabitants of Baden and Alſace. Its appellation ſeems to ariſe from the thick dark foreſts with which the aſcents are clothed. Beſides paſturage, the inhabitants of the Black Foreſt derive advantage from the roſin of the pines, and the timber, of which they make all kinds of utenſils. Some parts are cultivated by ſpreading branches of pine, covered with ſod, which being burnt, an excellent manure prepares the ground for four abundant harveſts. A branch of the Black Mountains ſpreads eaſt from near Sulz on the Necker towards the county of Œtingen, being more than ſixty miles in length. This chain is called the Alb, and ſometimes the Swabian Alps. Buſching traces this ridge from the north-eaſt extremity, the ſource of the Brenz, to the weſt of the Nereſheim, by Wiſenſteig, where the mountains are higheſt. Thence they turn north-weſt to Guttenberg, and weſt

to Neiffen, whence they pafs by Hohenzollern to the Necker, then bend fouth and weft between that river and the Danube. Buſching adds, that as this chain riſes inſenſibly at Konigſbronn north-eaſt, ſo it gradually terminates at Ebingen ſouth-weſt. The principal ſummits are in the north and weſt of the ridge; and the foreſts are chiefly beech, while the open ſpaces ſupply abundant paſturage for numerous flocks of ſheep. Of theſe two extenſive ridges of mountains, the Black Foreſt and the Alb, a conſiderable portion pervades the country of Wirtemburg; and near Stutgard, the capital, are the mountains of Boyferſteig, Weinſteig, and Haſenſteig. The conſtituent parts of theſe extenſive ridges have not yet been much examined; but a great part is calcareous, as they ſupply excellent marbles. Near Frudenſtadt, in the Black Mountains, are mines of ſilver and copper.

The ſouth-eaſt of this portion of Germany is bounded by the high mountains of Bavaria and Salzia or Salzburg; being branches or continuations of the Swiſs or Tyroleſe Alps, but without general appellations. Ferber ſays that the high mountains of Bavaria, bordering on the Tyrol, are granite; thence, as uſual, argillaceous and calcareous in the lower parts. Large pieces of graſs-green quartz are found ſtudded with red tranſparent garnets, and at Munchen or Munich they are worked into elegant ſnuff-boxes. Some hills near Regenſburg, or Ratiſbon, are calcareous; but towards Bohemia they conſiſt of gneiſs and granite. Of the Alps of Salzburg an account has been publiſhed by Vierthaler, whence it would ſeem that they exceed in height the Carpathian chain, or the Pyrenees, and only yield to the Swiſs and Tyroleſe Alps. The higheſt ſummits are ſaid to be the Sonnenblic, the Ankogel, the Wiſbacher Horn, and the Loffler in the Stillupe. Even the next to theſe in height, the Hohe Nan, or the Hockhorn, is computed at 10633 feet above the ſea; and the Groſſe Kogel in Rauris, at 9100; while ſeveral others exceed 8000 feet. The mines of this country are highly celebrated; and in Zillarthal, or the vale of the river Ziller, on the weſt, is found the ſubſtance called *zillerthite* by the French mineralogiſts. The chief ridge of the Salzian Alps is on the ſouth and eaſt of the country, being an elongation of the grand chain, reaching from Mount Blanc and Mount Roſa along the north of Italy through Tyrol.

Conſiderable remains even yet exiſt of the ancient woods and foreſts which pervaded Germany. The German word *wald*, correſponding with the old Engliſh *weald*, denotes a foreſt; and ſuch are found in the ſouth of Mecklenburg, continued eaſterly in different parts of the Pruſſian dominions; but the timber of Dantzic is ſupplied by the navigation of the Viſtula. The chief foreſts appear always to have extended along the middle regions of Germany, from the north-weſt towards the ſouth-eaſt. The Dromling-wald is to the north of Magdeburg; but the Sollinger-wald, the woody mountains of Hartz, the Lutten-wald, the wide foreſt of Thuringia, may be ſaid to be connected with the ancient foreſts of Sileſia, hence extending far to the eaſt through the centre of Poland and Ruſſia. More to the ſouth, in this part of Germany, are the Speſſart foreſt, and others. In the portion ſouth of the Maine, the vaſt Black Foreſt, and the woods along the Alb, are continued by others in various parts of Bavaria. In general, the paſſion among the grandees for the chace of the wild boar, and other pleaſures of hunting, has contributed greatly to the preſervation of the foreſts.

As Spain is diſtinguiſhed by its groves of cork trees and ilex, and Scandinavia by its fir woods, ſo is Germany remarkable for its deep and almoſt impenetrable foreſts of oak; not indeed that this is the invariable characteriſtic of the country, for in an empire of ſuch great extent, and of ſo varied a ſurface, it muſt needs happen that the native vegetable productions on the ſhore of the German Ocean ſhould differ conſiderably from thoſe in the receſſes of the Black Foreſt, or on the frontiers of Tyrol. There is however on the whole more uniformity than might be expected, and though perhaps few plants are abſolutely peculiar to Germany, yet the abundance of ſome ſpecies, and the abſence of others, forms a ſtriking feature in the botanical hiſtory of the empire. The woods are not to be dreaded, as in Aſia and Africa, for venomous and ferocious animals; the wild boar is indeed of ſuperior ſize; and thoſe of Weſtphalia are in particular eſtimation as food. In the north of Germany the lynx and bear are ſometimes ſeen; and the wolf is not unfrequent in the ſouth.

PRIMITIVE HISTORY.

The warlike nations of Germany, who firſt reſiſted, then invaded, and at length overturned, the weſtern monarchy of Rome, occupy an important place in hiſtory, and claim particular attention and regard. The name *German*, or, as it was formerly written, *Gar man*, ſignifies, in the Celtic, a *warlike man*.

The moſt civilized nations of modern Europe, appear to have iſſued from the woods of Germany; and in the rude inſtitutions of thoſe barbarians, we may partly diſtinguiſh the original principles of our preſent laws and manners. In their primitive ſtate of ſimplicity and independence, the Germans are ſtrikingly delineated by the maſterly pencil of Tacitus, the firſt of hiſtorians who applied the ſcience of philoſophy to the ſtudy of facts. The expreſſive conciſeneſs of his deſcriptions has exerciſed the diligence of innumerable antiquarians, and excited the genius and penetration of the hiſtorians and geographers of our own times.

Ancient Germany, excluding from its independent limits the province weſtward of the Rhine, which had very early ſubmitted to the Roman yoke, extended itſelf over a third part of Europe. Almoſt the whole of modern Germany, Denmark, Norway, Sweden, Finland, Livonia, Pruſſia, and the greater part of Poland, were peopled by the various tribes of this great nation, whoſe complexion, manners, and language, denoted a common origin, and preſerved a ſtriking reſemblance. On the weſt, ancient Germany was divided by the Rhine from the Gaulic, and on the ſouth by the Danube from the Illyrian, provinces of the empire. A ridge of hills, riſing from the Danube, called the Carpathian mountains, covered Germany on the ſide of Dacia or Hungary. The eaſtern frontier was partially marked by the mutual fears of the Germans and the Sarmatians, and was often confounded by the mixture of warring and confederating tribes of the two nations. In the remote darkneſs of the north, the ancients faintly deſcried a frozen ocean that lay beyond the Baltic ſea, and beyond the peninſula, or iſlands, of Scandinavia.

Some writers have ſuſpected that Europe was much colder formerly than it is at preſent; and the moſt ancient deſcriptions of the climate of Germany tend exceedingly to confirm their theory. The general complaints of intenſe froſt, and eternal winter, are perhaps little to be regarded, ſince we have no method of reducing to the accurate ſtandard of the thermometer, the feelings or the expreſſions of an orator born in the happier regions of Greece or Aſia. But there are two remarkable circumſtances of a leſs equivocal nature. 1. The great rivers which covered the Roman provinces, the Rhine and the Danube, were frequently frozen over, and capable of ſupporting the moſt enormous weights. The barbarians, who often choſe that ſevere ſeaſon for their inroads, tranſported, without apprehenſion or danger, their numerous armies, their cavalry, and their heavy waggons, over a vaſt and ſolid bridge of ice. Modern ages have not preſented an inſtance of a like phenomenon. 2. The rein-deer, from whom the ſavage of the North derives the beſt comforts of his

dreary

dreary life, is of a conſtitution that ſupports, and even ſeems to require, the moſt intenſe cold. He is found on the rocks of Spitzbergen, within ten degrees of the pole; he ſeems to delight in the ſnows of Lapland and Siberia; but at preſent he cannot ſubſiſt, much leſs multiply, in any country to the ſouth of the Baltic. Yet in the time of Cæſar, the rein-deer, as well as the elk, and the wild bull, was a native of the Hercynian foreſt, which then overſhadowed a great part of Germany and Poland. Modern improvements, however, ſufficiently explain the cauſes of the diminution of the cold. Theſe immenſe woods have been gradually cleared, which intercepted from the earth the rays of the ſun. The moraſſes have been drained, and, in proportion as the ſoil has been cultivated, the climate has become more genial, and the air more temperate. Canada, at this day, is an exact picture of ancient Germany. Although ſituated in the ſame parallel with the fineſt provinces of France and England, that country ſtill experiences the moſt rigorous cold. The rein-deer are very numerous, the ground is covered with deep and laſting ſnow, and the great river of St. Lawrence is regularly frozen, in a ſeaſon when the waters of the Seine and the Thames are uſually free from ice.

It is difficult to aſcertain, though eaſy to exaggerate, the influence of the ſevere climate of ancient Germany over the minds and bodies of the natives. Many writers have ſuppoſed, and ſome have allowed, though, as it ſhould ſeem, without any adequate proof, that the rigorous cold of the north was favourable to long life and generative vigour; that the women were more fruitful, and the human ſpecies more prolific, than in warmer or more temperate climates. We may aſſert, with greater confidence, that the keen air of Germany formed the large and maſculine limbs of the natives, who were, in general, of a more lofty ſtature than the people of the ſouth, gave them a kind of ſtrength better adapted to violent exertions than to patient labour, and inſpired them with conſtitutional bravery, which is the reſult of nerves and ſpirits. The ſeverity of a winter campaign, that chilled the courage of the Roman troops, was ſcarcely felt by theſe hardy children of the north, who in their turn were unable to reſiſt the ſummer heats, and diſſolved away in languor and ſickneſs under the beams of an Italian ſun.

There is not any where upon the globe, a large tract of country, which has ever been diſcovered deſtitute of inhabitants, or whoſe firſt population can be fixed with any degree of hiſtorical certainty. And yet, as the moſt philoſophic minds can ſeldom refrain from inveſtigating the infancy of great nations, our curioſity conſumes itſelf in toilſome and diſappointed efforts. When Tacitus conſidered the purity of the German blood, and the forbidding aſpect of the country, he was diſpoſed to pronounce thoſe barbarians *indigenæ*, or natives of the ſoil. We may allow with ſafety, and perhaps with truth, that ancient Germany was not originally peopled by any foreign colonies already formed into a political ſociety; but that the name and nation received their exiſtence from the gradual union of ſome wandering ſavages of the Hercynian woods. To aſſert thoſe ſavages to have been the ſpontaneous production of the earth which they inhabited, would be an inference condemned by religion, and unwarranted by reaſon.

An immenſe ſuperſtructure of wild fable has however been erected upon this doubtful and precarious foundation. The ſeventeenth century abounded with antiquarians of eaſy faith, who, by the dim light of legends and traditions, of conjectures and etymologies, conducted the great grandchildren of Noah from the Tower of Babel to the extremities of the globe. Of theſe credulous writers, one of the moſt entertaining was Olaus Rudbeck, profeſſor in the univerſity of Upſal. Whatever is celebrated either in hiſtory or fable, this zealous critic aſcribes to his own country. From Sweden, which formed ſo conſiderable a part of ancient Germany, the Greeks were ſaid to derive their alphabetical characters, their aſtronomy, and their religion. Of that delightful region, (for ſuch it appeared to the eyes of a *native*,) the Atlantis of Plato, the country of the Hyperboreans, the gardens of the Heſperides, the Fortunate Iſlands, and even the Elyſian Fields, were but faint and imperfect tranſcripts. A clime ſo favoured by nature, could not long remain deſert after the flood. The learned Rudbeck therefore allows the family of Noah a few years to multiply from about eight to twenty thouſand perſons. He then diſperſes them into ſmall colonies to repleniſh the earth, and to propagate the human ſpecies. The Swediſh detachment, which, according to him, marched under the command of Aſkenaz the ſon of Gomer, the ſon of Japhet, diſtinguiſhed itſelf by a more than common diligence in the proſecution of this great work. This northern hive caſt its ſwarms over the greateſt part of Europe, Africa, and Aſia; and, (to uſe Rudbeck's own metaphor,) "the blood circulated from the extremities to the heart."

But, unfortunately, all this laboured genealogy of the Germans is annihilated by a ſingle fact, too well atteſted to admit of doubt, and of too deciſive a nature to leave room for reply. The Germans, in the age of Tacitus, were unacquainted with the uſe of letters; and the uſe of letters is the principal circumſtance that diſtinguiſhes a civilized people from a race of ſavages, incapable of knowledge or reflection. Without that artificial help, the human memory ſoon diſſipates or corrupts the ideas intruſted to her charge; and thus the nobler faculties of the human mind, no longer ſupplied with models or with materials, gradually forget their powers; the judgment becomes feeble and lethargic, the imagination languid and irregular. Fully to comprehend this important truth, let us but attempt, in an improved ſociety, to calculate the immenſe diſtance between the man of learning, and the *illiterate* peaſant. The former, by reading and reflection, multiplies his own experience, and lives even in diſtant ages and remote countries; whilſt the latter, rooted to a ſingle ſpot, and confined to a few years of mere exiſtence, ſurpaſſes but very little his fellow-labourer, the ox, in the exerciſe of his mental faculties. The ſame, and even a greater, difference will be found between nations than between individuals; and we may ſafely pronounce, that without ſome form of writing, no people has ever preſerved the faithful annals of their hiſtory, ever made any progreſs in the abſtract ſciences, or ever poſſeſſed, in any ſenſible degree, the uſeful and elegant arts of human life.

Of theſe arts, the ancient Germans were certainly deſtitute. They paſſed their lives in a ſtate of ignorance and poverty, which it has pleaſed ſome declaimers to dignify with the appellation of virtuous ſimplicity. Modern Germany is ſaid to contain about two thouſand three hundred walled towns. In a much wider extent of country, the great Ptolemy could diſcover no more than ninety places, which he called by the name of cities; though, according to modern ideas, they would but ill deſerve that ſplendid title. We can only ſuppoſe them to have been rude fortifications, conſtructed, like thoſe of the ancient Britons, in the faſtneſſes of the woods, and deſigned to ſecure the women, children, and cattle, whilſt the warriors of the tribe marched out to repel a ſudden invaſion.

Tacitus however aſſerts, as a well-known fact, that the Germans, in his time, had *no* cities; and that they affected to deſpiſe the works of Roman induſtry, as places of confinement rather than of ſecurity. Their edifices were not even contiguous, or formed into regular villas; each barbarian fixed his independent dwelling on the ſpot to which a plain, a wood, or a ſtream of freſh water, had induced him to give the preference. Neither ſtone, nor brick, nor tiles, were employed in

theſe ſlight habitations. They were indeed no more than low huts of a circular figure, built of rough timber, thatched with boughs or ſtraw, and pierced at the top to leave a free paſſage for the ſmoke. In the moſt inclement winter, the children went naked, and the men hung the ſkin of ſome wild beaſt upon their ſhoulders, faſtening it with a thong; and perſons of the beſt quality wore only a coarſe woollen mantle, or a ſort of coat without ſleeves. Their uſual bed was the ground, covered with a little ſtraw, or the ſkins of bears and wolves. Their meals were taken in the ſame apartment, with the maſter of the family in the middle, and the reſt on the right and left, ſitting on the ground in a ſemicircle. The game of various ſorts, with which the foreſts of Germany were plentifully ſtocked, ſupplied them with food and exerciſe. Their numerous herds of cattle, leſs remarkable indeed for their beauty than for their utility, formed the principal object of their wealth. A ſmall quantity of corn was the only produce exacted from the earth: the uſe of orchards or artificial meadows was unknown to the Germans; nor ought we to expect any improvements in agriculture from a people, whoſe property every year experienced a general change by a new diviſion of the arable lands, and who, in that ſtrange operation, avoided diſputes, by ſuffering a great part of their territory to lie waſte and without tillage.

Gold, ſilver, and iron, were extremely ſcarce in ancient Germany. Its barbarous inhabitants wanted both ſkill and patience to inveſtigate thoſe rich veins of ſilver, which have ſo liberally rewarded the attention of the princes of Brunſwick and Saxony. Sweden, which now ſupplies Europe with iron, was equally ignorant of its own riches; and the appearance of the arms of the Germans furniſhed a ſufficient proof how little iron they were able to beſtow on what they muſt have deemed the nobleſt uſe of that metal. The various tranſactions of peace and war had introduced ſome Roman coins (chiefly ſilver) among the borderers of the Rhine and Danube; but the more diſtant tribes were abſolutely unacquainted with the uſe of money, inſomuch that they carried on their confined traffic by the exchange of commodities, and prized their rude earthen veſſels as of equal value with the ſilver vaſes, the preſents of Rome to their princes and ambaſſadors. To a mind capable of reflection, ſuch leading facts convey more inſtruction than a long detail of ſubordinate circumſtances. The value of money has been ſettled by general conſent to expreſs our wants and our property; as letters were invented to expreſs our ideas; and both theſe inſtitutions, by giving a more active energy to the powers and paſſions of human nature, have contributed to multiply the objects they were deſigned to repreſent. The uſe of gold and ſilver is in a great meaſure factitious; but it would be impoſſible to enumerate the important and various ſervices which agriculture, and all the arts, have received from iron, when tempered and faſhioned by the operation of fire, and the dextrous hand of man. Money, in a word, is the moſt univerſal incitement, iron the moſt powerful inſtrument, of human induſtry; and it is very difficult to conceive by what means a people, neither actuated by the one, nor ſeconded by the other, could emerge from the groſſeſt barbariſm.

If we contemplate a ſavage nation in any part of the globe, a ſupine indolence, and a careleſſneſs of futurity, will be found to conſtitute their general character. In a civilized ſtate, every faculty of man is expanded and exerciſed; and the great chain of mutual dependence connects and embraces the ſeveral members of ſociety. The moſt numerous portion of it is employed in conſtant and uſeful labour. The ſelect few, placed by fortune above that neceſſity, can, however, fill up their time by the purſuits of intereſt or glory, by the improvement of their eſtate, or of their underſtanding; by the duties, the pleaſures, and even the follies, of ſocial life. The Germans were not poſſeſſed of theſe reſources. The care of the houſe and family, the management of the land and cattle, were delegated to the old and the infirm, to women and ſlaves. The unemployed warrior, deſtitute of every art that might fill up his leiſure hours, conſumed his days and nights in the animal gratifications of ſleep and food. And yet, by a wonderful diverſity of nature, according to the remark of Tacitus, the ſame barbarians are by turns the moſt indolent, and the moſt active, of mankind. They delight in ſloth, they deteſt tranquillity. The languid ſoul, oppreſſed with its own weight, anxiouſly required ſome new and powerful ſenſation; and war and danger were the only amuſements adapted to its fierce temper. The ſound that ſummoned the German to arms, was grateful to his ear. It rouſed him from his lethargy, gave him a dauntleſs courage, and, by ſtrong exerciſe of the body, and violent emotions of the mind, reſtored him to a more lively ſenſe of his nature and exiſtence. In the dull intervals of peace, theſe barbarians were immoderately addicted to gaming and drinking; both of which, by different means, the one by inflaming their paſſions, the other by extinguiſhing their reaſon, alike relieved them from the pain of thinking. They gloried in paſſing whole days and nights in feaſting; and the blood of friends and relations too often ſtained theſe inebriating aſſemblies. Their debts of honour, (for in that light they have tranſmitted to us thoſe of play,) they diſcharged with the moſt ſcrupulous fidelity. The deſperate gameſter, who had ſtaked his perſon and liberty on a laſt throw of the dice, patiently ſubmitted to the deciſion of fortune, and ſuffered himſelf to be bound, chaſtiſed, and ſold into remote ſlavery, by his weaker but more fortunate antagoniſt.

Strong beer, a liquor which they extracted with very little art from wheat or barley, and *corrupted* (as it is expreſſed by Tacitus) into a certain ſemblance of wine, was ſufficient for the groſs purpoſes of German debauchery. Yet thoſe who had taſted the rich wines of Italy, and afterwards of Gaul, ſighed for the more delicious ſpecies of intoxication. They attempted not, however, (as has ſince been executed with ſo much ſucceſs,) to naturalize the vine on the banks of the Rhine and Danube; nor did they endeavour to procure by induſtry and labour, the materials of an advantageous commerce. To procure by labour what might be gained by arms, was eſteemed unworthy of the German ſpirit. The intemperate thirſt of ſtrong liquors often urged them to invade the provinces on which art or nature had beſtowed thoſe much envied, yet dangerous, preſents. The Tuſcan who betrayed his country to the Celtic nations, attracted them into Italy, according to Plutarch, by the proſpect of the rich fruits and delicious wines, the productions of a happier climate. And in the ſame manner the German auxiliaries, invited into France during the civil wars of the ſixteenth century, were allured by the promiſe of plenteous quarters in the wine-drinking provinces of Champaigne and Burgundy. Drunkenneſs, the moſt illiberal, though perhaps not the moſt dangerous, of *our* vices, was ſometimes capable, in a leſs civilized ſtate of mankind, of occaſioning a battle, a war, or a revolution.

The climate of ancient Germany has been mollified, and the ſoil fertilized, by the labour of ten centuries from the time of Charlemagne. The ſame extent of ground which at preſent maintains, in eaſe and plenty, a million of huſbandmen and artificers, was unable to ſupply an hundred thouſand warriors, or fighting men, with the ſimple neceſſaries of life. The Germans abandoned their immenſe foreſts to the exerciſe of hunting, employed in paſturage the moſt conſiderable part of their lands, beſtowed on the ſmall remainder a careleſs cultivation, and then accuſed with ſcantineſs and ſterility, the face of a country that refuſed, for want of labour only, to maintain the multitude of its inhabitants. When famine ſeverely admoniſhed them of the import-

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ance of the arts, the national diſtreſs was ſometimes alleviated by the emigration of a third, perhaps, or a fourth, part, of their youth. The poſſeſſion and the enjoyment of property are the pledges which bind a civilized people to an improved country. But the Germans, who carried with them what they moſt valued, their arms, their cattle, and their women, cheerfully abandoned the gloom of their woods, for the unbounded hopes of plunder and conqueſt in cultivated and populous countries. The innumerable ſwarms that iſſued, or ſeemed to iſſue, from the great ſtorehouſe of nations, were however multiplied by the fears of the vanquiſhed, and by the credulity of ſucceeding ages. And from facts thus exaggerated, an opinion was gradually eſtabliſhed, and has been ſupported by writers of diſtinguiſhed reputation, that, in the age of Cæſar and Tacitus, the inhabitants of the north were far more numerous than they are in our preſent days. But a more ſerious inquiry into the cauſes of population, ſeems to have convinced modern philoſophers of the falſehood, and indeed the impoſſibility, of the ſuppoſition. To the names of Mariana and of Machiavel, we can oppoſe the equal names of Robertſon and Hume.

A warlike nation like the Germans, without either cities, letters, arts, or money, thought they found a compenſation for this ſavage ſtate in the enjoyment of liberty. Their poverty certainly ſecured their freedom, ſince our deſires and our poſſeſſions are the ſtrongeſt fetters of deſpotiſm. "Among the Suiones, (ſays Tacitus,) riches are held in honour. They are therefore ſubject to an abſolute monarch, who, inſtead of intruſting his people with the free uſe of arms, as is practiſed in the reſt of Germany, commits them to the cuſtody, not of a citizen, or even of a freedman, but of a ſlave. The neighbours of the Suiones, the Sitones, are ſunk even below ſervitude; they obey a woman." In the mention of theſe exceptions, the great hiſtorian ſufficiently acknowledges the general theory of government. We are only at a loſs to conceive by what means riches and deſpotiſm could penetrate into a remote corner of the north, and extinguiſh the generous flame that blazed with ſuch fierceneſs on the frontier of the Roman provinces: or how the anceſtors of thoſe Danes and Norwegians, ſo diſtinguiſhed in latter ages by their unconquerable ſpirit, could thus tamely reſign the great character of German liberty. Some tribes, however, on the coaſt of the Baltic, acknowledged the authority of kings, though without relinquiſhing the rights of men; but in the far greater part of Germany, the form of government was a democracy, tempered indeed, and controlled, not ſo much by general and poſitive laws, as by the occaſional aſcendant of birth or valour, of eloquence or ſuperſtition.

Civil governments, in their firſt inſtitution, are voluntary aſſociations of the people for mutual defence. To obtain the deſired end, it is abſolutely neceſſary that each individual ſhould conceive himſelf obliged to ſubmit his private opinion and actions to the judgment of the greater number of his aſſociates. The German tribes were contented with this rude but liberal outline of political ſociety. As ſoon as a youth, born of free parents, had attained the age of manhood, he was introduced into the general council of his countrymen, ſolemnly inveſted with a ſhield and ſpear, and adopted as a new and equal member of the military commonwealth. The aſſembly of the warriors of each tribe was convened at ſtated ſeaſons, or on ſudden emergencies. The trial of public offences, the election of magiſtrates, and the great buſineſs of peace and war, were determined by its independent voice. Sometimes, indeed, theſe queſtions were previouſly conſidered, and prepared in a more ſelect council of the principal chieftains. The magiſtrates might deliberate and perſuade, but the people only could reſolve and execute; and the reſolutions of the Germans were for the moſt part haſty and violent. Barbarians accuſtomed to place their freedom in gratifying the preſent paſſion, and their courage in overlooking all future conſequences, turned away with indignant contempt from the remonſtrances of juſtice and policy; and it was the practice to ſignify by a hollow murmur, their diſapprobation of ſuch timid counſels. But whenever a more popular orator propoſed to vindicate the meaneſt citizen from either foreign or domeſtic injury, whenever he called upon his fellow-countrymen to aſſert the national honour, or to purſue ſome enterpriſe full of danger and peril, a loud claſhing of ſhields and ſpears expreſſed the eager applauſe of the aſſembly. For the Germans always met in arms; and it was ever to be dreaded, leſt an irregular multitude, inflamed with faction and ſtrong liquors, ſhould uſe thoſe arms to enforce, as well as to declare, their furious reſolves.

A general or chief of the tribe was elected on occaſions of danger; and, if the danger was preſſing and extenſive, ſeveral tribes concurred in the choice of the ſame chief. The braveſt warrior was named to lead his countrymen into the field, by his example rather than by his commands. But this power, however limited, was ſtill invidious. It expired with the war, and in time of peace the German tribes acknowledged not any ſupreme lord. *Princes* were, however, appointed in the general aſſembly, to adminiſter juſtice, or rather to compoſe differences, in their reſpective diſtricts. In the choice of theſe magiſtrates, as much regard was ſhewn to birth as to merit; and to each was aſſigned a guard, and a council of an hundred perſons, by the ſovereign voice of the people.

The comparative view of the powers of the magiſtrates, in two remarkable inſtances, is alone ſufficient to repreſent the early ſyſtem of German manners. The diſpoſal of the landed property within their diſtrict, was abſolutely veſted in their hands, and they diſtributed it every year according to a new diviſion. At the ſame time they were not authoriſed to puniſh with death, to impriſon, or even to ſtrike, a private citizen. A people thus jealous of their perſons, and careleſs of their poſſeſſions, muſt have been totally deſtitute of induſtry and the arts, but animated with a high ſenſe of honour and of independence.

The Germans reſpected only thoſe duties which they impoſed on themſelves. The moſt obſcure ſoldier reſiſted with diſdain the authority of the magiſtrates. "The nobleſt youths bluſhed not (ſays Tacitus,) to be numbered among the faithful companions of ſome renowned chief, to whom they devoted their arms and their ſervice. A noble emulation prevailed among the companions to obtain the firſt place in the eſteem of their chief; amongſt the chiefs to acquire the greateſt number of valiant companions. To be ever ſurrounded by a band of ſelect youths, was the pride and ſtrength of the chiefs, their ornament in peace, their defence in war. The glory of ſuch diſtinguiſhed heroes diffuſed itſelf beyond the narrow limits of their own tribe. Preſents and embaſſies ſolicited their friendſhip, and the fame of their arms often enſured victory to the party which they eſpouſed. In the hour of danger it was ſhameful for the chief to be ſurpaſſed in valour by his companions; ſhameful for the companions not to equal the valour of their chief. To ſurvive his fall in battle was indelible infamy. To protect his perſon, and to adorn his glory with the trophies of their own exploits, were the moſt ſacred of their duties. The chiefs combated for victory; the companions for the chief. The nobleſt warriors, whenever their native country was ſunk in the indolence of peace, maintained their numerous bands in ſome diſtant ſcene of action, to exerciſe their proweſs, and to acquire renown by voluntary dangers. Gifts worthy of ſoldiers, the warlike ſteed, the bloody and ever-victorious lance, were the rewards which the companions claimed from the liberality of their chief.

The rude plenty of his hoſpitable board was the only pay that he could beſtow, or they would accept. "War, rapine, and the free-will offerings of his friends, ſupplied the materials of his conſtant munificence." This inſtitution, however it might accidentally weaken the ſeveral republics, invigorated the general character of the Germans, and even ripened amongſt them all the virtues of which barbarians are ſuſceptible; the faith and valour, the hoſpitality and the courteſy, ſo conſpicuous long afterwards in the ages of knighthood and chivalry. The honourable gifts beſtowed by the chief on his brave companions, have been ſuppoſed, by an ingenious writer, to contain the firſt rudiments of the fiefs, or feodal tenures, diſtributed, after the conqueſt of the Roman provinces, by the barbarian lords among their vaſſals, with a ſimilar duty of homage and military ſervice. Theſe conditions are, however, very repugnant to the maxims of the ancient Germans, who delighted in mutual preſents; but without either impoſing, or accepting, the weight of obligations.

"In thoſe days of knighthood or chivalry, the men were brave, and the women chaſte;"—and notwithſtanding the latter of theſe virtues is acquired and preſerved with much more difficulty than the former, it is aſcribed, almoſt without exception, to the wines of the ancient Germans. See the article CHIVALRY, vol. iv. p. 505.—Polygamy was not in uſe, except among the princes, and among them only for the ſake of multiplying their alliances. Divorces were prohibited by manners, rather than by laws. Adulteries were puniſhed as rare and inexpiable crimes; nor was ſeduction juſtified by high example and faſhion. We can eaſily diſcover, that Tacitus indulges an honeſt pleaſure in the contraſt of barbarian virtue, with the diſſolute conduct of the Roman ladies; yet there are ſome ſtriking circumſtances that give an air of truth, or at leaſt of probability, to the conjugal faith and chaſtity of the German people.

Although the progreſs of civilization has undoubtedly contributed to aſſuage the fiercer paſſions of human nature, it ſeems to have been leſs favourable to the virtue of chaſtity, whoſe moſt dangerous enemy is the ſoftneſs of the mind. The refinements of life corrupt, even while they poliſh, the intercourſe of the ſexes. The groſs appetite of love becomes moſt dangerous when it is elevated, or rather indeed diſguiſed, by ſentimental paſſion. The elegance of dreſs, of motion, and of manners, gives a luſtre to beauty, and inflames the ſenſes through the eye of imagination. Luxurious entertainments, midnight dances, and licentious ſpectacles, preſent at once temptation and opportunity to female frailty. From ſuch dangers the unpoliſhed wives of the barbarians were ſecured by poverty, ſolitude, and the painful cares of a domeſtic life. The German huts, open on every ſide to the detection of indiſcretions, were a better ſafeguard of conjugal fidelity, than the walls, the bolts, and the eunuchs, of a Perſian harem. To this reaſon, another may be added of a more honourable nature. The Germans treated their women with eſteem and confidence, conſulted them on all occaſions of importance, and fondly believed, that in their breaſts reſided a ſanctity and wiſdom more than human. Some of theſe interpreters of fate, ſuch as Velleda, in the Batavian war, governed in the name of the deity the fierceſt nations of Germany. The reſt of the ſex, without being adored as goddeſſes, were reſpected as the free and equal companions of ſoldiers; aſſociated even by the marriage ceremony to a life of toil, of danger, and of glory. In their great invaſions, the camps of the Germans were filled with a multitude of women, who remained firm and undaunted amidſt the claſh of arms, the horrors of deſtruction, and the bleeding wounds of their ſons and huſbands. Fainting armies of German warriors have more than once been driven back upon the enemy, by the generous deſpair of the women, who dreaded death much leſs than ſervitude. If the day was irrecoverably loſt, they well knew how to deliver themſelves and their children, with their own hands, from an implacable victor. Heroines of ſuch a caſt may claim our admiration; but they were moſt aſſuredly neither lovely, nor very ſuſceptible of tender love. Whilſt they affected to emulate the ſtern valour of *man*, they muſt have reſigned that attractive ſoftneſs in which principally conſiſts the charms and weakneſs of *woman*. Conſcious pride taught the German females to ſuppreſs every tender emotion that ſtood in competition with honour, and the firſt honour of the ſex has ever been that of chaſtity. The ſentiments and conduct of theſe high-ſpirited matrons may, at once, be conſidered as a cauſe, as an effect, and as a proof, of the ſingular character of the nation. Female courage, however it may be raiſed by fanaticiſm, or confirmed by habit, can be only a faint and imperfect imitation of the manly valour that diſtinguiſhes the age or country in which it may be found.

The religious ſyſtem of the ancient Germans (if the wild opinions of ſavages can deſerve that name) was dictated by their wants, their fears, and their ignorance. Like the aboriginal Britons, they adored the great viſible objects and agents of nature, the ſun and the moon, the fire and the earth; together with thoſe imaginary deities, who were ſuppoſed to preſide over the moſt intereſting occupations of human life. They were perſuaded, that, by arts of divination, they could diſcover the will of the ſuperior beings, and that human ſacrifices were the moſt precious and acceptable offering to their altars. Some applauſe has been thoughtleſsly beſtowed on the ſublime notion entertained by that people of the Deity, whom they neither confined within the walls of a temple, nor repreſented by any human figure; but when we recollect, that the Germans were unſkilled in architecture, and totally unacquainted with the art of ſculpture, we ſhall readily aſſign the true reaſon of a ſcruple which aroſe not ſo much from a ſuperiority of reaſon as from a want of ingenuity. The only temples in Germany were dark and ſolitary groves, conſecrated by the reverence of ſucceeding generations. Their ſecret gloom, the imagined reſidence of an inviſible power, by preſenting no diſtinct object of fear or worſhip, impreſſed the mind with a ſtill deeper ſenſe of religious awe; and the prieſts, rude and illiterate as they were, had been taught by experience the uſe of every artifice that could preſerve and fortify impreſſions ſo well ſuited to their intereſt and authority.

The ſame ignorance which renders barbarians incapable of conceiving or embracing the uſeful reſtraints of laws, expoſes them naked and unarmed to the blind terrors of ſuperſtition. The German prieſts, improving this favourable temper of their countrymen, had aſſumed a juriſdiction, even in temporal concerns, which the magiſtrate could not venture to exerciſe; and the haughty warrior patiently ſubmitted to the laſh of correction, when it was inflicted, not by any human power, but by the immediate order of the god of war. The defects of civil policy were ſometimes ſupplied by the interpoſition of eccleſiaſtical authority. The latter was conſtantly exerted to maintain ſilence and decency in the popular aſſemblies; and was ſometimes extended to a more enlarged concern for the national welfare. A ſolemn proceſſion was occaſionally celebrated in the preſent countries of Mecklenburgh and Pomerania. The unknown ſymbol of the Earth, covered with a thick veil, was placed on a carriage drawn by cows; and in this manner the goddeſs, whoſe common reſidence was in the iſle of Rugen, viſited ſeveral adjacent tribes of her worſhippers. During her progreſs, the ſound of war was huſhed, quarrels were ſuſpended, arms laid aſide, and the reſtleſs Germans had an opportunity of taſting the bleſſings of peace and harmony. The *truce of God*, ſo often and ſo ineffectually proclaimed by the clergy

clergy of the eleventh century, was probably an imitation of this ancient cuſtom.

But the influence of religion was far more powerful to inflame, than to moderate, the fierce paſſions of the Germans. Intereſt and fanaticiſm often prompted its miniſters to ſanctify the moſt daring and the moſt unjuſt enterpriſes, by the approbation of Heaven, and full aſſurances of ſucceſs. The conſecrated ſtandards, long revered in the groves of ſuperſtition, were placed in the front of the battle; and the hoſtile army was devoted with dire execrations to the gods of war and of thunder. In the faith of ſoldiers, (and ſuch as were the Germans,) cowardice is the moſt unpardonable of ſins. A brave man was the worthy favourite of their martial deities; the wretch, who had loſt his ſhield, was alike baniſhed from the religious and the civil aſſemblies of his countrymen. Some tribes of the north ſeem to have embraced the doctrine of tranſmigration, others imagined a groſs paradiſe of immortal drunkenneſs. All agreed, that a life ſpent in arms, and a glorious death in battle, were the beſt preparations for a happy futurity, either in this or in another world.

The immortality ſo ſplendidly promiſed by the prieſts, was in ſome degree conferred by the bards. That remarkable order of men has deſervedly attracted the notice of all who have attempted to inveſtigate the antiquities of the Celts, the Scandinavians, and the Germans. Their genius and character, as well as the reverence paid to their office, have been ſufficiently illuſtrated. See the article BARD, vol. ii. p. 716.—But we cannot ſo eaſily expreſs, or even conceive, the enthuſiaſm of arms and glory, which they kindled in the breaſt of their audience. Among a poliſhed people, a taſte for poetry is rather an amuſement of the fancy, than a paſſion of the ſoul. And yet, when in calm retirement we peruſe the combats deſcribed by Homer or Taſſo, we are inſenſibly ſeduced by the fiction, and feel a momentary glow of martial ardour. But how faint, how cold, is the ſenſation which a peaceful mind can receive from ſolitary ſtudy! It was in the hour of battle, or in the feaſt of victory, that the bards celebrated the glory of heroes of ancient days, the anceſtors of thoſe warlike chieftains, who liſtened with tranſport to their artleſs but animated ſtrains. The view of arms and of danger heightened the effect of the military ſong; and the paſſions which it tended to excite, the deſire of fame, and the contempt of death, were the habitual ſentiments of a German mind.

Such was the character, ſuch the manners, of the ancient Germans, when attacked by Cæſar. Their climate, their want of learning, of arts, and of laws, their notions of honour, of gallantry, and of religion, their ſenſe of freedom, impatience of peace, and thirſt of enterpriſe, all contributed to form a nation of military heroes. And yet we ſhall find, that, during more than two hundred and fifty years that elapſed from the defeat of Varus to the reign of Decius, theſe formidable barbarians made but few conſiderable attempts, and not any material impreſſion, on the luxurious and enſlaved provinces of the Roman empire. Their progreſs was checked by their want of arms and diſcipline, and their fury was diverted by the inteſtine diviſions of their own country.

It has been obſerved, and not without truth, that the command of iron ſoon gives a nation the command of gold. But the rude tribes of Germany, alike deſtitute of both thoſe valuable metals, were reduced ſlowly to acquire, by their unaſſiſted ſtrength, the poſſeſſion of the one as well as of the other. The face of a German army diſplayed their paucity of iron. Swords, and the longer kind of lances, they could ſeldom uſe. Their *frameæ* (as they called them in their own language) were long ſpears headed with a ſharp but narrow iron point, and which, as occaſion required, they either darted from a diſtance, or thruſted in cloſe onſet. With this ſpear, and with a ſhield, their cavalry was contented. A multitude of darts, thrown with incredible force, were an additional reſource of the infantry. Their military dreſs, when they wore any, was nothing more than a looſe mantle. A variety of colours was the only ornament of their wooden or oſier ſhields. Few of the chiefs were diſtinguiſhed by cuiraſſes, ſcarcely any by helmets. Though the horſes of Germany were neither beautiful, ſwift, nor practiſed in the ſkilful evolutions of the manege, yet ſeveral of the nations obtained renown by their cavalry; but, in general, the principal ſtrength of the Germans conſiſted in their infantry, which was drawn up in ſeveral wedge-formed columns, according to the diſtinction of tribes and families. Impatient of fatigue or delay, theſe half-armed warriors ruſhed on to battle with diſſonant ſhouts and diſordered ranks; and ſometimes, by the effort of native valour, prevailed over the conſtrained and more artificial bravery of diſciplined mercenaries. But as the barbarians poured forth their whole ſouls on the firſt onſet, they knew not how to rally or to retire. A repulſe was a ſure defeat; and a defeat was moſt commonly attended with total deſtruction.

About the year 55 before Chriſt, Cæſar having ſubdued Belgic Gaul, haſtened to oppoſe the Uſipetes and Tenctheri, who had been driven out of Germany by the Suevi, and croſſed the Rhine, with a deſign to ſettle in Gaul. As ſoon as Cæſar appeared, theſe Germans ſent him a deputation, offering to join him, provided he would aſſign them lands. Cæſar replied, that there was no room for them in Gaul; upon which they fell upon ſome Roman ſquadrons, and cut them in pieces. This ſo provoked Cæſar, that he immediately marched againſt them, and purſuing them to the conflux of the Rhine and the Maeſe, the battle raged with ſuch fury, that almoſt forty thouſand of the Germans are ſaid to have periſhed. After this, Cæſar being reſolved to ſpread the terror of the Roman name through Germany, built a bridge over the Rhine, and entered their country. In this expedition, however, he performed no remarkable exploit. A little before his death, he had projected the conqueſt of Germany; but his aſſaſſination prevented the execution of his deſign.

Soon after this event, the Rhæti of Germany invaded the Roman territory, and committed the greateſt devaſtations. Againſt them was ſent Druſus, who found means to bring them to a battle; in which the Romans proved victorious, and cut in pieces great numbers of the enemy. Thoſe who eſcaped the general ſlaughter, being joined by the Vindelici, took their route towards Gaul, with a deſign to invade that province. But Auguſtus, upon the firſt notice of their march, diſpatched againſt them Tiberius, who was no leſs ſucceſsful than Druſus, in having given them a total overthrow. Thus were the Vindelici, the Rhæti, and Norici, three of the nations in ancient Germany, ſubdued. Tiberius, to keep the conquered countries in awe, planted two colonies in Vindelicia, and opened from thence a road into Rhætia and Noricum. One of the cities which he built for the defence of his colonies, he called, from his father Druſus, *Druſomagus*; the other by the name of Auguſtus, *Auguſta Vindelicorum*; which are now known by the names of *Mimminghen* and *Augsburg*.

In the mean time Druſus prepared to attack the Germans who dwelt beyond the Rhine. They had previouſly collected a moſt formidable army, with which they were advancing towards the Rhine, in order to invade Gaul. But Druſus defeated them as they attempted to croſs that river; and, purſuing his advantage, he overthrew them in a great battle, and following the courſe of the Rhine, approached the German ocean, reducing the Friſii and the Chauci between the Ems and the Elbe. After this ſucceſs, Druſus built two forts to keep the conquered countries in awe; the one at the confluence of the Lippe and the Alme, the other in the country of the

the Catti on the Rhine. On this occaſion alſo he made a canal, called after his name, *Foſſa Druſiana*, to convey the waters of the Rhine into the Sala or Sale. It extended eight miles; and was very convenient for conveying the Roman troops by water to the countries of the Friſii and Chauci, which was the object of the undertaking.

After the death of Druſus, Tiberius over-ran all thoſe countries which Druſus had conquered the preceding ſummer; and carried on, in a languid manner, a predatory war for upwards of eighteen years. During this period, ſome of the German nations had quitted their foreſts, and begun to live in a civilized manner under the protection of the Roman laws; but Quintilius Varus being now ſent to command the Roman forces, he ſo provoked the inhabitants by his extortions, that not only thoſe who ſtill held out refuſed to ſubmit, but even the nations that had ſubmitted were ſeized with an anxious deſire of throwing off the yoke. Among them was a young German named *Arminius*. He was the ſon of Sigimer, one of the moſt powerful lords among the Catti, had ſerved with reputation in the Roman armies, and been honoured by Auguſtus with the privileges of a Roman citizen; but the love of his country prevailing over his gratitude, he reſolved to improve the general diſcontent, to deliver his country from the bondage of a foreign dominion. In order to put Varus off his guard, he adviſed him to ſhow himſelf amicably to the inhabitants of the diſtant provinces, which, he ſaid, would more effectually ſubdue them than the perils of the Roman ſword. As Varus was a man of a peaceable temper, he readily conſented to this propoſal; and, leaving the neighbourhood of the Rhine, marched into the country of the Cheruſci. Upon which Arminius and the Germans roſe up in arms, and prepared to drive the invaders from the utmoſt boundaries of their country. On the firſt news of this revolt, Varus turned againſt the enemy with three legions and ſix cohorts; but being attacked by the Germans as he defiled through a wood, his army was totally cut off, while he himſelf and moſt of his officers fell by their own hands.

About the year 15 of the Chriſtian era, Germanicus the ſon of Druſus, ſo named on account of his exploits in Germany, entered that country with a powerful army, and commenced an arduous and bloody war with Arminius. Having built with great diſpatch, during the winter, one thouſand veſſels of different ſorts, he ordered them, early in the ſpring of the year 16, to fall down the Rhine, and appointed the iſland of the Batavians for the general rendezvous of his forces. Here the fleet arrived, and the proviſions and warlike engines were put on-board, and the whole army being embarked, the fleet entered the canal formerly cut by Druſus. Hence he ſailed to the mouth of the Ems; where, having landed his troops, he marched directly to the Weſer, where he found Arminius encamped on the oppoſite bank, ready to diſpute his paſſage. The next day Arminius drew out his troops in order of battle: but Germanicus, not thinking it adviſable to attack them, ordered the horſe to ford over under the command of Stertinius and Emilius; who, to divide the enemy's forces, croſſed the river in two different places. At the ſame time Cariovalda, the leader of the Batavian auxiliaries, croſſed the river where it was moſt rapid: but, being drawn into an ambuſcade, he was killed, together with moſt of the Batavian nobility; and the reſt would have been totally cut off, had not Stertinius and Emilius haſtened to their aſſiſtance. Germanicus in the mean time paſſed his main army over the river without moleſtation. A battle enſued, in which the Germans were defeated with ſo great a ſlaughter, that the ground was covered with arms and dead bodies for more than ten miles round. In memory of this ſignal victory Germanicus raiſed a mount, upon which he placed as trophies the arms of the enemy, and inſcribed underneath the names of the conquered nations. After this victory he returned to Rome, was honoured with a triumph, and took the ſurname of *Germanicus* Cæſar.

From this time partial invaſions, and predatory wars, were frequently carried on, in which the Germans loſt an incredible number of their troops, and the Romans gained nothing but hard blows, and very little glory. At length the gallant Probus, purſuing his Gaulic victories, paſſed the Rhine into Germany, A. D. 277, and diſplayed his invincible eagles on the banks of the Elbe and the Necker. He was fully convinced, that nothing could reconcile the minds of the Germans to peace, unleſs they experienced in their own country the calamities of war. Germany, having been exhauſted by repeated emigration, was as much unprepared for his attack, as aſtoniſhed by his preſence. Nine of the moſt conſiderable princes repaired to his camp, and fell proſtrate at his feet; and ſuch a treaty was gladly received by the Germans, as it pleaſed the conqueror to dictate. He exacted a ſtrict reſtitution of the effects and captives which in their predatory wars they had carried away from the provinces; and obliged their own magiſtrates to puniſh the more obſtinate ſoldiers, who preſumed to detain any part of the ſpoil. A conſiderable tribute of corn, cattle, and horſes, was at the ſame time reſerved for the uſe of the garriſons which Probus eſtabliſhed on the limits of their territory. He even entertained ſome thoughts of compelling the Germans to relinquiſh the exerciſe of arms, and to truſt entirely to the juſtice and power of Rome. To accompliſh theſe ends, the conſtant reſidence of an imperial governor, ſupported by a numerous army, would have been requiſite. Probus therefore judged it more expedient to defer the execution of ſo great a deſign; which was indeed rather of ſpecious than ſolid utility. Inſtead, therefore, of reducing the warlike natives of Germany to the condition of ſubjects, Probus contented himſelf with the humble expedient of raiſing a bulwark againſt their inroads. The country, which afterwards formed the circle of Swabia, had been left deſert in the age of Auguſtus, by the emigration of its ancient inhabitants. The fertility of the ſoil ſoon attracted a new colony from the adjacent provinces of Gaul. Crowds of adventurers, of a roving temper and of deſperate fortunes, occupied the doubtful poſſeſſion, and acknowledged, by the payment of tythes, the majeſty of the Roman empire. To protect theſe new ſubjects, a line of frontier garriſons was gradually extended from the Rhine to the Danube. About the reign of Adrian, when that mode of defence began to be practiſed, theſe garriſons were connected and covered by a ſtrong intrenchment of trees and paliſades. In the place of ſo rude a bulwark, the emperor Probus conſtructed a ſtone-wall of a conſiderable height, and ſtrengthened it by towers at convenient diſtances. From the neighbourhood of Newſtadt and Ratiſbon on the Danube, it ſtretched acroſs hills, valleys, rivers, and moraſſes, as far as Wimpfen on the Necker, and at length terminated on the banks of the Rhine, after a winding courſe of near two hundred miles. This important barrier, uniting the two grand ſtreams that protected the provinces of Europe, ſeemed to fill up the vacant ſpace through which the barbarians, and particularly the Alemanni, could penetrate with the greateſt facility into the heart of the empire. But the experience of the world, from China to Britain, has expoſed the vain attempt of fortifying any extenſive tract of country. An active enemy, who can ſelect and vary his points of attack, muſt, in the end, diſcover ſome feeble ſpot, or ſome unguarded moment. The ſtrength, as well as the attention, of the defenders is divided; and ſuch are the blind effects of terror on the firmeſt troops, that a line once broken in a ſingle place, is almoſt inſtantly deſerted. The fate of the wall which Probus erected, may confirm the general obſervation. Within a few years after his death, it was overthrown by the Alemanni. Its

ſcattered

ſcattered ruins, aſcribed by the natives to the power of the *dæmon*, now ſerve only to excite the wonder of the Swabian peaſants.

Marcus Aurelius was the next among the Roman emperors who meditated the conqueſt of Germany, and whoſe numerous legions menaced its armies with approaching deſtruction. His great deſigns were cut ſhort by his death; after which the Germanic nations became every day more and more formidable to the Romans. Far from being able to invade and attempt the further conqueſt of theſe northern countries, the Romans had now the greateſt difficulty to repreſs the incurſions of their armies, which threatened Rome itſelf. The immediate deſtroyers of the Roman empire were the Heruli; who, under their leader Odoacer, dethroned Auguſtulus the laſt Roman emperor, and proclaimed Odoacer king of Italy, A. D. 476. The Heruli were ſoon expelled by the Oſtrogoths; and theſe in their turn were ſubdued by Juſtinian, who re-annexed Italy to the eaſtern empire. But the popes found means to obtain the temporal as well as ſpiritual juriſdiction over a conſiderable part of the country, while the Lombards ſubdued the reſt. Theſe laſt proved very troubleſome to the popes, and at length beſieged Adrian I. in his capital. In this diſtreſs he applied to *Charles the Great*, king of France; who conquered both Italy and Germany, and was crowned emperor of the weſt in the year 800.—See the articles FRANCE and ROME.

Charlemagne, or Charles the Great, was the firſt who united the warlike ſtates of Germany under the ſame ſceptre. The Alemanni, ſo formidable to the Romans, became the faithful vaſſals of Charlemagne; and their country was inſcribed within the modern limits of Alſace, Swabia, and Swiſſerland. The Bavarians, with a liberal indulgence of their laws and manners, were leſs patient of a maſter: but the north of Germany, from the Rhine and beyond the Elbe, ſtill remained hoſtile and pagan; nor was it till after a war of thirty-three years, that the Saxons bowed under the yoke of Charlemagne. The idols and their worſhip were extirpated: the foundation of eight biſhoprics, of Munſter, Oſnaburgh, Paderborn, and Minden, of Bremen, Verden, Hildeſheim, and Halberſtadt, define, on either ſide of the Weſer, the bounds of ancient Saxony; theſe epiſcopal ſeats conſtituted the firſt ſchools and cities of that ſavage land. Beyond the Elbe, the *Slavi*, or Sclavonians, overſpread the modern dominions of Pruſſia, Poland, and Bohemia. The conqueſt or converſion of the two former countries, is of a more recent age; but the firſt union of Bohemia with the Germanic body may be juſtly aſcribed to the arms of Charlemagne, the firſt conqueror of the invincible nations of Germany; which, with his reſtoration of the weſtern empire, forms a grand epocha in the chronology of the world.

Charlemagne, and his poſterity, continued to reign over the Germanic empire until the extinction of the Carlovingian race. Louis *le Debonaire*, king of France and emperor of Germany, the ſon and ſucceſſor of Charlemagne, dividing at his death his immenſe territories among his children, Germany was made the portion of his ſon Louis, who thence received the name of "Louis the German," and was crowned *king* of that country, by the title of Louis II. his father, *le Debonaire*, having been conſidered as Louis I. In 870, this prince reduced half of the Lotharingian kingdom under his ſubjection; and his ſon, Louis III. ſurnamed the Younger, nine years after, reduced the other half. Louis the Younger ſharing his paternal kingdom with his two other brothers, Carlman was made king of Bavaria, Louis of Eaſt Franconia, and Charles the Fat of Alemannia; but the latter, ſurviving both his brothers, not only inherited their kingdoms, but obtained all Italy and France; yet governed in ſo injudicious a manner, that in 887 he was depoſed by the German ſtates, who conſtituted Arnulph, Carlman's natural ſon, king of Germany. This prince defeated the Normans, who had made great devaſtations in Germany; and, by the aſſiſtance of the Huns, ſubdued the Bohemians. To him ſucceeded his ſon Louis IV. ſurnamed the Child; at whoſe death, in 911, the race of Charlemagne became extinct. The affairs of Germany under the government of theſe kings, are already recorded under the article FRANCE, vol. vii. p. 654–661, to which the reader is referred. When the empire raiſed by Charlemagne had thus fallen away, the different princes of the ſtates of Germany aſſumed the right of election, and gave a new and ſingular turn to their own importance, as well as to the pretenſions of their ſovereign, totally unwarranted by any precedent or example in the annals of other countries. Thus, while in the other kingdoms of Europe, the dignity of the great lords, who were all originally allodial or independent barons, was diminiſhed by the power of the king, as in France, and by the influence of the people, as in Great Britain; in Germany, on the other hand, the power of the electors was raiſed upon the ruins of the emperor's ſupremacy, and of the people's juriſdiction; from which remote period, the right of the *electors* has been recognized and employed without interruption, until the recent ſubjugation of Germany by Napoleon emperor of France.

FROM THE EXTINCTION OF THE POSTERITY OF CHARLEMAGNE, TO THE ELECTION OF RODOLPHUS I. FOUNDER OF THE AUSTRIAN DYNASTY.

After the death of Louis IV. the laſt *king* of Germany, the princes of the empire aſſembled at the place now called Worms, and offered the imperial diadem to Otho duke of Saxony; but being unwilling to accept a dignity for which his advanced age rendered him unfit, he requeſted that they would apply their invitation to Conrad duke of Franconia, whom he knew to be a prince of merit and capacity, and who was deſcended from Louis I. Conrad therefore was unanimouſly elected to fill the German throne, by the title of *emperor*, A. D. 912; and he immediately took the neceſſary precautions to eſtabliſh and ſupport his authority. Underſtanding that his preſence was neceſſary to quell ſome diſcontents in Lorrain, he marched thither with great expedition; and, by ſeveral popular acts, conciliated the eſteem and affection of the natives. He then perſuaded the duke of Saxony, who had aſſembled a powerful army, to ſuſpend his intended hoſtilities; and cruſhed three alarming rebellions, which were ſucceſſively raiſed againſt him. The Hungarians, however, made a ſanguinary irruption into his dominions, and, after marking their progreſs with fire and ſword, compelled Conrad to purchaſe a peace upon very diſadvantageous terms: but, notwithſtanding all the exertions of his enemies, he retained the ſceptre, and conducted the affairs of the empire with proſperity and prudence till the time of his death. Perceiving at length his approaching diſſolution, he convened the princes and ſtates of the empire, and ſeriouſly exhorted them to raiſe Henry duke of Saxony, and ſon of Otho, to the imperial throne; although that nobleman had inſulted him by open rebellion, and had made an attempt upon his life by means of a poiſoned bracelet. Thus he nobly ſacrificed his reſentment to the public intereſt, and ſent the crown, ſceptre, and imperial regalia, to his intended ſucceſſor. Conrad I. then expired, after a virtuous and patriotic reign of ſeven years.

Early in the enſuing year, 919, the dukes of Bavaria, Franconia, and Swabia, with the heads of other ſtates of Germany, aſſembled at the place now called Fritzlar, and beſtowed the imperial dignity upon Henry duke of Saxony, whom hiſtorians have diſtinguiſhed by the epithet of the *Fowler*, on account of his predilection for that amuſement. This prince had no ſooner aſſumed the reins of government, than he prudently laboured to promote

promote a general reconciliation among the princes of the empire. His exertions for this purpoſe were crowned with ſucceſs: they unanimouſly reſolved to ſupport his intereſts, and acted with ſuch extraordinary gallantry in his defence, that a numerous army of Hungarian invaders were repulſed with prodigious ſlaughter; the Vandals alſo, who had made an inroad into the empire, were almoſt exterminated on the coaſts of the Baltic; and the Dalmatians, Bohemians, Abotrites, and Sclavonians, were compelled to lay down their arms. His greateſt ſtruggle was with the Thuringians, with whom he at length concluded a truce. Charles the Simple he drove from the banks of the Rhine; and, after ſome conferences, the two princes concluded the treaty called *Pactum Bonneſe*, which conſtitutes a famous epoch in hiſtory. An aſſembly, compoſed of ſeveral French and German prelates, was held ſoon afterwards at the place now called Coblentz, where this treaty was confirmed; and, among other regulations, it was enacted that no layman ſhould receive tythes, which were entirely eccleſiaſtic, and that no marriage ſhould be ſolemnized between relations within the ſixth degree of conſanguinity.

Henry now turned his attention to the regulation and improvement of his dominions. Accordingly he publiſhed a general amneſty in favour of the robbers and banditti, with which deſcription of men every part of Germany at that time abounded, and he actually perſuaded them to engage in the ſervice of their country. He alſo took excellent precautions for the eſtabliſhment and regular ſupply of magazines of corn, that the inhabitants might never be diſtreſſed by a ſcarcity of proviſions. Nor were the exertions of this prince confined to the diſcharge of his imperial duties; but his zeal induced him to undertake the propagation of the Chriſtian religion; and, after appointing the firſt biſhop in Holſtein to declare the glad tidings of the goſpel to the recently ſubdued Vandals, he had the ſatisfaction to witneſs, in the year 927, the converſion of the king of the Abotrites, whoſe territories bordered upon Bulgaria, in that part of Dacia contiguous to the Danube. Henry now received a preſſing invitation into Italy, to receive the holy unction from the hands of the pope. This induced him to undertake that journey; but, being ſeized with an apoplexy on the road, he was compelled to return to the place now called Manſleben, where, with the conſent of the ſtates, he ſettled the ſucceſſion on his ſon Otho, and expired in the ſixtieth year of his age, and the ſeventeenth of his reign.

It was reſerved for the emperor Henry I. to re-eſtabliſh the authority of the imperial crown, which had ſuffered a great decline. To preſerve the connection of Bavaria with the empire, after the introduction of Chriſtianity, he made a ſacrifice, in granting to the dukes of that country the authority over the biſhops of it, which was conſidered as a part of the royal power. Whether this was deſigned merely as a perſonal prerogative conferred on the then duke, or intended for all the ſucceeding dukes of Bavaria, is a queſtion which is ſtill diſputed, particularly by the Bavarian and Salzburg writers. The union which had been formed between Lorrain and Germany, in the years 923 and 935, was now reſtored, by more than one treaty with the king of France, to its former ſtate.

"We are principally indebted (ſays the learned Pütter) to this reign for the change which took place in the interior parts of Germany, by drawing the inhabitants from the woods, and laying the foundation of the German towns. Before this period, excepting the caſtles on the mountains, the ſeats of the nobility, and convents which happened to be ſurrounded with walls, there were only lonely farms and villages. A few people might poſſibly have erected ſome houſes in the neighbourhood of a caſtle or church; but all theſe places were open and defenceleſs.

"The mournful experience, that ſo few were able, in ſuch ſituations, to make effectual proviſion againſt the increaſing diſtreſs occaſioned by the incurſions of foreign nations, firſt ſuggeſted the idea to Henry, that it would be more conducive to the public ſecurity if there were towns ſurrounded with walls, with towers and gates; and not only large enough to contain a greater number of inhabitants, but capable of affording protection to their effects, and thoſe of their neighbours who might take refuge there in times of neceſſity. Any other motives than thoſe of neceſſity would have availed but little to diveſt the people of their averſion to live in towns; but the experience of other advantages which this inſtitution produced, ſoon taught them to change their opinion; and of courſe therefore the number of towns continually increaſed.

"But how was it poſſible to accompliſh this innovation at firſt? The method which Henry adopted was, that every ninth man ſhould remove from the country, and ſettle in the towns, and that all public meetings ſhould be held there; a plan which certainly merits the higheſt approbation. We have no particular account of any other regulation which might have been made, to encourage the population of the towns, and promote their trade; much leſs are we acquainted with the number and ſituation of the particular towns then founded. It is probable that many of them owed their origin to buildings which happened to be already in the neighbourhood of epiſcopal churches and cloiſters, or elſe adjoining caſtles which were ſurrounded by extenſive walls. The diviſion of the ſtreets muſt naturally have depended upon accident, by one houſe by degrees being added to another. Even where the towns were built entirely from the ground, one cannot be ſurprized that there was ſo little regularity obſerved, and ſo little application of that refined policy which we imagine to be requiſite in a town at preſent; partly as this event relates to an age of the groſſeſt ignorance, and partly becauſe there was only the ſhort period of nine years, during which Henry had made a truce with the Thuringians, allotted for the purpoſe. In ſuch circumſtances it is rather a wonder that ſo much was performed, and that a nation which was before ſo exceedingly averſe to this mode of living, could ſo ſoon be prevailed upon to reſide in towns. But the greateſt proof of this having really been the caſe was, that, after the dangers which they were expoſed to from the Thuringians were over, their number continually increaſed in the towns.

"With reſpect to the manner of life of the inhabitants of theſe new towns, and amongſt other things the particular diſtinction of rank which prevailed, we muſt not form our ideas of them from the ſtate of our modern towns. Every one of the original inhabitants knew what rank he was of, and whether he was free or not. In the firſt generation, it is probable that the people ſeldom married perſons of any other rank than their own. At that time, the mere abode in a town was not a ſufficient reaſon for conſtituting a particular rank or order of men; and this is the cauſe that even in the preſent day there are noble families in many ancient cities, who have preſerved their rank from time immemorial. It was not till ſeveral generations afterwards that the inhabitants of cities, whoſe anceſtors were freemen, no longer ſcrupled to intermarry with perſons whoſe wealth and perſonal accompliſhments made them willingly forget that their anceſtors perhaps were originally ſlaves, or came firſt into the town in the capacity of menial ſervants.

"In the ſame manner, likewiſe, the averſion which the people in general had to merchandiſe and mechanical employments, was by degrees deſtroyed. Thoſe indeed who continued to keep up their houſes in the old ſtyle in the country, ſoon laid claim to precedency, becauſe they ſtill complied with the cuſtoms of their anceſtors, by principally occupying themſelves in the chaſe and

and the war, and trading only in the produce of their lands and cattle. Theſe likewiſe were the only perſons who were appointed to the offices of the court, and performed the feudal duties, which the inhabitants of the towns were wholly excluded from. At laſt people were required to produce proof of the noble deſcent both of their paternal and maternal anceſtors, in religious foundations, and at tournaments. Hence we may conceive how the few people of the country, whoſe liberty and birth otherwiſe entitled them to no ſuperiority over the inhabitants of towns, who were originally equally free, in a few centuries conſidered themſelves of a diſtinct rank from the burghers, and endeavoured to emulate the rank of thoſe independent families which had hitherto conſtituted the real nobility of Germany; though an eſſential difference has been always preſerved between this order of high nobility, and thoſe free families which conſtitute at preſent what is called the inferior nobility. On the other ſide, the burghers, by virtue of the freedom which they originally inherited from their anceſtors, or elſe by obtaining their burgherſhip, or freedom of the town, remained as eſſentially diſtinct from the order of peaſants, who were ſtill either in a ſtate of ſlavery, or elſe groaned under the grievous hardſhips of villanage, and impoſts on their property. This was the origin of the four diſtinct ranks of people ſtill exiſting in Germany. The high nobility, conſiſting of princes, counts, and barons; the inferior nobility, who had anciently no other pretenſion to ſuperiority than their mere enjoyment of freedom; the order of burghers, or freemen of towns; and, laſtly, the peaſants.

"The cotemporary writer, to whom we are indebted for the account of the towns founded by the emperor Henry I. ſpeaking of the manner adopted to people them, by means of taking every ninth man from the country, makes uſe of an expreſſion, which ſome interpret as if the firſt inhabitants of the German towns had been only peaſants: but he expreſsly ſays, *milites agrarios*, which, according to the language of the ſucceeding times, muſt be tranſlated "country knights," or warriors who lived on their eſtates. The addition of the word *agrarius* was probably intended to diſtinguiſh ſuch knights or freeholders from thoſe who were obliged to perform military ſervice as vaſſals in the field, or elſe garriſon duty in the caſtles, or the offices of the court as miniſters, juſt as at preſent the country gentlemen, *landjunkers*, are diſtinguiſhed from thoſe noblemen who are in offices at court, or in the army."—See Dornford's Tranſlation of Pütter's German Empire.

Purſuant to the dying requeſt of Henry I. his ſon Otho, ſurnamed the Great, was elected emperor at Aix-la-Chapelle, A.D. 936. The ceremonial of his election is thus recorded: The eccleſiaſtical and ſecular princes, having taken the oath of allegiance, conducted him to the great church, where he was met by the archbiſhop of Mentz and the diocefan, in their pontificals, aſſiſted by other biſhops and clergymen. On his advancing into the church, the prelate addreſſed the congregation to this effect:—"I preſent the imperial crown unto Otho, choſen of God, formerly nominated to the empire by his reverend father, and now elected into that ſupreme ſtation by the princes here aſſembled. If this election be agreeable to you, hold up your hands in token of approbation." This addreſs was received with unbounded applauſe; and Otho was conducted to the high altar. The archbiſhop then girded on the emperor's ſword, ſaying: "Receive this ſword, and uſe it againſt the enemies of Jeſus Chriſt; and employ the power of the empire, which God hath put into your hands, to preſerve and confirm the welfare of the church." Then, putting on the imperial mantle, "Remember, (continued he,) with what fidelity and fortitude you are obliged to maintain peace and tranquillity to the end of your life." Laſtly, preſenting the mace and ſceptre, he added, "Warned by theſe emblems, inflict no other than paternal chaſtiſement upon your ſubjects; extend your mercy to the miniſters of God, to the widow and the orphan; and let the balm of your pity never ceaſe to flow, that with your diadem in this life you may acquire an unfading one in that which is to come." After this ſolemn exhortation, Otho received the imperial crown from the hands of the archbiſhop; and on his return to the palace a magnificent feaſt was ſerved up, which terminated the ceremony.

The commencement of Otho's reign was marked by profound tranquillity; but an irruption of the Hungarians, ſome ſucceſſes of the Bohemians under their duke Boleſlaus, and a revolt in the province of Bavaria, ſoon alarmed the emperor, and called his army into action. After ſome time, however, the invaders were defeated; Boleſlaus was compelled to ſubmit to his powerful opponents; and Bavaria was reduced to obedience. The emperor now marched into France, in order to ſupport Louis againſt his formidable enemy Hugh the Great. Upon this occaſion he made ſome noble exertions, and acquired much military renown.

Having, in 950, made a ſucceſsful expedition againſt the Danes, and employed his mediation in terminating the troubles of France, Otho eſpouſed Alix, widow of Lotharius king of Italy; and gained a deciſive conqueſt over Beranger, who had recently perſecuted and ſtripped her of her dominions. Shortly after the marriage, Otho's ſon, Ludolphus, engaged in a treaſonable confederacy with Conrad duke of Franconia, and ſeveral other German noblemen. This unnatural revolt produced ſome ſerious hoſtilities, and occaſioned the deſtruction of the city of Ratiſbon: but, after ſome time, the prince was made ſenſible of his error, and took an opportunity, while his father was hunting, to throw himſelf at his feet, and implore his clemency: "Have pity (ſaid he) upon your miſguided child, who returns like the prodigal ſon to his father. If you permit him to live after he has deſerved death, he will aſſuredly repent of his ingratitude, and the reſidue of his life ſhall be marked by exemplary obedience." To this affecting appeal Otho could only reply by a paternal embrace; but when his agitations ſubſided, he aſſured the penitent of his warmeſt favour, and generouſly pardoned all his adherents. The bitter reproaches, however, which Ludolphus received from the Italians, in his ſubſequent expedition againſt Beranger, overwhelmed him with inſupportable diſtreſs, and brought him to an untimely grave.

At the earneſt ſolicitation of the Italians, Otho repaired in perſon to Rome, where he was ſolemnly crowned emperor of the Romans, dignified with the appellation of Auguſtus, and honoured with the homage of the ſenate and people, who unanimouſly ſwore obedience to him as their lawful ſovereign. Yet, notwithſtanding the exterior marks of reſpect which he received upon this occaſion, Otho had ſcarcely withdrawn his army, before pope John introduced Albert the ſon of Beranger into the city, and endeavoured to excite the fears of the populace, by aſſerting that the lands of the church were in danger. The emperor, however, returned with ſuch ſpeed to Rome, that the treacherous pontiff and his new patron conſulted their ſafety by flight; and a council was convened, which, after a mature examination of John's licentious conduct, ſolemnly depoſed him, and elected Leo VIII. to fill the papal chair. This pontiff executed a decree by which Otho was recogniſed emperor of the Romans and king of Italy, with all the rights and prerogatives to him and his ſucceſſors which pope Adrian I. had granted to Charlemagne; ſo that from this period, Otho may be juſtly ſtyled Emperor of the Romans.

Having judiciouſly regulated the affairs of the ſtate, the emperor cauſed his ſon Otho to be crowned as his aſſociate in the empire. He then made a tour through

the cities of Italy, and acquired a conſiderable degree of popularity by confirming the donations of Pepin and Charlemagne. During Otho's reſidence at Capua, he received an embaſſy from Nicephorus Phocas, emperor of Conſtantinople, who profeſſed a deſire of renewing the alliance which formerly ſubſiſted between the eaſtern and weſtern empires. Otho returned a polite anſwer to the Greek emperor, and ſignified his aſſent to a match which had been propoſed between his own ſon Otho and the princeſs Theophania. But Nicephorus was ſo highly incenſed at the refuſal of ſome other demands, that he reſolved to take a cruel revenge; and, accordingly, when the German ambaſſadors were ſent to fetch his daughter, he cauſed both them and their attendants to be maſſacred. This enormity, however, was ſoon puniſhed by an imperial army, under counts Gonther and Sigifrid; and, on the ſubſequent aſſaſſination of Nicephorus, the princeſs Theophania was ſent, with a magnificent train, into Italy, where her marriage with the emperor's ſon was immediately ſolemnized.

In 972, about two years after this event, the emperor died, at the city of Minleben in Saxony, after an active reign of thirty years, during which he gave ſome extraordinary proofs of piety, courage, and generoſity, and juſtly acquired the epithet of *Great*. His conſort Alix retired into a convent immediately after his deceaſe; and his remains were interred with due ſolemnity in the cathedral church of Magdebourg, where his tomb may ſtill be diſtinguiſhed by a Latin inſcription.

Otho II. ſurnamed the Sanguinary, ſucceeded his father on the imperial throne: but his authority was warmly diſputed by Henry duke of Bavaria; and the commencement of his reign was diſturbed by ſome hoſtile incurſions of the Danes and Bohemians. After ſome time, however, the rebellious duke was ſubdued, and baniſhed to Utrecht; and the invaders were compelled to agree to a very diſadvantageous peace. But no ſooner were theſe commotions appeaſed, than Otho found himſelf involved in a troubleſome war with Lothaire king of France. That monarch had revived his pretenſions to the ſovereignty of Lorrain, and granted his protection to the two ſons of Ranier, count of Hainault, who had been deprived of his dominions during the reign of the late emperor. Otho attempted to appeaſe the French king by ſome important conceſſions; but this proving unſucceſsful, he aſſembled an army of ſixty thouſand men, made an irruption into the enemy's country, and committed ſuch dreadful ravages, that he ſoon obtained peace upon his own terms. In this expedition, however, he was expoſed to imminent danger by an inundation of the river Aiſne, which deſtroyed a conſiderable part of his army.

After devoting ſome time to the arrangement of his affairs in Germany, he led a numerous body of forces into Italy, A. D. 979, in order to puniſh a revolt of the Romans, and to recover Apulia and Calabria, which had been taken by the Greeks and Saracens. He accordingly entered Rome without oppoſition, and ſoon afterward hazarded a battle with the enemy; when his army was utterly defeated, and he was reduced to the neceſſity of committing himſelf to the mercy of the waves in a ſolitary veſſel. This ſhip being taken by corſairs, who were totally ignorant of his quality, he was carried into Sicily; but on the payment of a large ſum of money, he obtained his freedom. Soon after this event he renewed the war with increaſed vigour, and his exertions were attended with ſuch ſignal ſucceſs, that the Saracens in Italy were utterly exterminated, in 980. He then chaſtiſed the puſillanimous troops who had deſerted him in his former engagement; gave up the town of Beneventum to military execution, for having furniſhed his enemies with proviſions; and revenged himſelf for the defection of the Romans, by cauſing many of the principal citizens to be maſſacred at a banquet. This action, ſo totally unworthy of a Chriſtian prince, was the occaſion of his being branded with the epithet of Sanguinary. In 983, the emperor died at Rome, of a bloody flux, ſaid to be occaſioned by the wound of a poiſoned javelin, received in his war with the Greeks. Some hiſtorians however have aſſerted, that his death was haſtened by the imprudent behaviour of his empreſs Theophania, who publicly exulted in the victory of her countrymen, though it was obtained over her own huſband.

Otho III. was but twelve years of age when he ſucceeded his father in the empire, for which reaſon he was ſurnamed the Infant; but this appellation was ſoon laid aſide, and he acquired the epithet of Rufus. The commencement of his reign was diſturbed by ſome hoſtile incurſions of the Danes and Sclavonians; but they were repulſed in ſeveral inſtances, and the imperial arms were decidedly victorious. The emperor, having attained the age of diſcretion, made a progreſs, A. D. 988, through the different provinces of the empire, enacted ſome excellent regulations for the welfare and civilization of his ſubjects, and confirmed the eccleſiaſtics in the enjoyment of many valuable privileges. At the ſame time the Saxons repulſed a freſh irruption of the Danes; and Eric king of Sweden ſoon afterward annexed Denmark to his hereditary dominions. Otho, being apprifed of this circumſtance, thought it adviſable to court the friendſhip of his powerful neighbour; and a treaty was concluded by the two princes, which authoriſed the German miſſionaries to preach the goſpel in the dominions of Eric, and promiſed future ſecurity to the inhabitants of the empire.

A revolt being now excited by Creſcentius, the emperor marched with a numerous army into Italy, and took poſſeſſion of Milan, where he was crowned king of Lombardy. He then repaired to Ravenna, and raiſed his relation Bruno to the papal chair, which had become vacant by the demiſe of John XV. The new pontiff aſſumed the name of Gregory V. and, on the firſt convenient opportunity, expreſſed his gratitude to his powerful patron, by crowning him king of the Romans.

Having reſtored the public tranquillity in Capua and Beneventum, and extended his pardon to the turbulent Creſcentius, Otho ſet out on his return to Germany, taking his route through the principal towns of Lombardy. On his arrival at Modena, he gave a ſtriking proof of his love of juſtice, by his conduct towards the empreſs Mary, daughter of the king of Arragon. That princeſs, exaſperated at the coldneſs of an Italian count to whom ſhe had made ſome amorous advances, accuſed him of having inſulted her by an attempt upon her honour. In conſequence of this charge, the unfortunate nobleman was tried, and ſentenced to loſe his head; but, as his innocence was clearly proved after his execution, the vile calumniatreſs was ordered to be burnt alive, and the emperor devoted a large ſum of money to the benefit of the nobleman's widow.

Otho next made a tour through the towns of Upper Saxony; and thence proceeded to Poland, which he created into a kingdom, at the requeſt of duke Boleſlaus, who conſented to hold his dominions as a fief of the empire. Shortly after this event, Otho was called into Italy to repel an invaſion of the Saracens, and to cruſh a freſh revolt of the turbulent Romans. His exertions againſt the Saracens were attended with complete ſucceſs; but the Romans openly refuſed to ſubmit to his authority; and while he was aſſembling an army to revenge this inſult, he was poiſoned by a widow, whom he is ſaid to have ſeduced under a promiſe of marriage. The Germanic empire ſuſtained a heavy loſs by the death of this prince; for he was equally famed on account of his munificence to the church, his valour in defending his dominions, and his equity in redreſſing the wrongs of his ſubjects. He died at Paterno, in the

OTHO I. EMPEROR OF GERMANY.

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thirtieth year of his age and the nineteenth of his reign, A. D. 1002. He fixed upon Aix-la-Chapelle, in his laſt moments, as the place of his ſepulture.

As Otho III. left no iſſue, three competitors immediately claimed the imperial dignity; Henry duke of Bavaria, Herman duke of Swabia, and Ekkard marquis of Saxony. The pretenſions of theſe noblemen ſeem to have been nearly equal; but, by means of his ſuperior power, the duke of Bavaria triumphed over his rivals, and was ſolemnly elected and conſecrated, at Mentz, by the name of Henry II. It appears, however, that he did not obtain this ſucceſs till Ekkard was removed by aſſaſſination. Henry had no ſooner aſſumed the imperial enſigns, than he cauſed his ſurviving competitor, Herman, to be declared an enemy to the empire; and even employed the forces of Germany in ravaging his territories. Herman, on the other hand, reſolved to ſupport his pretenſions by force of arms, and boldly challenged the emperor to decide their claim by ſingle combat: but, when Henry intimated his acceptance of the challenge, Herman's courage forſook him; and he was eventually compelled to bow before the ſuperior fortune of his enemy.

In compliance with the earneſt ſolicitations of his nobles, Henry eſpouſed Cunegunda, daughter of the count of Luxembourg; and Paderborn was honoured with the celebration of the royal nuptials. He then made a tour through his provinces, deciding vexatious cauſes, re-eſtabliſhing the peace of the empire, and promoting a ſpirit of harmony among the grandees; and on his arrival at Aix-la-Chapelle, he was crowned a ſecond time, for the ſatisfaction of ſeveral of the nobles, who had objected to the informality of his firſt coronation.

At the urgent requeſt of the archbiſhop of Milan, the emperor put himſelf at the head of his troops, and marched to Pavia, where he was ſolemnly crowned king of Lombardy; but the partiſans of Hardouin, who had recently aſſumed the ſovereignty, inflamed the unthinking populace to ſuch a degree, that the whole city was thrown into commotion, the ſtreets were ſprinkled with the blood of Henry's adherents, and the emperor himſelf was obliged to retire to the fortreſs of St. Peter. The tumult, however, gradually ſubſided; and an apology of the principal inhabitants was generouſly accepted. For ſeven years after this occurrence, Henry was fully employed in chaſtiſing the inſolence of the Poles, and appeaſing the frequent troubles of Lorrain. But his mind was fatigued by his perpetual exertions, and he ardently deſired to abdicate the imperial throne, that he might devote the remainder of his life to religious retirement. Theſe ſentiments, however, were ſtrongly combated by the princes of Germany; and he was perſuaded to retain the government of a country which now required extraordinary care and attention.

Upon the concluſion of peace with Boleſlaus king of Poland, A. D. 1014, Henry led a freſh army acroſs the Alps, in order to chaſtiſe the inſolence of Hardouin, who had reaſſumed the ſupreme authority in Italy. He met and defeated his enemy on the frontiers of the Veroneſe; and was ſoon afterward crowned by pope Benedict VIII. in the city of Rome. Having at length, A. D. 1024, appeaſed the troubles which had long diſtracted his dominions, Henry reſolved to devote the remainder of his life to that repoſe which ſeems to have been the conſtant object of his heart; and in order to preſerve a good underſtanding with his neighbours, he had an interview with Robert king of France; upon which occaſion the two princes conceived a particular friendſhip for each other, and mutually concerted meaſures for the reformation and aggrandiſement of their ſubjects. This conference ſeems to have been the laſt remarkable tranſaction of Henry's life; for he died in the month of July following, after a proſperous reign of twenty-two years. He was ſurnamed the Lame, from an impediment in walking; and he received the appellation of the Hungarian Apoſtle, from his great munificence to the church. In him the male race of the Saxon emperors became extinct.

Violent diſputes now aroſe reſpecting the nomination of a ſucceſſor to the empire. At length, however, the Germanic princes and ſtates aſſembled in the open fields, between Mentz and Worms; and Conrad duke of Franconia, ſurnamed the Salic, was unanimouſly inveſted with the ſupreme authority. Conrad II. received this appellation from the circumſtance of his having been born on the banks of the river Sala. During the two firſt years of his reign, Conrad was chiefly employed in regulating the police, and other affairs of adminiſtration; but in the third, A. D. 1027, he received intelligence that the Lombards had ſhaken off their allegiance, and he was conſequently obliged to march into Italy. The rebels, however, were ſoon reduced to obedience; and the conqueror was ſolemnly crowned at Rome, by pope John XX. in preſence of Rodolph III. king of Burgundy, and Canute king of England. Soon after this event, Conrad's ſon Henry was declared his ſucceſſor, and crowned at Aix-la-Chapelle; and the dukes of Swabia, Worms, and Carinthia, who had endeavoured to excite a revolt, were, by a ſolemn decree, ſtripped of their dominions. The ſeven ſucceeding years were occupied by wars between the emperor, Poland, Bohemia, and Hungary; but as theſe offer nothing worthy of particular notice here, it is only neceſſary to obſerve, that the imperial arms were generally ſucceſsful; and that, on the demiſe of Rodolph, Conrad acquired the ſovereignty of all Transjurane Burgundy.

After chaſtiſing a revolt of the Milaneſe, and receiving the benediction of pope Benedict IX. Conrad II. died ſuddenly, at Utrecht, in the fifteenth year of his reign. He was univerſally revered as a juſt and magnanimous prince; and all thoſe who diſtinguiſhed themſelves in his ſervice had ample cauſe to applaud his munificence. Among many other inſtances of his generoſity, we are told, that a gentleman who had loſt his leg in battle, received as many peices of gold as one of his boots would contain; which the emperor remarked might defray the expence of his cure.

Henry III. ſurnamed the Black, aſcended the imperial throne on his father's deceaſe, A. D. 1040; and he immediately led a numerous army againſt Brztiſlaus duke of Bohemia, who had refuſed to pay the accuſtomed tribute. This expedition was crowned with ſucceſs; and in a ſubſequent one againſt Hungary, Henry acquired great reputation, by wreſting the ſceptre from an uſurper, and reſtoring it to the lawful prince. Henry's young ſon was now declared king of the Romans, and heir to the empire. Some freſh commotions, however, called the emperor into Italy; and an unexpected irruption of the Sclavonians took place in Saxony; which, with the public calamities of earthquakes, plague, and famine, overwhelmed his ſpirits, and finally occaſioned his death, in the thirty-ninth year of his age, and the ſixteenth of his reign. He entered twice into the conjugal ſtate; and by his ſecond empreſs, Agnes, daughter of William duke of Poitou, he had two ſons and three daughters. It muſt not be forgotten that Henry III. depoſed three popes, who had ſet up againſt each other; and he ſupported a fourth againſt them: ſince which time the vacancy of the papal chair was always intimated to the emperor, and it became an eſtabliſhed form for the emperor to ſend a deputation to Rome, requeſting that a new pope may be elected.

Henry IV. ſurnamed the Great, was acknowledged emperor on the death of his father, A. D. 1056. But as he was at this time only five years of age, he was placed under the tutelage of his mother Agnes, who acquitted herſelf of that truſt with prudence and affection. When Henry had attained the age of twenty-two, he took the reins of government into his own hands,

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A. D. 1072; and commenced his adminiſtration by reſtraining the robberies and extortions which the inhabitants of Saxony had long exerciſed upon ſtrangers, and among themſelves, to the great prejudice of the public tranquillity. In order to cruſh theſe practices, he took up his reſidence among them at Goſlar, and ordered ſeveral caſtles to be erected as a check upon the country, and a protection to the innocent ſufferers. This meaſure, however, excited a general diſcontent in the duchy, and both laymen and eccleſiaſtics accuſed him of intending the ſubverſion of their liberties.

It muſt indeed be acknowledged that the violence of Henry's paſſions often hurried him into indiſcretions, which fixed an indelible ſtain upon his character, and induced his moſt powerful adherents to abandon his intereſts. His incontinence, in particular, was ſo great, that he endeavoured to ſacrifice every beautiful female to his unlawful deſires; and he was ſo highly exaſperated at his empreſs for attempting to obſtruct theſe licentious amours, that he earneſtly ſolicited the pope to diſſolve his marriage, and even authoriſed one of his courtiers to attempt her honour, that he might obtain a divorce. But the injured princeſs conducted herſelf with exemplary prudence, and Henry's baſe deſigns were happily fruſtrated.

Soon after the concluſion of the treaty with his Saxon ſubjects, Henry was accuſed, by one of his own domeſtics, of having laid a plan for the deſtruction of the dukes of Swabia and Carinthia; and this calumny, though entirely groundleſs, proved of ſuch prejudice to his affairs, that he was compelled to take refuge in the city of Worms; while the princes of the empire aſſembled at Mentz for the expreſs purpoſe of depoſing him, and of electing another emperor. After ſome time, however, a conference was held at Oppenheim, in which Henry, by a ſolemn acknowledgment of his faults, appeaſed the princes who claimed to be electors, and was by them permitted to reſume his authority.

No ſooner had the emperor's fears ſubſided, in conſequence of this accommodation, than the Saxons broke out in a freſh revolt, which occaſioned a prodigious effuſion of blood; and, though they were eventually compelled to ſubmit, they were encouraged by the partiſans of Hildebrand, who had aſſumed the papacy under the name of Gregory VII. to ſend ambaſſadors to Rome, complaining of the injuries they had received from the emperor, and requeſting that the pope would depoſe him, on account of his miſconduct and immorality. Gregory, in conſequence, exerted himſelf ſo ſucceſsfully in embroiling the affairs of Germany, that the princes of the empire actually renounced their allegiance, and placed Rodolph duke of Swabia on the imperial throne. Henry, being appriſed of this rebellion, marched with all poſſible diſpatch againſt the inſurgents, and gained three ſucceſſive victories over them: but his affairs ſtill continued in a perilous ſituation; a ſentence of excommunication was fulminated againſt him, and the Roman pontiff effectually revived the ſpirits of the malcontents, by confirming the election of Rodolph.

Henry convened an aſſembly of the German biſhops at Mentz, to inveſtigate this pretended right of the pope to dethrone an emperor, or whether he might legally depoſe Hildebrand, and nominate another prelate to the apoſtolic chair. After mature deliberation, the nineteen biſhops propoſed that Henry ſhould call in all the other prelates, and hold a national council at Brixen. This the emperor agreed to; and, on the revival of the buſineſs at Brixen, the depoſition of Gregory was ſolemnly confirmed; and cardinal Wiberti, archbiſhop of Ravenna, was choſen pope, under the name of Clement III. In the mean time, Rodolph aſſembled ſome forces in Saxony, and began to make formidable preparations againſt his competitor. Henry, receiving intelligence of his motions, marched againſt him with great expedition, and the two armies engaged near Merſberg, with equal fury. For ſome time victory ſeemed to hover over the rebel troops; but their leader's hand being cut off by the duke of Lorrain, they were ſeized with a panic, and ſoon gave up the advantage they had gained. Rodolph, perceiving himſelf at the point of death, ordered the hand which he had loſt to be brought to him, and, addreſſing himſelf to his officers, "Behold, (ſaid he,) the hand with which I took my oath of allegiance to Henry, which I have violated at the inſtigation of the court of Rome, in perfidiouſly aſpiring to an honour that was not my due!" Having uttered theſe words, he expired with great penitence, and was buried at Merſberg in Saxony.

The diſturbances of Germany being thus compoſed, Henry, in 1081, led a numerous army into Italy, for the purpoſe of ſetting Clement in the papal chair; but Gregory had ordered the gates of Rome to be ſhut againſt him, and the garriſon withſtood a ſiege of two years and a half. At the expiration of that time the city was taken by aſſault; Gregory retired firſt to the caſtle of St. Angelo, and afterward to Salerno; and the new pope, being conſecrated in the church of St. Peter, expreſſed his gratitude by crowning Henry, on Eaſter-day, emperor of the Romans.

Henry now hoped to enjoy ſome tranquillity, ſince the chiefs of the German rebels were dead, and an accommodation had been entered into with the Saxons and Bavarians, A. D. 1099. But his ſubſequent attempts to preſerve the rights of the empire relative to the nomination of a pope, ſerved to foment the enmity of the Romans, and induced Paſcal III. the ſucceeding pontiff, to fulminate a new excommunication againſt him for introducing ſchiſms into the church.

Whilſt the emperor laboured under theſe preſſing calamities, his unnatural ſon Henry took up arms againſt him, and avowed the intention of wreſting the ſceptre from his hands; alleging that, as the ſubjects were diſcharged from their allegiance, he was obliged to fulfil the duties of the imperial ſtation; and that, as the laws of the church were ſuperior to thoſe of nature, he could not acknowledge Henry for his father, until he ſhould be abſolved from the ſentence of excommunication. The emperor uſed many remonſtrances to diſſuade his ſon from proceeding to ſuch extremities: but theſe produced no effect; and the uſurper brought an army into the field which put him in poſſeſſion of Spire, and the imperial treaſures. He then fixed a day for the princes to aſſemble at Mentz; but as he underſtood that the emperor deſigned to be preſent, with a very numerous army, he had recourſe to treachery, and, throwing himſelf at his father's feet, implored forgiveneſs for his undutiful behaviour, which he imputed to the advice of evil counſellors. The ill-fated emperor heard this declaration with unſpeakable joy, and, at the requeſt of his ſon, diſbanded the imperial army; but he was next day confined to his chamber by the ſuppoſed penitent, and the archbiſhop of Mentz and Cologne, together with the biſhops of Worms, were ſent to inform him of his depoſition, and to demand the crown and other regalia.

The emperor received this deputation, A. D. 1106, with concern and aſtoniſhment, and earneſtly demanded the cauſe of ſuch indignant treatment. The archbiſhop of Mentz replied, that he had rendered himſelf unworthy of wearing the imperial diadem, by the numerous ſchiſms he had introduced into the church, and the ſcandalous manner in which he expoſed benefices to ſale. "If then, (exclaimed the agitated prince,) we have proſtituted the benefices of the church for hire, you are the moſt proper perſons to convict us of that charge. Say then, I adjure you, what have we either exacted or received for *your* promotion to the dignities which you now enjoy?—You acknowledge our innocence with reſpect to your preferment; and yet, the arch-

archbiſhoprics of Mentz and Cologne being two of the beſt in our diſpoſal, we might have filled our coffers by expoſing them to ſale, inſtead of beſtowing them gratuitouſly upon perſons who have made ſo unworthy a return for our benevolence. Alas! we begin to ſink under the accumulated weight of age and ſorrow, and but little of our mortal pilgrimage is left unperformed: ſuffer that little to be concluded in peace, and ſeek not to terminate our reign with miſery, by becoming partiſans of thoſe who, in defiance of gratitude and allegiance, have lifted up their hands againſt their lawful ſovereign."

As this pathetic addreſs produced no effect on the minds of the unfeeling prelates, Henry put on his royal ornaments, and, ſeating himſelf in a chair of ſtate, renewed his remonſtrance to this effect: "Here are the enſigns of that royalty with which we were inveſted by God and the princes of the empire: if you diſregard the wrath of heaven, and the eternal reproach of mankind, ſo much as to lay violent hands upon your ſovereign, and ſtrip us of them by force, we are not in a condition to defend ourſelves from ſuch an outrage." This expoſtulation had no more effect than the former upon the eccleſiaſtic deputies, who immediately ſnatched the crown from Henry's head, and, dragging him from his ſeat, pulled off the imperial robes by force; whilſt he lifted his hands to heaven, acknowledging the ſins of his youth, and imploring God to puniſh the perjury and inſolence of his enemies. Soon after this heart-rending occurrence, an aſſembly of the princes obliged the old emperor to make a voluntary reſignation of his authority in favour of his unworthy ſon. With this ſad neceſſity he complied; and his ſpirit was ſo effectually broken, that he threw himſelf at the feet of the pope's legate, and earneſtly beſought him to abſolve him from the ſentence of excommunication; but his requeſt was refuſed, on pretence that he could receive abſolution from no other than the ſovereign pontiff himſelf.

In contemplating the hard fate of this prince, who was hurled from the pinnacle of greatneſs to the loweſt abyſs of miſery, diveſted of his honours, deprived of ſupport, abandoned by his friends, and eventually thrown into priſon by command of his ſon, we are naturally led to ſuppoſe that his courage muſt have been utterly extinguiſhed, and his mind overwhelmed with deſpair. This ſurmiſe, however, is unfounded; for, after the firſt exceſs of his grief had ſubſided, he found means to elude the vigilance of his keepers, and repaired to the Low-countries, where he raiſed a conſiderable body of forces to attempt his reſtoration, and wrote circular letters to all the princes in Chriſtendom, to intereſt them in his misfortunes. He even wrote to the pope, offering terms of accommodation; and he had the ſatisfaction of ſeeing many of his ſubjects return to their allegiance: but before any thing of importance could take place, he died at Liege, in the fifty-ſixth year of his age, and the forty-ninth of his reign. His remains were interred in the cathedral with becoming ſolemnity: but his unfeeling ſon ordered them to be dug up and depoſited in the chapel of Afron, where they remained five years unburied, on account of his dying under the ſentence of excommunication.

Upon an impartial review of the chequered life of Henry IV. it appears that he was endowed with great courage, and many other excellent qualities; and, if he had not excited the indignation of his ſubjects by his youthful exceſſes, and inflamed the hatred of the Romans by an obſtinate adherence to the rights of his prerogative, he might have eclipſed the glory of all his anceſtors. A peculiar air of dignity was ſtamped upon his countenance; his converſation was lively and intereſting; he poſſeſſed a mild and merciful temper; and he was ſo extremely charitable, that he is ſaid to have entertained the ſick, the lame, and the blind, at his own table, and even to have lodged ſome of them in his own apartments, that he might be at hand to miniſter to their neceſſities. From the twelfth year of his age, he had been conſtantly engaged in the toils of war; he had commanded in ſixty pitched battles, and ſurvived many ſecret attempts that were made upon his life. He frequently expreſſed a lively contrition for the enormities which had diſgraced the commencement of his reign; and he met his death, A. D. 1197, with equal fortitude and reſignation.

Henry V. ſurnamed the Young, endeavoured to eſtabliſh himſelf in the authority which he had ſo baſely uſurped, by conciliating the eſteem of the eccleſiaſtics: but the natural haughtineſs of his temper ſoon induced him to change his conduct, and a quarrel broke out between him and pope Paſcal II. about the long-diſputed queſtion of the inveſtitures of biſhoprics, which threatened very ſerious conſequences. After an unſucceſsful invaſion of Hungary, and a troubleſome war with the Poles, the emperor croſſed the Alps with an army of eighty thouſand men, and a great number of noblemen, in order to aſſert the rights of his crown in Italy, and to do himſelf juſtice either by negociation or force of arms. Having reduced ſome cities which attempted to diſpute his paſſage, he ſent a ſplendid embaſſy to Paſchal, and ſoon afterwards concluded a treaty of peace at Sutri, to his entire ſatisfaction.

It appears, however, that the Roman pontiff was inſincere in all his conceſſions: for on the very day of the emperor's entry into Rome, A. D. 1111, ſeveral perſons belonging to his train were groſsly inſulted by the populace; the new treaty of peace was formally oppoſed by the Italian prelates; and a ſpirit of diſaffection was predominant in the breaſts of the citizens. Exaſperated at theſe indignities, Henry ordered his ſoldiers to ſeize the perſon of the pope, and permitted them to inſult the cardinals and biſhops without diſtinction. The conſul now put all the Romans under arms, and a battle was fought with equal fury and reſolution. The citizens, however, were defeated with ſuch ſlaughter, that the Tiber was ſtained with their blood; the walls of the city were raſed in ſeveral places; and the pope, after enduring an impriſonment, and witneſſing the execution of his friends, was obliged to comply with all the demands of the conqueror, and to ratify the former accommodation. Upon the concluſion of this treaty, Henry was ſolemnly crowned at Rome; and the pope, in token of perfect reconciliation, divided the hoſt between the emperor and himſelf. But, though Paſchal preſerved the exterior marks of friendſhip, the court of Rome ſtill acted with its accuſtomed treachery; and Henry had afterwards the mortification to hear that the new bull, relative to inveſtitures, was publicly burnt, and himſelf excommunicated by the council of Lateran, for having preſumed to revive the prerogative of his anceſtors. Great diſturbances were now fomented between the courts of Rome and Germany, and an alarming confederacy was formed againſt the emperor: but, after ſeveral embaſſies and negociations, a general council was convened at Rome, A. D. 1124, in which the long-conteſted affair of inveſtitures was ſettled to the mutual ſatisfaction of all parties; and, in a ſubſequent diet held at Worms, the pope's legate adminiſtered the ſacrament to Henry, as a token of perfect reconciliation.

Soon after this accommodation with the Roman pontiff, Henry found himſelf engaged in a civil war, by the revolt of Holland; and, notwithſtanding the general ſucceſs of his arms, a ſpirit of ſedition continued to ſpread from town to town, and his own life was expoſed to the moſt imminent danger. Theſe misfortunes made a deep impreſſion on his ſpirits, and are ſuppoſed to have haſtened his death, which happened at Utrecht, in the forty-fifth year of his age, and the nineteenth of his reign, A. D. 1125. In him became extinct the male line of the Franconian emperors. Henry V. poſ-

feſſed a good ſhare of wiſdom, policy, and courage; but he has been generally branded with the vices of cruelty, pride, and avarice, and his unnatural behaviour to his father has fixed an indelible ſtain upon his memory.

It was generally ſuppoſed that the ſupreme dignity would be conferred upon one of the nephews of the deceaſed emperor. But Albert archbiſhop of Mentz prevailed on the princes of the empire to give their ſuffrages in favour of Lotharius duke of Saxe-Supplembourg, who was accordingly crowned at Aix-la-Chapelle, in preſence of the pope's nuncio. His competitors made ſome vigorous exertions for the ſupport of their pretenſions; but, after a ſanguinary and unavailing conteſt, they took the oath of allegiance, and were honoured with particular marks of their ſovereign's friendſhip. After a ſucceſsful expedition againſt the Bohemians, Lotharius, in 1133, undertook to re-eſtabliſh pope Innocent II. who had been forced from the apoſtolic chair by Anacletus. This attempt anſwered his expectation, and Innocent remunerated his ſervices by performing the ceremony of his coronation with great magnificence. Some time after theſe tranſactions, his holineſs was expoſed to imminent danger by an hoſtile incurſion of Roger king of Sicily: but Lotharius again advanced to his aſſiſtance, and Roger's inſult was puniſhed by the loſs of all his Italian poſſeſſions. On his return to Germany, Lotharius was ſeized with a dangerous diſtemper, which terminated his life, in the twelfth year of his reign. By command of this prince, the Juſtinian code of laws, which had been diſuſed for upwards of five-hundred years, was revived in the empire. This reign was alſo rendered remarkable by ſome exceſſive heats in Germany, which withered the corn and fruits of the earth, dried up the moſt conſiderable rivers, and occaſioned a dreadful mortality among the cattle.

Having paid the laſt duties to the deceaſed emperor, the princes and ſtates aſſembled at Coblentz, A.D. 1139, and unanimouſly elected Conrad III. duke of Franconia, to fill the vacant throne. This meaſure was warmly reſented by Henry of Bavaria, ſurnamed the Haughty, and he poſitively refuſed to ſurrender the regalia, which had been depoſited in his hands by Lotharius: but after ſome time he was compelled to ſubmit, and his grief on the ſubſequent alienation of his territories brought him to his grave. Upon the demiſe of this nobleman, his brother Guelphe, with the aſſiſtance of the king of Sicily, raiſed the ſtandard of rebellion, and made ſome vigorous exertions for the recovery of the confiſcated duchies. After ſeveral indecifive engagements, however, he was cloſely beſieged by the emperor in the caſtle of Weinſberg, and compelled to ſurrender at diſcretion. Upon this occaſion, the ducheſs petitioned that herſelf and all the women belonging to the caſtle might come out with as much as each could carry, and be conducted to a place of ſafety. Conrad granted her requeſt, ſuppoſing that the ladies were anxious for the preſervation of their treaſures; but when he ſaw them ſtaggering under the weight of their huſbands, who had incurred his reſentment, he was overcome with admiration at the affecting ſpectacle, and freely pardoned the objects of their conjugal affection.

In 1147, Conrad was prevailed on by the admonitions of St. Bernard, to join the cruſade againſt the Saracens, for the defence of the Holy Land; and he accordingly ſet out for Paleſtine, at the head of no leſs than ſixty thouſand cavalry. But moſt of his forces were ſacrificed to the treachery of the Greek emperor, and the irreſiſtible fury of the Turks; and he was ſoon compelled to return with diſgrace into his own dominions. The death of the emperor's eldeſt ſon, who had been elected king of the Romans, added to the above misfortune, ſeems to have made a very deep impreſſion on his ſpirits, and conſiderably affected his health. However, being anxious to provide for the ſucceſſion, he convened a diet at Bamberg, and recommended his nephew, Frederic Barbaroſſa, to the ſtates of the empire, as a prince of known courage and capacity. This recommendation was univerſally approved; and Conrad III. died ſoon afterward at Bamberg, in the fourteenth year of his reign. He left one ſon by his empreſs Gertrude, but his tender age precluded him from aſcending the throne.

Frederic I. ſurnamed Barbaroſſa, was ſolemnly crowned at Aix-la-Chapelle, A.D. 1152, in the twenty-ninth year of his age; and he had the ſatisfaction of receiving congratulatory addreſſes from almoſt all the princes of Europe. Having compromiſed ſome differences between the princes of the empire, and compelled Sueno to do homage for the kingdom of Denmark, Frederic put himſelf at the head of a numerous army, and marched into Italy, where ſeveral cities had thrown off their allegiance, and the Romans had made an inſurrection againſt the pope's ſovereignty. This expedition was attended with complete ſucceſs: for the revolted towns were quickly reduced; the Romans were obliged to acknowledge their pontiff's ſupremacy; and the victorious emperor was ſolemnly crowned with the Lombard and imperial diadems. Some time after theſe tranſactions, a quarrel broke out between Frederic and his holineſs, reſpecting the imperial authority; and a letter of Adrian IV. which audaciouſly intimated his power of tranferring the empire from the Germans to the Greeks, occaſioned an univerſal conſternation. Frederic, however, acted with ſuch ſpirit and reſolution, that his adverſary thought proper to elude chaſtiſement, by writing a ſecond letter, in which he explained away the meaning of his former expreſſions.

Notwithſtanding this ſubmiſſion on the part of Adrian, the emperor reſolved to march into Italy, and aſſert the rights of his imperial crown. Accordingly, after reducing Boliſlaus duke of Poland, confirming the ſovereignty of Waldemar, and ſecuring the fidelity of the king of Hungary, he croſſed the Alps with a numerous army, and reduced Breſcia, which had the preſumption to oppoſe his paſſage. He then compelled all the revolted cities of Lombardy to return to their allegiance; and held an aſſembly on the plain of Roncalie, where he enacted ſeveral laws for the maintenance of tranquillity, aſcertained the prerogatives of royalty, and exacted homage of all who held of the empire, without making any diſtinction between laymen and eccleſiaſtics. The latter part of theſe proceedings gave great umbrage to his holineſs, and a grand embaſſy of legates was ſent to complain of the diſrepect which had been thus offered to the church: but Frederic effectually ſilenced them by obſerving, that Jeſus Chriſt himſelf, though lord of the univerſe, had deigned to pay, for himſelf and St. Peter, the tribute which was demanded in the name of Cæſar.

Whilſt Frederic was employed in chaſtiſing ths Milaneſe for a freſh inſurrection, pope Adrian died; and a ſchiſm aroſe in the election of a ſucceſſor to the papacy. The greateſt part of the cardinals, who were on the ſpot at the time of his death, gave their ſuffrages on behalf of Roland, chancellor of the church, who aſſumed the name of Alexander III. and the reſt choſe Octavian of St. Cecilia, who tore the papal robe, by force, from his competitor, and cauſed himſelf to be proclaimed by the name of Victor IV. The emperor, being appriſed of this circumſtance, convened a council at Pavia, in which Victor was recogniſed as lawful pope, and declared with the uſual ſolemnities; but Alexander thundered out a ſentence of excommunication againſt the emperor, and all his adherents.

The ſeverity which Barbaroſſa had exerciſed upon the Milaneſe excited moſt of the other Italian ſtates againſt him, and induced them, in 1164, again to ſhake off the imperial yoke. The Romans and Venetians accordingly

FREDERICK BARBAROSSA, EMPEROR OF GERMANY

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cordingly entered into a confederacy with the inhabitants of Padua, Vicenza, and Verona; the citizens of Milan rebuilt their walls, and pillaged the caſtle of Trea of immenſe treaſures; and the imperial army was ſo dreadfully afflicted by diſeaſe, as to render a return into Germany indiſpenſably neceſſary. Meanwhile, Alexander continued to receive the homage of his numerous adherents; and all Italy was tired of a ſchiſm which had continued under theſe anti-popes. At length fortune ſeemed to deſert the imperial arms; and the loſs of a battle near Signano, together with a naval defeat by the Venetians in which his eldeſt ſon was taken priſoner, induced the emperor to conclude a peace with his formidable enemy. Alexander readily embraced his propoſals; and an accommodation was ſoon entered into with the revolted cities.

During theſe tranſactions in Italy, Henry duke of Saxony, ſurnamed the Lion, raiſed freſh troubles in Germany, by oppreſſing his own ſubjects, and committing many outrages againſt his neighbours. Upon the emperor's return, therefore, Henry was ſummoned to a diet, in order to anſwer for his miſconduct; and on his refuſing to appear, he was put to the ban of the empire, and ſtripped of all his dominions. After ſome time, however, he excited the compaſſion of the emperor, and prevailed on him to promiſe that the territories of Brunſwic and Lunenburg ſhould be protected on behalf of his children. Having obtained this aſſurance, he retired to England, where he was hoſpitably entertained by his father-in-law, Henry II. and where his wife bore him a fourth ſon, from whom the preſent illuſtrious houſe of Brunſwic is deſcended.

After this event, Frederic made a tour through the Italian cities, cauſed his ſon Henry to be crowned king of Lombardy, and negociated a match between that prince and Conſtance, ſiſter of William king of Sicily. But no remarkable political occurrence claims our attention till the year 1188, when the emperor engaged in a cruſade againſt the famous ſultan Saladin, and marched at the head of a prodigious army into the dominions of the Greek emperor, whom he chaſtiſed for his perfidious conduct. Having croſſed the Helleſpont, and refreſhed his troops for a few days at Laodicea, he fell upon the Turks, and defeated them in ſeveral engagements. He alſo pillaged the city of Iconium, led his victorious followers acroſs Mount Taurus, and filled Aſia Minor with the terror of his name: but whilſt the Chriſtians of that country expected to derive the moſt important advantages from his aſſiſtance, he was unfortunately drowned in the river Cydnus, in the ſixty-ninth year of his age, and thirty-eighth of his reign. His ſon Frederic duke of Swabia, having performed the rites of ſepulture to the emperor at Tyre, haſtened to join the army of the eaſtern Chriſtians, who were engaged in the ſiege of Ptolemais; but he ſoon fell a victim to an infectious diſorder; and moſt of his troops returned, with the duke of Guelderland and the landgrave of Thuringia, into Germany, in 1190.

Henry VI. ſurnamed the Severe, had been already elected king of the Romans, and was acknowledged the lawful ſucceſſor of the empire: but the commencement of his reign was diſturbed by ſome freſh outrages of Henry the Lion, who had returned from England; and ſeveral bloody engagements took place before the malcontents were reduced to ſubmiſſion. At length, however, an accommodation was negociated, and the emperor marched into Italy, in order to receive the imperial diadem from the hands of the pope, and to recover the ſucceſſion of William king of Sicily, who had died without legitimate iſſue. On his arrival at Rome, in 1191, Henry and his empreſs Conſtance were ſolemnly crowned by pope Celeſtine III.

Henry now reſolved to make ſome vigorous exertions againſt Tancred count of Leccio, who had been lately placed on the throne of Sicily; and his forces ſoon reduced the towns of Campania, Apulia, and Calabria: but whilſt he was engaged in the ſubſequent blockade of Naples, a dreadful diſtemper broke out in the camp, and he was ſoon compelled to return to Germany. Having prevailed on the princes of the empire to enact a law for rendering the ſupreme dignity hereditary in his houſe, Henry applied himſelf very attentively to the adminiſtration of juſtice, ſitting in perſon to hear and redreſs the grievances of his ſubjects. One of his favourites obſerving that he fatigued himſelf too much with giving audience, which frequently interfered with his neceſſary meals, Henry replied, that although a private man was at liberty to eat when he pleaſed, a prince ought not to ſit down to table till he had diſcuſſed the affairs of his people.

Soon after the termination of a quarrel between Henry the Lion and Rodolphus count of Holſtein, Richard I. king of England, returned from Paleſtine; and, being ſhipwrecked on the coaſt of the Adriatic, aſſumed the habit of a pilgrim, that he might ſafely paſs through the territories of Leopold duke of Auſtria, whom he had offended at the ſiege of Ptolemais. Leopold, however, obtained intelligence of this event, and cauſed the unfortunate monarch to be ſeized, and loaded with chains. After ſome time, the emperor demanded that the royal priſoner ſhould be put into his hands, and compelled him to appear before a diet at Haguenau, where he was formally accuſed of maintaining an uſurper on the throne of Sicily, preventing the conqueſt of Jeruſalem by his diſagreement with the king of France, unlawfully invading the kingdom of Cyprus, inſulting the duke of Auſtria during the ſiege of Ptolemais, conſenting to the aſſaſſination of the marquis of Montſerrat, and finally concluding a truce with Saladin, contrary to the general intereſts of Chriſtendom.

The king of England replied, that, although he was accountable to no perſon for his actions, yet, as his honour was concerned, he would wave his royal prerogative, and vindicate his character from theſe aſperſions. He affirmed that he had not made any attempts either for the elevation of Tancred, or the confirmation of his authority, but had merely treated with him as a prince in actual poſſeſſion of the Sicilian crown; that the ill ſucceſs of the cruſade in Paleſtine reſulted entirely from the jealouſy of the French monarch, who was the firſt to retire from the ſcene of action; that he had, indeed, wreſted the kingdom of Cyprus from a tyrannical uſurper, who had incurred his reſentment, but had afterward ceded it in favour of Guy de Luſignan, to indemnify him for the loſs of Jeruſalem; that the duke of Auſtria had effectually revenged his ſuppoſed inſult, by loading a ſovereign prince with chains; that the marquis of Montſerrat had acquitted him of all ſuſpicion of being concerned in his murder, by requeſting, with his lateſt breath, that the city of Tyre might be delivered into his hands; and laſtly, that the truce he concluded with Saladin could not be the effect of any intereſted view, ſince of all the booty he had taken from the caravan of Babylon, he had reſerved nothing to himſelf but the ring upon his finger.

This explanation made a deep impreſſion on the German princes, who not only admitted the defence, but pitied the misfortunes, of the invincible Richard; and with one conſent ſolicited their emperor to ſet him at liberty. By the intrigues of the French monarch, however, Richard was detained for a conſiderable time, and was at length compelled to purchaſe his freedom upon the hard conditions of paying one hundred and fifty thouſand marks of ſilver, liberating the king of Cyprus and his daughter, and beſtowing his niece Eleanor of Bretagne upon the eldeſt ſon of the duke of Auſtria. However, Leopold died ſoon afterwards, confeſſing his injuſtice toward the king of England; his ſucceſſor ſent back the princeſs Eleanor, who did not happen to captivate his affections; and the emperor diſpatched an ambaſſador

ambaſſador to ſolicit the future friendſhip of Richard, and to promiſe reſtitution of the ſum which had been exacted for his ranſom.—See the article ENGLAND, vol. iv. p. 572.

Shortly after theſe tranſactions, Henry ſent a conſiderable body of forces againſt Naples, under the command of his lieutenant Berthold, who, in 1194, obtained ſome conſiderable advantages during his march, and gave up the towns of Recca, Sexti, and Venafro, to be pillaged by his followers. Tancred immediately made preparations for checking the progreſs of the imperial general; but the death of his ſon Roger made ſo deep an impreſſion on his ſpirits, that he ſoon fell a victim to grief; and his ſurviving ſon William, though in his cradle, was declared king of Sicily. Upon the firſt intelligence of Tancred's death, the emperor repaired to Genoa, and thence to Naples, which, by the vigorous exertions of himſelf and his allies, was ſoon reduced, together with Apulia and Calabria. Palermo alſo was taken by aſſault, and the citizens were treated with ſuch ſeverity for an inſult which they had formerly offered to the empreſs, that all the other towns were terrified into ſubmiſſion, and Henry found himſelf in peaceable poſſeſſion of the two Sicilies. He then prevailed on Tancred's widow, with her infant ſon and two daughters, to ſurrender themſelves upon certain terms of accommodation: but they were no ſooner in his power, than, in direct violation of his word of honour, he ſtripped them of all their treaſures, cauſed the harmleſs infant to be emaſculated and deprived of ſight, and confined the widow and her unfortunate daughters in a monaſtery.—Such were the infamous practices even of kings, in the twelfth century!

Having ſettled the affairs of his new kingdom, and ſeized the immenſe treaſures which had been amaſſed by Tancred, the emperor returned into Germany; where he cauſed his infant ſon Frederic to be elected king of the Romans; and, in a general diet at Worms, declared his reſolution of taking the croſs to ſuccour the Chriſtians in the Holy Land. This declaration was received with general applauſe; a multitude of ſoldiers from all the imperial provinces expreſſed a deſire to engage in the purpoſed expedition; and even Margaret, queen-dowager of Hungary, reſolved to enliſt among the cruſaders.

But whilſt two powerful armies were ſent toward Paleſtine, Henry was obliged to employ a third againſt the Sicilians, who had raiſed a rebellion, and taken vigorous meaſures for ſhaking off the imperial yoke. On his arrival at Naples, he diveſted all the Neapolitans, Calabrians, and Sicilians, of their lucrative offices and employments, and even extended his ſeverity to the clergy, by annulling their exemptions from military ſervice. This rigour, however, only ſerved to inſpire the Sicilians with a kind of deſperate reſentment; and even the empreſs Conſtance was ſo highly provoked at the unworthy treatment of her countrymen, that a general inſurrection was fomented under her immediate encouragement; and Henry, having permitted moſt of his troops to embark for Paleſtine, was compelled to conclude a peace with the malcontents on very degrading terms. A few days after this accommodation the emperor died, as was generally ſuppoſed, of a fever, occaſioned by too violent exerciſe in hunting; but other hiſtorians have hinted that he received a deleterious potion from the hands of Conſtance, who dreaded the effects of his vindictive diſpoſition. Henry VI. appears to have poſſeſſed ſome good qualities, and was generally renowned for his prudence, eloquence, courage, and reputation: but he was juſtly charged with bloodſhed and cruelty; and his perfidious behaviour towards the king of England, and the family of Tancred, were equally unworthy of his character as a ſovereign or a Chriſtian. The troops whom he had ſent into Aſia abandoned their deſign upon the firſt intelligence of his death, and returned into Europe, leaving Paleſtine in the hands of the Saracens.

Philip duke of Swabia aſſumed the adminiſtration, A. D. 1197, in compliance with the requeſt of his dying brother, who ſent him the regalia, and committed to his tuition the young king of the Romans. But pope Innocent III. immediately declared againſt theſe meaſures, and not only exhorted the German princes to ſet aſide the houſe of Swabia and proceed to the election of another king of the Romans, but was even heard to affirm that Philip ſhould loſe the empire, or he himſelf forfeit the papacy. This behaviour on the part of the ſovereign pontiff ſoon occaſioned violent diſſenſions in Germany; and Otho duke of Saxony was ſolemnly crowned by one party, while Frederic's election was confirmed by another, and Philip was choſen king of the Romans, that he might exerciſe the office of guardian with more authority. Theſe elections ſoon ſpread ſlaughter and conſternation over the empire. Otho was ſtrongly ſupported by the pope, and by his uncle Richard of England; and Philip found a powerful patron in the king of France. Every nobleman was now at variance with his neighbour; the ties of friendſhip and conſanguinity were diſregarded; and the moſt flagrant outrages were committed by a licentious ſoldiery.

After many deſperate conflicts, Otho was obliged to ſeek refuge in England, and Philip, in 1208, remained the undiſputed maſter of the empire: but whilſt he was labouring to conciliate the affections of his ſubjects, and endeavouring to procure an accommodation with the pope, he was baſely aſſaſſinated by the count-palatine Otho of Wittleſbach, whom he had incenſed by refuſing to give him one of his daughters in marriage. Such was the untimely end of Philip:—a prince endowed with many amiable qualities, and ſincerely regretted by all who knew him. His countenance was comely and intereſting, his behaviour remarkably affable, and his eloquence perſuaſive. He acted with great prudence during his ſhort adminiſtration, and he poſſeſſed in an eminent degree the virtues of clemency and liberality.

Otho IV. appriſed of his competitor's death, haſtened to Halberſtadt, where his election was renewed by the princes of Saxony, Miſnia, and Thuringia; and he ſoon afterwards conciliated the eſteem of the oppoſite faction by eſpouſing Beatrice, daughter of the deceaſed regent. After ſettling the affairs of the empire, and ſecuring the loyalty of his clergy by many conſiderable promiſes, he ſet out for Italy, and was ſolemnly crowned at Rome by the pope. But, notwithſtanding the apparent friendſhip of Innocent, and ſome important conceſſions on the part of the emperor, the Romans took up arms, on ſome trifling occaſion, and killed upwards of a thouſand Imperialiſts on the ſpot; Otho's remonſtrances were but little regarded; and the pope took an early opportunity of ſeizing Apulia, together with the marquiſate of Ancona, and the county of Spoleto. Otho judged it adviſable to diſſemble his reſentment for the preſent, and accordingly quitted Rome in apparent friendſhip with his holineſs: but in the enſuing ſpring he put himſelf at the head of a numerous army, and avowed his intention of re-eſtabliſhing his authority in thoſe countries which had been unjuſtly withdrawn from the empire. This declaration was followed by ſeveral victories; the dominions of Frederic king of the Two Sicilies were ravaged by the conquering army; and Innocent learned, with equal grief and indignation, that the protection of the holy ſee was too weak to repel the arms of his exaſperated Otho. Recourſe was now had to the eccleſiaſtical fulminations; and an aſſembly was held at Bamberg, in compliance with the pope's deſire, in which Otho was ſolemnly depoſed, and Frederic duke of Swabia and king of Sicily, who in his infancy had been proclaimed king of the Romans, was nominated to the imperial throne. Alarmed at theſe meaſures,

fures, Otho haſtened into Germany, and proſecuted the war with ſucceſs againſt the rebels: but in attempting to weaken the power of France, he was defeated with prodigious ſlaughter; and his young competitor ſucceeded ſo effectually in conciliating the eſteem of the Germans, that he was eventually compelled to reſign all pretenſions to the crown, and to ſeek a retreat in Brunſwic, where he died after a ſhort and unfortunate reign.

Frederic II. at about eighteen years of age, A.D. 1215, aſcended the throne in full poſſeſſion of thoſe accompliſhments which are expected to give luſtre to a diadem, and to render a nation happy. He had been carefully educated, and had ſtudied, above all things, to imitate the conduct of his illuſtrious grandfather Frederic I. He was crowned at Aix-la-Chapelle with great magnificence; and, as an acknowledgement of the favours which Divine Providence had hitherto beſtowed upon him, he made a vow to go in perſon to the Holy Land.

The firſt four years of Frederic's reign having been ſpent in arranging the affairs of the empire, and curbing the rebellious ſpirit of Otho's adherents, he made a progreſs into Italy in the ſummer of 1220, and received the imperial crown from Honorius III. He alſo cauſed his ſon Henry to be declared king of the Romans; and promiſed, upon oath, that he would lead an army into Aſia, at any time his holineſs ſhould appoint. However he delayed ſo long to perform his vow, that Honorius threatened him with excommunication; and a rupture enſued which preſaged very ſerious conſequences: for the emperor not only ſent a ſevere remonſtrance to the pope, but publiſhed a manifeſto for the juſtification of his own conduct, and ordered his troops to march to the frontiers of the eccleſiaſtical ſtate. Honorius perceived the neceſſity of apologizing for his raſhneſs; and a reconciliation took place, in which Frederic agreed to marry Yolanda, daughter of the king of Jeruſalem; and promiſed to ſet out with an army in two years, for the recovery of Paleſtine. But notwithſtanding theſe freſh engagements, Frederic ſtill heſitated to take the croſs; and a revolt of the Lombards excuſed his delay; but on the termination of thoſe troubles, Honorius renewed his remonſtrances, and a literary correſpondence commenced, in which he accuſed the emperor of ingratitude and cruelty towards his father-in-law, who had ceded his title to the kingdom of Jeruſalem; and Frederic recriminated by charging his adverſary with having diſturbed the peace of Italy, and granted an aſylum to perſons who had dared to raiſe the ſtandard of rebellion againſt their lawful ſovereign.

On the demiſe of Honorius, and the elevation of Gregory IX. to the apoſtolic chair, in 1228, Frederic avowed his intention of performing his engagement, and actually ſet ſail from Brundiſi, with a very powerful armament: but, about three days after he had put to ſea, a ſlight indiſpoſition ſerved him as an excuſe for returning. Hereupon the pope excommunicated him; and ſuch commotions enſued, that Frederic thought proper to ſet out again for the Holy Land. As he did not wait, however, for an abſolution from the papal anathema, he met with a very cold reception at Jeruſalem; the cruſaders peremptorily refuſed to acknowledge him as their chief; and the conſequent improbability of acquiring any military reputation, induced him to conclude a treaty with the Saracens. He then cauſed himſelf to be crowned at Jeruſalem, and returned to Naples with an empty title, which however, from that time, has been preſerved by the Sicilian monarchs.

The emperor ſtill laboured under the ſentence of excommunication; and the Roman pontiff was ſo highly exaſperated at his treaty with the ſultan of Egypt, that the breach ſeemed to be conſiderably widened. But Frederic reſolved to ſupport his authority by force of arms; and his ſoldiers committed ſuch dreadful ravages in the eccleſiaſtical ſtate, that Gregory thought proper to liſten to terms of accommodation, and the papal fulmination was withdrawn. This reconciliation, however, was followed by freſh troubles. The Lombards peremptorily refuſed to bear the imperial yoke; and after Frederic had been employed nearly five years in reducing them to obedience, Germany was ſuddenly involved in commotion, and Henry king of the Romans, forgetting or totally diſregarding the duties of a ſon, put himſelf at the head of the rebels. This prince, however, acted with ſuch extreme caution, that many of the nobles approved without underſtanding his conduct; and although, on Frederic's return, he was fully convicted of rebellion, his crime was imputed entirely to evil counſellors, and he was permitted to retire into Sicily. Thus diſmiſſed with impunity, Henry engaged in freſh ſchemes againſt his father's authority, and even promiſed to ſuccour thoſe towns in Lombardy which ſtill refuſed to return to their allegiance. Frederic now perceived his danger; and his ungrateful ſon was cloſely confined in the caſtle of Apulia.

Some time after this event, the emperor, in 1237, cauſed his ſecond ſon, Conrad, to be elected king of the Romans; and then repaired into Lombardy, where ſeveral cities remained in arms under pretence of defending certain liberties which had been granted them during the reign of Frederic Barbaroſſa. This expedition proved ſucceſsful to the Imperialiſts; and upon the elevation of Innocent IV. to the papacy, the German princes congratulated themſelves on the proſpect of returning tranquillity; but Frederic poſſeſſed more penetration, and obſerved that the cauſe of their rejoicing had deprived him of a cardinal's friendſhip, and entailed on him the hatred of a pope. The event ſoon juſtified this aſſertion; for, notwithſtanding the zeal which Innocent had hitherto expreſſed for the emperor's intereſt, he now avowed himſelf his enemy; cauſed the election of Conrad to be annulled in the council of Lyons; adviſed the nomination of Henry, landgrave of Thuringia, to ſuperſede Conrad; and even procured a ſentence of depoſition againſt the emperor himſelf. On hearing of theſe tranſactions, Frederic placed the imperial diadem on his head, ſaying, "Before this depoſition I was obedient to the pope and to the laws of the church: but, now that he has releaſed me from my duty in that particular, I no longer owe him any reſpect, and will continue to be emperor in ſpite of all his exertions."

Henry of Thuringia being ſlain by an arrow at the ſiege of Ulm, in 1247, the pope cauſed an aſſembly of the ſtates to be held at Nuitz, where the title of "king of the Romans" was ſolemnly conferred upon William count of Holland. But ſeveral cities ſtill retained their allegiance to the emperor and his ſon Conrad, notwithſtanding all the exhortations and menaces of the Roman pontiff. Meanwhile Frederic, who was buſily employed at the ſiege of Parma, narrowly eſcaped the treachery of his enemies, who had bribed both his phyſician and his favourite chancellor to take him off by poiſon. He was, however, fortunately appriſed of their deſign, and his infamous ſervants received the juſt reward of their villainous purpoſe. Soon after this event, Frederic was totally defeated by the Parmeſans, and was obliged to retire to his kingdom of Naples, where he died of a fever, in the fifty-fifth year of his age and the thirty-fourth of his reign. Frederic II. was five times excommunicated by three popes; yet he prevailed ſo far againſt Gregory IX. as to depoſe him from the papal chair. Theſe reiterated conteſts between him and the popes, gave riſe to the two famous factions of the Guelphs and Gibellines; the former adhering to the popes, and the latter to the emperors.

Conrad IV. was no ſooner appriſed of his father's death, in 1254, than he aſſumed the imperial title, and ſet out to take poſſeſſion of his Italian dominions. He

was, however, engaged in ſeveral quarrels with the court of Rome; and his life was ſoon terminated, either by ſickneſs or the treachery of his enemies. He left one ſon, named Conradin; but as he was only three years of age, the Sicilian ſceptre was uſurped by Mainfroy prince of Tarentum; and the government of the empire was veſted in William count of Holland, who had been elected king of the Romans during the reign of Frederic II.

William's acceſſion was marked by two ſingular occurrences, which expoſed him to the moſt imminent peril; for, ſoon after his marriage with the daughter of the duke of Brunſwic, his palace was conſumed by fire; and, during a temporary reſidence at Utrecht, he was ſo dangerouſly wounded with a ſtone from an unknown hand, that he narrowly eſcaped inſtant death. The coronation of this prince was performed at Aix-la-Chapelle, with the expreſs conſent of the pope: but he found himſelf involved in a troubleſome war with Margaret counteſs of Hainault, and his partiſans were, for ſome time, unable to make any conſiderable progreſs againſt the noblemen who refuſed to acknowledge his authority. At length, however, he concluded a treaty with Margaret; conciliated the affection of the German princes; and acquired great popularity by patroniſing an aſſociation of towns for the defence of their commerce, which, in thoſe times of confuſion, had ſuffered very ſeverely from the depredations and oppreſſions of ſeveral petty noblemen, who reſided in ſtrong caſtles, and ſubſiſted chiefly by rapine and plunder. This ſeems to have been the true epoch of the general union among the Hans Towns; though a ſimilar treaty had long ſubſiſted between Hamburg, Bremen, and Lubec.

After a cruſade againſt the Ruſſians, and the founding of Konigſberg by the Teutonic knights, William, in 1256, undertook an expedition againſt the Friezelanders, who had renounced their allegiance. But in attempting to reconnoitre the burg of Hochwend, without any attendants, his horſe unfortunately ſunk into a moraſs, and he became an eaſy prey to the enemy, who killed him without knowing his rank, and afterwards buried his remains in a burgher's houſe. Such was the ſad cataſtrophe of a prince whoſe courage and accompliſhments deſerved a better fate.

Several aſſemblies were now convened for the purpoſe of electing a new emperor; but none of the princes were willing to undertake ſo weighty a charge. At length, however, Richard duke of Cornwall conſented to accept the proffered dignity, and was ſolemnly crowned at Aix-la-Chapelle, notwithſtanding the ſpirited oppoſition of a party who declared for Alphonſo king of Caſtile. The new emperor had laviſhed ſuch immenſe ſums previouſly to his election, that he found his treaſures totally exhauſted whilſt making a tour through the cities of the empire; and the princes, after avowing that they had choſen him merely on account of his riches, ſent him a formal renunciation of their allegiance. He was therefore compelled, in 1258, to abandon the government, and retire into England, where he ended his life.

For fifteen years after the abdication of this prince, Germany groaned beneath the accumulated evils which uſually attend an interregnum. No laws were obſerved, no order was maintained; but murder, theft, and rapine, were committed with impunity, and the conſtitutions of the empire were totally neglected. Sanguinary wars reſulted from the feuds of private noblemen; biſhops and clergymen, forgetful of their ſacred character, embrued their hands in blood, for the augmentation of their benefices; commerce was almoſt annihilated; travelling was unſafe; and anarchy was completely and univerſally prevalent. The princes, indeed, convoked ſeveral aſſemblies: and Conradin, ſon of Conrad IV. made ſome gallant exertions to retrieve his inheritance; but the meaſures of the former were rendered abortive by the obſtinacy of the Roman pontiff; and the latter, being taken priſoner by Charles count of Anjou, was doomed to periſh on a ſcaffold. The ſubſequent execution of Conrad prince of Antioch, terminated the illuſtrious race of Swabia; and Germany continued without a maſter till pope Gregory X. enforced the neceſſity of a ſpeedy renewal of the ſovereign authority, by the nomination and election of a new emperor.

From the ELECTION of RODOLPHUS I. Founder of the AUSTRIAN DYNASTY, to the ABDICATION of CHARLES V.

In compliance with the injunctions of the pope, the princes of the empire aſſembled, in diet, at Frankfort, A. D. 1273; and, notwithſtanding the remonſtrance of Alphonſo's ambaſſador, and the pretenſions of ſome other candidates to the imperial crown, they elected Rodolphus count Hapſburg, on account of his known prudence, and the brilliant reputation which he had acquired by his bravery on ſeveral important occaſions. On receiving information of this event, Rodolphus haſtened to Frankfort, whence he was conducted to Aix-la-Chapelle, in order to be inveſted with the imperial crown: but when all things were prepared for the ceremony, it was diſcovered that the ſceptre was wanting, without which the princes could not receive the inveſtiture of their reſpective fiefs. This circumſtance occaſioned much confuſion, and the princes ſcrupled to take the accuſtomed oaths in an irregular manner: but the emperor immediately took a crucifix from the altar, ſaying, "This is the repreſentation of Him by whom we were ſaved; let us uſe it inſtead of a ſceptre." They agreed to this expedient, and the ſolemnity was performed accordingly.

The firſt care of Rodolphus was to put a ſtop to thoſe acts of cruelty and depredation which had ſo long diſgraced the police of Germany, and he exerted himſelf with ſuch vigilance upon this occaſion, that ſixty caſtles which had ſerved as retreats to banditti, were demoliſhed; ninety-nine marauders were executed, at one time, in the city of Erfurt; and peace and ſecurity were ſeaſonably re-eſtabliſhed. He then obtained a confirmation of his dignity from the pope, after promiſing to defend the holy ſee againſt all its enemies; and Alphonſo of Caſtile was perſuaded to renounce his pretenſions to the empire.

Rodolphus maintained his intereſts with the popes, by a truly dextrous policy. At an interview with Gregory X. he promiſed to lead an army into Paleſtine; and, at the deſire of Nicholas III. his ambaſſadors renewed his promiſe, in full conſiſtory, at Rome; but he wiſely contrived to diſpenſe with theſe engagements; and his chancellor was empowered to treat with ſeveral of the Italian cities reſpecting their enfranchiſements, as he preferred the receipt of their money to the alternative of making war upon them. He had been frequently requeſted to viſit Rome, and to receive the imperial crown from the hands of his holineſs; but he always declined the journey, and (alluding to the fable of the ſick lion) replied, that many of his predeceſſors had gone to Italy, but that he had obſerved few of them to return without the loſs either of their rights or authority.

After Rodolphus had ſwayed the imperial ſceptre about eighteen years, he convoked a diet at Frankfort, and requeſted that the empire might be ſecured to his ſon Albert duke of Auſtria, by creating him king of the Romans: but the princes excuſed themſelves from complying with this propoſal; and Rodolphus retired in diſguſt to Gemerſheim, where he died, after a ſhort illneſs, in the ſeventy-third year of his age. This prince was juſtly renowned for his valour, ſagacity, and love of juſtice; and by his ſole conduct and courage, the empire was extricated from rapine and miſery, and reſtored to the enjoyment of peace and opulence.

Rodolphus

Rodolphus had ſeven beautiful daughters, by means of whom he contracted alliances which proved highly advantageous to his poſterity. He had alſo ſeven ſons; but none of theſe ſurvived him except his ſon the duke of Auſtria. In him began the ſovereign elevation of the houſe of Auſtria, of which dynaſty of emperors he was the founder.—Their hiſtory is briefly this: The houſe of Auſtria ſprung from the counts of Hapſburg, a ſmall territory of Swiſſerland on the river Aar, in the canton of Bern; where, on a lofty eminence, ſtand the remains of an ancient caſtle, the firſt ſeat of the houſe of Auſtria. When Rodolphus I. count of Hapſburg, was called to fill the imperial throne, he was liege lord of the greater part of Swiſſerland, after the extinction of the powerful houſe of Zaeringen, and that of the counts of Kyburg; whoſe joint inheritance devolving on Rodolphus, became, in 1273, the grand baſis of his power, and that of his ſucceſſors of the ancient and illuſtrious houſe of Auſtria.

After an interregnum of about nine months, a diet was held at Frankfort for the election of a new ſovereign, A. D. 1292; and the princes were ſtrongly ſolicited to give their ſuffrages in favour of the late emperor's ſon; but by the intrigues of Gerhard elector of Mentz, the majority declared for Adolphus of Naſſau, who, although one of the pooreſt princes of the empire, was renowned for his military ſkill and bravery. He proved himſelf, however, unworthy of his new dignity; for, having injudiciouſly attacked the count-palatine of Burgundy and the princes of Thuringia, his ill ſucceſs diminiſhed his reputation: he alſo rendered himſelf odious to the people by violating his promiſes, and ſetting up his own will as a ſupreme law; and was publicly accuſed of having ſacrificed helpleſs maidens, wives, widows, and even nuns, to his luſt and cruelty. Accordingly the ſtates declared him incapable of wearing the diadem; and, by a ſolemn act, transferred their allegiance to the duke of Auſtria. Upon the firſt intelligence of this tranſaction, Adolphus advanced againſt his competitor, and ſingled him out in the heat of engagement; but victory reſted on the ſword of Albert, and the remains of the fallen emperor were depoſited in the cloiſter of Frauenfelt, whence they were afterward removed to the imperial ſepulchre by Henry of Luxemburg.

Albert I. furnamed the Triumphant, on account of the numerous victories he obtained over his enemies, was inveſted with the royal diadem at Aix-la-Chapelle, in 1298. Upon the demiſe of Winceſlaus the Younger, Albert raiſed a ſtrong party in order to put the crown of Bohemia upon the head of his ſon Rodolphus, and even perſuaded the widow of the late king to beſtow her hand upon him in marriage. Rodolphus, however, was ſoon taken off by a ſudden death; and Henry count of Carinthia eſtabliſhed himſelf ſo firmly on the throne, that Albert found it impoſſible to depoſe him. Some time after theſe tranſactions, the emperor eſpouſed the cauſe of Philip Naſſau againſt Frederic and Dictmann, who had been diſinherited by an unnatural father; but this flagrant injuſtice was generally execrated; Frederic raiſed a numerous body of troops; and Albert was eventually compelled to retire from the ſword of his young adverſary. His chagrin on this occaſion, however, was ſoon diſſipated by the elevation of his nephew Charobert to the throne of Hungary.

Albert's conduct toward the Swiſs was exactly the reverſe of his father's; for, though the latter had conciliated their affection by kindneſs and indulgence, and had uniformly defended their privileges againſt the nobles who attempted to infringe them, yet Albert wiſhed to govern them as an abſolute ſovereign, and appointed governors who oppreſſed them in the moſt unfeeling manner. The three cantons of Ury, Switz, and Underwald, in 1307, preferred ſeveral complaints and remonſtrances to the emperor on the ſubject of their grievances: but as they found it impoſſible to obtain any redreſs, they took an early opportunity of ſhaking off the imperial yoke; and the other cantons ſoon engaged in a confederacy, which laid the firſt foundation of the Helvetic republic.

The emperor had ſix ſons and three daughters; and the eagerneſs which he manifeſted to aggrandiſe his family, caſt a ſtain upon his reputation, and finally coſt him his life. Being entruſted with the guardianſhip of his nephew John, ſon of Rodolphus duke of Swabia, he took upon himſelf the adminiſtration of his dominions, and even heſitated to reſtore to him ſome caſtles which the young duke demanded. This conduct induced many of the German princes to ſuppoſe that Albert meant to appropriate his ward's patrimony to the benefit of his own children; and John was ſo exaſperated at the idea of ſuch an injury, that he engaged three confederates to aid him in his purpoſed revenge. They accordingly fixed a time for the execution of their deſign, and aſſaſſinated the emperor on the bank of the Rhus, near Schaffhauſen. One of the murderers, being apprehended, was broken alive upon the wheel; John, and another of his accomplices, lingered out a miſerable life of penitentiary humiliation in a monaſtery; and the fourth aſſaſſin lived thirty-five years as a cowherd in an obſcure village, and did not diſcover his guilty ſecret till the hour of his diſſolution.

Upon the firſt news of Albert's aſſaſſination, A. D. 1308, Philip the Fair, king of France, avowed his intention of becoming a candidate for the vacant throne; and even ſet out for Avignon, in order to ſolicit pope Clement V. to determine the ſuffrages in his favour: but the ſovereign pontiff had ſufficient cauſe to dread the elevation of a prince who might probably enforce the claims of his predeceſſors to Italy; and therefore wrote privately to the electors, urging them to nominate a chief, and aſſuring them that, unleſs they proceeded to the election immediately, the imperial dignity would revert from Germany to France. An aſſembly of the princes was accordingly held at Frankfort, and Henry of Luxemburg was unanimouſly choſen to fill the vacant throne.

Having been crowned, with the uſual ſolemnities, at Aix-la-Chapelle, in 1309, Henry made a progreſs along the Rhine, to receive the cuſtomary oaths of fidelity from the princes; and ſoon afterward convened an imperial diet at Spire, where ſentence of death was pronounced againſt the murderers of the late emperor, and Albert's four ſons were inveſted with the duchy of Auſtria. Upon this occaſion, alſo, a marriage was ſolemniſed between the emperor's ſon John, and the princeſs Elizabeth of Bohemia, by which means the crown of Bohemia became hereditary in the houſe of Luxemburg. After chaſtiſing one of his refractory counts, and promulgating a famous decree for the expulſion of the Jews from all the provinces of Germany, the emperor ſet out on an expedition to Italy; where he received the ſubmiſſions of ſeveral cities, and was ſolemnly crowned at Milan. The pope, however, took ſuch offence at the arrival of a German army, that he formed a confederacy againſt his illuſtrious viſitor, and urged the inhabitants of Cremona, Breſcia, Florence, and ſome other cities, to defend themſelves with vigour; but againſt whom the emperor immediately led the imperial forces.

After reducing Cremona, and compelling Parma, Vicenza, and Placentia, to make peace upon his own terms, Henry laid ſiege to Breſcia, which reſiſted all his efforts for a conſiderable time, with aſtoniſhing firmneſs; but the inhabitants were at laſt reduced to ſuch extremity, that they were compelled to appeal to his clemency, and preſented themſelves before him, barefoot, with halters about their necks. This ſpectacle effectually appeaſed the reſentment which had been excited in Henry's breaſt by the death of his brother Waleran,

and the execution of fifty German priſoners upon the walls; and he readily granted the ſupplicants their lives, on condition they ſhould pay ſixty thouſand crowns, and deliver one hundred hoſtages. However, he ordered their walls and fortifications to be demoliſhed, and entered in triumph through the breach which his troops had made.

Though Henry was, for ſome time, amuſed by the diſſimulation of Robert king of Naples, who had formed a ſtrict alliance with the pope, he reſolved to march toward Rome, in 1312, in order to receive the imperial crown. Accordingly, he led his army thither with all poſſible expedition, and was crowned by ſome cardinals (who had received a commiſſion for that purpoſe) in the church of St. John of Lateran, becauſe the church of St. Peter was occupied by his enemies. As the city of Rome was at this period diſtracted by two contending factions, the majority of the inhabitants rejoiced at Henry's arrival, as the only means of delivering them from the horrors of civil war; but when the emperor, inſtead of gratifying them with inſtances of his bounty, demanded money for the ſupport of his army, they broke out into open rebellion, and upwards of two thouſand Imperialiſts were ſacrificed to their tumultuary vengeance.

Finding it impoſſible to reduce his enemies at Rome, the emperor marched through the territory of Perugia, which he ravaged with fire and ſword, and laid ſiege to Florence; but the inhabitants defended themſelves with ſuch gallantry, that he was unable to obtain any advantage over them, and retired into winter quarters. In the enſuing ſpring, notwithſtanding his ill ſtate of health, he engaged in an expedition againſt Robert king of Naples; but on his arrival at Buonconvento he died ſuddenly, and it was generally aſſerted that a Florentine dominican had poiſoned him in adminiſtering the ſacrament. Henry VII. was, at the time of his death, in the fifty-firſt year of his age, and the fifth of his reign. In his perſon he poſſeſſed an appearance of majeſty mingled with great complaiſance; and he was generally beloved by his ſubjects, on account of his juſtice, piety, and valour.

The imperial diadem now excited the wiſhes and the efforts of Frederic of Auſtria, and Louis of Bavaria, who came forward, in 1315, as candidates for the ſupreme dignity; and each formed a party ſufficiently ſtrong to inveſt them with the inſignia of royalty. Accordingly, a double coronation took place, and the two emperors made the moſt vigorous efforts againſt each other for about ſeven years; but at the expiration of that time, Frederic was defeated and taken priſoner, and Louis was ſolemnly recogniſed as the lawful poſſeſſor of the throne.

Louis had no ſooner ſettled the affairs of Germany, than he exerted himſelf to appeaſe pope John XXII. who had availed himſelf of the recent quarrels to gain poſſeſſion of ſeveral domains, and to make various encroachments upon the imperial crown. But the haughty pontiff, inſtead of liſtening to propoſals of an accommodation, publiſhed a bull, in which he aſſerted that the empire was a fief of the holy ſee, and that Louis was an uſurper of the ſupreme dignity. He even commanded the emperor to deſiſt immediately from the adminiſtration of government; and enjoined all patriarchs, biſhops, prieſts, nobles, and commoners, to withdraw or renounce their allegiance. Louis proteſted againſt this bull, and requeſted that his holineſs would ſuſpend his cenſures until he could conſult the ſtates of the empire; but, at the expiration of three months, the pontiff had recourſe to the eccleſiaſtical thunder, and actually negociated with ſome of the German princes for electing Charles the Fair, king of France, to the imperial dignity.

Notwithſtanding this violent conduct, the pope found himſelf unable to effect his purpoſe; and perceived, with the utmoſt mortification, that a great majority of the Germans were reſolved to defend the dignity of their ſovereign, and the liberties of their conſtitution. Some diſorders which had recently broke out in the empire were happily huſhed to ſilence; the populace were overjoyed at the liberation of the duke of Auſtria, who now renounced his pretenſions to the throne; and Louis contrived to render himſelf peculiarly agreeable to his nobles, by the faſhion of the times, in entertaining them with ſeveral magnificent tournaments.

Having convened a diet at Spire, A. D. 1327, and obtained ſome neceſſary ſupplies of troops and money, Louis reſolved to make an expedition into Italy, whither he had been ſtrongly invited by the Gibellines, and took a ſolemn oath that he would never return until he ſhould have received the imperial crown at Rome. Upon this occaſion, alſo, he ordered the pope to be excommunicated, as an heretic unworthy of filling the apoſtolic chair. On his arrival at Milan, he was crowned king of Italy by the biſhop of Arezzo, as the archbiſhop of Milan refuſed to perform the ceremony. He then advanced into Tuſcany; and, after reducing the city of Piſa, marched towards Rome, where he was received with all poſſible reſpect. The governor and ſenators came out to welcome his arrival; and, after the ceremony of his coronation, which was performed by the biſhops of Venice and Aleria, the affection of the Romans was effectually conciliated by his liberality and courteous behaviour.

The pope, in the mean time, renewed his bulls of excommunication againſt the emperor, and treated him with ſuch indignity, that Louis loſt all patience, and ſwore to be revenged. Accordingly, he convoked an aſſembly at Rome, where pope John was degraded and condemned to death, as a perſon guilty of hereſy and treaſon; and Pietro de Rainauci, a Cordelier, was ſolemnly inveſted with the papacy, by the name of Nicholas V. Sentences of excommunication were now mutually fulminated by John and the antipope, and the former was actually burnt in effigy: but, after ſome time, the Romans became diſcontented; the Piſans reconciled themſelves to the holy ſee; ſeveral other Italian cities renounced the emperor's party; and Nicholas, being compelled to ſubmit to the ſuperior power of his enemy, was ſtripped of his ſacerdotal dignities, and doomed to perpetual impriſonment. His holineſs then engaged in ſeveral new intrigues with the German princes, and with the king of Bohemia; but his meaſures were cut ſhort by death, in the ninetieth year of his age, and the papal chair was filled by James Duſour, in 1336, who aſſumed the name of Benedict XII.

Louis, having quelled other diſturbances in the empire, ſent a ſubmiſſive embaſſy to the new pope, who received them very graciouſly, and expreſſed an earneſt deſire of terminating the differences which had ſo long ſubſiſted between Germany and the ſee of Rome. But the pontiff's favourable intentions were defeated by the intrigues of the French, Bohemian, and Neapolitan, courts; and he was ſoon afterwards perſuaded to renounce the intereſts of Louis, as thoſe of an excommunicated heretic. Hereupon the German princes nobly aſſembled at Spire, declared the empire independent of the pope, and acknowledged Louis of Bavaria as their only lawful emperor; and in a ſubſequent diet at Frankfort, they enacted that famous Conſtitution by which the independence of the empire was for ever eſtabliſhed. On this occaſion, all the electors, except the king of Bohemia, declared by a ſolemn proteſtation, "that whoever was elected king of the Romans by a majority of the princes, needed not the conſent or confirmation of the holy ſee to aſſume the regal title, adminiſter the laws, or govern the eſtates of the empire."

After this triumph, Louis applied himſelf with great diligence to the regulation of the police, and the eſtabliſhment of wholeſome regulations for the preſervation

of

of public tranquillity. The mildneſs of his adminiſtration, united with his ſtrict adherence to juſtice, effectually conciliated the eſteem of his ſubjects; his court became numerous, ſplendid, and polite; and almoſt all the princes who had formerly thwarted his meaſures now began to ſolicit his friendſhip and protection. In this proſperous ſtate of his affairs he was unfortunately killed by a fall from his horſe, A.D. 1343, in the thirty-ſecond year of his reign.

Charles IV. of Luxemburg, was grandſon of Henry VIII. and king of Bohemia in his mother's right. He received an excellent education at the court of Charles the Fair, king of France; and gave ſo many proofs of his valour upon ſubſequent occaſions, that he was univerſally beloved by the Bohemians; who, upon his father's deceaſe, declared him their lawful ſovereign. After Charles had ſpent about ſeven years in arranging the affairs of the empire, he took a journey to Milan, in 1355, where he was crowned king of Lombardy. On his return to Germany, he convoked a diet at Nuremburg, in order to regulate the future election of the emperors, and the number of electors. It was accordingly reſolved, that the form and ceremonies to be obſerved on thoſe occaſions, together with the number, rights, and privileges, of the electors, ſhould be written and publiſhed in the form of an edict. This edict received the name of the *Golden Bull*, from a golden ſeal called *bulla*; which decreed, that the territories by which the great offices of the ſtate were held, ſhould deſcend to their heirs male for ever, in perpetual entail, entire and indiviſible: and the emperor prepared a magnificent entertainment on the occaſion. The city of Mentz was honoured with the firſt exhibition of this new ceremonial. Charles and his empreſs repaired, in their royal robes, to a magnificent platform which roſe from the centre of the market place, and was covered with a ſumptuous banquet. The archbiſhops of Mentz, Triers, and Cologne, as high-chancellors of Germany, Gaul, and Italy, preſented themſelves on horſeback, each having a ſeal depending from his neck, and a letter in his hand. From the fartheſt part of the market-place came up, at full gallop, the duke of Saxony, as chief marſhal, bearing a ſilver meaſure of oats in his hand; and, as it was his province to regulate the precedency of his colleagues, he alighted, and aſſigned to each his proper ſtation. The marquis of Brandenburg, grand-maſter of the palace, then poured out water for the emperor and empreſs to waſh; the count palatine ſerved up the repaſt in a ſervice of gold; and the duke of Luxemburg, repreſentative of the king of Bohemia in the office of chief butler, poured out wine for their majeſties to drink. The marquis of Miſnia and the count of Schwartzenburg, as chief huntſmen, exhibited the ſpectacle of the death of a ſtag and a bear; and the entertainment was concluded with a liberal diſtribution of preſents.

After this ſolemnity, Charles applied himſelf ſedulouſly to the encouragement of the liberal arts, the reformation of his clergy, and the impartial adminiſtration of juſtice; but he gradually ſunk into a ſtate of deſpondency, and paid little attention to the affairs of his dominions. Yet, notwithſtanding his ſupine conduct, he ſucceeded in procuring the election of his ſon Winceſlaus as king of the Romans. He then undertook a journey to France, for the ſole pleaſure of reviſiting a country for which he had ever entertained an affection; and, ſoon after his return to Prague, he was ſeized with a fever, which terminated his life, in the thirty-ſecond year of his reign, A.D. 1378. Beſides the Golden Bull, Charles enacted ſeveral ſalutary laws and conſtitutions; and ordered the feaſt of Charlemagne to be annually celebrated in the church of Aix-la-Chapelle.

Winceſlaus ſucceeded his father in the empire, when ſcarcely ſeventeen years of age; and his firſt public act was deſigned to heal a ſchiſm of the church, which had been occaſioned by the competition of the two pontiffs who had aſſumed the names of Urban VI. and Clement VII. But, notwithſtanding his ſeeming attention to the intereſts of religion, he ſoon exhibited the moſt vicious inclinations, and abandoned himſelf to all kinds of licentiouſneſs; while the provinces became an eaſy prey to banditti, and many cities were obliged to engage in aſſociations for their mutual defence. Two attempts were made to take him off by poiſon, but both failed in their effect. Winceſlaus, as ſome ſay from the deleterious effect of the poiſon, acquired an habit of drunkenneſs, which augmented his natural tyranny, and enflamed him to ſuch a degree of fury, that it was dangerous to be near him. Among other acts of cruelty, he is ſaid to have ordered his confort's confeſſor to be drowned, becauſe he would not reveal the particulars of her confeſſion; cauſed his cook to be roaſted alive, for having ill prepared a diſh of meat; ſtruck off the head of a common executioner, with whom he had contracted a diſgraceful intimacy; and ſentenced all the magiſtrates of the chief tribunal at Prague to be decapitated in a ſingle day, without the formality of a trial. This was afterwards imputed to inſanity; and the princes of the empire ſolemnly depoſed him, and elected Frederic duke of Brunſwic to the ſupreme dignity. The violence of his temper, however, remained unabated, and finally occaſioned his death: for being ſuddenly alarmed by a tumult in the city of Prague, and one of his domeſtics imprudently ſaying that he had been appriſed of this diſturbance, Winceſlaus flew upon him, pulled him to the ground by the hair of his head, and abandoned himſelf to ſuch ungovernable fury, that he fell down in an apoplectic fit, and expired, in the fifty-ſeventh year of his age.

Frederic of Brunſwic being aſſaſſinated, A.D. 1400, the electors conferred the ſovereignty upon Robert count palatine, and cauſed him to be ſolemnly conſecrated in the church of Cologne. At the earneſt ſolicitation of the electors, he undertook an expedition into Italy, in order to reſtore the affairs of that country to their former ſituation: but John Galeazzo, duke of Milan, haraſſed him in ſuch a manner, that, notwithſtanding ſome conſiderable reinforcements which he received from Auſtria, he found it impoſſible to achieve any advantage, and was compelled to return into Germany. The ſubſequent death of Galeazzo offered a more favourable opportunity of retrieving the imperial authority; but the electors of Mentz, Triers, and Cologne, refuſed to grant any ſubſidies for a ſecond expedition, and Robert was conſequently obliged to remain at home.

After chaſtiſing Bernard marquis of Baden, for having eſtabliſhed tolls in his dominions, contrary to the regulations of the public peace, and witneſſing the happy termination of a war between the city of Baſil and the houſe of Auſtria, Robert ſolaced himſelf with the idea of having extinguiſhed all the factions in Germany. But the elector of Mentz ſtill contrived to vex and alarm him, by forming aſſociations againſt the imperial authority, and erecting a ſtrong fortreſs at Horhſt in open defiance of his orders. The emperor was highly incenſed at theſe proceedings; and, after ſome time, determined to curb his enemy's inſolence by force of arms: but this deſign was fruſtrated by a fever, which put a period to his life, in the ninth year of his reign, A.D. 1411.

This prince acquired the ſurname of Short, on account of his ſtature; but he was remarkably active and vigorous, poſſeſſed great penetration, and had made ſome progreſs in the ſtudy of literature. His reign was more diſtinguiſhed by juſtice and clemency, than conſpicuous for martial exploits; and the only blemiſh in his character was avarice. He left three daughters

by his empreſs Elizabeth; and his remains were ſolemnly interred at Heidelberg, where he had founded an academy.

After the death of Robert, Joſſe marquis of Moravia was regularly elected at Frankfort: but his promotion was vigorouſly oppoſed by Sigiſmund, brother to Winceſlaus; many of the imperial cities refuſed to take the cuſtomary oaths of allegiance; and death put a period to his authority, after he had worn the diadem about three months.

Sigiſmund aſcended the imperial throne in 1411, and employed his firſt attention in remedying the grievances which had long prevailed in the provinces, and the ſchiſm which had, for thirty years, diſtracted the church. Accordingly, after effecting an accommodation between ſome hoſtile noblemen, and concluding a treaty with the king of Poland againſt the Teutonic Order, he concurred with pope John XXII. for convoking a council at Conſtance, and deliberating upon meaſures for terminating the ſchiſm and hereſy of the Huſſites.

The reign of this prince was very little diſturbed by the devaſtations of war; and without difficulty he got the ſucceſſion ſettled in favour of his ſon-in-law, Albert duke of Auſtria. This was one of his laſt actions; and he died in the ſeventieth year of his age, having reigned fifty years in Hungary; twenty-ſeven in quality of emperor of Germany, and ſeventeen as king of Bohemia. Sigiſmund was equally remarkable for his comelineſs and majeſtic deportment: he was a liberal rewarder of literary merit; and his own learning was ſo extenſive as to have gained him the epithet of "Light of the World."

Albert II. ſurnamed the Grave and the Magnanimous, was honoured with the crowns of Hungary, Bohemia, and Germany, A. D. 1438. Caſimir of Poland, who had oppoſed his election, was compelled to bow before his reſiſtleſs arms; and his general conduct, both in the field and the cabinet, was, in all reſpects, worthy of applauſe. But while his numerous ſubjects rejoiced in the contemplation of his accompliſhments, and while his vigorous conſtitution promiſed many years of felicity, he died of an indigeſtion, cauſed by an over quantity of fruit, and his remains were ſolemnly interred at Weiſſenberg. Albert was of a tall ſtature, and extraordinary ſtrength; he poſſeſſed the virtues of juſtice and munificence in a very eminent degree; and his memory is revered on account of his zeal for religion and the true intereſts of his people.

After the demiſe of Albert, in 1440, the electors placed Frederic of Auſtria upon the imperial throne; and he made ſome laudable exertions, in the commencement of his reign, for the regulation of the police, and an impartial adminiſtration of juſtice. He alſo ſtrove to extinguiſh the ſchiſm which ſtill continued to diſtract the church, and, at the council of Baſil, he propoſed terms of conciliation between the popes Felix and Eugenius; but as his propoſitions were totally diſregarded, he left them to accommodate their differences themſelves. A rupture between the Swiſs and Auſtrians involved the emperor in greater difficulties, and induced him to ſolicit the aid of Charles VII. of France, after he had unſucceſsfully applied to all the princes of the empire. Charles readily granted his requeſt, and ſent the dauphin with forty thouſand men into Germany, where he defeated the Swiſs with prodigious ſlaughter: but the victorious troops committed ſuch outrages in Alſace, that the ſtates began to be ſeriouſly alarmed, and even threatened to take up arms againſt France. However, this meaſure was prevented by negociation, and the dauphin retired to his father's dominions.

Frederic now returned to Auſtria, where he found himſelf involved in very ſerious difficulties, by a diſpute with the Hungarians, whom he had irritated by detaining their young king, Ladiſlaus, at his court, and delaying to reſtore their crown and regalia, which were in his poſſeſſion. The princes of the empire expreſſed their diſapprobation of his conduct in ſtrong terms, and a number of Bohemians expoſtulated with him upon the ſame ſubject: but he continued to amuſe them with evaſions, till he was, in 1453, compelled by hoſtilities to ſign an accommodation.

Frederic now received intelligence that Charles duke of Burgundy had augmented his paternal inheritance by the addition of Zutphen and Guelderland; and that his ambition had prompted him to tamper with ſome of the electors, in hopes of being choſen king of the Romans. But, ſhortly after this diſcovery, Charles altered his ſcheme, and reſolved to cultivate the friendſhip of the emperor, who, he ſuppoſed, might be eaſily perſuaded to erect his duchy into a kingdom, and confer upon him the title of vicar of the empire in thoſe parts. Having made this determination, he invited Frederic to an interview at Triers, in 1471, and even prepared a throne, canopy, and regalia, for the expected ceremony; but when the emperor had received the homage which was to be the price of his conſent, he departed, under pretence of urgent buſineſs, on the very day appointed for the coronation. Having thus converted the duke's foible to his own advantage, Frederic contented himſelf with keeping an obſervant eye upon his motions: he ſaw him exhauſt his ſtrength in a war againſt his ſubjects, come to an open rupture with France, and periſh in a combat with the Swiſs, leaving an only daughter, Mary of Burgundy, who was reputed the richeſt heireſs in Europe. This conjuncture was exactly ſuited to the wiſhes of the emperor, who gained over the Flemings, and perſuaded them to beſtow the hand of their ducheſs on his ſon Maximilian, whom he had procured to be elected king of the Romans. From this period he repoſed upon Maximilian the chief weight of the government, though, from a review of his conduct, it does not appear to have been a very heavy burthen upon his own ſhoulders. At the age of ſeventy-nine years he ſubmitted to the amputation of an ulcerated leg; but the fever which followed that operation conducted him to the grave.

Frederic III. was a prince of an agreeable air and majeſtic countenance. He was plain in his apparel, moderate in his paſſions, and ſo remarkably abſtemious that his life is ſaid to have reſembled a continual faſt. From his natural averſion to war he was ſurnamed the Pacific, yet the inconſtancy of his temper often prompted him to embark in a quarrel. He was endowed with a fund of low cunning, and a tenacious memory, but he appears to have been equally deſtitute of courage, reſolution, and generoſity. It muſt, however, be remarked, that he greatly aggrandiſed the wealth and power of the houſe of Auſtria.

His ſon Maximilian I. was inveſted with the ſupreme authority, by the unanimous conſent of the electors, A. D. 1493. Shortly after his coronation, he entered a ſecond time into the conjugal ſtate, and eſpouſed Blanche Maria, ſiſter to the duke of Milan, famed for her perſonal charms and amiable qualities. He then appointed his ſon Philip governor of the Low-countries; and convoked a diet at Worms, where he cauſed a conſtitution to be enacted for the preſervation of the public tranquillity, and decreed that the imperial chamber, which had hitherto travelled about with the court, ſhould be ſtationary.

Upon the reduction of Naples by Charles VIII. the emperor and the princes of Italy engaged in a league againſt that monarch, and their confederacy was joined by Ferdinand and Iſabella of Spain. Maximilian embraced this favourable opportunity to propoſe a match, which afterwards took place, between his ſon Philip and the infanta Joanna, and which proved no leſs advantageous to the Auſtrian family than that of the em-

peror

J. Chapman sculp.

MAXIMILIAN I.

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peror with the princeſs of Burgundy. Meanwhile the king of France, hearing of the powerful league that was formed againſt him, ſet out from Naples to return to his own dominions; but on his arrival at the plain of Fornova, he found the allies drawn up to diſpute his paſſage, and he was conſequently obliged to give them battle. Fortune, however, favoured his arms upon this occaſion, and he purſued his route without further interruption.

Soon after theſe tranſactions, Ferdinand recovered the kingdom of Naples; and the emperor was earneſtly ſolicited to march into Italy in order to fruſtrate the new deſigns of aggrandiſement of the French monarch. Maximilian readily acceded to this requeſt, and croſſed the Alps with a ſmall body of troops; but his expedition proved altogether fruitleſs. Louis XII. having now aſcended the throne of France, avowed his intention of ſeizing Milan; ſo that the emperor found it indiſpenſably neceſſary to turn his arms againſt the Swiſs, who had begun to make hoſtile irruptions into the Auſtrian territories, and had renewed their alliance with France. Maximilian therefore ordered a numerous army to rendezvous near Conſtance, whence they ſallied out, in ſeveral ſmall detachments, to pillage the caſtles and villages in the neighbourhood of Schaffhauſen: but whilſt they were thus employed, the enemy ruſhed upon them with irreſiſtable fury, and put them nearly all to the ſword. A ſimilar misfortune happened to a body of Swabians, who had plundered the cantons of St. Gall and Appenzel; for, whilſt they were triumphing in their ſucceſs, they fell into an ambuſcade, and were cut to pieces. The emperor then repaired in perſon to Conſtance, and collected a body of forces conſiſting of about fifteen thouſand men: but theſe, together with ſome powerful reinforcements, were defeated, and Maximilian was compelled to negociate a peace.

In the mean time, Louis XII. having ſubdued the Milaneſe, and compelled the king of Naples to reſign his ſovereignty, A. D. 1501, reſolved to cultivate Maximilian's friendſhip, and actually demanded of that prince the inveſtiture of Milan. The emperor was, at firſt, greatly averſe to this propoſal: but a pecuniary preſent effectually conquered his reluctance; and a peace was concluded between the courts of France and Germany, by which the emperor granted the inveſtiture of the Milaneſe, and Louis engaged to aſſiſt his ally againſt the Turks, maintain the rights of his ſucceſſors to the kingdoms of Hungary and Bohemia, and facilitate his coronation at Rome.

Soon after this occurrence, Maximilian undertook an expedition to receive the crown of Italy; but, being refuſed a paſſage through the valley of Trent, he was obliged to deſiſt from his enterpriſe, after having ſuſtained conſiderable loſs in an engagement with Bartolomeo d'Alviano, general of the Venetian republic. And, as he was alſo diſappointed of his coronation at Rome, he laid injunctions upon all the ſtates of the empire, to give him the appellation of "Roman emperor elected,"—a title which has ſince been aſſumed by all his ſucceſſors. The conduct of the Venetians gave ſuch umbrage to the French monarch, that, in 1509, he formed the project of a league, in order to diveſt the Venetians of all the dominions they had uſurped from the empire in Lombardy, from France and Spain in the Milaneſe and Apulia, and from the eccleſiaſtical ſtate in Romagna. The emperor was ſo far from oppoſing this ſcheme, that he entered into it with the greateſt cheerfulneſs; and the combined armies proved ſo ſucceſsful, that the Venetians ſoon abandoned all their territories upon the continent, and were eventually reduced to ſuch extremity, that they ſent a *charte blanche* to the emperor, and implored his clemency in the moſt ſubmiſſive terms; but their application was rendered fruitleſs by the remonſtrances of cardinal d'Amboiſe, who, about this time, received the inveſtiture of Milan in the name of his royal maſter.

Louis had no ſooner repaſſed the Alps, than the Venetians felt their courage revive; and they retook ſeveral places which were garriſoned by the imperial troops. Maximilian marched to check their progreſs, at the head of eighty thouſand men: but they defended themſelves with uncommon reſolution, and, by a capital ſtroke of policy, prevailed on the Roman pontiff to eſpouſe their cauſe. At this time alſo the Florentines obtained an advantageous peace of the emperor, and, in conſideration of forty thouſand crowns of gold, he granted an amneſty for all their revolts, and confirmed their privileges in the moſt ample manner.

The attempt of pope Julius to negociate an accommodation, proved entirely fruitleſs; and Julius, finding it impoſſible to effect his deſigns by mediation, declared war againſt the French monarch, on pretence of his having refuſed to reſtore ſome towns which belonged to the holy ſee. Louis immediately convoked an aſſembly of his clergy, to enquire how far he ought to reſpect the power of the church, which the pope exerciſed ſo unjuſtly; and the aſſembly unanimouſly declared that he might repel an unjuſt attack by force of arms, and inſiſt upon the common rights of mankind, according to the decrees of the council of Baſil. This declaration was not more agreeable to Louis than the emperor, who, it is ſaid, entertained the ſingular idea of procuring himſelf to be elected pope, and had actually reſolved to borrow a large ſum of money to purchaſe the votes of the cardinals.

Whilſt the pope was employed againſt the duke of Ferrara, Louis and Maximilian ſent ambaſſadors to the king of Arragon, complaining of his conduct, and exhorting him to ſecond their endeavours for the convocation of a council; but he anſwered very coldly upon both theſe ſubjects, and endeavoured, by private negociation, to detach Maximilian from the intereſt of France. His attempts, in that reſpect, were not altogether unſucceſsful; for the emperor ſoon began to treat his ally with indifference, and eventually declared for his enemies. Louis, thus forſaken, was ſoon ſtript of his conqueſts in Italy, and found himſelf reduced to great extremities by an invaſion of the Swiſs and the Engliſh; the latter of whom had denounced war againſt him at the inſtigation of Ferdinand, and joined the imperial forces in Picardy, where they obtained the deciſive victory which is generally called the battle of the ſpurs. Hoſtilities were carried on with various ſucceſs till the demiſe of Louis, A. D. 1515; when his ſucceſſor Francis I. negociated an accommodation with the emperor, and concluded a treaty of peace with Venice and England. The ſubſequent ſucceſs of that prince in Italy alarmed Maximilian, and induced him to have recourſe to arms; but he ſoon conſented to make peace; and Francis remained in tranquil poſſeſſion of his important conqueſts.—See the article FRANCE.

Maximilian now exerted all his abilities to procure the election of his grandſon Charles, who had recently taken poſſeſſion of the Spaniſh diadem: but, as there was no precedent for nominating a king of the Romans previouſly to the emperor's coronation at Rome, he could not obtain the gratification of his deſire. This diſappointment ſeems to have preyed upon his ſpirits; for he was, ſoon afterwards, attacked with a fever, which brought him to the grave, in the ſixtieth year of his age, and the twenty-ſixth of his reign, A. D. 1520. Maximilian was a prince of a very majeſtic appearance, and a friend to literature: and he poſſeſſed ſo tenacious a memory, that he never forgot the names of perſons whom he had once ſeen, or heard mentioned. During his reign, the empire was divided into ten circles.

Charles V. ſon of Philip king of Caſtile, upon the firſt intelligence of his grandfather's death, preſented himſelf

himſelf as a candidate for the imperial throne, and (as his partiſans obſerved) his hereditary claim to the extenſive territories of the houſe of Auſtria, the rich ſovereignty of Franche Compté and the Netherlands, and the entire poſſeſſion of Spain and Sicily, all united to hold him up to the firſt dignity among Chriſtian princes. But Francis I. of France declared himſelf a competitor, and with no leſs confidence of ſucceſs than Charles. He truſted to his ſuperior years and experience; and, urged, as a peculiar recommendation, that the French cavalry when united to the German infantry would not only form an irreſiſtible barrier againſt invaſion, but might alſo prove ſufficient to cruſh the augmenting power of the Turks.

Both theſe claims were certainly plauſible, yet both were rejected; and the electors made a tender of the imperial diadem to Frederic, ſurnamed the Wiſe, duke of Saxony. But he was ſo far from being dazzled by its ſplendour, that he rejected it with noble firmneſs, and inſiſted on the expediency of raiſing Charles to the ſupreme dignity. "In times of tranquillity, (ſaid the magnanimous duke,) we wiſh for an emperor who has no power to curtail our liberties; times of danger demand one who is able to maintain our ſafety. The Ottoman forces, led by a martial and victorious prince, are now aſſembling, and are ready to pour in upon our empire with a violence unknown in former ages. New conjunctures call for freſh expedients. The imperial ſceptre muſt be placed in ſome hand more powerful than mine, or that of any other German prince. We poſſeſs neither dominions, revenues, nor authority, ſufficient to encounter ſo formidable an enemy. Recourſe muſt, therefore, be had to one of the royal competitors. Each of them can certainly raiſe forces for our defence: but as the king of Spain is of German extraction, as he is a prince of the empire by the territories which deſcend to him from his grandfather, and as his dominions ſtretch along that frontier which lies moſt expoſed to the enemy, his claim, in my opinion, is preferable to that of Francis, who, notwithſtanding his extenſive power, is a ſtranger to our language, our cuſtoms, and our country." This well-timed ſpeech made a deep impreſſion on the minds of the electors, and Charles was inveſted with the imperial crown at Aix-la-Chapelle, in the year 1521.

The firſt act of Charles's adminiſtration was to appoint an imperial diet to be held at Worms, in order to concert meaſures for checking the progreſs of Luther's opinions, and the reformation, which were repreſented as inimical to the peace of Germany, and ſubverſive of the catholic religion. Luther appeared at that aſſembly; and, being aſked whether he would retract or defend the doctrines he had recently promulgated, he inſiſted upon the truth of what he had advanced, and reſiſted, with equal firmneſs, the perſuaſions and remonſtrances of thoſe who had tampered with him in private. Some of the members of the diet were highly incenſed at his perſeverance, and urged the emperor to violate the ſafe conduct which he had granted; but Charles rejected this advice with noble diſdain, and reminded them, "that if good faith were baniſhed from all the reſt of the world, it ought to find an aſylum in the palaces of princes." Luther was, therefore, permitted to retire in ſafety, though he was, at the ſame time, condemned and proſcribed, by public edict, as an impious heretic, who had broached the moſt pernicious doctrines.

Previouſly to the deciſion of the electors reſpecting an emperor, Charles and Francis had conducted their rivalſhip without enmity, and had even mingled in their competition many expreſſions of fraternal regard. But a ſpirit of jealouſy was afterwards kindled between thoſe two great princes, which involved them in frequent hoſtilities, and kept their whole lives in diſquietude. The Spaniards alſo, chagrined at the departure of their ſovereign, and exaſperated by the avarice of the Flemings, who had lately preſided at the helm of government, entered into an aſſociation, which they called the *Sancta Juncta*; and the ſword was appealed to as a means of redreſs. Francis conſidered this as a favourable conjuncture for reinſtating the family of John d'Albert in the ſovereignty of Navarre; and a French army was immediately ſent out under the command of Andrew de Foix, whoſe exertions were, at firſt, crowned with victory; but on his raſhly penetrating into Caſtile, he was defeated and taken priſoner; and Navarre was recovered in a ſhorter time than he had ſpent in reducing it.

Soon after this event, Francis encouraged the duke of Bouillon to make war upon the emperor, and to invade Luxemberg; but this inſult was ſoon chaſtiſed by the imperial forces: and the French king, who had broken into the Low-countries, loſt an opportunity of gaining a complete victory. During theſe operations a congreſs was held at Calais, under the mediation of Henry VIII. king of England; but this proved entirely unſucceſsful: and a league was ſoon afterward concluded between the pope, the emperor, and the Engliſh monarch, againſt France. In the mean time, the Milaneſe, weary of the exactions of mareſchal de Lautrec, reſolved to expel the French troops, and put themſelves under the protection of Francis Sforza, brother to Maximilian their late duke. This deſign was approved by his holineſs the pope, who fulminated an excommunication againſt Lautrec, and took into his pay a numerous body of Swiſs. The papal army, commanded by Proſper Colonna, received a powerful reinforcement from Germany; the city of Milan was betrayed to the confederates; Parma and Placentia were united to the eccleſiaſtical ſtate; and of all their conqueſts in Lombardy, only the caſtle of Milan, the town of Cremona, and ſome inconſiderable forts, remained in the hands of the French.

Pope Leo X. received the news of this brilliant ſucceſs with ſuch immoderate tranſport, as brought on a fever and occaſioned his death. By this accident the ſpirit of the confederacy was broken, and its operations ſuſpended. The Swiſs were immediately recalled; ſome other mercenaries diſbanded for want of pay; and only the Spaniards and a few Germans remained to defend the Milaneſe. Lautrec, who had taken refuge in the territories of Venice, was anxious to improve ſo favourable an opportunity; but all his efforts were fruſtrated by the vigilance and ability of Colonna. During theſe tranſactions, much diſcord prevailed at Rome reſpecting the election of a ſucceſſor to Leo X. Cardinal Wolſey had long relied on the emperor's intereſt; and Julio de Medici, Leo's nephew, thought himſelf ſure of the tiara; but both theſe candidates were ſet aſide, and cardinal Adrian, who at that time governed in the emperor's name, was unanimouſly raiſed to the papal chair, to the great diſguſt of the Italians, and the aſtoniſhment of all Europe.

Rouſed by the augmented power of his rival, Francis now determined to make a vigorous exertion for the recovery of Lombardy; and, accordingly, ſent a reinforcement of ten thouſand Swiſs to Lautrec. The French commander was alſo in a condition to act offenſively, and actually advanced within a few miles of the city of Milan: but his new auxiliaries growing mutinous, he was obliged to attack the Imperialiſts at Biocca, where he was defeated with prodigious ſlaughter. He was conſequently obliged to retire into France; while Colonna effected the reduction of Genoa, and effectually re-eſtabliſhed the imperial authority.

Whilſt an Engliſh army, under the earl of Surrey, made an unſucceſsful deſcent on the coaſt of France, and the emperor was fully employed in tranquillizing the

the Spaniſh dominions, Solyman the Magnificent made an irruption into Hungary, and reduced Belgrade. He then turned his arms againſt the iſland of Rhodes, and, after an obſtinate ſiege of ſix months, added that important place to his former conqueſts. Charles and Francis were equally aſhamed of having neglected the relief of an iſland which was generally conſidered as the great bulwark of Chriſtendom in the eaſt; and the emperor, by way of reparation, granted to the knights of St. John the iſland of Malta, where they fixed their reſidence, and continued long to retain their ancient ſpirit, though diminiſhed in ſtrength and ſplendour.

Pope Adrian IV. though devoted to the intereſts of the emperor, endeavoured to aſſume the impartiality which beeame his pontifical character, and laboured to effect a reconciliation between the contending princes. The Italian ſtates were alſo diſpoſed to peace; and ſo much regard was paid to the pope's propoſal of a truce for three years, that the Imperial, French, and Engliſh, ambaſſadors, at Rome, were empowered to treat upon that ſubject; but whilſt they were employed in fruitleſs negociations, their ſovereigns were continuing hoſtile preparations, and the confederacy againſt Francis became more powerful than ever. The Venetians, who had hitherto eſpouſed the French intereſt, formed engagements with the emperor for ſecuring the Milaneſe to Francis Sforza; the Florentines, the dukes of Ferrara and Mantua, and all the Italian powers, acceded to the ſame alliance; while the emperor undertook the invaſion of Guienne, the forces of England and the Netherlands hovered about Picardy, and a numerous body of Germans was appointed to ravage Burgundy.

Although the enemies of France had thus carried the war into the very bowels of that kingdom, Francis ſtill retained his natural courage, and determined, even at this perilous criſis, to make a freſh attempt for the recovery of the Milaneſe. Accordingly, in 1524, he ſent an army of thirty thouſand men acroſs the Alps, under the command of general Bonnivet. Colonna was in no condition to reſiſt this force; and the duchy of Milan might have been eaſily reduced, had not Bonnivet waſted his time in unimportant enterpriſes. By his imprudent conduct, in this reſpect, his own army was greatly diminiſhed, while that of the confederates received powerful ſuccours, and he was compelled to make an ignominious retreat, after loſing his braveſt troops in an engagement at Biagraſſa. Francis, having defended his native kingdom with aſtoniſhing ſucceſs, reſolved to march in perſon againſt the Milaneſe, in order to wipe off the diſgrace of Bonnivet's expedition; but, although he obtained ſeveral important advantages, he was at laſt defeated, and taken priſoner at the ſiege of Pavia; Milan was inſtantly abandoned; and after a few weeks there was ſcarcely a Frenchman left in Italy.

Whatever joy the emperor might have felt on this occaſion, he concealed his real ſenſations, and forbade any public rejoicing to be made in his dominions; obſerving, that all victories gained over fellow-chriſtians were rather objects of mourning than of mirth. His confeſſor, believing that he ſpoke the language of his heart, exhorted him to releaſe his illuſtrious captive without ranſom, as ſuch an act of generoſity would tranſmit his name with glory to poſterity, and the French monarch would be neceſſarily attached to his intereſts in future, by the ſtrongeſt ties of gratitude. But, inſtead of following this advice, Charles ſuffered his unfortunate rival to remain in cloſe confinement, and propoſed ſuch ſevere terms as the price of his liberty, that he was with difficulty reſtrained from putting a period to his own exiſtence. At length, however, the emperor thought proper to abate a part of his exorbitant demands, and Francis was removed to Madrid, where he obtained his liberty on condition of ceding Burgundy, and ſome other territories, to his conqueror, and delivering up his two ſons, the dauphin of France, and the duke of Orleans, as hoſtages for the performance of the treaty. He had, however, no ſooner returned to his own dominions, than he proteſted againſt this agreement as a compulſory act, and announced his intention of renewing the war. Francis was ſupported in theſe meaſures by the courts of Rome and England; and a formidable confederacy, called the "Holy League," was formed, to curb the dangerous power of the emperor, to enforce the liberation of Francis's ſons on the payment of a reaſonable ranſom, and to re-eſtabliſh Sforza in the duchy of Milan.

In conſequence of this league, Italy once more became the ſeat of war, and the confederate army entertained the moſt brilliant hopes of ſucceſs: but Francis, who it was expected would have infuſed vigour into the whole body, had paſſed through ſuch a ſcene of diſtreſs, that he was become diffident of his abilities, and diſtruſtful of his fortune. He flattered himſelf that the mere name of ſuch a confederacy would induce Charles to liſten to terms of accommodation; and under this miſtaken idea, neglected to ſend reinforcements to his allies in Italy. Meanwhile the duke of Bourbon, who commanded the imperialiſts, reduced the whole of the Milaneſe, and led his victorious forces to the gates of Rome. His attempt upon that city coſt him his life; but his followers ſoon ſcaled the walls, ſacrificed many of the unfortunate inhabitants to their reſentment, and confined the ſovereign pontiff in the caſtle of St. Angelo. Charles received the news of theſe tranſactions with his accuſtomed diſſimulation, and even ordered his clergy to offer up prayers in their churches for the pope's liberation; though he determined to prolong his captivity till he ſhould pay an enormous ranſom, and ſurrender to him all the places of ſtrength in the eccleſiaſtical dominions.

The kings of France and England had, previouſly to the ſacking of Rome, agreed to invade the Low-countries with a powerful army; but on the firſt intimation of the pope's misfortune, they transferred the theatre of the projected war to Italy, and Clement obtained his liberty. But though the confederates were ſucceſsful at the opening of the campaign, their fortune was ſuddenly changed by ſome untoward accidents; and Francis was ſo effectually diſcouraged, that he began to turn his thoughts toward a pacification. Charles, on the other hand, was anxious to return into Germany, where his preſence was abſolutely neceſſary; and after ſome time, an accommodation was negociated at Cambray, by which Francis conſented to reſign all his claims to Lombardy, Flanders, and Artois, and pay two millions of crowns as the ranſom of his ſons, and the emperor ceaſed to demand the reſtitution of Burgundy. Charles alſo, about the ſame time, concluded a peace with the pope; and having been crowned by his holineſs at Bologna, he returned triumphant to the German empire.

Charles now made ſome vigorous exertions for ſecuring the imperial dignity to his brother Ferdinand, who had aſcended the throne of Hungary; and, notwithſtanding the ſpirited remonſtrances of ſeveral princes, he procured him to be elected king of the Romans. This meaſure gave great offence to the elector of Saxony and his confederates, and Germany appeared to be threatened with the horrors of a civil war, but the dread of an invaſion from the Turks, induced both parties to unite in defence of their country. Charles had received intelligence that the armies of that nation were advancing in prodigious numbers toward Stiria; that fifteen thouſand cavalry had already penetrated as far as Lintz, and that Solyman had croſſed the Danube in perſon at Belgrade. But a timely treaty of accommodation with the proteſtants had produced ſuch general unanimity, that the emperor ſoon found himſelf at the head of 120,000 men. With theſe he marched againſt the invaders; and had either he or Solyman dared to hazard a general engagement, it would probably have been deciſive of the fate of two great empires: but both the chieftains ſeemed to have entertained fears of each other's power, and they

took the earlieſt opportunity of retreating mutually to their reſpective dominions.

After making ſome unſucceſsful exertions againſt the proteſtant reformers, A. D. 1536, Charles fitted out a powerful armament, and undertook an expedition into Barbary, in order to reinſtate Muley Haſſein, the exiled king of Tunis, upon his throne; and to chaſtiſe the inſolence of the grand pirate Barbaroſſa, who continually infeſted the coaſts of Spain and Sicily. He accordingly ſet ſail with a numerous fleet, and his deſign was ſo well conducted, that in a ſhort time he reduced the city of Tunis, and the fortreſs of Goletta; liberated a great number of Chriſtian ſlaves; defeated the corſair both by ſea and land; and reſtored Muley Haſſein to the ſovereignty, after that prince had acknowledged himſelf his vaſſal, and engaged to ſupport a Spaniſh garriſon in the Goletta.

The king of France now took advantage of the emperor's abſence, to revive his pretenſions to Italy; and though unſupported by any ally, he raiſed a formidable army, under the pretence of chaſtiſing the duke of Milan for a breach of the law of nations, in putting to death his ambaſſador. Inſtead, however, of marching directly into the Milaneſe, he commenced hoſtilities againſt the duke of Savoy, with whom he had ſome cauſe of diſſatisfaction; and in the courſe of a ſingle campaign ſtripped him of all his dominions, except the province of Piedmont. In this exigence the unfortunate duke applied to Charles for protection; and, as his calamities were chiefly occaſioned by his attachment to the imperial intereſt, he naturally expected immediate aſſiſtance; but the emperor, who had juſt returned from his African expedition, was unable either to march to his relief, or to ſend him the neceſſary ſuccours. In the mean time, the death of Sforza duke of Milan totally changed the nature of the war, and afforded Charles full leiſure to prepare for taking an active part in the conteſt. The pretext of the king of France for taking up arms was now removed; but, as Sforza had died without iſſue, all the rights which had been added to him and his deſcendants reverted now to his enemy. Had Francis, at this juncture, enforced his claim at the head of his army, Milan muſt have immediately ſubmitted to his authority; but, by an accountable fatality, he waſted his time in fruitleſs negociations, while his more politic rival took poſſeſſion of the duchy, as a vacant fief of the empire, and even formed a project for the ſubverſion of the French monarchy.

Upon this occaſion Charles appears to have been too ſanguine. Having chaced the forces of his enemy out of Savoy, he led an army of fifty thouſand men to invade the ſouthern provinces of France, while two formidable detachments were ordered to make an irruption into Champagne and Picardy. Francis was greatly alarmed at this invaſion; but he prudently reſolved to remain entirely upon the defenſive, and to deprive the enemy of ſubſiſtence, by laying waſte the country before them. The mareſchal Montmorency, who was entruſted with the execution of this plan, aſſembled a conſiderable body of forces at the confluence of the Rhone and Durance; while Francis, with another army, encamped at Valence, higher up the Rhone. Arles and Marſeilles were furniſhed with ſtrong garriſons, but the other frontier towns were evacuated; ſuch fortifications as might have afforded ſhelter to the enemy were demoliſhed; corn, forage, and proviſions of every kind, were carried off; and the country was literally changed into a vaſt deſert, from the Alps to Marſeilles, and from the ſea to the confines of Dauphiny.

Charles was much chagrined at the unexpected difficulties which preſented themſelves to his view; but he ſtill perſiſted in his reſolution, and endeavoured to revive the ſinking hopes of his officers, by liberal promiſes of lands and honours in France. He accordingly undertook the ſiege of Marſeilles, and uſed his utmoſt exertions to draw Montmorency from his camp at Avignon; but, at the expiration of two months, he found it impoſſible to obtain any advantage, and was, conſequently, obliged to retreat. The invaſion of Picardy was equally unſucceſsful. After theſe events a ſuſpenſion of arms was effected by the interpoſition of the queens of France and Hungary, and a truce was concluded at Nice, through the mediation of pope Paul III. a man of a venerable character, and pacific diſpoſition. A few days after ſigning the truce, Charles was driven, by contrary winds, on the coaſt of Provence, and was received by Francis with the warmeſt demonſtrations of eſteem and affection. Mutual viſits were paid with an equal degree of confidence; and theſe two powerful rivals, who had accuſed each other of every kind of baſeneſs, converſed together with the cordiality of brothers.

Whilſt the emperor was employed in regulating the affairs of Spain, the citizens of Ghent, in 1540, broke out into rebellion, on account of a tax which they judged contrary to their ancient privileges. Senſible, however, of their inability to reſiſt the force which would inevitably be ſent againſt them, they implored the protection of the French monarch, offering to put him in immediate poſſeſſion of their city, and to aſſiſt him in recovering ſuch provinces of the Netherlands as had formerly belonged to his crown. But Francis, forgetful of his paſt injuries, rejected theſe propoſitions, and communicated the whole negociation to the emperor. By this generous proceeding, Francis hoped to obtain the inveſtiture of Milan, and the emperor flattered him in that apprehenſion for his own intereſted purpoſes. His preſence being neceſſary in the Netherlands, Charles demanded a paſſage through France; and was received in that kingdom with every mark of reſpect. The dauphin and the duke of Orleans offered to go into Spain, as hoſtages for his ſecurity; the king entertained him at Paris with the utmoſt magnificence; and the young princes, whoſe generous offer had been refuſed with due acknowledgment, accompanied him to the frontiers of the Low-countries; yet he ſtill found means to evade his promiſe relative to the inveſtiture of the Milaneſe.

The rebellious citizens of Ghent were no ſooner appriſed of the emperor's arrival, than they ſent a ſolemn embaſſy to deprecate his wrath; but he was deaf to their entreaties, and entered the place of his nativity at the head of a formidable army, as if it had been a hoſtile city taken by aſſault. Twenty-ſix of the principal burghers were executed, as ringleaders of the ſedition, a greater number were baniſhed, the town was deprived of its artillery, arms, and privileges, and the unfortunate inhabitants were compelled to pay a fine of one million two hundred thouſand crowns for the erection of a citadel and the ſupport of a garriſon, which might operate as a future check upon them.

Having thus re-eſtabliſhed his authority in the Low-countries, Charles was obliged to turn his attention toward the affairs of Germany. The proteſtants, having made ſeveral fruitleſs applications for a general council, entreated him to appoint a conference between a ſelect number of divines of each party, in order to examine thoſe points which had been ſo long and vigorouſly conteſted. After mature deliberation, the emperor acceded to this requeſt, and a conference was held, with great ſolemnity, at Ratiſbon: but the eccleſiaſtics choſen to manage the controverſy, were only able to ſettle a few ſpeculative opinions, and the diet was adjourned to a future period.

In 1541, Charles received the vexatious intelligence of a great revolution which had happened in Hungary, to the detriment of his brother's power, and the aggrandiſement of the infidels. However, his well-timed conceſſions to the proteſtants were productive of ſuch ample ſupplies, both of men and money, as left him under little anxiety about the ſafety of Germany. He therefore haſtened

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haſtened to execute a favourite project which he had concerted againſt Algiers, and ſet ſail, with a formidable fleet, for the coaſt of Barbary; but the weather proved ſo extremely tempeſtuous, and the Algerines defended themſelves with ſuch gallantry, that he was compelled to abandon his deſign. The loſs which Charles ſuſtained in this affair encouraged the king of France to begin hoſtilities, on which he had for ſome time reſolved, in order to chaſtiſe the emperor for his duplicity relative to the inveſtiture of Milan, and for the treacherous aſſaſſination of two ambaſſadors, by the marquis del Guaſto, governor of the Milaneſe.

After explaining to all the courts of Europe the heinouſneſs of this injury, the baſe conduct of the emperor, and the abſolute neceſſity of vengeance, Francis, in 1545, made formidable preparations for war; and his orders were executed with ſuch diſpatch, that five armies were ſoon ready to take the field, under different deſtinations. Charles, on the other hand, levied a prodigious number of forces, and even threatened to divide the kingdom of France between himſelf and Henry VIII. of England. But the ſubſequent hoſtilities proved altogether indeciſive; and after ſome time a peace was concluded at Creſpy, by which it was agreed, that all recent conqueſts ſhould be mutually reſtored; that Charles ſhould reſign his claim to the duchy of Burgundy, and Francis renounce all pretenſions to the ſovereignty of Flanders and Artois; that the emperor ſhould give in marriage to the duke of Orleans, either his eldeſt daughter with the Low-countries, or the ſecond daughter of his brother Ferdinand, with the inveſtiture of Milan; and that both parties ſhould turn their arms againſt the infidels; but the premature death of the duke of Orleans ſoon diſentangled Charles from this ſtipulation.

The emperor was chiefly induced to grant this peace by a deſire of humbling the proteſtant princes in Germany, who with the papal juriſdiction might probably throw off the imperial authority. He accordingly concluded a diſhonourable peace with the Porte; and, at the ſame time entered into a league with pope Paul III. for the extirpation of hereſy. His ambition, however, met with a very ſevere check; for, although his arms were for ſome time crowned with ſucceſs, he was obliged, in 1552, to conclude a peace with the proteſtants on their own terms.

Charles had no ſooner made peace with the proteſtants, than he began to regret the loſs of Metz, Toul, and Verdun; and reſolved to attempt the recovery of thoſe biſhoprics, by force of arms. Accordingly, he levied an army of ſixty thouſand men, and prevailed on Albert of Brandenburg to join him, with a ſtrong reinforcement; but after ſpending almoſt ſixty days before the walls of Metz, and loſing upwards of thirty thouſand men, he was compelled to abandon the enterpriſe. To add to his misfortunes, he now loſt the footing which he had hitherto maintained in Tuſcany; and the mal-adminiſtration of his viceroy in Naples threatened that kingdom with the moſt dreadful calamities. Exaſperated by theſe diſaſters, and impatient to obliterate the ſtain which his military reputation had received before Metz, Charles retired into the Low-countries, and carried Terouane and Heſdin by aſſault. In Italy, however, the imperial arms were leſs ſucceſsful, and the Turks continued to augment their conqueſts in Hungary. After the war had been carried on for ſome time, with various ſucceſs, a truce for five years was concluded between the emperor and Henry II. king of France, on condition that both parties ſhould retain the territories which they then had in poſſeſſion.

Shortly after the ceſſation of hoſtilities, the emperor, finding his health rapidly decline, determined to relinquiſh the burthen of government; and accordingly recalled his ſon, on whom, at his recent marriage with Mary queen of England, he had beſtowed the kingdoms of Naples and Sicily, together with the duchy of Milan. Having aſſembled the ſtates of the Low-countries at Bruſſels, he explained the reaſons of his reſignation, recapitulated the moſt important actions of his life, and transferred the ſovereign authority to Philip with ſuch unaffected magnanimity and paternal affection, that the whole audience melted into tears. A few weeks after this ſolemnity, Charles conferred all his royalties and ſignories, both in Europe and America, upon his ſon; reſerving nothing to himſelf but a penſion of one hundred thouſand crowns, to be deducted from the revenue of Spain. After making ſome ineffectual attempts to ſecure the German princes in the intereſts of Philip, Charles made a formal reſignation of the empire to his brother Ferdinand, and immediately ſet out for Spain with a choſen retinue, A. D. 1555. On his landing at Laredo, his joy was ſo exceſſive, that he proſtrated himſelf upon his knees, and with an exclamation of rapture kiſſed the ground. Previouſly to his arrival in Spain, a ſmall building had been annexed to the monaſtery of St. Juſt, conſiſting of ſix rooms; four of them in the form of friars' cells, with naked walls; and the other two hung with brown cloth, and furniſhed in the moſt ſimple manner. Thither Charles retired with only twelve domeſtics; and there, after a peaceful ſolitude of about two years, he reſigned his breath, in the fifty-ninth year of his age. His body was interred at Granada, near thoſe of his grandfather and grandmother; but it was afterwards removed to the Eſcurial, by order of Philip IV. —See the article SPAIN.

FROM THE ABDICATION OF CHARLES V. TO THE TREATY OF RASTADT.

Ferdinand I. brother of Charles V. having been unanimouſly approved of by the electors, they transferred to him, on the late emperor's act of abdication, the imperial dignity, and took the accuſtomed oaths of allegiance. The Roman pontiff, however, refuſed to admit the abdication of Charles, or the election of his brother, becauſe both theſe events had taken place without his concurrence. He even refuſed audience to don Martin de Guzman, whom Ferdinand had ſent to take the uſual oath in his name; and appointed certain cardinals to examine into the merits of the affair. Theſe commiſſaries declared that the ambaſſador could not be admitted to any audience, until he ſhould have demonſtrated in what manner the imperial throne became vacant, and by what right Ferdinand pretended to the ſucceſſion; as all the recent proceedings at Frankfort were null and void, becauſe carried on by heretic electors, without the conſent of his holineſs. Ferdinand, however, paid little regard to this declaration; for he conſidered the ancient cuſtom of ſoliciting the papal confirmation, and going to receive the imperial diadem at Rome, as ſuperfluous ceremonies. His indifference was not productive of any ſerious conſequence; for, on the death of Paul IV. which happened ſhortly after the election, he received the confirmation of his new dignity from Pius IV.

Ferdinand, being deſirous of ſettling the affairs of the empire, convoked a diet at Augſburg, in 1560, to which was given the name of the *aulic council*; and he earneſtly exhorted the princes and ſtates to ſubmit to it, as the only means of re-eſtabliſhing the union of Germany; and he pledged his word that they ſhould be more favourably heard in that aſſembly than they had been in the council of Trent. The proteſtants refuſed to accede to this propoſal: upon which Ferdinand ſolicited the pope to convoke a national council; and after ſome time his holineſs publiſhed a bull for renewing the council of Trent, whither all princes, prelates, and ambaſſadors, were invited. On the publication of this bull, the proteſtants aſſembled at Naumberg in Saxony, where they were viſited by two nuncios, whom the pope had ſent to invite them to the council. But, though they received the papal ambaſſadors with great politeneſs, and liſtened to their harangue with profound attention, they firmly

firmly refuſed to attend a council which the pope had no power to convoke, and declared their intention of adhering to the Confeſſion of Augſburg in ſpite of all oppoſition.

In the mean time, Ferdinand managed his intereſts ſo ſucceſsfully in a diet at Frankfort, that his ſon Maximilian, who had already received the crown of Bohemia, was unanimouſly elected king of the Romans. He likewiſe took this opportunity of attempting to perſuade the proteſtants to ſubmit to a general council; but finding them inflexible, he reſolved to take another method to terminate thoſe diſſenſions which had ſo long diſtracted the empire. Accordingly, with the aſſiſtance of Charles IX. of France, he concerted a remonſtrance to the fathers of the council, exhorting them to undertake a reformation among the eccleſiaſtics, whoſe depravity afforded a ſubject of univerſal complaint; but the pope would not allow the council to take cognizance of an an affair which he affirmed to belong to his own peculiar province. This was the laſt public act in which Ferdinand was concerned; for he was ſoon afterward attacked by a diſorder, which put a period to his life, in the ſixty-firſt year of his age, and the eighth of his reign, A. D. 1564.

Maximilian II. aſcended the imperial throne immediately after the death of his father. Like him, he preferred pacific expedients in all diſputes, eſpecially thoſe of religion: obſerving that ſpiritual affairs ought not to be determined by the ſword; and affirming that thoſe who held a contrary opinion were enemies to union and tranquillity.

Having obtained a ſubſidy for the maintenance of a numerous army, Maximilian marched, at the head of eighty thouſand foot and twenty thouſand horſe, into Hungary, where Solyman had inveſted Zighet. But, being perſuaded to remain on the defenſive, he had the mortification to witneſs the reduction of that town; and imprudently retreated to Auſtria, while the infidels were thrown into conſternation by the ſudden death of their ſovereign, which was occaſioned by an apoplexy. The emperor however placed ſuch ſtrong garriſons in moſt of the principal towns of Hungary, that Selim, the ſon of Solyman, thought proper to conclude a truce for twelve years. On his return from this expedition, Maximilian condemned John-Frederic, duke of Saxony, to perpetual impriſonment, for having granted a protection to criminals, and levied troops with a deſign of ſeizing the imperial throne. About this time alſo the proteſtants of Auſtria were indulged in liberty of conſcience; and the emperor made ſome vigorous, though ineffectual, exertions on behalf of thoſe inhabitants of the Netherlands whoſe religion ſubjected them to the vengeance of the court of Spain.

After procuring his eldeſt ſon Rodolphus to be elected king of the Romans, and acknowledged as his ſucceſſor to the crowns of Hungary and Bohemia, Maximilian hoped to have obtained the kingdom of Poland for his ſecond ſon; and he actually made preparations for aſſerting his claim by force of arms. But his project was ſoon interrupted by a diſtemper, which induced him to relinquiſh all worldly affairs, and devote his thoughts entirely to the contemplation of a future ſtate. He had for ſome time been accuſtomed to diſcourſe, in his familiar parties, upon the immortality of the ſoul; and he encountered the terrors of death with perfect reſignation, in the fiftieth year of his age. Maximilian II. appears to have been one of the moſt amiable princes that ever ſwayed the imperial ſceptre. No individual ever complained of having heard a harſh expreſſion from his lips; none ever departed diſſatisfied from his audience. So regular were his economical arrangements, that to every act of his life its appropriate hour was allotted; and every day, after dinner, the meaneſt of his ſubjects was at liberty to approach him. A faithful huſband, an affectionate parent, and a paſſionate lover of truth, his example had conſiderable influence on the manners of his people, and the empire flouriſhed in a peculiar manner under his adminiſtration.

On the demiſe of this illuſtrious prince, A. D. 1576, his eldeſt ſon ſucceeded to the empire by the title of Rodolphus II. and the firſt acts of his government were calculated ſtill to preſerve the peace of Germany, and to provide a powerful reſiſtance againſt the Turks. Their emperor, Amurath III. in violation of a truce which he had concluded, made an hoſtile incurſion into Croatia, and ravaged the country with fire and ſword. Hereupon Rodolphus ſent out an army of forty thouſand men, which attacked the infidels, near the abbey of Siffeg, and defeated them with prodigious ſlaughter. Amurath made ſome vigorous attempts to retrieve this misfortune; but victory continued to hover over the imperial ſtandard, and the Turks were again diſcomfited, with the loſs of twelve thouſand men. The emperor's lieutenant-general alſo recovered twelve ſtrong caſtles, and emancipated a prodigious number of Chriſtians from ſlavery.

After obtaining ſome freſh ſupplies from a diet at Ratiſbon, the emperor returned to Prague, in order to prepare for the defence of Hungary, as the grand-vizir Sinan, general of the Turks, had compelled the archduke Matthias to raiſe the ſiege of Graan; made himſelf maſter of the fortreſſes of Thata and St. Martin; and prevailed on the governor of Javerin to betray his truſt for a conſiderable ſum of money. In 1526, Sinan's progreſs was checked by a reinforcement which the emperor ſent to his brother Matthias, and the infidels were defeated in ſeveral engagements; but the enſuing year was not ſo fortunate to the imperialiſts. Mohammed III. who had ſucceeded Amurath in the Ottoman empire, reſolved to ſignaliſe the commencement of his reign by ſome great exploit; and accordingly marched with an army of a hundred and fifty thouſand men againſt Agria, one of the moſt important places in Hungary. At firſt the garriſon made a reſolute defence; but, growing impatient at the delay of an expected reinforcement, they compelled the governor to ſurrender upon diſhonourable conditions. This baſeneſs, however, was amply revenged; for the Turks had no ſooner entered the place than they violated the capitulation, and put the whole garriſon to the ſword.

The war was carried on with various ſucceſs for about nine years; but as no advantages were gained by either party which could juſtify ſuch a prodigious effuſion of blood, both ſides began to think of peace, and an accommodation was concluded, in 1606, between the emperor and ſultan Achmet, the ſucceſſor of Mohammed, by which it was agreed that the Turks ſhould forbear from making incurſions on the Chriſtians; that both parties ſhould mutually ſend preſents to each other every three years; that they ſhould retain their reſpective conqueſts; and that they ſhould not attack each other on any pretence during the term of twenty years.

Shortly after the ratification of this treaty, the ſtates of Hungary aſſembled at Preſburg, and elected the archduke Matthias for their king, on condition that he ſhould confirm all their privileges, and indulge them with the liberty of profeſſing the reformed religion. Many of the Bohemians alſo determined on a ſimilar meaſure, and actually perſuaded Matthias to march into their country at the head of a numerous army. Theſe proceedings were extremely diſagreeable to the emperor, who had conceived a ſlight jealouſy of his brother; and it was expected that ſome ſerious conſequences would take place. But theſe were happily prevented by the interpoſition of the princes; and, after ſome time, a treaty was concluded, by which Rodolphus yielded Hungary and Auſtria to the archduke, and even promiſed to ſecure him in the ſucceſſion to Bohemia, provided he himſelf ſhould die without male iſſue. After this tranſaction the emperor became melancholy and diſtruſtful, and ſe-

cluded himſelf in the retirement of his palace, till he was ſeized with a diſorder which put a period to his life, in the fifty-ninth year of his age, and the thirty-ſixth of his reign, A. D. 1612.

Matthias, having received his brother's diadem from the electors, fixed his reſidence at Vienna, and exerted himſelf to re-eſtabliſh the tranquillity of the empire. This he in a great meaſure effected; and he had alſo the good fortune to perſuade the Perſians and Ruſſians to participate the burthen of a war againſt the Turks. But, by his procuring the crowns of Hungary and Bohemia for his couſin Ferdinand, he occaſioned much diſturbance and effuſion of blood. Ferdinand had no ſooner received the ſceptre of Bohemia, than he declared himſelf inimical to the ſectaries, who were very numerous in that kingdom; and both the proteſtants and catholics ſoon perceived that his grand object was to weaken their parties, for the purpoſe of obtaining abſolute authority. A general revolt was the conſequence of this diſcovery; and, though the emperor aſſiſted his couſin with the braveſt troops of Germany, the Bohemians defended themſelves with extraordinary reſolution, and often cauſed the victory to be doubtful. After this conflict had continued ſome time, the ſtates of Sileſia entered into an alliance with the Bohemians; which meaſure proved the ſource of a war that ravaged Germany during the ſpace of thirty years. This misfortune, together with the loſs of his empreſs, and the obvious diſcontent of the Auſtrians, had ſuch an effect upon Matthias, that he ſunk into a languiſhing diſtemper, which terminated his life in the ſixty-third year of his age and the eighth of his reign, A. D. 1619.

Upon the demiſe of Matthias, the imperial crown was offered to Maximilian duke of Bavaria; but he prudently refuſed a preſent which muſt inevitably have ſubjected him to the vengeance of the houſe of Auſtria; and, after ſome time, Ferdinand II. was proclaimed king of the Romans with the accuſtomed ceremonies. The Bohemians were ſo highly exaſperated at this election, that they renounced all allegiance to Ferdinand, and beſtowed his diadem upon Frederic, the elector palatine. That prince prevailed on the kings of Sweden and Denmark to eſpouſe his cauſe; but, while he remained in expectation of their aſſiſtance, he was totally defeated by the imperialiſts, put under the ban of the empire, and deprived of all his ſtates. Gabor alſo, whom the emperor had, in a moment of difficulty, acknowledged as king of Hungary, was now compelled to reſign his regal dignity; the king of Denmark was deſpoiled of his Germanic poſſeſſions, and confined within his priſtine boundaries; and Mansfeld, the gallant general who had long nouriſhed the martial ardour of the Bohemians, fell a victim to unconquerable grief.

Theſe ſucceſſive advantages ſeemed to promiſe Ferdinand a happy triumph; but his hopes proved illuſive, and a tremendous ſtorm ſoon followed the ſun-ſhine of ſecurity; for now commenced the thirty years war, which aimed at the total extirpation of the proteſtants. The court of Vienna, emboldened by ſucceſs, was the firſt to avow their deſign of ſuppreſſing the proteſtant religion, extinguiſhing the liberties of the empire, and rendering the imperial diadem hereditary in the houſe of Auſtria. Germany conſequently began to tremble with the apprehenſion of a ſlaviſh ſubjection; the proteſtants more eſpecially took the alarm; and cardinal Richelieu, anxious to humble the Auſtrian greatneſs, excited the public inquietude, and fomented the diſcontent of Guſtavus Adolphus king of Sweden, who had been inſulted by the emperor. Richelieu's plans were attended with complete ſucceſs. The proteſtants and catholics, laying aſide their theological diſputes, conſpired together for the diminution of Ferdinand's power; the courts of France and England cheerfully embarked in the ſame cauſe; and Guſtavus ruſhed, with the impetuoſity of a torrent, into Germany.

Having made himſelf maſter of ſeveral places of importance, and engaged in a treaty with the landgrave of Heſſe and the electors of Saxony and Brandenburg, Guſtavus made preparations for engaging count Tilly, general of the imperial forces, who was then encamped in the fields of Leipſic. Accordingly the two armies (each conſiſting of about forty thouſand men) were drawn up in order of battle, and a moſt obſtinate conflict enſued; but victory declared in favour of the Swedes and their allies, and the imperialiſts were defeated, with the loſs of ſeven thouſand ſix hundred men, beſides five thouſand who were taken priſoners. One hundred pair of colours and many ſtandards, together with all the baggage and artillery, fell into the hands of the conquerors. The immediate conſequence of this victory was the reduction of Leipſic, which had been long wreſted from the elector of Saxony: and Guſtavus extended his conqueſts with ſuch ſurpriſing rapidity, that he ſoon made himſelf maſter of the whole country from the Elbe to the Rhine, comprehending a ſpace of near one hundred leagues, full of fortified towns. Erfort in Thuringia, Wirtzburg, and all the ſtrong places of Franconia, eluded his reſentment, by timely ſubmiſſions; Mentz ſurrendered, after a ſhort reſiſtance; and the victorious prince erected a pyramid upon the banks of the Rhine, that poſterity might know how far he had conducted his heroic followers.

Theſe ſucceſſes were followed, in 1632, by a general revolution in favour of the conqueror; and Ferdinand ſaw himſelf in danger of being beſieged in his own capital, or chaſed for ever from his dominions. In this extremity his miniſters repreſented, that the moſt prudent expedient for re-eſtabliſhing his affairs would be to deprive Tilly of his command, and beſtow it upon a general of ſuperior ability. This advice was accepted; and Walſtein duke of Fridland, who had been unjuſtly diſgraced, was now recalled to defend his country. But notwithſtanding this regulation, and the ſubſequent exertions of the emperor, Guſtavus continued to enlarge his conqueſts; and the wreath of laurel which adorned his brow ſeemed to acquire freſh verdure in every engagement. Having reduced a conſiderable part of Franconia, and expreſſed his intention of penetrating into Bavaria, he received intelligence that Tilly had prepared to diſpute the paſſage of the Leck; but he perſiſted in his deſign, and opened ſuch a prodigious fire upon the imperial regiments, that they were ſoon diſperſed with dreadful ſlaughter, and Tilly himſelf was mortally wounded.

While Guſtavus was employed in the reduction of Munich, Walſtein reduced all Bohemia under the dominion of the emperor; but the recollection of his private wrongs predominated in his mind, and he obſtinately refuſed to adopt ſuch meaſures as might have facilitated the reſtoration of a general peace. He even permitted his troops to ravage the Upper Palatinate, as if it had been an enemy's country; and inſtead of attacking the Swedes while they were greatly inferior to him in numbers, he contented himſelf with cutting off their convoys, and interrupting their foraging parties. Meanwhile Guſtavus received ſuch numerous reinforcements, that he ſoon found himſelf at the head of ſixty thouſand men, and made immediate preparations for attacking the imperialiſts in their camp. An engagement accordingly enſued, in which both parties diſtinguiſhed themſelves by extraordinary exertions for the ſpace of ten hours: but, though every regiment in the Swediſh army marched up to the attack in its turn, Guſtavus found it utterly impoſſible to force the intrenchments; and he therefore reſolved to effectuate a retreat.

After this rencontre, Guſtavus marched to Naumburg, where he received intelligence that Papenheim had been detached from the imperial army to conduct ſix regiments to Cologne; and that Walſtein had retired to Lutzen, at the diſtance of two leagues from Leipſic. The

king was elated by this news, and immediately ſet out to attack his enemies, who had thus imprudently weakened their forces. On his arrival at Lutzen, in 1633, he arranged his troops in order of battle, and next morning commenced the aſſault with ſuch irreſiſtible fury, that the imperialiſts were driven from the place where their cannon was mounted: but this poſt was retaken in half an hour, and the Swedes were compelled to give way in their turn. Alarmed at this circumſtance, Guſtavus alighted from his charger, and, putting himſelf at the head of his regiments, "If," ſaid he, "after having forded ſo many rivers, ſcaled ſo many walls, and reduced ſo many fortified towns, you have not courage to defend me, at leaſt make one effort to ſtand and witneſs my death." This ſpeech produced an inſtantaneous effect upon his troops, who now faced about, and renewed the battle with ſuch reſolution as to gain the artillery and force the intrenchments of Walſtein's camp: but while they were thus employed, their gallant ſovereign was ſlain by a party of cuiraſſiers. This fatal accident, together with the arrival of count Papenheim, ſeemed to threaten the Swedes with the moſt fatal conſequences: but they ſtood their ground with undaunted firmneſs; and continued the combat with unremitting fury, till the imperialiſts were defeated, with the loſs of ſix thouſand men and all their cannon. Next morning the king's body was found, ſtripped and mangled, on the field of battle; whence it was conveyed to Stockholm with great ſolemnity.

Upon the death of Guſtavus, the emperor was adviſed to publiſh a general amneſty, in order to facilitate an accommodation: but he perſiſted in his deſign of acquiring abſolute power, and made new preparations for continuing the war. Germany was, therefore, doomed to remain under her diſtracting calamities; towns were reduced and retaken; battles were fought with various ſucceſs till the country was purpled with blood. During theſe tranſactions, Walſtein alarmed the emperor by his ambitious conduct; and, in conſequence of his threatening a revolt, the cabinet of Vienna determined that he ſhould either be killed or apprehended. The former alternative took place, and the gallant duke of Fridland periſhed by the hand of an aſſaſſin. His moſt intimate friends, who had engaged to follow his fortune, met a ſimilar fate.

Notwithſtanding the general calamities which had reſulted from his own pride and ambition, Ferdinand poſſeſſed ſufficient intereſt with the ſtates to procure the election of his ſon as king of the Romans. This, however, was one of his laſt gratifications; for he died ſoon afterwards, in the fifty-ninth year of his age, and the eighteenth of his reign. By the performance of ſeveral vows which he made againſt the proteſtants, he acquired the appellation of the "Apoſtolic Emperor," and many popiſh hiſtorians have held him up as the object of admiration: but, from an impartial review of his conduct, we muſt pronounce him an unfeeling bigot, and a ſcourge of the empire.

Ferdinand III. ſon of the late emperor, aſcended the imperial throne at a diſtreſſing juncture; for though he ſucceeded in tranquilliſing the interior of Germany, he had the mortification to perceive that the flames of war continued to rage with unabated fury on the frontiers, and that the calamities of the people were unneceſſarily prolonged by the generals employed, Bannier, Torſtenſon, Weimar, Wrangel, Merci, and many others, who were anxious to diſtinguiſh themſelves by their gallant conduct. Shortly after the new emperor's acceſſion, Bernard duke of Weimar penetrated into Alſace, and croſſed the Rhine by a bridge of boats about ſix leagues above Straſburg: he alſo erected ſeveral forts in the iſland of Wittenweyer. But his forces were defeated by general de Wert; and he himſelf was ſeriouſly embarraſſed by the death of his friend William landgrave of Heſſe-Caſſel, who had deſigned to re-eſtabliſh the Palatine family, by means of a league between France, Sweden, and the United Provinces.

The duke's courage, however, was not damped by theſe misfortunes. Having croſſed the Rhine with ſome choſen troops, he reduced the foreſt-towns of Seckingen, Lauffemberg, and Waldſhut, and defeated the imperialiſts in a pitched battle before Rhinfield. Hunningen, Neuberg, and Rottelin, were ſoon added to his conqueſts; and Briſac was obliged to ſurrender, after having been reduced to ſuch extremity of famine, that the inhabitants were with difficulty reſtrained from digging up and devouring the bodies of their deceaſed friends. Louis XIII. being appriſed of theſe tranſactions, diſpatched a meſſenger on pretence of congratulating the duke, but in reality to perſuade him to cede Briſac to the crown of France. This attempt proved unſucceſsful; but Weimar returned ſuch an evaſive anſwer, that the French monarch promiſed him a reinforcement of eight thouſand men.

Whilſt the duke of Weimar was thus triumphing over the Auſtrians in Alſace, and the Swediſh general Bannier was employed in the reduction of Pomerania, an engagement took place in Weſtphalia, between Charles Louis, prince palatine, and count de Hasfeld, one of the emperor's lieutenant-generals; and, after a very ſanguinary conflict, victory declared in favour of the imperialiſts. Prince Rupert and count de Ferents were made priſoners; all the palatine's artillery fell into the hands of the conqueror; and Charles Louis eſcaped with great difficulty to Minden.

Upon the demiſe of the duke de Weimar, which happened ſhortly after his reduction of Thau, in 1639, a treaty was concluded between the king of France and the Weimarian forces; by which the duke de Longueville was acknowledged general, and a reſolution was taken to march toward the Lower Palatinate, while the count de Guebriant put the foreſt-towns in a ſtate of defence; John Louis d'Erlach was continued in the government of Briſac; and Philip Bernold, a gentleman of Alſace, was inveſted with the command of Rhinfeld. In the mean time conferences were held at Hamburg, to promote the reſtoration of peace; but the powers who ſent their miniſters ſeemed to be inſpired with mutual diſtruſt. Louis XIII. quarrelled with the count palatine about the omiſſion of ſome ceremonial; an ancient grudge which ſubſiſted between the French and Engliſh rendered them averſe to the concluſion of a treaty; and the Dutch, who were ill-affected to both, refuſed to renounce the neutrality which they had promiſed to the emperor.

While all the true patriots of Germany regretted the failure of theſe negociations, Bannier was making a rapid progreſs in Saxony; where he took ſeveral places of importance, and defeated the Saxon general Maracini in two engagements. Bohemia was alſo filled with diſmay by the terror of his arms; and Mecklenburg, Brandenburg, and Franconia, were ravaged by generals Koningſmark and Axel-Cili. The emperor endeavoured to check Bannier's career by ſome ſplendid offers, and the Swediſh hero actually began to think of putting an end to his fatigues: but this was a mere ſtratagem to amuſe the mareſchal, till the archduke Leopold and general Picolomini ſhould be in readineſs to march againſt him. Upon the arrival of theſe imperial forces, Bannier formed a junction with the troops of de Longueville, and perſuaded George duke of Brunſwic to aſſiſt him with three thouſand foot and five hundred horſe: but Picolomini's advantageous encampment precluded the hope of a ſucceſsful attack; and, after the two armies had remained in ſight of each other for ſix weeks, the confederates removed to Neuſtadt. Picolomini followed them with the utmoſt expedition; but he ſtill remained on the defenſive, and carefully ſhunned an engagement. By ſteadily purſuing this conduct, the imperial general compelled Bannier to quit the hereditary territories of the houſe

houſe of Auſtria, and eventually chaſed the confederates out of Franconia.

The hoſtile powers again expreſſed a wiſh for a pacification; and Lutzoro, one of Ferdinand's aulic counſellors, was employed to negociate the preliminaries at Hamburg, with the plenipotentiaries of France and Sweden, A. D. 1641. But the emperor conſidered the articles as derogatory to his honour; and a diet which he had convoked at Ratiſbon granted him ſupplies for carrying on the war. Bannier, being appriſed of this circumſtance, formed the deſign of diſperſing the aſſembly, and even of ſurpriſing the town: accordingly he led the confederates to Schwendorf, whence he detached ſix regiments of cavalry acroſs the Danube, to Ratiſbon. The approach of this army occaſioned an univerſal conſternation; fifteen hundred imperial troops were made priſoners, and the emperor himſelf eſcaped with difficulty; for whilſt he was preparing to take the diverſion of hunting, his advanced guard, litter, hawks, and equipage, were all carried off by the enemy. It ſeems that the confederates had deſigned to take the advantage of the froſt, to block up the town; but the weather becoming more mild, they were obliged to repaſs the river, and rejoin their main army. Soon after this expedition, Bannier retired to Halberſtadt, where he died, in the forty-firſt year of his age, to the inexpreſſible regret of his partiſans.

Notwithſtanding the death of Bannier, war continued to deſolate the empire; and the imperial forces were extremely unſucceſsful. Picolomini and the archduke Leopold flattered themſelves with the hope of compelling the proteſtant princes of Brunſwic and the landgrave of Heſſe to ſue for an accommodation; but this project was ſoon fruſtrated by the Swedes and French, who met and defeated them near Wolfembuttle, with great ſlaughter. In the enſuing campaign, count de Guebriant gained a deciſive victory over a body of Auſtrian troops near Ordinguen; the duke of Saxe-Lawemburg was defeated by the Swediſh general Torſtenſon, and obliged to ſurrender himſelf priſoner of war; and a more numerous army under Picolomini was utterly diſperſed in the plain of Breitenfield, with the loſs of eight thouſand men, forty-ſix pieces of cannon, one hundred and ſixteen pair of colours, and ſeventy-five ſtandards. After this battle, and the ſubſequent reduction of Leipſic, in 1643, the confederates expected that the houſe of Auſtria would be ſincerely diſpoſed to an accommodation; but as the courts of Vienna and Madrid were ſenſible that an exorbitant price would be ſet upon the peace at that juncture, they appeared very indifferent about renewing the negociations. However, after mature deliberation, they agreed to open conferences for a general peace in the month of July; and the preliminaries being publiſhed, all the nations which had been ſo long expoſed to a calamitous war, congratulated themſelves upon the near approach of returning tranquillity.

But this pleaſing proſpect was for a time overcaſt by the death of Louis XIII. and the hoſtile deſigns of the new government. A victory obtained over the Spaniards, by the duke d'Enguien, convinced the confederates that they might ſtill expect the aſſiſtance of the French miniſtry; and Torſtenſon was ordered by his court to march againſt the king of Denmark, whom they accuſed of harbouring all the ſentiments of an enemy, under the maſk of a mediator. About the ſame time the duke of Lorrain renounced his treaty with France; Guebriant was mortally wounded at the ſiege of Rotweil; and de Rantzau, who ſucceeded him in command, was defeated and taken priſoner by count de Merci, general of the Bavarians. On the re-eſtabliſhment of peace between the crowns of Sweden and Denmark, Torſtenſon returned into Germany, and purſued the imperial army from place to place, till at length an engagement took place in the neighbourhood of Thabor. This action continued for the ſpace of four hours with equal obſtinacy and ſucceſs, but the Auſtrians were defeated; general Gocutz, and about three thouſand men, were killed on the ſpot; general Hasfield, and ſeveral officers of diſtinction, were numbered among the priſoners, and twelve hundred fugitives were overtaken and ſlaughtered upon the banks of the Danube.

Alarmed by theſe repeated misfortunes, Ferdinand preſſed the elector of Bavaria to furniſh him with more troops; and the duke accordingly ſent four thouſand men toward Vienna, while Galas collected the remains of the imperial army in Bohemia, and encamped under the cannon of Pilſen to obſerve the motions of the enemy. Torſtenſon, in the mean time, made himſelf maſter of almoſt all the towns in Moravia, and laid cloſe ſiege to Brinn, as the reduction of that place would enable him to penetrate into Hungary and Auſtria. Upon the firſt intelligence of Torſtenſon's deſign, the city of Vienna was overwhelmed with ſuch conſternation, that the emperor immediately retired to Ratiſbon; and the empreſs, with many of the courtiers, took refuge at Gratz, in Stiria. All the valuable furniture was removed; the fortifications were repaired; the magazines were filled; and all the neceſſary preparations made for ſuſtaining a vigorous ſiege. However it was ſoon diſcovered that Torſtenſon had no intention of attacking the capital, and the gallant reſiſtance of Brinn gave Ferdinand time to put his affairs in better order. During theſe tranſactions, general Merci obtained a ſignal victory over the viſcount de Turenne, in the neighbourhood of Mariendal; but, on the arrival of a reinforcement under the duke d'Enguien, a ſecond battle was fought, which terminated in the death of Merci, and the defeat of the imperialiſts. Nordlingen, and ſome adjacent towns, immediately opened their gates to the conquerors; but they were, ſoon afterward, retaken by the archduke Leopold.

Torſtenſon having reſigned the command of the Swediſh army, in 1646, general Wrangel was nominated as his ſucceſſor; and his arms were attended with conſiderable ſucceſs. In concert with the viſcount Turenne, he ravaged part of Bavaria, pillaged all the country toward the Lake of Conſtance, and ſurpriſed ſeveral important fortreſſes in the vicinity of Bruckheim. Meanwhile the emperor cauſed his ſon Ferdinand to be proclaimed king of Bohemia, and afterwards carried him to Preſburg, where he was ſolemnly inveſted with the crown of Hungary. Early in the enſuing ſpring, Wrangel and Turenne attacked an imperial army, under general Melander, in the neighbourhood of Augſburg. The engagement commenced with great fury, and both ſides fought with incredible reſolution; but, on the death of Melander, the imperialiſts were thrown into confuſion, and were diſperſed with great ſlaughter. About the ſame time baron Lamboy, who commanded the troops of Weſtphalia and Cologne, was utterly defeated in the duchy of Juliers; and Charles Guſtavus, prince palatine, undertook the ſiege of Prague with ſo numerous an army, that the place muſt inevitably have been taken, had not the emperor now reſolved to conclude a peace.

Hitherto the negociations at Munſter and Oſnaburg had varied according to the viciſſitudes of the war: the ceſſion of Alſace to the crown of France, and the ſeveral demands of the treating powers, met with ſuch difficulties as appeared almoſt inſurmountable. But after many debates and altercations, theſe obſtructions were removed; the conferences were tranſlated firſt to Oſnaburg and then to Munſter; and at each place a treaty was concluded, ſince known by the appellation of the "Peace of Weſtphalia," which terminated the thirty years war. By this treaty, France acquired the biſhoprics of Metz, Toul, and Verdun; together with Briſac, the landgraviate of Upper and Lower Alſace, the Suntgaw, and the prefecture of the ten towns ſituated in Alſace: Sweden obtained the archbiſhopric of Bremen, and ſome other territories: the houſe of Auſtria recovered the foreſt-towns, with all their territories and appurtenances:

purtenances: the electors and princes of both parties were re-eſtabliſhed in all their poſſeſſions: and the proteſtants obtained the right of exerciſing their religion, both in private and public. Yet notwithſtanding all the precautions that could be taken, many difficulties intervened before this important buſineſs could be concluded. The pope publiſhed a bull, annulling all the articles which he conceived prejudicial to the Romiſh religion; and the king of Spain formally proteſted againſt the reſtoration of the Lower Palatinate to Charles Louis, count palatine of the Rhine. But theſe meaſures were totally diſregarded; and, after mature deliberation, the plenipotentiaries of the different powers mutually delivered their ratifications, A. D. 1649.

Soon after the reſtoration of peace, the emperor exerted himſelf to procure the ſucceſſion for his ſon Ferdinand; and that prince was accordingly elected king of the Romans, in 1652, after ſigning a ſolemn engagement, by which he obliged himſelf to maintain inviolably the Golden Bull; to obſerve religiouſly the treaties of Munſter and Oſnaburg; and to form no alliance concerning the affairs of the empire without the conſent of the Germanic body. After this, the emperor returned to Ratiſbon; where a diet was held to deliberate upon complaints that had been made by ſeveral ſtates againſt the king of France, who, they affirmed, had invaded their privileges, in conſequence of the ceſſion of Alſace. The inhabitants of Bremen alſo complained that Charles Guſtavus, king of Sweden, paid no attention to the preſervation of their rights, but had even ſurpriſed a borough in their neighbourhood by force of arms; and that, when the towns of Lubec and Hamburg remonſtrated on theſe proceedings, Koningſmark had replied, that neither the diet nor the emperor had the leaſt right to intermeddle with the concerns of Sweden and its ſubjects. Upon this repreſentation, the circles of Weſtphalia and Lower Saxony were ordered to defend the privileges of Bremen, and hoſtilities were immediately threatened on both ſides; but, by the mediation of the Hollanders, this difference was accommodated; and the grievances of Bremen were redreſſed in a congreſs at Staden. At the ſame time, the proteſtants choſe the elector of Saxony to direct their conferences and execute their reſolutions; and the catholics declared the elector of Bavaria chief of their union. Theſe affairs being ſettled, the diet broke up; and the emperor, with his empreſs and eldeſt ſon, returned to Vienna amidſt univerſal acclamations. The joy of the populace, however, was ſoon converted into mourning, by the loſs of the king of the Romans, who died in the twentieth year of his age; and the imperial court removed to Eberſdorf, overwhelmed with grief.

Having procured his ſon Leopold to be acknowledged king of Hungary, and amuſed the proteſtants of that kingdom with great promiſes of indulgence, Ferdinand engaged in a treaty with the kings of Denmark and Poland againſt the Swedes. This league was approved by the cham of the Crim Tartars, and the king of Denmark declared war by a manifeſto: but the emperor did not ſee the effect of theſe meaſures; for, previouſly to the commencement of hoſtilities, he died at Vienna, in the forty-ninth year of his age, and the twentieth of his reign, A. D. 1657. Ferdinand III. was zealouſly attached to the Romiſh religion; and on ſome occaſions he expreſſed a tender regard for the intereſts of his ſubjects: but he was peculiarly unfortunate in the diſtribution of his favours, and admitted ſeveral perſons into his councils who involved him in many difficulties. It is but juſtice, however, to obſerve, that no emperor was ever attacked by ſo many potent enemies at once, or ſuſtained ſuch accumulated defeats, without ſinking under his misfortunes.

Immediately after the demiſe of this prince, an electoral diet was held at Frankfort, in order to ſupply the vacancy on the imperial throne; and, after much oppoſition on the part of France, Leopold Ignatius, king of Hungary and Bohemia, was declared duly elected. The new emperor, having compelled the king of Sweden to make an accommodation with Poland, determined alſo to check his progreſs in Denmark, and accordingly ordered a numerous army of Auſtrians and Brandenburgers to invade Pomerania: but the Swediſh generals took ſuch precautions for the defence of the principal towns, that this expedition was rendered abortive. Meanwhile, the French and Engliſh preſſed the States-general to withhold all further aſſiſtance from the king of Denmark; and, having concluded a treaty, called the Convention of the Hague, they engaged to reduce by force that party which ſhould refuſe to come to an accommodation. This meaſure was extremely diſpleaſing to his Swediſh majeſty; but, having ſuſtained a ſevere defeat, he declared his reſolution of acceding to it; and his death, which happened ſoon afterwards, facilitated the reſtoration of peace.

Scarcely were the troubles of the North compoſed, before Leopold I. was threatened with an invaſion from the Turks, who had made an irruption into Tranſylvania, ſlain the vaivode Ragotſki in battle, and threatened to ravage the country of Zathmar with fire and ſword, unleſs the inhabitants would acknowledge the ſultan for their ſovereign. Hereupon Leopold ſent Montecuculi with twenty thouſand men into Hungary, garriſoned Zekelheid with five thouſand Germans, and repaired all the fortifications of the frontier towns. Theſe preparations, however, were by no means agreeable to the Hungarian nobles: they imagined that Leopold intended rather to conquer their country than to oppoſe the invaders; and that, by taking poſſeſſion of all the fortreſſes, he hoped to drive the proteſtants out of Hungary, as he formerly had expelled them from Bohemia. Theſe ſuſpicions being communicated to the commonalty, a general diſcontent prevailed over all parts of the kingdom, and the imperialiſts were obliged to make uſe of violence to obtain quarters and proviſions.

In the enſuing ſpring, the Turks took the field, and advanced by rapid marches towards Friuli; but they were attacked by count Serina at the paſſage of the Sluin, and defeated with prodigious ſlaughter. The conqueror improved this advantage by burning the bridge of Eſſek, taking the city of Five Churches, and ſecuring ſeveral important places between the Drave and the Danube; while the count de Souches, who commanded a ſeparate detachment, defeated four thouſand of the infidels near Newhauſel, and attacked the town of Lewentz with ſuch irreſiſtible fury, that the garriſon ſurrendered at diſcretion.

Meanwhile the grand-vizir, having made himſelf maſter of Serinſwar, in 1664, paſſed the Meur, and avowed his intention of marching to Vienna. Montecuculi, however, reſolved to ſtop his progreſs; and a battle enſued, near St. Godard, which terminated in the total defeat of the Ottoman forces. This memorable engagement laſted from nine o'clock in the morning till four in the afternoon, and the Turks obſtinately refuſed to yield the victory till they had loſt the greateſt part of their troops. Upon the firſt intelligence of this defeat, the emperor expected ſome conceſſions on the part of the Turks, and his expectations were verified; the grand-vizir immediately offered negociations of peace, and a treaty was in conſequence concluded at Temeſwaer.

The Hungarians were ſo highly exaſperated at the concluſion of this treaty, that they openly threatened a revolt, and even aſſaulted the meſſenger who was employed to carry diſpatches from the grand-vizir to their ſovereign. Hereupon the emperor ſummoned ſome of the refractory noblemen to Vienna; and authoriſed prince Lobkowitz, preſident of the imperial council, to tell them, that the Turks had of themſelves propoſed a peace, in which it was agreed that Tranſylvania ſhould enjoy its liberty; that Zathmar and Zambolick ſhould

be ceded to the empire; and that his imperial majeſty ſhould have the power of erecting forts to reſtrain the garriſons of Waradin and Newhauſel. This declaration, together with an aſſurance of exemption from the lodging and ſubſiſtence of foreign troops, appeaſed the minds of the Hungarian lords, who immediately ratified the treaty, and returned peaceably to their reſpective eſtates. But the ſubſequent conduct of the emperor proved ſo inimical to the liberty of Hungary, that the people unanimouſly reſolved to ſhake off their allegiance, and actually took up arms to deliver themſelves from the unjuſt oppreſſions of the houſe of Auſtria.

No ſooner had Leopold ſent a body of forces to check this dangerous revolt, than he received intelligence that Louis XIV. of France had made an irruption into the Low-countries, and threatened to carry the war into Franche Comté. The emperor now ſaw himſelf placed as it were between two fires—being attacked on the one hand by Louis, and on the other by the revolted Hungarians: the princes of the empire offered but little aſſiſtance in this diſtreſſing exigence; and the French monarch purſued his conqueſts with ſuch ſurpriſing rapidity, that in the ſpace of one month the Netherlands were threatened with entire reduction; and the Spaniards were obliged to purchaſe the recovery of Franche Compté by a ceſſion of Borgues, Fernes, Courtray, and the whole country afterwards called French Flanders. In the mean time, the Hungarians perſiſted in their reſolution of either ſhaking off the imperial yoke or leſſening their dependence. Leopold conſented to ſilence ſome of their complaints, by filling up the vacant office of palatine, and reſtoring the proteſtants all their churches and revenues; but the reſidence of a German garriſon at Tokai ſtill afforded ample cauſe of diſcontent, and Hungary ſtill reſounded with murmurs and diſaffection.

While the emperor was taking meaſures to appeaſe the troubles of Hungary, the malcontents of that kingdom, in 1671, conceived the deſign of expelling all the German forces; and counts Tattembach and Serini ſent a private deputation to ſolicit the aſſiſtance of the Turks. The ſultan, however, honourably refuſed this overture; and the conſpirators, being betrayed to his imperial majeſty, periſhed by the hands of the executioner. All the nobles and deputies of Upper and Lower Hungary were then ſummoned to a diet at Preſburg; and inſtead of obtaining their former demands, they were compelled to maintain a German army of thirty thouſand men, to pay their uſual taxes, and to inflict exemplary puniſhments on their ſeditious countrymen.

Meanwhile Louis XIV. having diſſolved the triple alliance of the Dutch, Swedes, and Engliſh, made formidable preparations for an invaſion of Holland, and prevailed on the emperor to obſerve a neutrality. Leopold, however, was ſoon alarmed by the progreſs of the French arms, and determined on ſending a powerful reinforcement to the States-general. Accordingly, he ordered thirty thouſand men to march to their aſſiſtance; and at the ſame time declared by a manifeſto, that, as guarantee of the treaty of Weſtphalia, which the French had violated, he propoſed to exert himſelf for the ſafety of the Germanic body, and to check the progreſs of an inſatiate enemy, who was dreaded by all Europe.

The prince of Orange, being unable to oppoſe the French army, employed himſelf in retaking ſome towns which had been recently ſeized; and, by a ſubſequent junction of his forces with thoſe of Montecuculi and the governor of Spaniſh Flanders, he compelled the enemy to evacuate the provinces of Holland, after they had exacted ſome heavy contributions, and ſecured the artillery at Graves and Maeſtricht.

Louis XIV. opened the next campaign with the ſiege of Beſançon, the garriſon of which made a vigorous defence; but were at length obliged to ſurrender themſelves priſoners of war. Dole, Salins, and Gemerſheim, were alſo reduced; and the viſcount Turenne, having defeated an army of the allies near Sintzheim, ravaged the whole palatinate with fire and ſword. The complaints of the elector palatine upon this occaſion inſpired the other princes of Germany with indignation againſt the invaders; and in leſs than a month they ſent out ſuch powerful reinforcements, that Turenne deemed it adviſable to retire to Landau, while the imperialiſts waited upon the banks of the Ill for the elector of Brandenburg, who had promiſed to join them with twenty thouſand men. Previouſly to that junction, however, they were attacked by Turenne, who obliged them to take refuge under the cannon of Straſburg. He afterwards made a ſucceſsful attempt upon their quarters at Remiremont, and reduced them to great extremities: but in attempting the reduction of Salſbach, he was killed by a cannon-ball, and his troops were obliged to retire with precipitation to Altenheim. Immediately after this event, the elector of Brandenburg made an irruption into Swediſh Pomerania, and the cities of Bremen and Verden were taken by the imperialiſts.

Montecuculi having, in 1677, obtained permiſſion to retire upon account of his infirmities, the command of the imperial army was given to the duke of Lorraine, one of the greateſt generals that ever ſerved the houſe of Auſtria. This prince immediately marched into Upper Alſace againſt the duke of Luxemburg, and attacked the French forces with ſuch impetuoſity, that they were quickly thrown into diſorder, and would have been totally routed, had not their Engliſh allies ſupported the charge, while they retreated under the counterſcarp of Saverne. The ſubſequent ſiege of Philipſburg proved extremely troubleſome to the imperialiſts; for their tents were waſhed away by the overflowing of the Rhine, and the duke of Luxemburg ſeized every opportunity of traverſing their meaſures: but theſe difficulties were ultimately ſurmounted, and the town ſurrendered on capitulation. Meanwhile the elector of Brandenburg, having reduced Stettin, and many other places of importance in Swediſh Pomerania, paſſed over to Stralſund, where general Koningſmark commanded, with one thouſand ſix hundred horſe, and ſix hundred foot. Three thouſand of the citizens immediately took up arms, and avowed their intention of defending themſelves to the laſt extremity; but, after ſuſtaining a furious bombardment, they hoiſted a flag of truce, and obliged the governor to capitulate. Gripſwald was ſoon afterward attacked in a ſimilar manner, and the garriſon were obliged to ſurrender at diſcretion.

Whilſt the duke of Lorraine was employed in Alſace, Leopold gave freſh cauſe of diſcontent to the Hungarians, by ſuppreſſing the office of palatine, and appointing a viceroy for their kingdom. This change of government was ſo extremely odious, that the malcontents immediately threatened to throw off the Auſtrian yoke, and chooſe a king of their own nation; and they received ſuch powerful ſuccours from the vaivode of Tranſylvania, that they were ſoon in a condition to reſiſt the troops of the emperor. Tekeli, prime miniſter to the vaivode, aſſerted the rights of Hungary at the head of twenty thouſand men; and a zealous proteſtant, called Father Joſeph, led a numerous army into the hereditary countries of the houſe of Auſtria, and compelled moſt of the inhabitants to flee for ſafety to Vienna.

The imperialiſts made every poſſible exertion to cruſh this dangerous revolt; but their attempts were generally unſucceſsful, and they were defeated in ſeveral ſucceſſive engagements. This circumſtance, together with the expectation of more ſerious conſequences from the interference of the Turks, induced Leopold, in 1679, to hearken to terms of accommodation, and a truce was accordingly concluded between Tekeli and the imperial general. About the ſame time, Louis XIV. and the allies concluded a peace at Nimeguen, which was ſoon after ratified by the emperor. The elector of Brandenburg, and the king of Denmark, conceiving themſelves

to be injured by this treaty, prepared to aſſert their rights by force of arms, and actually commenced hoſtilities againſt the troops of France and Sweden: but after ſome time they conſented to ſheath their ſwords, and all differences were happily terminated. The bleſſings of tranquillity, however, proved of ſhort duration. Count Tekeli violated the truce in Hungary, and a numerous army of Turks, having joined the malcontents, marched up to the walls of Vienna: whilſt the emperor and his courtiers took refuge in Lintz, and the citizens were overwhelmed with conſternation. On the 16th of July, 1683, the trenches were opened, and the ſiege was carried on with ſuch extraordinary vigour, that a conſiderable breach was made in the body of the place, notwithſtanding the intrepid gallantry of its defendants. But juſt at the moment when all reſiſtance appeared fruitleſs, and the Ottoman forces exulted in the anticipation of their important conqueſt, John Sobieſki king of Poland, with the duke of Lorraine and the elector of Bavaria, deſcended from the mountains of Calemburg, at the head of ſixty thouſand men, and defeated the infidels with prodigious ſlaughter. This victory was ſo complete, that the Turks who eſcaped deſtruction fled on every ſide with precipitation, leaving behind them the great ſtandard of Mahomet, with their baggage, ſtores, and artillery.

Leopold, being now informed of the great preparations which the grand-ſignior had been making to repair his loſſes, obtained a ſupply of thirty-five thouſand men from the ſtates of the empire, and prevailed on the Roman pontiff to contribute to the expences of the war. The operations of the campaign were left to the duke of Lorraine, only it was reſolved that count Schultz ſhould cover Moravia with ten thouſand men, and that count Leſlie with a body of Croatians ſhould act upon the Drave. After gaining ſome advantages in the neighbourhood of Buda, the duke of Lorraine reſolved to beſiege Newhauſel; but on hearing that the Turks had inveſted Strigonia, he immediately marched thither at the head of thirty thouſand men. The infidels were no ſooner informed of his approach, than they retired to an advantageous poſt, having a marſh before them and the Danube on the right: but the duke contrived to draw them into an engagement, and they were defeated with great ſlaughter. This victory was followed by the reduction of Newhauſel, Novigrade, and Wiſſegrade; and the Turks were ſo effectually diſcouraged, that they croſſed the Danube, and retired with the utmoſt precipitation.

The duke of Lorraine having now ſtrongly repreſented that the reduction of Buda was eſſentially neceſſary to the ſecurity of his former conqueſts, it was reſolved, in 1686, to undertake the ſiege of that city. Accordingly, the allies marched thither with all poſſible expedition; and, after a month ſpent in advancing their approaches, the duke of Lorraine and the elector of Bavaria agreed upon a general aſſault. At the firſt ſignal, the grenadiers removed the gabions from a breach which had been recently made, and being ſupported by a body of fuſileers, advanced to take poſſeſſion of the paliſadoes: but the Turks, after diſcharging a volley of ſtones, bombs, and grenades, attacked them ſword in hand, and compelled them to retire. Impatient to revenge this diſgrace, the imperialiſts ruſhed again towards the breach with irreſiſtible fury, and actually made themſelves maſters of the paliſadoes; but, the enemy ſpringing a mine, they were all killed or dreadfully wounded. Freſh troops, however, preſſed forward with unabated ardour, and notwithſtanding the prodigious fire to which they were expoſed, they took poſſeſſion, and made a lodgement upon the ruins.

Upon intelligence that the grand-vizir was advancing at the head of forty thouſand men, the duke of Lorraine reſolved to increaſe the fire of his batteries; and the imperialiſts renewed the attack with ſuch irreſiſtible fury, that the Turks were driven from their poſts. A dreadful ſcene of confuſion enſued, and the wretched inhabitants were maſſacred without diſtinction of age, ſex, or quality. The Ottoman army carefully avoided an engagement, and the imperial ſtandard was, in 1687, planted on the walls of Segedin and Five-Churches. About this time, alſo, Leopold procured for his ſon Joſeph the crown of Hungary, and prevailed on an aſſembly of the ſtates to declare that kingdom hereditary in the houſe of Auſtria.

The duke of Lorraine being ſeized with a dangerous illneſs, the elector of Bavaria undertook to open the enſuing campaign; and he accordingly reſolved to lay ſiege to Belgrade. Having thrown a bridge acroſs the Save, he marched in order of battle to force the Turks, who had intrenched themſelves in that neighbourhood; but he was agreeably ſurpriſed to find their camp abandoned, though abounding in proviſions and forage. He then reconnoitred the city, and made ſuch prudent arrangements for the proſecution of the ſiege, that on the fifth of the enſuing month the place was taken by aſſault.

During theſe tranſactions, the king of France commenced hoſtilities againſt the empire, under colour of ſupporting the pretenſions of the ducheſs of Orleans to the ſucceſſion of the late elector palatine, and of aſſerting the right of the cardinal of Furſtemberg to the electorate of Cologne. Accordingly the marquis de Boufflers, having paſſed the Rhine, reduced Keiſer-Lauter, Oppenheim, and Philipſburg; and, on the emperor's refuſing to conclude a peace, the conquering army proceeded to beſiege Mentz, Frankerdal, Triers, Spire, and Worms. Alarmed at theſe rapid movements, the ſtates of the empire reſolved to declare war againſt the aggreſſors; and they were ſupported in this reſolution by the courts of England, Sweden, Spain, and Denmark. The elector of Saxony, the landgrave of Heſſe, and the duke of Hanover, immediately marched ſome forces toward Frankfort; the biſhop of Munſter and the marquis of Brandenburg engaged to ſend two thouſand eight hundred men into Cologne; the elector of Brandenburg aſſembled his beſt troops at Weſel; and the ſtates of Holland ſent upwards of eight thouſand men into the country of Juliers and the electorate of Mentz; while Leopold ordered ſix regiments of cavalry and five of infantry to advance towards the Rhine. The command of the troops in Hungary being given to prince Louis of Baden, it was deemed adviſable to aſſemble three armies on the Rhine; namely, thirty thouſand men on the Upper Rhine, to aſſemble at Heilbron, under the elector of Bavaria; an equal number to aſſemble on the Lower Rhine, under the command of the elector of Brandenburg; and the third body, conſiſting of forty thouſand men, to aſſemble near Frankfort, and be commanded by the duke of Lorraine.

The electors of Saxony and Bavaria, and the landgrave of Heſſe, arriving at the camp, it was reſolved to undertake the ſiege of Mentz, as the allied armies by their ſituation might be eaſily united. The town was accordingly inveſted on the ſixteenth of July, 1689, and the garriſon was compelled to capitulate, after a ſiege of ſeven weeks. The conqueſt of this place was ſoon followed by the reduction of Bonn; and the duke of Lorraine propoſed to beſiege Terderbach, but the allies declining any new action during that campaign, the troops retired into winter quarters. In the mean time, the prince of Baden gained three ſucceſſive victories over the infidels in Hungary, forced their camp, and ſeized all their baggage, military ſtores, and proviſions. He likewiſe took poſſeſſion of Niſſa and Vidin, and ſtationed ſix regiments in Walachia, in order to protect the hoſpodar from the incurſions of the Tartars.

Leopold having convoked a diet at Augſburg, in 1690, he earneſtly exhorted the electors to nominate a king of the Romans; obſerving, that ſuch a meaſure was indiſpenſably neceſſary for diſappointing the ambitious hopes

of Louis XIV. and ſecuring the tranquillity of the empire: accordingly Joſeph was crowned on the twenty-ſixth of January, 1691, with the accuſtomed ceremonies. About three months after this event, the duke of Lorraine died in the forty-eighth year of his age, and the command of the imperial army devolved upon the elector of Bavaria.

Meanwhile the grand-ſignior, having declared Tekeli vaivode of Tranſylvania, and choſen a new vizir, made great preparations for the enſuing campaign; and his arms were, for ſome time, attended with conſiderable ſucceſs. General Heiſler undertook, with a body of four thouſand men, to check the progreſs of Tekeli, who appeared upon the frontiers of Tranſylvania; but the vaivode poſſeſſed ſuch a ſuperior force, that the imperialiſts were ſoon cut in pieces, and Heiſler himſelf was taken priſoner. This defeat obliged the prince of Baden to paſs the Danube at Semendria, and during his abſence Niſſa and Vidin fell into the hands of the enemy. The grand-vizir, alſo, took that opportunity of laying ſiege to Belgrade; and the confuſion occaſioned by an accidental exploſion of a powder magazine, enabled him to carry the place by aſſault.

While Catinat, one of the French generals, was employed in ravaging the territories of the duke of Savoy, Leopold had ordered the prince of Baden to watch the motions of the grand-vizir, who, at the head of ſixty thouſand Turks, deſigned to paſs the Save and beſiege Eſſeck. The prince earneſtly wiſhed for an engagement, but the vizir contented himſelf with haraſſing his enemies by ſlight ſkirmiſhes, and intercepting their convoys. This he executed ſo effectually, that two hundred waggons loaded with proviſions fell into his hands, and the imperialiſts were conſequently reduced to great extremities. On the nineteenth of Auguſt, however, the prince reſolved to force the Turkiſh camp; and his ſoldiers acquitted themſelves with ſuch extraordinary gallantry, that the enemy was compelled to retire, and the grand-vizir himſelf was ſlain in the action.

Early in the enſuing ſpring of 1692, the French army paſſed the Rhine near Philipſburg, and the marquis de Chamilly encamped before Heidelberg; while the duke de Lorges, at the head of thirty thouſand men, croſſed the mountains in order to oppoſe the prince of Baden. The marquis having gained the ſuburbs of Heidelberg, and killed about five hundred of the garriſon, entered the town, and compelled the governor to ſurrender on capitulation. The articles being ſigned, and the garriſon conducted to Wimpfen, the French reduced the caſtle to aſhes, not ſparing even the tombs of the electors and palatine princes. About this time, the duke of Savoy was defeated by Catinat, at Marſaglia; and the approach of the new grand-vizir with a numerous army, obliged the duke de Croy to raiſe the ſiege of Belgrade.

Purſuant to the advice of the prince of Baden, Leopold, in 1694, reſolved to have a fleet this year upon the Danube; but his finances being exhauſted, he was obliged to grant commiſſions to private adventurers, which proved very injurious to commerce. It was alſo found neceſſary to levy a new tax upon Hungary, in order to ſupport the expences of the war; and the court of Vienna was ſo completely embarraſſed for want of money, that very ſerious conſequences might have been expected, had not ſome loyal noblemen borrowed conſiderable ſums upon their own credit, to pay the garriſons of Peterwaradin and the adjacent cities. Meanwhile the grand-vizir paſſed the Save, and inveſted Peterwaradin with an army of ninety thouſand men, while his fleet of one hundred and ten veſſels advanced within cannon-ſhot of the imperialiſts; but he was ſeverely haraſſed by perpetual ſkirmiſhes with the German forces, and the heavy rains which came on about the end of September, compelled him to abandon his enterpriſe.

Whilſt the prince of Orange was employed in the reduction of Dixmude, and ſome other places in the biſhopric of Liege, the mareſchal de Lorges, having paſſed the Neckar, burnt the town of Laudenburg, and ravaged the adjacent country. He then formed a deſign of ſurrounding the imperial army, and ordered the marquis d'Uxelles to fall upon their rear, whilſt he himſelf attacked them in front; but the prince of Baden, ſuſpecting his intention, immediately repaſſed the Rhine, and a ſudden ſwell of that river precluded the poſſibility of a purſuit.

In Montferrat, the duke of Savoy and prince Eugene undertook the reduction of Caſal, with an army of twelve thouſand men, and twenty-four pieces of cannon; but after the ſiege was conſiderably advanced, they were compelled, by a heavy fall of ſnow, to return into winter quarters. In the month of June, however, they again took the field, and the town ſurrendered on capitulation. Meanwhile the imperialiſts in Hungary were obliged to remain upon the defenſive: for the Turkiſh army amounted to upwards of a hundred thouſand men; the fleet upon the Danube was unſerviceable for want of ſailors; the court of Vienna was ſtill perplexed for money; and many officers refuſed to join their regiments till they had aſſurances of receiving their arrears.

In the beginning of Auguſt, 1695, the elector of Saxony marched to Peterwaradin, and from thence to the aſſiſtance of Veterani, who guarded the frontiers of Tranſylvania; but the Turks having made themſelves maſters of Titoul and Lippa, came up with Veterani before the elector's arrival, and defeated him with conſiderable loſs. And now the intrigues of the French court, ſeconded by the pope's nuncio and the Venetian envoy, proved ſucceſsful in detaching the duke of Savoy from the grand alliance. Accordingly, a treaty was publiſhed under the title of the neutrality of Italy; the allies began to retire out of a country where they were regarded as enemies; and the duke, after requeiting Leopold to accede to the neutrality, joined his forces with thoſe of France. Thus, by an adventure ſcarcely paralleled in hiſtory, the ſame general commanded two contending armies in one campaign. The ſubſequent ſiege of Valentia obliged the allies to evacuate Italy, and haſtened the general pacification of the following year.

In the mean time, the elector of Saxony, who commanded in Hungary, reſolved to attack the grand-vizir's army, which was encamped in the plain of Temeſwaer. He accordingly ordered ſix battalions, ſupported by two regiments of dragoons, to force the intrenchments; but a body of Turkiſh cavalry ſoon compelled them to retire, and the janiſſaries having penetrated to their ſecond line, threw the whole army into confuſion. The imperialiſts prepared to repaſs the Beghe, but many of their braveſt troops were cut off in the attempt; and they were ſo perpetually haraſſed in their march, that it was with difficulty they effected a retreat to Ollaſch. Shortly after this occurrence, the elector of Saxony was choſen to ſucceed John Sobieſki on the throne of Poland.

The French, having withdrawn their troops from Italy, ordered Catinat to undertake the ſiege of Aeth, in Flanders, with forty thouſand men, while Boufflers and Villeroy, with two other armies, oppoſed the progreſs of the allies. Aeth was ſoon reduced, and the victors propoſed to take poſſeſſion of the poſt of Anderlach, which might have facilitated the reduction of Bruſſels and Vilvorde; but finding the allies advantageouſly ſituated, they thought proper to alter their deſign.

In 1697, the plenipotentiaries of the allies being arrived at the Hague, while thoſe of France reſided at Delft, it was deemed expedient to hold the conferences at Ryſwick; and baron Lillieroot, who acted as mediator, appointed the firſt conference to be held on the ninth of May. The imperial miniſters made a tedious anſwer to the plan propoſed by France, as Leopold was deſirous of continuing the grand alliance, to aſſiſt him in placing his youngeſt ſon upon the throne of Spain; but Louis, having formed a ſimilar deſign in favour of the duke of Anjou,

Anjou, reſolved to haſten a pacification, and the emperor was compelled to ratify a treaty which had already received the approbation of his allies. By the treaty of Ryſwick, Louis XIV. agreed, that the fort of Keil, with Philipſburg, Friburg, and all his other conqueſts beyond Alſace, ſhould be reſtored to the empire; Leopold ceded Straſburg, and all its territories on the left ſide of the Rhine, to the crown of France; and the duke of Neuburg was re-eſtabliſhed in the palatinate.

During theſe negociations, the grand-ſignior marched from Belgrade with an intention of beſieging Peterwaradin, while his fleet of one hundred and ſix veſſels ſailed up the Danube, and paſſed the Save; but on the approach of prince Eugene he changed his deſign, and made an irruption into Tranſylvania. Eugene continued his march to watch the enemy's motions, and on their forming an encampment near Zenta he reſolved to draw them to an engagement. The Turks, being defended by three intrenchments and ſeventy pieces of cannon, reſiſted the attack of the imperialiſts with extraordinary vigour, and returned their fire with unſhaken reſolution for upwards of two hours; but their intrenchments being at length forced, they were totally routed, with the loſs of thirty thouſand men. The ſpoil taken from the infidels, on this occaſion, conſiſted of fifteen thouſand tents, the military cheſt, the archives of the ſultan's chancery, nine hundred waggons, ſix thouſand camels laden with proviſions, ſeven thouſand horſes, and ſeventy-two heavy cannon. After this brilliant exploit, prince Eugene took the capital of Boſnia by ſurpriſe, deſtroyed the fortreſſes of Dobay, Magloy, and Brandack; and led his victorious army into winter quarters. The enſuing campaign paſſed over without any action; and a peace was, ſoon afterward, concluded between the emperor and the ſultan at Carlowitz.

Louis XIV. having, in 1701, accompliſhed his deſign of placing Philip of Anjou on the throne of Spain, ordered French garriſons into the Spaniſh Netherlands and the duchy of Milan; and at the ſame time ſent a ſquadron of veſſels to the Weſt Indies. Leopold was highly exaſperated at the ſeizure of the Milaneſe, which devolved to him by the death of the king of Spain, and he reſolved to aſſert his right to that territory by force of arms. Accordingly he ordered a body of twenty-nine thouſand men to march into Italy, under the command of prince Eugene, and ſecured the elector of Brandenburg to his intereſt, by conſenting to acknowledge him as king of Pruſſia. He alſo endeavoured to negociate alliances with the other powers of Europe; but the kings of Denmark, Sweden, and Poland, refuſed to engage in a league againſt France, and the Swiſs and Venetians declared that they would obſerve a ſtrict neutrality. After ſome time, however, William king of England concluded a treaty with the emperor, and the ſtates of Holland; by which it was agreed, that if, in the ſpace of two months, Louis did not make ſatisfaction, the parties concerned ſhould mutually aſſiſt each other with their whole ſtrength.

Meanwhile prince Eugene, hearing that the mareſchal Villeroy had repaired to Milan, in order to be preſent at ſome public diverſions, formed the deſign of ſurpriſing Cremona. Accordingly he ordered a body of eight thouſand men to be ready at a certain time to take poſſeſſion of the bridge upon the Po, whilſt he ſent a ſmall detachment through the ruins of an old aqueduct, and by that means obtained admiſſion into the city before the garriſon had any apprehenſion of his approach. The ſubſequent conflict between the garriſon and imperialiſts was extremely obſtinate; and Villeroy, who had juſt returned from Milan, was taken priſoner. But, as the German troops who had been appointed to ſeize the bridge arrived too late, Eugene was compelled to retreat with all poſſible expedition. Queen Anne at this time ſucceeding to the throne of England, ſupported the engagements of her illuſtrious predeceſſor, and, on the fourth of May, declared war againſt France and Spain; and the Dutch, who had hitherto contented themſelves with furniſhing ſome auxiliaries, now became principals in the war.

Whilſt the French army was encamped at Cleves, the duke of Marlborough took upon him the command of the confederates, and endeavoured to bring the enemy to an engagement; but the deputies of the States-general having repreſented to him that it would be more for the advantage of Holland to recover ſome towns in Spaniſh Guelderland, he detached ſeveral parties, who ſoon made themſelves maſters of Venloo, Stevenſwert, Maſeick, and Ruremond. Marechal Boufflers, fearing that the allies had a deſign upon Leige, poſted himſelf at Tongres, in order to ſecure that place; but, in ſpite of all his exertions, the town was compelled to capitulate, and the citadel was ſoon afterward taken by aſſault. About this time, the king of the Romans effected the reduction of Landau, and left the imperial army at Biſchweiller, under the command of the prince of Baden.

As the hoſtilities between Leopold and Louis XIV. did not directly regard the empire, but only the ſucceſſion to the crown of Spain, ſeveral of the German princes had hitherto ſtood neutral; but on the elector of Bavaria declaring publicly for France, the diet at Ratiſbon reſolved to eſpouſe the cauſe of their ſovereign, and requeſted him to proceed againſt the elector according to the conſtitution of the empire. Meanwhile the French army took poſſeſſion of Neuberg on the Rhine, and, after an obſtinate conflict with the prince of Baden, made themſelves maſters of Triers and Traerbach; while on the other ſide, the prince of Heſſe Caſſel marched from Liege at the head of ten thouſand men, and retook Zinch, Briſac, and Andernach. About the ſame time, the duke of Savoy abandoned the intereſts of France, and concluded a treaty of alliance with the emperor.

Whilſt the elector of Bavaria was employed in defending his territories from the imperialiſts, mareſchal Villars had croſſed the Rhine, and taken the fortreſs of Keil, together with ſeveral redoubts. Afterwards attacking the lines of the prince of Baden at Stolhoffen, he was repulſed with conſiderable loſs, but he contrived to join the elector by the paſſes of the Black Foreſt, and obtained a deciſive victory over count Stirum, while another army, commanded by the duke of Burgundy, laid ſiege to Briſac. Upon the Lower Rhine, and in Flanders, the affairs of the confederates were more ſucceſsful. Count Lotum, general of the Pruſſians, made himſelf maſter of Rhenberg, and blocked up Guelders; the duke of Marlborough obliged Bonn to ſurrender after a vigorous ſiege; and the French were compelled to evacuate Maeſtricht, after having blown up the walls and tower. A deſperate engagement took place, about the ſame time, between the forces of general Opdam and thoſe of the mareſchal Boufflers; but as the loſs was nearly equal on both ſides, each party claimed the victory.

Shortly after the re-taking of Landau by the French, in 1704, Leopold ceded his pretenſions to the Spaniſh monarchy in favour of the archduke Charles, who was received at the court of England with great magnificence, and ſailed from thence to Portugal with about nine thouſand men. Upon his arrival at Liſbon, he publiſhed a manifeſto, promiſing a pardon to all who ſhould abandon the intereſts of Anjou, while Philip V. took ſtill more vigorous meaſures, and reduced ſeveral towns on the frontiers of Portugal. At the ſame time the prince of Darmſtadt, having made an unſucceſsful attempt on Barcelona, ſailed with the combined fleet to Gibraltar, which he reduced, and ſurrendered into the hands of the Engliſh.

While the duke of Vendome was rapidly extending his conqueſts in Italy, freſh diſturbances broke out among the Hungarians; and the malcontents, after ravaging the duchy of Auſtria, puſhed their incurſions to the very gates

gates of Vienna. Ragotſki, who had recently eſcaped from priſon, commanded an army of twenty thouſand men; general Forgarts appeared at the head of eight thouſand; and count Caroli, with Eſterhagi and Berecenni, were employed in aſſembling an army of thirty-eight thouſand men. So formidable an armament elevated the courage, and raiſed the demands, of the Hungarians; inſomuch that they grew indifferent to an accommodation, and ſeemed diſpoſed to drive matters to the laſt extremity.

In the mean time, the elector of Bavaria occupied the chief poſts on the Neckar and Danube; mareſchal Tallard penetrated, by forced marches, through the Black Foreſt; and the empire would, in all probability, have ſunk under the arms of France, had not the duke of Marlborough haſtened to join the prince of Baden, and turned the balance of victory by his extraordinary exertions. Several advantageous propoſitions were now made to the elector of Bavaria, in order to detach him from the intereſts of Louis XIV. but, although the battle of Blenheim was loſt after prodigious ſlaughter, the electreſs was obliged to implore the protection of the imperial court at the price of half her dominions, and the electorate was reduced to the utmoſt diſtreſs, he remained firm and unmoved in his reſolution.

After mature deliberation, the confederates reſolved to undertake the ſiege of Landau, and here the brave defence of Laubanis excited the aſtoniſhment of all Europe. This intrepid officer, though labouring under bodily infirmity and the misfortune of blindneſs, behaved with all the ardour and impetuoſity of youth. He replied to a menacing ſummons ſent by the king of the Romans, "that he could not loſe the glorious opportunity of periſhing in the ſervice of his country, and erecting the moſt honourable monument to his own memory on the ruins of Landau." His ſubſequent conduct was perfectly conſiſtent with this aſſertion; for he obſtinately defended the laſt remaining work, cauſing himſelf to be led to the trenches in order to feel the progreſs of the enemy, and giving directions for ſallies, which his ſoldiers obeyed without murmuring, and executed with irreſiſtible fury. At length, however, Laubanis was wounded: every inch of ground was diſputed before it was loſt; the garriſon began to ſink beneath their fatigue; and the enemy made vigorous preparations for a general aſſault. Theſe circumſtances induced the governor to prevent an unneceſſary effuſion of blood by an honourable capitulation; and his propoſals were accepted, after the allies had loſt nearly ten thouſand men in the proſecution of the ſiege.

This campaign terminated with the battle of Caſſano, in which prince Eugene was defeated, after having made the moſt arduous exertions for the reſtoration of the emperor's affairs in Italy. Greatly inferior in force, diſtreſſed for neceſſaries, and ſupported only by his own genius, he encountered Vendome, the beſt general of France, at the head of an army flushed with conqueſt; but his prodigies of valour now proved unavailing, and his gallant followers were overpowered by numbers. The princes of Germany now began to reprobate the war, as productive of nothing but uſeleſs victories, ſlaughter, and deſolation; the republic of Holland ſtarted ſeveral difficulties reſpecting her quota of troops and money; the prince of Heſſe inſiſted that his men ſhould never be commanded by Dutch officers; and the prince of Baden refuſed to acknowledge that ſuperiority which the other inferior officers of the empire conſidered as due to the States General. Such was the diſtracted ſtate of the court of Vienna when the emperor Leopold died, in the forty-ſeventh year of his reign. This prince is ſaid to have maintained the affection of his ſubjects, and conciliated the eſteem of his neighbours, by his affable behaviour; and it is certain that his prudence often preſerved the diadem which tottered on his head.

Upon the acceſſion of Joſeph to the imperial throne in 1705, it was generally expected that a termination would be put to the war, which had already deſolated Germany, and impoveriſhed a conſiderable part of Europe: but the Engliſh peremptorily refuſed to liſten to an accommodation; and Louis was not ſufficiently humbled to propoſe ſuch conditions to the emperor as he could with honour accept. To compromiſe the differences with the Hungarians, Joſeph diſmiſſed thoſe miniſters that were attached to the intereſts of the Jeſuits, and offered to convoke a general diet, where the pretenſions of the diſcontented chiefs might be examined, and all grievances taken into conſideration. But the malcontents declared, that they would hearken to no propoſals till the emperor ſhould engage to baniſh all the Jeſuits, to reſtore to the people their ancient right of electing their own ſovereigns, and to give ample ſecurity that no foreign troops ſhould ever be quartered in the kingdom, or employments beſtowed but upon Hungarians, except in caſes where the diet ſhould think proper to gratify extraordinary ſervices by preferment. The conſequence of this declaration being dreaded by the confederates, they undertook to mediate an accommodation, and conferences were actually opened at Tyrnaw; but ſome inconſiderable advantages encouraged the emperor to riſe in his demands, and the negociation was ſuddenly broken off.

General Heberville, having raiſed the blockade of Waradin, advanced within ſight of the malcontents, in the neighbourhood of Scibo, and determined to draw them to an engagement. The enemy ſuſtained his firſt attack with extraordinary firmneſs, and twice repulſed his troops with great ſlaughter; but being at length overpowered by the imperial cavalry, they were obliged to abandon their camp with precipitation. This victory was ſoon followed by the total reduction of Tranſylvania. But whilſt Vienna rung with rejoicings for this brilliant ſucceſs, Lower Hungary, Moravia, and the hereditary dominions of the houſe of Auſtria, were literally deſolated by the rebels; and ſuch crowds of Auſtrian peaſants flocked to their ſtandard, that they bade defiance to oppoſition, and poſitively refuſed an armiſtice which was propoſed by the mediators.

In the mean time, mareſchal Villars was at the head of a formidable army on the Moſelle; the banks of the Rhine were covered by the numerous troops of Marſin; the elector of Bavaria had taken Huy; and Liege muſt probably have ſurrendered, had not the reſiſtleſs arm of Marlborough interpoſed for its preſervation. That general, with his accuſtomed intrepidity, forced the elector's lines near Meſſeling on the Maine, and obliged him to retire in diſorder towards Louvain. His glorious ardour, however, was checked by the unſeaſonable caution of the Hollanders, and he juſtly complained that they wreſted victory out of his hands. Violent altercations enſued between Marlborough and the prince of Baden, and a ſeparation of the allied army enabled Villars to reinforce the elector of Bavaria with thirty battalions and fifty ſquadrons.

During theſe tranſactions, Joſeph found himſelf involved in a diſpute with the Roman pontiff. Cavaletti, one of the imperial ambaſſador's domeſtics at Rome, had been thrown into priſon for ſtriking ſome officers of juſtice; and the affair was repreſented at Vienna in ſo ſerious a manner, that the count de Lamberg was immediately recalled, and the pope's nuncio was deſired to quit the imperial court. This trivial circumſtance was ſufficient to revive an ancient controverſy; and the emperor now demanded that Palavicini, governor of Rome, ſhould be baniſhed; that a proceſs formed againſt the marquis del Vaſto, who had been veſted with the character of ambaſſador from the archduke Charles, ſhould be burnt by the common executioner; that his holineſs ſhould immediately ſend a cardinal to apologiſe for his conduct; and that Ferrara ſhould admit an imperial garriſon. Had Joſeph perſiſted in theſe demands,

the pope would, in all probability, have been effectually humbled; but, after ſome time, the affair ſunk into oblivion.

Meanwhile Bavaria groaned under the moſt cruel and tyrannical oppreſſions. A treaty had been concluded between the electreſs and the imperialiſts, by which all acts of hoſtility on both ſides were to ceaſe; the elector was to be regarded merely as a general of Louis XIV. at the head of a French army; the Bavarians were to be confirmed in all their privileges; and the revenues of Munich and its dependencies were to remain unfouched, as conſtituting the ſupport of the princeſs and the electoral family. But the Auſtrian forces had no ſooner taken poſſeſſion of the country, than the electoral palace was ſtripped of all its rich furniture; the nobility and people were oppreſſed with exorbitant contributions; many individuals were impriſoned, upon ſuſpicion of concealing their property; and even the tombs were violated in queſt of hidden treaſure. Loud complaints were conſequently made to the imperial commiſſaries, and crowds of ſufferers poured out their grievances in the moſt pathetic manner: but they were treated with brutal neglect; and the aggreſſors endeavoured to juſtify their proceedings, by charging the Bavarians with a dangerous conſpiracy.

After theſe flagrant acts of injuſtice had for ſome time been committed with impunity, count de Lowenſtein, governor of the province, publiſhed an edict, enjoining all the young men, from the age of eighteen to thirty-five, to appear at certain places, in order to be draughted for recruits to the regiments in Hungary and Italy. The peaſants, alarmed at this ordinance, endeavoured to elude compliance by a temporary concealment; but this evaſion was conſtrued into an act of rebellion, and all the gaols in Bavaria were crowded with unfortunate wretches, who had been dragged out of churches, monaſteries, and other places of refuge; while their houſes were pillaged, and their homes deſtroyed. Diſtracted by theſe calamities, and rendered deſperate by the preſſure of extreme want, the ſufferers at length reſolved to unite for their own defence, and join the Bohemian malcontents againſt their common enemy. This plan being reduced to execution, an army of twenty thouſand men took the field, and made themſelves maſters of ſeveral important places; but, finding it impoſſible to make a long reſiſtance againſt regular troops, they laid down their arms, upon aſſurances of a general amneſty. The Auſtrian faith, however, was ſoon violated; and the unhappy leaders of the inſurrection were treated with the moſt ſavage barbarity. At this time the electreſs, who had been to viſit her mother the queen of Poland, demanded leave to return to her dominions; but juſt as ſhe arrived on the frontiers, ſhe was prohibited from purſuing her journey, and deprived of the poor ſatisfaction of mingling her tears with thoſe of her faithful ſubjects.

In the mean time Joſeph, in 1706, having conſtrained the aulic council to proſcribe the electors of Bavaria and Cologne, convened a numerous aſſembly to witneſs the ceremonial of their diſgrace. Being ſeated in his imperial throne, he cauſed the acts to be recited by which Leopold had inveſted the proſcribed princes with the electoral dignity: he then tore them in pieces, daſhed them on the ground, and directed the heralds at arms to throw them into the ſtreet. The decree of the aulic council was then publicly proclaimed in all the principal ſtreets of Vienna; a price was ſet upon the head of the elector of Bavaria; and the ſame meaſure would have been taken againſt the elector of Cologne, had not his eccleſiaſtical character exempted him from ſuch ſeverity. Theſe rigorous proceedings, however, were ſtrongly reprobated by ſeveral of the German princes, and many of them expreſſed great aſtoniſhment at the emperor's conduct.

M. Villars, being appriſed of theſe circumſtances, determined to uſe his utmoſt endeavours for reſtoring the affairs of the electors. Having advanced by rapid marches along the Sar, he compelled the prince of Baden to retire precipitately toward Druſenheim; and the imperialiſts were driven from place to place, without the credit of ſtriking a ſingle blow, or making the leaſt reſiſtance. The French commander availed himſelf of this general conſternation, to gain poſſeſſion of ſeveral fortreſſes between the rivers Moter and Spirebach, and to recover Haguenau from the enemy. About the ſame time, the Hungarian malcontents, having forced the intrenchments of Guy de Staremberg, made an irruption into Auſtria, and concerted a ſcheme for ſeizing the emperor as he was hunting in the foreſt of Eberdorf: but this project miſcarried.

The affairs of the imperialiſts in Italy, in 1707, were not more fortunate: the French, under M. Berwick, had gained ſuch a decided ſuperiority, that they actually meditated the conqueſt of all Piedmont, while prince Eugene found it equally impracticable to animate the councils or quicken the meaſures of the court of Vienna. At length, however, the ſum of twenty-five thouſand pounds ſterling was borrowed from the Engliſh; and Eugene repaired with a numerous army to Turin, at the very moment that the capital was on the verge of deſtruction. This was indeed a moſt extraordinary exertion; and the rapidity with which he recovered all the recent conqueſts, will tranſmit his memory with glory to the lateſt poſterity: but the duke of Marlborough rivalled his fame at the battle of Ramilies, in which Villeroy was utterly defeated, with the loſs of his cannon, baggage, and a prodigious number of men, who were either killed or taken priſoners.—See theſe intereſting events more copiouſly narrated, under the article ENGLAND, vol. vi. p. 702–707.

The long duration of a war in which all Europe had ſome concern entirely drained the provinces of money, and incapacitated them from furniſhing the uſual ſupplies. But the Imperial and Britiſh courts, and the States General, were not yet ſatiated with conqueſt. The circles of the Upper and Lower Rhine, with thoſe of Swabia and Franconia, complained of the impracticability of defending the frontiers, unleſs the ſtipulated forces were regularly levied; and it was therefore reſolved, that an army of forty thouſand men ſhould be raiſed for this purpoſe. Magazines were alſo ordered to be erected at Philipſburg; Landau was to be well fortified and garriſoned; and recruits were to be ſent off with the greateſt expedition, to complete all the imperial regiments in Savoy. At the ſame time, the emperor ceded Valencia and Alexandria, with their dependencies, to Victor Amadeus duke of Savoy, and inveſted the archduke with the duchy of Milan.

Upon the demiſe of Louis prince of Baden, the command of the imperial army on the Rhine was given to the margrave of Brandenburg Bareith; but as his troops did not exceed twenty thouſand men, and moſt of theſe were newly levied and indifferently armed, it appeared impoſſible to reſiſt the ſuperior force of M. Villars, and to defend the lines at Stolhoffen, which covered the territory of Baden Dourlach, and extended to the impaſſable mountains of the Black Foreſt. Villars was perfectly acquainted with the ſtate of the imperial army, and amuſed them with ſeveral feints and falſe attacks, while he was aſſembling twenty battalions and forty-five ſquadrons, under the count de Broglio, at Lauterberg. Filling ſixty boats with grenadiers, he haſtened to the iſle of Newberg, whence he chaſed the imperialiſts, after a ſhort reſiſtance; and, on his preparing to attack the lines, the margrave retired with the utmoſt precipitation, leaving the enemy in poſſeſſion of all the ſtrong works of Stolhoffen, together with the tents, artillery, baggage, and ammunition. Villars conſequently became maſter of the whole marquiſate of Baden, and ſoon afterward penetrated into the duchy of Wirtem-

Wirtemberg, which he taxed at the rate of two millions of livres.

Meanwhile the circles of Swabia and Franconia remonſtrated to the diet at Ratiſbon upon the dangers which threatened their territories, and intimated, that if ſpeedy meaſures were not taken for their defence they ſhould be obliged to accept a neutrality, which had been offered by the king of France. Theſe repreſentations, and the ſubſequent aſſurance that Baden and ſome other frontier towns had reſolved to conclude a ſeparate pacification, effectually alarmed the diet, and induced them to exert their utmoſt vigilance for preventing ſo dangerous a breach in the ſtates of the empire. After mature deliberation, it was reſolved that the margrave of Bareith ſhould haſten to join the troops of Weſtphalia and other circles aſſembling in the neighbourhood of Mentz; and that, after this junction, he ſhould proceed to the Rhine; as it was expected that M. Villars, who had now advanced into the interior of Germany, would follow the margrave's route. This project was put in execution; and the imperial general paſſed through Franconia with ſuch rapidity, as baffled all the endeavours of Villars to obſtruct his progreſs. The French commander, however, ſent a detachment of four thouſand men to defend the lines at Lauterberg, while the count de Broglio ſecured Lauffen on the Neckar, and the mareſchal in perſon haſtened to Dourlach. His approach fruſtrated the deſign which the imperialiſts had formed againſt Alſace, and enabled him to lay the whole palatinate under contribution. Shortly after theſe tranſactions, the margrave of Bareith reſigned his command, which was beſtowed, with the title of field-mareſchal, on the elector of Hanover.

Meanwhile the affairs of Spain bore a gloomy aſpect. The battle of Almanza was loſt; all the deſigns of the confederates were rendered abortive, by the ſuperior vigilance and genius of M. Berwick; and the kingdoms of Arragon and Valencia were obliged to ſubmit to the conqueror. Theſe misfortunes, however, were in ſome meaſure counterbalanced by the revolution in Naples, which raiſed the archduke Charles to the ſovereignty of that kingdom.

Whilſt the imperial diet was diſtracted by altercations reſpecting the proſecution of the war, the king of Portugal, the duke of Savoy, prince Eugene, the prince of Heſſe-Caſſel, and the duke of Wirtemberg, were clamorous for money, troops, and other neceſſaries. All were completely embarraſſed, and all their projects were equally at a ſtand; but nothing could quicken the proceedings of the Germanic body. Without the aid of England, the confederates muſt inevitably have been ruined, and the brilliant victories of Eugene and Marlborough rendered abortive. But the Britiſh parliament adhered ſtrictly to their engagements, and exerted themſelves with ſuch activity, that the combined armies were again put in motion. In Flanders, the battle of Oudenarde was gained under the auſpices of Marlborough and Eugene, though the enemy were headed by a prince of the blood, and aſſiſted by the duke of Vendome, who was generally conſidered as the prop of Louis's declining glory. Liſle, Ghent, and other cities, were alſo ſpeedily reduced; and the impetuoſity of the confederates ſeemed now irreſiſtible.

After an unſucceſsful negociation for peace between the courts of Verſailles and Vienna, in 1709, both ſides prepared, with augmented fury, for the proſecution of the war. The confederates, under Eugene and Marlborough, were again victorious in the Netherlands: Villars loſt the battle of Malplaquet; but it has been juſtly remarked, that he was formidable in his defeat, and ſtained deeply with blood the laurels gained by his enemies. On the Rhine, however, the imperialiſts were leſs ſucceſsful; and count Thaun, who commanded in Italy, found it impoſſible to acquire any important advantage. While the allies were, with ſucceſs, proſecuting the war in Flanders, Louis XIV. made freſh overtures for peace, by his ſecretary the marquis de Torcy; but although he offered to accept ſome of the conditions which he had rejected in the preceding year, Joſeph was ſtill inexorable; and the confederates gradually roſe in their demands, till at length they plainly declared, that no treaty of pacification could take effect, unleſs the moſt Chriſtian king would contribute his aſſiſtance to dethrone his own grandſon.

No ſooner were the conferences broken off at Gertrudenburg, than the allies renewed hoſtilities in the Netherlands, and made themſelves maſters of Aire, St. Venant, and Bethune; but theſe advantages were purchaſed by the loſs of twenty thouſand men. Towards the Rhine no conſiderable action was performed; for the ſtrength of the adverſe armies was nearly equal, and the reſpective commanders were unwilling to hazard an engagement. In Hungary the affairs of the empire were rather more proſperous than in the preceding campaign; but the old obſtructions to peace ſtill remained, and all attempts to ſoothe the malcontents proved entirely fruitleſs.

Meanwhile the ſuccours afforded by England enabled the archduke Charles to gain the victory of Saragoſſa, which would have eſtabliſhed him on the Spaniſh throne, had the advantages been properly purſued. But the arrival of De Vendome ſoon reſtored the affairs of Philip V. and raiſed him from a fugitive prince to a triumphant monarch.

The beginning of the year 1711, was marked by a revolution in the Engliſh miniſtry; and the intereſts of Europe were ſenſibly affected by the death of the emperor, who fell a martyr to the ſmall-pox in the prime of life. His character has been variouſly repreſented: but from a review of his actions we may pronounce him leſs gentle, mild, and affable, than his father; though his ſpirit and vivacity ſometimes procured him the tribute of admiration. Impatient of oppoſition, he was haughty, active, and enterpriſing, and frequently purſued from motives of reſentment what he had firſt undertaken from policy. His ſucceſs augmented the pride of his diſpoſition, and added fuel to a fire which had long burnt with extreme violence. In the ſpace of five years he ſaw Lombardy ſubdued, Piedmont evacuated, Naples reduced, and the Netherlands conquered by his own arms and thoſe of his allies. In his imperial capacity he certainly governed with more deſpotiſm than any of his predeceſſors, and the houſe of Bavaria was a monument of the inflexibility of his temper.

When the electoral college aſſembled, in order to ſupply the vacancy on the imperial throne, the archduke Charles was propoſed as a candidate, and the elector of Mentz gained for him all the votes by a deciſive argument. "The empire, (ſaid he) is a wife of high birth without a fortune. She requires a great expenditure for her maintenance; and the houſe of Auſtria alone poſſeſſes revenues adequate to that purpoſe." Upon the firſt intimation of his election, Charles ſet out from Barcelona, and on his arrival at Frankfort he ſwore to obſerve the imperial capitulation in the manner it was propoſed by the electors. The ceremony of his coronation was performed with great magnificence, in 1711, and ſeveral gold medals were diſtributed among the princes of the empire and the foreign ambaſſadors.

As the queen of England had acquainted her parliament with her pacific intentions, and Holland was upon the point of concluding a ſeparate treaty, the new emperor found himſelf under the neceſſity of ſuſtaining the entire weight of a war with France and Spain, or of accepting the terms offered by Louis. At this juncture a congreſs was held at Utrecht for the purpoſe of opening negociations between the hoſtile powers, and the allies reſolved to make ſome freſh exertions againſt

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the crown of France; and it was generally expected that the queen of England, tired out with the clamours of her allies, would enter zealously into this measure: but Eugene entertained suspicions, and expressed his impatience at the mysterious conduct of the British officers. When the confederates had passed the Scheld, and encamped opposite to the enemy, Eugene proposed a junction between the English and Austrian forces; but this proposal was rejected; and, after some time, the duke of Ormond produced his orders not to act offensively. Exasperated at this discovery, the Imperial and Dutch generals declared, they would prosecute the war without the queen's concurrence; and demonstrate to her that England was of less consequence to the alliance than she imagined. Having made this declaration, they undertook the seige of Quesnoi, and pushed on their attacks with such vigour, that the garrison were compelled to surrender at discretion; while the duke of Ormond withdrew his army, and took possession of Dunkirk.

Elated by their success at Quesnoi, the allies resolved to attempt the reduction of Landreci, which was accordingly invested by the prince of Anhalt Dessau, with thirty-four battalions and thirty squadrons; while prince Eugene, with the remainder of the army, covered the siege, and took every precaution to ensure success. Mareschal Villars, however, soon obliged them to abandon their enterprise; and recovered all the conquests which they had made in three successive campaigns. About the same time, the emperor Charles was crowned king of Hungary, without the formality of an election, which he regarded as a mere ceremony; and with respect to Bohemia, he did not think even a coronation necessary to the complete investiture of the sovereignty.

Charles seems to have flattered himself that the French monarch, being advanced in years, and harassed by perpetual inquietudes, must soon finish his career, and that the subsequent minority would produce a revolution favourable to the empire. The Dutch also seemed rather desirous of extending the flames of war, than of cherishing the blessings of tranquillity; and the influence of prince Eugene seemed to throw insurmountable obstacles in the way of a general pacification. At this juncture, however, the duke of Savoy began to cool in his attachment toward the house of Austria. Tired with a war which only contributed to his ruin and the opposition to his own daughter's elevation, he resolved to commit his affairs into the hands of the queen of England, who immediately undertook to mediate his peace with Louis, and also to procure for him the crown of Sicily, and the reversion of the Spanish monarchy in default of male issue of the direct line. A treaty having been concluded to this effect, and the courts of Savoy and Portugal having acceded to the treaty of Utrecht, the queen drew off all her forces from Portugal and Catalonia; and, after mature deliberation, the States General also resolved on a peace with France.

The negociations at Utrecht now assumed a more promising aspect, and the clouds which had been raised by jealousy or resentment were mostly dissipated. The congress was opened by a number of ministers, equally famed for ability and elocution. All practised the utmost refinements of policy; each enforced his master's rights with energetic zeal; and their perseverance at length triumphed over all difficulties. Accordingly, after some violent altercations, it was agreed that the imperialists should evacuate Catalonia, and a neutrality take place in Italy; that an armistice should be published in Catalonia, and that, on the day of its publication, the imperialists should surrender Barcelona or Tarragona; that all prisoners on either side should be released; that an amnesty should be published in Spain; and that the utmost influence of her Britannic majesty, and the king of France, should be exerted to persuade Philip V. to leave the Catalans in full possession of their liberties.

The subsequent propositions respecting the cession of conquests were peremptorily refused by count Zinzendorf; and his conduct was approved at the court of Vienna, where the peace was violently contested; and her Britannic majesty was libelled in a most scandalous manner, for having withdrawn herself from the grand alliance. Sums of money were now borrowed for the prosecution of the war, and prince Eugene was again employed to check the arms of France; but these exertions proved totally unavailing; and the reduction of Keiserlauter, Linenga, Volstein, and Friburg, convinced the emperor of his own inferiority, and the impossibility of prosecuting a claim against two powerful monarchies, in which he must rely entirely upon the abilities of his generals, unsupported by men or money. Eugene was, therefore, in 1713, permitted to open a negociation with M. Villars, at the castle of Rastadt; and, after a few days, a definitive treaty was concluded, by which it was agreed that Philipsburg and Friburg should be restored to the emperor; that all the French conquests on this side the river Queifch should be confirmed to his most Christian majesty; and that the proscribed electors should be reinstated in all their former dignities and possessions. Such was the termination of a sanguinary war which had continued almost during three reigns, and involved all the powers of Europe in bloodshed and slaughter.

From the TREATY of RASTADT, to the PEACE of PRESBURG, in 1805.

Soon after the conclusion of the treaty of Rastadt, Charles was alarmed by the hostile proceedings of the Turks; but these were completely repulsed by the sword of Eugene; and two decisive victories obtained by that hero at Peterwaradin and Belgrade, in 1714, obliged the infidels to accede to a pacification. From this time the emperor was anxiously employed in forming projects for the preservation of his hereditary dominions in Italy; and the accession of the house of Hanover to the throne of England, gave him a very decisive importance in the affairs of Europe. His knowledge of this advantage rendered him assuming, and his haughty conduct occasioned a breach between him and George I. which threatened very serious consequences; but as the aggrandisement of Hanover was a favourite object with the British court, and Charles was equally desirous of establishing the pragmatic sanction in favour of his daughter, mutual concessions were made during the reign of George II. and the elector of Saxony was persuaded to relinquish his claims upon the Austrian succession.

Some time after this accommodation, Charles entered into a fresh war with the Turks, under the expectation of indemnifying himself for some great sacrifices which he had been compelled to make to the princes of Bourbon. But on this occasion his hopes were entirely groundless. Prince Eugene, who had formerly infused vigour and emulation into the imperial troops, was now dead; and the war was carried on with very ill success, till, at length, cardinal Fleury undertook to mediate a peace, and obtained better terms for Germany than she had any reason to expect. Having ratified this treaty, and given his eldest daughter in marriage to the duke of Lorraine, Charles paid the debt of nature in the twenty-ninth year of his reign, A. D. 1740.

The imperial throne, after having been long vacant, was filled, in 1742, by the elector of Bavaria, who assumed the title of Charles VII. while the French took possession of the capital of Bohemia; and the queen of Hungary was compelled to make a formal renunciation of

of the duchy of Silesia to the king of Prussia. Her youth and beauty, however, made a sensible impression on the hearts of the Hungarians, and induced them to declare unanimously in her favour. Accordingly, her generals acted with such extraordinary vigilance that the French were soon chased out of Bohemia; George II. at the head of an English and Hanoverian army, gained the famous battle of Dettingen; and Charles VII. was reduced to such extremities, that he would have concluded a peace with the queen of Hungary upon any terms that were not absolutely injurious to his honour. But that princess imprudently refused to listen to any accommodation, till the king of Prussia led a numerous army into Bohemia, and subdued the greatest part of that kingdom, under pretence of supporting the imperial dignity.

Upon the demise of Charles VII. in 1745, and the subsequent election of the duke of Lorraine, consort to her Hungarian majesty, the king of Prussia asserted, that the empress-queen, the empress of Russia, and the king of Poland as elector of Saxony, had entered into a secret convention to strip him of his dominions, and divide them among themselves. On this pretence he took up arms against the king of Poland, defeated his troops, chased him out of Saxony, and held the city of Dresden as a legal conquest, till his Britannic majesty interfered and negociated an accommodation. By the subsequent treaty of Aix-la-Chapelle, the duchy of Silesia was guaranteed to Prussia: but, as the empress of Russia happened to coincide in sentiment with the king of Poland and the empress-queen, and as France engaged to support their designs, a fresh war was kindled in the empire.

The king of Prussia, in 1756, encouraged by the promise of an annual subsidy from the British parliament, rushed like a resistless torrent into Saxony, defeated the imperial general at Lowositz, and again compelled the elector to retire into Poland. After this exploit he was put under the ban of the empire, and the armies of France and Russia hastened to support the imperial arms: but, instead of shrinking from the danger, or even lowering his pretensions, the Prussian monarch made such exertions as are scarcely to be paralleled in history. Having made a fresh irruption into Bohemia, he defeated an army consisting of a hundred thousand Austrians, and attacked the city of Prague with a most tremendous artillery; but just as he was congratulating himself on the irresistible valour of his troops, the Austrian general Daun obliged them to raise the siege, and to retreat to Eisnach. The arrival of the Russians gave a new turn to the aspect of the war; and the political manœuvres of count Daun involved his Prussian majesty in many embarrassments, notwithstanding all his splendid victories. A nocturnal attack upon his army at Hochkirchen threw his affairs into a most perilous situation; and, though he contrived to retrieve this misfortune, he was compelled to sacrifice Saxony for the preservation of Silesia. It has been justly observed, that few periods of history afford so much room for contemplation as this campaign did:—six sieges were raised almost at the same time:—that of Colberg by the Russians; that of Leipsic by the duke of Deux-Ponts; that of Dresden by count Daun; and those of Cosel, Neiss, and Torgau, by the Austrians.

The king of Prussia's misfortunes now poured in upon him from every quarter. The Russians, of whom he had formerly entertained too mean an opinion, advanced, under the command of count Soltikoff, to Silesia, and defeated his army with prodigious slaughter; succeeding defeats seemed to announce his ruin, and all avenues to a pacification were barred against him. Still, however, he remained firm and undaunted; and towards the end of the campaign, he defeated the imperialists in the battle of Torgau; but this victory was attended with no great consequences in his favour, though it cost him ten thousand of his bravest troops. The subsequent reduction of Colberg by the Russians, and of Schweidnitz by the Austrians, seemed to threaten his last hopes with annihilation; but at this critical juncture, his most formidable enemy was removed by death, and the new emperor of Russia recalled his armies. The empress-queen still desired to crush this enterprising prince, who had incurred her implacable resentment; but as the German princes disapproved that design, and her generals testified a strong repugnance to execute her orders, she at length consented to an armistice; and the subsequent treaty of Hubertsburg again secured to his Prussian majesty the possession of Silesia. About two years after the conclusion of this treaty, the emperor Francis died, in the twenty-first year of his reign. This prince never appeared to take any share in the concerns of Germany, but such as his gratitude to his consort, his dependance upon her for the support of his imperial dignity, and a natural regard for his children, seemed to dictate.

Joseph II. who had been crowned king of the Romans in 1764, succeeded his father in the empire in 1765; and soon gave some convincing proofs of his activity, by new-modelling the armies, introducing economy, and visiting all the camps which were formed, during the summer, in Bohemia, Moravia, and Hungary. And among many other excellent regulations, the emperor set apart one day in every week for receiving petitions and complaints from all his subjects, without any distinction of birth or fortune; and the officers of his court were expressly forbidden to repulse any, even the meanest object, who came to implore his protection. "It behoves me, (said he,) to do justice, and it is my invariable intention to render it to all the world, without respect of persons."

Notwithstanding these exertions on the part of the sovereign, and the blessings of profound tranquillity, Germany was, in 1771, doomed to suffer most poignant calamities. A series of unfavourable seasons had occasioned a general dearth of corn, which was more or less felt in all the countries of Europe: but in most parts of Germany the scarcity was so great, that vast numbers of people actually perished, and the peasants, in many places, were compelled to unthatch their cottages to supply the want of provender for their cattle. The approach of summer increased instead of alleviating the public distress; for the unusual quantities of snow which lay on the mountains, being suddenly melted, rushed in torrents on the level country; while the overflowing of the great rivers, and the continual rains which fell from the latter end of May till the middle of July, diffused on every side scenes of confusion, terror, and distress. Many parts of Lower Saxony, of the old march of Brandenburg, and of the adjacent countries, were totally ruined by an inundation of the Elbe; Hamburg was in a most critical situation; and the great suburb lying toward the Elbe was so completely covered with water, that only the tops of the trees were discernible.

The princes and states of Germany made every possible exertion to hush the complaints, and alleviate the miseries, of the people; but, as the famine was not confined to the empire, the supplies which they procured were very disproportionable to their benevolent design. A riot happening at Prague in consequence of this unfortunate scarcity, the governor told the people, that if they did not immediately disperse, he would order his soldiers to fire upon them; but this menace was so far from terrifying them, that they replied with perfect coolness, they should look upon the execution of it as a signal favour, a sudden death by shot being much preferable to a lingering one by famine. The empress-queen, being informed of this transaction, burst into tears, and sent the unhappy rioters immediate relief. About the same time a hundred barrels of flour

were diſcovered in a ſtorehouſe at Munich, where they had lain ever ſince the year 1631, when the famous Guſtavus Adolphus ravaged Bavaria. This flour, upon examination, was found to be grown into a hard ſubſtance that reſembled a kind of ſtone; but the preſſing exigence of the times induced the diſcoverers to mix it with freſh meal, and to diſtribute it in bread to the poor, who had for a long time ſubſiſted on the bark of beech and alder, mixed with a ſmall quantity of ſpice.

During theſe calamities, his imperial majeſty joined with Ruſſia and Pruſſia in the diſmemberment of Poland: but it ſeems that the court of Vienna was either aſhamed of the infamy, or ſhocked at the injuſtice, of this tranſaction; for count Kaunitz, being interrogated upon the ſubject by ſome foreign miniſters, denied it in the moſt ſolemn terms, and the conduct of the emperor was ſo equivocal, that none of the European powers could fathom his real intentions. At length, however, all diſguiſe was thrown aſide; a manifeſto, delivered at Warſaw by the Ruſſian and Pruſſian miniſters, was ſeconded by the empreſs-queen; and the three powers openly avowed their intentions. This, however, did not prevent hoſtilities from being commenced between Auſtria and Pruſſia, on account of the ſucceſſion to the electorate of Bavaria. Upon this occaſion the emperor diſcovered much military ſkill; but, although prodigious armies were raiſed on both ſides, all the actions proved unimportant, and the diſpute was finally ſettled by negociation.

The year 1780 was marked by the death of Maria Thereſa, empreſs of Germany, queen of Hungary and Bohemia, and archduchefs of Auſtria; a princeſs who appears to have inherited all the ſpirit, firmneſs, and magnanimity, of her moſt renowned anceſtors, together with a clear underſtanding, a happy temper, and a captivating condeſcenſion, which inſenſibly gained her the affections of all her ſubjects. In the courſe of her life ſhe experienced many viciſſitudes of fortune; and at the death of her father, her enemies ruſhed with ſuch fury upon her territories, that it was actually doubted whether ſhe could retain the poſſeſſion of any place capable of affording an aſylum during her lying-in: but her undaunted courage enabled her to ſurmount all theſe difficulties, and to elevate the houſe of Auſtria to a degree of power which it had not enjoyed ſince the reign of Charles the Fifth. Excluſive of her imprudent engagements againſt Poland, ſhe was entitled to univerſal reſpect for the juſtice of her adminiſtration; and in the characters of a wife and parent ſhe was certainly unrivalled.

Early in the enſuing year, his imperial majeſty promulgated a decree in favour of the liberty of the preſs, which had been hitherto much circumſcribed in the Auſtrian dominions. By one of the articles he allowed a free circulation, without particular licence, to all literary reviews; and by another, he permitted that all ſtrictures upon the throne itſelf might be publiſhed with full ſecurity, provided they did not deſcend to the character of libels or paſquinades. His remark upon this occaſion was equally worthy of his character and dignity. "If they be founded on juſtice, (ſaid he,) we ſhall profit by them; if not, we ſhall diſregard them."

This decree was ſoon followed by others which were admirably calculated to augment the reputation of the ſovereign, and render the moſt important ſervices to the ſubjects. The proteſtants, who had formerly experienced much perſecution on account of their religion, were now indulged with the imperial protection; the Jews, on whom innumerable cruelties had often been practiſed in preceding reigns, were permitted to exerciſe all kinds of arts or trades, to apply themſelves to agriculture, or to purſue their ſtudies in the univerſities, without any impediment on the ſcore of religion; and the authority of the court of Rome was prudently curtailed, by an ordinance which prohibited all the religious orders within the imperial dominions from holding any correſpondence, on ſpiritual or temporal ſubjects, with their reſpective chiefs who reſided in any foreign country.

In a journey to the Netherlands, the emperor excited the admiration, and acquired the warmeſt affection, of the populace. The free audience which he granted to all ranks of perſons, the complaiſance with which he received their petitions, and the unwearied patience which he exhibited in the inveſtigation of their grievances, were indeed calculated to produce the happieſt effects. The inhabitants of Oſtend were particularly honoured with his royal favour. He declared their port to be free; ordered their accommodations for ſhipping to be enlarged at his own expence; and gave ſuch encouragement to foreign ſettlers in the commercial line, that the town was immediately augmented by many new ſtreets, and crowds of people flocked in from every quarter. The emperor afterwards demanded of the Dutch the free navigation of the Scheldt, but in this he failed.

On his return to Vienna, he reaſſumed his important regulations, and granted an enlargement of perſonal liberty to his ſubjects, which muſt infallibly tranſmit his name with unfading glory to all poſterity. The peaſants of Bohemia, Moravia, and Sileſia, had long languiſhed in a ſtate of vaſſalage, and had been frequently driven, by extreme oppreſſion, to the madneſs of inſurrection, without any poſſibility of ſucceſs. Some attempts had been made in the late reign to curb the wanton tyranny of the nobles, and to meliorate the condition of theſe unfortunate people: but much remained to be done, and the honour of their complete emancipation was reſerved for Joſeph the Second. Accordingly, that magnanimous prince publiſhed an edict for the total abolition of vilainage and ſlavery in thoſe three countries; and ſimilar meaſures were taken, ſoon afterward, for the relief of the peaſants in Auſtrian Poland.

The ſubſequent ſuppreſſion of many religious orders, and the promulgation of an imperial reſcript, diſclaiming all ſubordination in ſecular affairs to the holy ſee, induced pope Pius VI. to take a journey to Vienna; but, notwithſtanding the very flattering attentions which he received at his arrival, and the uniform politeneſs of the emperor and all the courtiers, he found it impoſſible either to accompliſh his purpoſe, or to procure an intermiſſion of thoſe reforms which were now extended to the ſecular clergy and hierarchy, as well as to the religious orders, or regulars.

But the court of Rome, in 1786, was deſtined to receive a greater ſhock from another quarter than it had yet ſuſtained from the vigorous exertions of Joſeph. The German prelacy, taking advantage of their ſovereign's diſpoſition, reſolved to ſeize the preſent opportunity of calling in the great official powers lodged in his hands, to concur in emancipating them from the Italian yoke in the adminiſtration of eccleſiaſtical affairs; for the interference of the pope in their metropolitan government had been long conſidered as an intolerable grievance, and an ignominious badge of ſervitude. The reſidence of nuncios, and the eccleſiaſtical juriſdiction which they aſſumed, appeared to ſum up in themſelves the whole amount of this grievance, and were conſidered as ſtanding monuments of the papal oppreſſion. The abolition of theſe was conſequently made the firſt object of contemplation; and at the earneſt ſolicitation of the elector of Mentz and the archbiſhop of Saltzburg, his imperial majeſty publiſhed a memorial, in which he refuſed to admit any future interference on the part of Rome in eccleſiaſtical matters, and exhorted his prelates to reſiſt and ſternly to oppoſe all encroachments and uſurpations againſt their rights and government. The publication of this memorial was ſoon followed by a conference of the eccleſiaſtical princes held

at Ratiſbon, where it was unanimouſly reſolved to withdraw themſelves entirely from the juriſdiction of the pope; to revive the ancient complaints of the German nation againſt the oppreſſions of the holy ſee; to claim the emperor's protection for the reſtoration of all their privileges; and to eſtabliſh new regulations with reſpect to eccleſiaſtical diſcipline. Thus was an end put to the papal domination in Germany, which had been maintained for many ages, and had frequently occaſioned much effuſion of blood.

Early in the ſpring of 1788, a declaration of war was publiſhed at Vienna againſt the grand-ſignior; and about the middle of April the emperor joined the grand army on the Danube, where the attack of Schabatz had been deferred till his arrival. Having altered the diſpoſitions made by the beſiegers, and ordered an attack to be made on the oppoſite ſide of the town, he had the ſatisfaction of witneſſing its ſpeedy reduction. The garriſon, conſiſting of eight hundred men, ſurrendered themſelves priſoners of war, and the emperor permitted their wives and children to retire with their effects to the neareſt Turkiſh garriſon. The triumph of this ſucceſs, however, was ſoon damped by the ſevere repulſe which Lichtenſtein's army received at Dubieza. The prince, having carried on his approaches for ſome time againſt that fortreſs, and made a breach which was deemed practicable, determined to carry the place by aſſault: but neither the diſcipline nor the cool determined valour of the German veterans, were capable of withſtanding the deſperate fury with which they were encountered by the garriſon. The fall of the imperial commander, and the immediate wounding of his ſucceſſor, occaſioned a general conſternation; and the aſſailants were routed and purſued with prodigious ſlaughter.

The firſt conſiderable action which took place after this unſucceſsful attempt upon Dubieza, was an attack made by the Turks on the prince of Saxe-Cobourg, who occupied with a conſiderable body of forces the heights of Rohatin. The engagement commenced with extraordinary fury, and was ſupported with unremitting vigour for three hours, when the arrival of a reinforcement to the prince obliged the enemy to retire. But the Turks, having likewiſe received a reinforcement, renewed the attack again towards evening, and the ſhades of night were ſcarcely ſufficient to ſeparate the combatants. On the three following days the battle was renewed with unabated fury; and the ceſſations were ſo extremely ſhort, each ſide being frequently relieved by freſh detachments, that it ſeemed to be little leſs than a continued action. The ſucceſs was various, and the effuſion of blood prodigious: but the adverſe armies at length parted, without having gained any deciſive advantage.

The emperor now attempted the reduction of Belgrade, in order to appeaſe the diſcontents which began to be extremely prevalent at Vienna and in the army. Accordingly, three bridges were thrown over the Saave, about the beginning of June, and an enormous train of battering cannon and other engines of deſtruction were brought forward from the neighbouring garriſon. But the rapid approach of the grand-vizir, with eighty thouſand men, produced an immediate change in his imperial majeſty's plan of operation. The bridges over the Saave were haſtily demoliſhed, the imperial camp was every where covered by artillery, and the war on the part of the Auſtrians became merely defenſive.

Meanwhile the grand-vizir, inſtead of following the quieſcent example of his adverſary, adopted meaſures which ſpread danger and confuſion on every ſide. Having thrown bridges acroſs the Danube at Cladora, he ſent ſome powerful detachments to the other ſide, with a view of invading the Bannat of Tameſwar, and of reducing his imperial majeſty to the dilemma, either of ſeeing that fine province ravaged, or of quitting his ſtrong camp at Semlin, and expoſing his troops to the inceſſant attacks of the Ottomans. Strong detachments were accordingly ſent from Semlin to counteract the motions of the enemy; while the grand-vizir diſpatched ſeveral reinforcements to maintain the ſuperiority which his forces had already gained. Thus, by degrees, both armies were drawn from their reſpective camps, and involved with their commanders in the Bannat. General Wartenſleben, who had held the principal command in that province before the arrival of his ſovereign, continued for ſome time on the heights of Mehadia; but he was ſoon driven thence by the ſuperior force of the infidels, and obliged to take ſhelter under the wings of the imperial army.

Prince Lichtenſtein being obliged, by illneſs, to reſign the command of the army in Croatia, marſhal Laudohn was, with ſome difficulty, perſuaded to ſucceed him, and the great name and preſence of that veteran officer ſeemed to reanimate the troops with vigour and confidence. Under his auſpices, fortune began to favour the Auſtrian arms, which had been long attended with doubtful ſucceſs. Dubieza was reduced after a moſt obſtinate defence; Novi, a ſtill ſtronger fortreſs, was obliged to ſurrender at diſcretion; and Turkiſh Gradiſca would inevitably have ſhared a ſimilar fate, had not the violence of the autumnal rains, and a ſudden inundation of the Saave, precluded the poſſibility of carrying on the ſiege.

During theſe tranſactions, the war in the Bannat raged with unabated violence; torrents of blood were ſhed on both ſides; and both armies performed actions of extraordinary valour. Fortune, however, ſeemed now to favour the Ottoman forces, and the utter defeat of general Papilla, in the neighbourhood of Schuppaneck, obliged the emperor to quit his camp at Semlin, and to lead the remainder of his army, conſiſting of forty thouſand men, to Weiſkirchen. After devoting a few days to neceſſary repoſe, his imperial majeſty removed to the valley of Karanſebes, which ſeemed to offer an advantageous ſituation. But in leſs than a week he was obliged to quit this place, and to deſcend into the open plain, being vigorouſly purſued by the victorious enemy. Nothing could be more unfortunate than this retreat: two columns, croſſing each other in the dark, fired under a mutual miſtake, and fourteen hundred men were ſacrificed before the error was diſcovered. The general confuſion was now ſo great, that the bat-men throwing the loads from their horſes, and the waggoners taking theirs from the carriages, conſulted their ſafety by a precipitate flight, while the plain was completely covered with baggage, which fell into the hands of the enemy. This ſhocking affair cloſed the campaign in the Bannat. The imperialiſts encamped in tolerable ſecurity at Lugos; and the violence of the autumnal rains ruined many of the Turkiſh horſes, inſomuch that ſix thouſand of their cavalry were obliged to ſerve on foot. This circumſtance, together with the loſs of a prodigious number of men, induced the grand-vizir to retire to Belgrade; and the emperor ſoon afterward returned to Vienna.

Notwithſtanding the bad ſucceſs of this campaign, and the ruin of his own conſtitution, Joſeph reſolved to proſecute the war with redoubled vigour. Accordingly, having obtained ſome ſubſidies, and filled up the ranks of his armies, he appointed the old field-marſhal Haddick to ſupply his place in the chief command, while the prince de Ligne enjoyed the ſecond poſt of honour in the grand army; the prince of Saxe Cobourg was to act in concert with the Ruſſians on the ſide of Moldavia, and marſhal Laudohn to command in Croatia. Early in the ſpring of 1789, both armies took the field; but the affairs of the Turks were involved in confuſion, all the arrangements of the late grand-vizir were ſubverted, the troops had loſt their accuſtomed valour, and fortune now forſook the Ottoman ſtandard. Upon the

borders

borders of Tranſylvania, the war commenced with mutual ſpirit and animoſity, but nothing of importance was achieved by the enemy. Turkiſh Gradiſca, which had formerly made ſo brave a reſiſtance, was ſtrangely abandoned on the firſt attack; the prince of Saxe-Cobourg gained a deciſive victory over thirty thouſand infidels, who were encamped under the command of a ſeraſquier in Wallachia; the grand-vizir was totally defeated at Martineſti by the joint forces of Saxe-Cobourg and general Suwarrow; and the fortreſs of Belgrade was reduced by the irreſiſtible arms of marſhal Laudohn.

Notwithſtanding the extraordinary ſucceſs of this and the ſucceeding campaign, a ſpirit of diſcontent ſeemed to predominate in the Auſtrian dominions; and even the empreſs conſented that Joſeph ſhould conclude a ſeparate treaty with the Turks. An alliance was now concluded between the Ottoman Porte and the king of Pruſſia, by which it was ſtipulated, that in caſe an equitable peace ſhould not be granted in a given time, his Pruſſian majeſty ſhould uſe his utmoſt endeavours for extorting it by force of arms. The emperor, however, perſiſted in his reſolution, and vigorous preparations were therefore made, on both ſides, for renewing the war.

Meanwhile the Hungarians, who had long been in a ſtate of inſurrection, ſent a haughty memorial to Vienna, demanding the reſtoration of all their ancient privileges, the return of their crown and other regalia, which had been removed from Preſburg, and the liberty of exchanging the German for their old native dreſs. Upon theſe conditions they promiſed to defend the kingdom to the laſt drop of their blood, and to ſupply the emperor's armies with every neceſſary their country would afford; but while their grievances remained without redreſs, they declared they muſt regard the imperial authority as unjuſt and deſpotic. The emperor, ſoftened by public calamities and worn down with bodily diſeaſe, complied with moſt of theſe requiſitions, and ſolemnly declared, that if he ſhould be alive in the enſuing month of May, he would viſit the capital of Hungary for the purpoſe of being crowned. Whilſt the Hungarians were making public rejoicings on this occaſion, the emperor was conſtantly attended by his two favourite generals, the marſhals Lacy and Laudohn, and very frequently, notwithſtanding his great age, by marſhal Haddick. His illneſs had been long and painful; but he bore all his ſufferings with remarkable patience, and met the approaches of death with fortitude and reſignation. He had even the magnanimity to order a preſent of ten thouſand florins to the phyſician who acquainted him, not only with the impoſſibility of his recovery, but that his diſſolution was to be apprehended hourly, and ſo ſuddenly as to prevent all notice of the fatal ſtroke. After this melancholy ſentence, he lingered for ſeveral days, and expired on the 20th of February, 1790, in the twenty-fifth year of his reign.

Joſeph II. was conſpicuouſly noted for benevolence, condeſcenſion, and temperance. Patient of fatigue, and poſſeſſed of an ardent mind, he applied himſelf with unremitting diligence to the ſuppreſſion of intolerance and ſuperſtition, and the promotion of induſtry, throughout his dominions. He has been violently accuſed of encroaching on the liberties of his Flemiſh ſubjects, and of exhibiting a conſiderable degree of rapacity in his attempts on Bavaria; but theſe faults may in ſome meaſure be overlooked among the truly glorious actions which contributed to the aggrandiſement of his own name, and the more permanent felicity of his people.

Leopold II. who was grand-duke of Tuſcany, ſucceeded his brother on the imperial throne; and, notwithſtanding the embarraſſed ſtate of public affairs, he ſoon acquired popularity by his moderation and conciliatory meaſures. Diſcontents in Hungary, an inſurrection in the Netherlands, and the formation of a ſextuple alliance againſt the confederation between Auſtria and Ruſſia, marked the commencement of his reign, and expoſed him to the moſt ſerious difficulties; but all theſe were gradually obviated by his prudent conduct, and a treaty was at length concluded between the Porte and Vienna, which happily terminated an expenſive, protracted, and deſtructive, war. A ſhort time before the concluſion of this treaty, marſhal Laudohn died, in the ſeventy-fifth year of his age; and his death was greatly lamented, not only on account of his military talents, but for his amiable virtues, which ſhone forth equally in his intercourſes with ſociety, and in his domeſtic retirement.

The French revolution now began to attract the attention of all the European powers; and, in 1791, a conference was held at Pilnitz between the emperor, the king of Pruſſia, and the elector of Saxony. Upon this occaſion, however, Leopold acted with his accuſtomed moderation; and, inſtead of adviſing hoſtilities with France, he merely wiſhed to oppoſe an effectual ſecurity againſt the tremendous hurricane which ſeemed to threaten all Europe. He was afterwards, however, perſuaded to commence hoſtilities, but his deſigns were ſoon terminated by a pleuritic fever, which brought him to the grave in the ſecond year of his reign. This prince had governed Tuſcany for nearly twenty-five years, with equal prudence and reputation; having directed his principal exertions to the amelioration of the laws, and the general improvement of his people. While only a diſtant ſpectator of the great ſcenes paſſing in the empire, he attentively ſtudied the affairs of government; and upon his elevation to the imperial throne, he retained all the ſentiments of his former life. In the courſe of his ſhort reign he remedied many calamities which had reſulted from his brother's precipitation; conducted his own affairs to a proſperous iſſue; and entered upon a career which ſeemed to promiſe the moſt ſolid advantages to Europe. Yet was this prince doomed to feel the thorns which ſo frequently encompaſs a diadem; although a lover of peace, he beheld the glowing embers of a ſanguinary war menacing his country from the French republic; whilſt he ſaw his unfortunate ſiſter Antoinette, the late queen of France, degraded from her high dignity, kept a cloſe priſoner, and in hourly expectation of an untimely end: but death kindly cloſed his eyes upon theſe afflicting ſcenes in March 1792, in the forty-fourth year of his age.

Francis II. ſucceeded his father, in 1792, in the kingdoms of Hungary and Bohemia, and, after a ſhort time, he was raiſed to the imperial throne. At the inſtigation of the king of Pruſſia, he reſolved to contribute his utmoſt endeavours to the reſtoration of monarchy in France; and the haughty language in which he demanded that Avignon ſhould be reſtored to the pope, and that the internal government of France ſhould be inveſted with ſuch efficiency as might obviate the apprehenſions of the other powers of Europe, produced a declaration of war on the part of the national aſſembly. On the 3d of July, the duke of Brunſwic arrived, with the firſt diviſion of an army of Pruſſians, at Coblentz, on the right bank of the Rhine; and on the 27th of the ſame month he publiſhed a manifeſto, which was intended to ſerve the cauſe of royalty, but which unhappily produced a very oppoſite effect. The indignation which it excited in France induced upwards of ten thouſand young men to enrol their names, without bounty, for the defence of their country; and the liberal rewards which were offered to all who ſhould reſort to the French ſtandard, occaſioned a great defection among the Auſtrian ſoldiers. On the 20th of September, the Auſtrians and Pruſſians made an attack upon the advanced guard of Kellerman, near Dampierre; but after a vigorous cannonade on both ſides, they were compelled to retire. Sickneſs and want of proviſions now began to pervade the combined armies; the ſoldiers, from eating large quantities of unripe grapes, had brought on a dyſentery; the horſes

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were alſo ſeized with diſtempers, owing to the new wheat on which they had been fed; while the extreme badneſs of the weather increaſed theſe calamities, and rendered the roads almoſt impaſſable.

In the mean time, Cuſtine took poſſeſſion of Spires, where he found abundance of arms and ammunition; Worms, Mayence, and Frankfort, were, ſoon after, compelled to ſurrender; and the victorious general appeared eager to proceed to Coblentz, the noted ſeat of counter-revolutioniſts: but the Auſtrians and Pruſſians for a time ſtopped his career, by garriſoning that town, and forming an encampment in the adjacent country. On the 4th of November, general Dumouriez entered the Auſtrian Netherlands, with an army of forty thouſand men, and a prodigious train of artillery. Next morning he reconnoitred the poſition of the Auſtrian army, which conſiſted of about twenty thouſand men, under the command of the duke of Saxe-Teſchen. Their right wing extended to the village of Jemappe, and their left towards mount Paliſel; and they were defended by three tiers of redoubts, furniſhed with a hundred pieces of cannon. Several ſkirmiſhes took place before they came to a general engagement; but at length a battle was fought at Jemappe, which decided the fate of the Netherlands. The aſſault was dreadful, and the obſtinacy of the conflict truly memorable. All the flanks and lines of the imperialiſts were attacked at once; all the diviſions of the French were in action, and almoſt every individual fought perſonally. See the article FRANCE, vol. vii. p. 783.

Meanwhile the operations in Weſt Flanders were carried on with equal ſpirit and effect. General Labourdonnaye, having forced the Auſtrians from ſeveral important poſts, and opened the navigation of the river Lys, marched to take poſſeſſion of Tournay, which had been recently evacuated; Menin and Ypres were ſoon added to his conqueſts; and on the 12th of November he took poſſeſſion of Ghent. The Auſtrians under La Tour retired to Antwerp; but part of their baggage, which had been embarked on the Scheldt, fell into the hands of the French. During theſe tranſactions, Dumouriez appeared before Bruſſels, and his advanced guard made a ſucceſsful attack on the prince of Wirtemburg, who, with an army of eight thouſand men, occupied the heights of Anderlicht. On the following day, the gates of Bruſſels were opened to the French commander. Charleroi, Antwerp, Mechlin, Louvain, Oſtend, Namur, and all the Auſtrian Netherlands except Luxembourg, ſucceſſively followed the example of the capital; while the moſt numerous and beſt appointed armies of Europe were retreating in every direction from the enthuſiaſtic forces of the victorious republic.

Early in the enſuing ſpring of 1793, general Miranda inveſted Maeſtricht with an army of twenty thouſand men, and ſummoned the town to ſurrender, in a proclamation replete with ſanguinary menace. But the prince of Saxe-Cobourg, having defeated the republicans at Aix la-Chapelle, obliged him to raiſe the ſiege. About the ſame time, prince Frederic of Brunſwic took ſome batteries at Zwaone, killed thirteen hundred of the French at Bruges, and took ſeven hundred priſoners. Alarmed at theſe defeats, Dumouriez returned into the Netherlands on the 15th of March, and compelled the Auſtrian advanced poſts to retire from Tirlemont. On the 18th, a general engagement took place at Neerwinden, the French army being covered on the right by Landen, and on the left by Dermael. This action continued with equal obſtinacy on both ſides from ſeven o'clock in the morning till five in the afternoon, when the French were defeated with the loſs of four thouſand men and ſeveral pieces of cannon. The latter end of June was only diſtinguiſhed by ſome petty ſkirmiſhes between the two grand armies; but in the enſuing month, the Auſtrians gained ſome advantages of greater importance. The garriſon of Condé, after ſuſtaining a blockade of three months, was obliged to capitulate to the prince of Wirtemberg; and Valenciennes ſurrendered to his royal highneſs the duke of York, who took poſſeſſion of it in the name of the emperor. About the ſame time Mentz was reduced, after a moſt tedious ſiege, by the king of Pruſſia.

The campaign of 1794, proved extremely unfortunate to the confederates. In Flanders, general Jourdan gained the battle of Fleurus; Charleroi, Bruges, Ypres, and Courtray, ſurrendered to the French; Oſtend was evacuated; the defeat of general Clairfait near Mons obliged that town to capitulate; and the prince of Cobourg was compelled to abandon the whole of the Netherlands; while Bruſſels, Antwerp, Landrecy, Queſnoi, Valenciennes, and Condé, were ſucceſſively retaken; and the victorious republicans, purſuing their ſucceſs, took Aix-la-Chapelle, defeated Clairfait in the vicinity of Juliers, and made themſelves maſters of Bonn, Cologne, Maeſtricht, and Nimeguen. It muſt, however, be acknowledged, that ſome of theſe victories were dearly purchaſed; and it is but juſtice to aſſert, that the allies gave many brilliant proofs, even in this unlucky campaign, of their extraordinary valour, ſkill, and reſolution. The duke of York, lord Moira, the hereditary prince of Orange, and many other illuſtrious commanders of the allies, diſtinguiſhed themſelves in a very particular manner; but the prodigious numbers and unparalleled enthuſiaſm of the French troops were altogether irreſiſtible; the coaleſced armies were likewiſe unfortunately reduced by hardſhips and diſeaſe; and, in moſt caſes, the eaſy reduction of towns and fortreſſes reſulted from the treachery of the inhabitants.

Elated, in 1795, by the ſeceſſion of Pruſſia and Spain from the grand alliance, and the inactivity of the German princes, the republicans avowed their intention of completing the humiliation of their enemies. They opened the campaign with the ſiege of Luxemburg, and the reduction of that important place ſerved to enflame their enthuſiaſm; but after obtaining ſome ſmall advantages over the Auſtrian armies, they were doomed to experience an unexpected reverſe of fortune. Their projects on the right bank of the Rhine were totally fruſtrated; Jourdan was compelled to raiſe the ſiege of Mentz, and to retire with precipitation to Düſſeldorf; Manheim was retaken after an obſtinate reſiſtance; and the victorious Clairfait, having effected a junction with Wurmſer, recovered the palatinate, and moſt of the countries between the Rhine and the Moſelle. Theſe ſucceſſes induced the Auſtrians to penetrate as far as Luxemburg, and a large diviſion of their troops was immediately provided with all the requiſites for ſuch an attempt: but the deſperate reſiſtance of the French retarded the execution of this project, and, after a prodigious effuſion of blood, the ſeverity of the winter compelled both parties to ſuſpend hoſtilities.

The ill ſucceſs of the laſt campaign was wholly attributed, by the French directory, to the unſkilful management of their generals. But as the Auſtrians were prepared to paſs the Rhine in great force, and the attachment of the Belgians began to waver, it was reſolved to divert the emperor's attention from the Netherlands, to his Italian dominions, whence he drew ſtill greater ſupplies. This undertaking was certainly arduous, and many obſtacles preſented themſelves which appeared almoſt inſuperable; but theſe were counterbalanced by the enthuſiaſtic ardour of thoſe French troops who were impatient to indemnify themſelves for the hardſhips they had ſuſtained upon a rocky and ſteril coaſt, to which they had long been confined by want of reinforcements.

Upon theſe conſiderations the French republic determined, in 1796, to attempt the reduction of Italy; and the rapid victories of their troops under general Bonaparte in that campaign, exceeded their moſt ſanguine expectations. The battles of Milleſimo, Dego, and Mondovi, compelled his Sardinian majeſty to accept of

peace, on the hard conditions of ceding Savoy and Nice to the invaders; general Beaulieu, after an obſtinate conflict at Lodi, was forced to retire, with the ſhattered remains of his army, to Mantua; and the conquerors, ſoon afterward, took poſſeſſion of the whole of Lombardy. The armiſtice which had been concluded on the Rhine, was declared to be at an end on the 31ſt of May; when the army of the Sambre and Meuſe, under Jourdan, gained ſome great advantages over the Auſtrians, and penetrated into the interior of the empire. Meanwhile another army, under general Moreau, having croſſed the Rhine at Straſburg, marched through Bavaria, in order to join the conquerors. This attempt, however, was rendered abortive, and both armies experienced a reverſe of fortune which obliged them to recroſs the Rhine. The archduke Charles, commander of the Auſtrian forces, followed Moreau with great expedition, and retook the fort of Kehl, after a moſt obſtinate reſiſtance on the part of the French.

Meanwhile the emperor aſſembled a new army, with a view to reſtore the affairs of Italy, and gave the command of it to general Wurmſer, one of the ableſt officers in the Auſtrian ſervice. This force, on its firſt arrival was ſo extremely ſucceſsful, that the French were repulſed, defeated, and compelled to raiſe the ſiege of Mantua. But Bonaparte ſoon returned to the charge; and, after a ſeries of obſtinate engagements, Wurmſer was obliged to take refuge behind the walls of Mantua, while a detachment of the republicans made an irruption into the Tyrol, and gained poſſeſſion of the paſſes leading into Vienna. The Auſtrians, at the ſame time, made a gallant effort, under general Alvinzy, to reſcue Wurmſer and his beſieged army; but the battles of Arcola and Rivoli unfortunately fruſtrated their deſign, and Mantua was obliged to ſurrender on capitulation.

While the victorious Bonaparte was compelling the pope, the king of Naples, and other princes, to conclude ſuch treaties as he thought proper to dictate, the imperial court was buſily occupied in the means of diſputing once more the empire of Italy. At length it was determined to collect a moſt formidable army from the numerous diviſions and garriſons in the Auſtrian ſervice; and to give the command to the archduke Charles, whoſe conduct and ſucceſſes during the laſt campaign had rendered him extremely popular. The Auſtrians had been ſo effectually diſcouraged by their defeat at Rivoli, that they had ever ſince avoided an engagement, and remained cautiouſly poſted on the northern ſide of the Piava; while the enemy lay on the oppoſite bank, to obſerve their motions, and prevent them from croſſing the river.

Upon the firſt appearance of the archduke Charles at the head of the Auſtrian army, in the campaign of 1797, the French reſolved to give him battle; and accordingly advanced to the Piava in three diviſions. The firſt, commanded by Maſſena, croſſed over near Feltri, and obliged the imperialiſts to retire to Belluno; the ſecond, under Serrurier, paſſed the river at Aſola, after repulſing a detachment who had attempted to check his progreſs; and the third, commanded by general Guiaux, advanced to Sacali, where he overtook the rear-guard of a diviſion of the Auſtrians, and took a conſiderable number of priſoners. The French diviſions now directed their march toward Tagliamento; but the Auſtrians entrenched themſelves on the oppoſite ſide, and prepared to make a vigorous reſiſtance; being perfectly aware that the enemy, by paſſing this river, would be able to over-run a large extent of country. Bonaparte and the archduke Charles were the commanders in chief on this occaſion, and both generals drew up their troops with extraordinary ſkill; but after a long and ſanguinary conflict, the Auſtrians were overpowered, and compelled to retreat with prodigious loſs. The archduke, however, retained his accuſtomed intrepidity, and reſolved to hazard another combat the next morning; but the diſcouragement of his troops, and an unexpected aſſault on the part of the French, compelled him to abandon his deſign, and conſult his ſafety by a precipitate flight.

By the paſſages of the Piava and Tagliamento, the whole country to the north of theſe rivers lay open to the French, while the imperialiſts retired in every direction. Palma Nova was haſtily evacuated; Gradiſca and Goritz were obliged to ſurrender, notwithſtanding the utmoſt exertions of their garriſons; and Trieſte, the only ſea-port belonging to his imperial majeſty on the Adriatic, ſoon fell into the hands of the conquerors. Meanwhile an Auſtrian army was utterly defeated by Maſſena, at Tarvis, with the loſs of a prodigious number of men, thirty pieces of cannon, and four hundred baggage-waggons. Towards the end of March, the central diviſion of the republicans, having entered Carinthia, chaſed the archduke from his head-quarters at Clagenfurth, and advanced acroſs the Drave to Friſach. An obſtinate conflict took place at the defiles leading to Neumark; but the imperialiſts were again forced to retire, with the loſs of a great number of ſlain, and about ſix hundred priſoners. The archduke, having collected his flying troops, attempted to make a vigorous ſtand at Hundſmark, but he was again defeated with great ſlaughter. In the mean time, the arms of Joubert were attended with equal ſucceſs in the Tyrol. The imperialiſts had poſted themſelves in the defiles leading to Inſpruck, and, as they conſiſted entirely of veteran troops detached from the Rhine, it was hoped they would have been able to guard the acceſſes of this province; but the diſcharge of the French artillery was ſo tremendous, that they were ſoon routed, with the loſs of ſix hundred priſoners and the whole of their baggage. About the ſame time Bernadotte completed the reduction of the province of Carniola, and opened an entrance on that ſide into Stiria. The court of Vienna now began ſeriouſly to regard their ſucceſs againſt the revolutionary French, as doubtful and precarious: the fifth army which Auſtria had raiſed againſt them was nearly deſtroyed; the recruits that were raiſing could not ſupply the place of veterans who had not themſelves been able to reſiſt the enemy; and the archduke, on whom implicit confidence was repoſed, had proved as unfortunate in command as his predeceſſors. The only apparent reſource was to acquieſce in the terms of pacification offered by France. But the Auſtrian nobility declared to the contrary, and expreſſed a zealous determination to ſhare the fortune of their ſovereign, and to defend his capital to the laſt extremity. Accordingly, a body of young gentlemen who had ſerved as volunteers under Alvinzi, were again to be completed; the Hungarian nobles were earneſtly exhorted to repair with their vaſſals to Vienna; a formidable maſs of reſolute ſoldiers was to be raiſed in the hereditary ſtates; and the regular troops were ordered to aſſemble from all quarters.

During theſe tranſactions, Bonaparte was collecting and concentrating his forces in order to proceed to Vienna, where he reſolved to plant the ſtandard of France, if the emperor ſtill refuſed to terminate the war. Previouſly to his renewing hoſtilities, however, he wrote a letter to the archduke Charles, which excited the univerſal attention of Europe, and was admirably calculated to conciliate the eſteem of a people to whom he preſented the olive-branch of peace: but on the archduke's expreſſing his inability to conclude a treaty without ſpecial orders, the French troops were immediately put in motion, and their general declared that he would ſoon carry all his deſigns into execution. The news of this determination, and the rapid approach of a victorious enemy, induced his imperial majeſty to liſten to terms of accommodation. Accordingly, generals Murveldt and Bellegarde were deputed to confer with Bonaparte on the ſubject of an armiſtice; and, after a few days, preliminaries of peace were ſigned by both parties.

Meanwhile the French armies on the Rhine had ob-

tained ſome conſiderable advantages. On the 19th of April, general Moreau effected a paſſage acroſs the river, and took poſſeſſion of fort Kehl, notwithſtanding the obſtinate reſiſtance of the Auſtrians who occupied that important place: the loſs on both ſides was very great; five French generals were wounded, and numbers of their ſoldiers killed; but the Auſtrians loſt many more men in the engagement, beſides three thouſand who were taken priſoners. About the ſame time, a furious battle was fought on the Lower Rhine, between generals Hoche and Kray, which terminated in the utter defeat of the imperialiſts, and the loſs of all their artillery. The enemy, elated with this ſucceſs, purſued the retiring Auſtrians to the defiles of the Dilla, and were advancing by rapid marches to Frankfort, when intelligence arrived of the preliminaries being ſigned by Bonaparte and the emperor.

By this treaty of peace, ſigned at Campo-Formio on the 17th of October, 1797, the emperor ceded to the French republic the whole of the Auſtrian Netherlands, and conſented to their retaining the Venetian iſlands of Corfu, Zante, Cephalonia, and all the other iſles in the Adriatic, together with their ſettlements in Albania. He alſo acknowledged the Ciſalpine republic as an independent ſtate; ceding to it the ſovereignty of the countries in Lombardy, which had formerly belonged to Auſtria, and conſenting that it ſhould poſſeſs Bergamo, Breſcia, and other territories late in the dependence of Venice, together with the duchies of Mantua and Modena, the principalities of Caveara and Maſſa, and the cities of Romagna, Ferrara, and Bologna, lately belonging to the pope. The ceſſions on the part of France were Iſtria, Dalmatia, the city of Venice with a large portion of the dominions of that republic, and all the Venetian iſlands in the Adriatic lying to the north-weſt of the Gulf of Lodrino.

Theſe were the leading articles of the treaty of Campo-Formio; but there were ſome other articles, deemed of an unoſtenſible nature, by which the emperor conſented that the Rhine ſhould be the boundary between France and Germany; and promiſed to uſe his mediation for procuring a ſimilar conſent on the part of the ſtates and princes of the empire. He alſo gave his formal aſſent to the diſpoſitions which had been made of various imperial fiefs in Italy, in favour of the Ciſalpine and Ligurian republics; and promiſed to concur with France in ſoliciting the diet of the empire to reſign its feudal ſovereignty over thoſe diſtricts.

This treaty, however, proved no more than an armed truce, during which the oppoſite parties were leſs animated by the deſire of a permanent peace, than by the wiſh of being in a condition to renew the war. The preliminaries of Leoben had been ſigned at a moment pregnant with dangers to the French commander, as well as with deſtruction to the houſe of Auſtria. In proportion, therefore, as that perilous criſis was removed, the French and Auſtrian governments reſumed their habitual paſſions and views. The French directory, by many overt acts of injuſtice and oppreſſion, manifeſted a ſtrong diſpoſition to extend their conqueſts; the negociations at Raſtadt gradually aſſumed the appearance of a diplomatic war, in which the reſpective plenipotentiaries acted as ſpies upon each other; and the admiſſion of general Suwarrow with a Ruſſian army into Germany, was conſidered as a declaration of war againſt the French republic.

The armies of both parties were at this time truly formidable. General Maſſena, with forty-five thouſand men, occupied Swiſſerland, and the left bank of the Rhine almoſt from its ſource to the weſtern extremity of the Lake of Conſtance; Jourdan was ſtationed, with ſixty-five thouſand, between Baſle and Duſſeldorf; and the corps on the right bank of the Rhine, amounting to twenty thouſand men, was called "the army of obſervation." The imperialiſts, on the other hand, had more than ſixty thouſand men, under command of the archduke Charles, on the Lech; twenty thouſand were aſſembled in the palatinate under general Stzarray; an equal number, commanded by general Hotze, occupied the Voralberg and the country of the Griſons; nearly twenty-five thouſand, under general Bellegarde, were on the frontiers of the laſt-mentioned country and the Tyrol; and the army of Italy was computed to conſiſt of ſixty thouſand effective men.

If numbers could have enſured ſucceſs, his imperial majeſty might now have triumphed in the anticipation of a moſt brilliant victory; for he had, at this juncture, one hundred and eighty thouſand men, ninety thouſand of whom were in a ſituation for acting againſt Jourdan and Maſſena. But, as the Auſtrians were reſolved to let the odium of recommencing hoſtilities fall upon the republicans, their firſt operations could only be defenſive and dependent on thoſe of the enemy. It was the buſineſs of the archduke to confine himſelf, in the firſt inſtance, to the defence of the paſſage of the Lech; and generals Hotze and Bellegarde were fully employed in providing for the ſecurity of their poſts in Swabia, Tyrol, and the country of the Griſons, together with thoſe in the Valteline and in Italy.

On the 2d of March, 1799, general Bernadotte preſented himſelf before the fortreſs of Philipſburg; and, in an inſolent letter to the commandant, ſummoned the place to ſurrender, aſſerting that the garriſon was ready to revolt, and denouncing vengeance in caſe of reſiſtance. But his menaces were treated with merited contempt; and, after making ſome vigorous exertions, he was compelled to raiſe the ſiege. Meanwhile the French army, having penetrated into the Palatinate and Swabia, levied heavy contributions, and continued their march without any impediment; as the Auſtrians were at a diſtance, and the duke of Wirtemberg, the only prince who could have thrown any obſtacles in their way, obſerved a ſtrict neutrality.

Maſſena having made himſelf maſter of the narrow paſs the Lucien-ſteig, by throwing a bridge acroſs the Rhine at Atmooz, general Auffenburg had no other reſource than to concentrate his forces for the defence of Chur. Accordingly, after an obſtinate conteſt, he took poſſeſſion of the heights near Chur, and prepared to make a gallant reſiſtance againſt the further encroachments of the enemy; but, being overpowered by numbers, he was compelled to ſurrender. General Hotze, in the mean time, made a vigorous effort to penetrate into the valley of the Rhine; but he was repulſed, and obliged to return to Field-kirk with the loſs of a conſiderable number of men and ſeveral pieces of cannon. A few days after theſe ſucceſſes, Lecourbe, with a ſtrong detachment of French troops, took poſſeſſion of almoſt all the valley of the upper and lower Engadine; but on his attacking an Auſtrian poſt at St. Martinſbruck, he was defeated by general Alciani, with conſiderable loſs. This check counterbalanced the ſucceſs of Deſolles in the Valteline; and delayed, for ſome time, the invaſion of the Tyrol.

Meanwhile the archduke, being appriſed of the enemy's motions, ordered the whole of his army to prepare to croſs the Lech, and to proceed with all poſſible expedition to Ulm, which he wiſhed to ſecure, as a ſtrong point of ſupport on the Danube. His orders were immediately reduced to execution, and in leſs than a week he fixed his head-quarters at Memmingen; while his vanguard, commanded by general Nawendorf, puſhed on towards Ravenſburg, and the corps which had occupied Ulm was ſending detachments along both ſides of the Danube. The line poſſeſſed by the Auſtrians between Ulm and Bregentz had already fruſtrated Jourdan's plan of gaining the flank of the Tyrol by mere marches; the main body of the imperial army was ready to ſupport general Hotze; and both parties prepared for a battle, which now became unavoidable.

Hitherto no reſiſtance had been made in Swabia; and the

the French continued to aver, notwithſtanding their numerous acts of injuſtice, that they had no other view than to take poſitions of ſafety. But, at length, the directory threw off the maſk, and cauſed war to be formally declared, by the legiſlative body, againſt his imperial majeſty and the grand-duke of Tuſcany. Hereupon Jourdan determined to come to action on the 21ſt of March: but the archduke reſolved to be beforehand with him, and immediately divided his army into three columns; one of which, commanded by the prince of Furſtemberg, was to march towards Mengen, in order to diſlodge the enemy from that place; while a ſecond diviſion, under general Wallis, directed their march to the river Oſtrach; and the archduke, with the centre, advanced on the ſame point along the cauſeway of Sulgau. The advanced poſts of the enemy made a moſt deſperate reſiſtance, but were at laſt overthrown by the imperialiſts: the bridge of Oſtrach was alſo forced after an obſtinate conflict, and the republicans were compelled to retire with the loſs of five thouſand men. A ſecond engagement took place near Aach, and was ſupported on both ſides with aſtoniſhing firmneſs and intrepidity: but victory again declared in favour of the Auſtrians; and Jourdan, after haſtily repaſſing the Rhine, proceeded to Paris, *for the re-eſtabliſhment of his health*. Here, however, he met with the reception that is uſually given by popular governments to unſucceſsful generals; and was ſtripped of his command of the army. About the ſame time the inhabitants of the Tyrol took up arms againſt their French invaders; and, after a moſt obſtinate conflict, compelled them to evacuate that country.

Maſſena was now appointed to ſucceed Jourdan in the chief command of all the French forces from the frontiers of the Tyrol and Italy to the palatinate. Accordingly, on the 12th of April, he fixed his head-quarters at Baſle, as the central point of his army; which conſiſted of about one hundred thouſand men, and extended from Manheim to the ſource of the Adige. The war might now be ſaid to aſſume a more decided character; and all the hopes which the French directory and ſome of the German princes had founded on the congreſs of Raſtadt, were totally overthrown. The brilliant ſucceſſes of the archduke re-animated the court of Vienna; and the imperial commiſſioner announced officially to the congreſs, that he had orders to revoke all the conceſſions he had made, and to declare that matters ſhould thenceforth be conſidered in the ſame ſtate as they were previouſly to the opening of the congreſs. This declaration, and the ſubſequent departure of the deputies of the empire, terminated the conferences at Raſtadt.

It will here be proper to take a retroſpective view of ſome particular events, which took place previous to the renewal of the war in Germany. On the 13th of April, 1796, the populace of Vienna had voluntarily taken up arms to defend their city, and the palace of their ſovereign, againſt the republican forces, who were ſuppoſed to be approaching by rapid marches toward the capital. This mark of loyalty was immediately recorded among the public acts of government, and the emperor commanded that its anniverſaries ſhould be celebrated with civil and religious ceremonies. On the evening of that day, 1798, the republican flag was diſplayed, for the firſt time, on the balcony of the French ambaſſador's hotel. This groſs inſult excited general indignation, and the populace demanded with loud and repeated cries that the flag ſhould be taken down. To murmurings ſucceeded violence; and the exaſperated multitude, after tearing the obnoxious colours to atoms, burſt open the gates of the hotel, threatening to ſacrifice the ambaſſador and all his ſuite to their vengeance. The furniture on the ground-floor was inſtantly demoliſhed, and two of Bernadotte's carriages were dragged to the court of the palace, and broken to pieces. But whilſt they were thus employed, a detachment of military occupied the ſtreet in which the ambaſſador's houſe was ſituated, and prevented their return. A polite apology was offered on the part of the court, for this unfortunate diſturbance; but the haughty demands of the ambaſſador could not be complied with, and he therefore took the earlieſt opportunity of quitting Vienna.

This occurrence was ſoon followed by another more tragical and calamitous. At the termination of the conferences at Raſtadt, the French plenipotentiaries expreſſed an intention of ſetting out in three days for Paris. But, on applying for a ſafe conduct, they were ordered to quit the territory of Gernbach and the imperial army in the ſpace of twenty-four hours. At the ſame moment, four hundred huſſars entered Raſtadt, and took poſſeſſion of the gates, with an order to ſuffer no perſon to enter in, or go out. About nine o'clock in the evening the French miniſters were in their carriages; and, after ſome altercation, they obtained permiſſion to leave the town; but they had ſcarcely proceeded five hundred paces from the gate, when a troop of huſſars ruſhed out from a wood, and ſurrounded the firſt carriage, in which was Jean Debrie with his wife and children. Miſtaking theſe ruffians for a patrole, Debrie held his paſſport out at the window, mentioning his name and quality; but he was immediately dragged out, and wounded in ſo terrible a manner by the ſabres of his aſſailants, that he was left for dead, though he afterwards contrived to crawl into an adjacent ditch. The ſecond carriage was then ſtopped, and Debrie's ſecretary and valet-de-chambre were forced to alight; but on their exclaiming that they were domeſtics, they eſcaped without any other injury than a few blows. Bonnier was dragged from the third carriage by one of the moſt violent huſſars, who cut off his hand, head, and arms. Roſenſteil, the ſecretary of legation, perceiving what was paſſing, jumped out of his carriage and made his eſcape; but Roberjot was inhumanly murdered, while his diſtracted wife held him ſtrongly locked in her arms. The aſſaſſins then retired, and the carriages with the ladies and ſervants returned to Raſtadt, whither Roſenſteil alſo came about eleven o'clock the ſame night, and Jean Debrie the next morning.

The Ruſſian miniſters immediately wrote to colonel Barbaczy, commander of the Auſtrian advanced poſts, demanding a proper eſcort for what remained of the French legation; and the injured parties quitted Raſtadt on the following day, in company with the Ligurian miniſter, who had followed them on the former occaſion, but had fortunately eſcaped before the huſſars came up to his carriage. Various conjectures were formed reſpecting this myſterious tranſaction, and two imperial officers were arreſted, in order to undergo a trial by a court-martial; but as it was afterward declared that the aſſaſſins were French emigrants, under the aſſumed appearance of huſſars, this trial did not take place.

The French directory peremptorily charged the court of Vienna with the murder, and the councils adopted a reſolution, "that this act ſhould be denounced, in the name of the republic, to the governments of every country, as commanded by the imperial cabinet, and executed by its troops; that funeral ſolemnities ſhould be performed throughout France, in honour of the murdered deputies; that in all places of municipal adminiſtration, in ſchools, tribunals, and public eſtabliſhments, an inſcription ſhould be ſet up, ſtating that the Auſtrian government had cauſed this inhuman murder to be committed by its ſoldiers; that a banner ſhould be ſent to every army by ſea and land, with an inſcription provocative of vengeance againſt the Auſtrians; and that indemnities ſhould be given to the widows and children of the deceaſed miniſters." His imperial majeſty, however, expreſſed ſuch abhorrence of the atrocious deed, and made ſuch vigorous exertions for diſcovering its authors or accomplices, that the French nation gradually cooled in their reſentment, and began to doubt the reality of what had been ſo poſitively charged upon the cabinet of Vienna.

But

But to return to the progrefs of the war:—After victory had enabled the Auftrians to act offenfively in Germany and Italy, they found themfelves obliged to regulate every operation in fuch a manner as to direct the whole to the attainment of one common object. A plan was concerted between generals Hotze and Bellegarde, for an attack on the territories of the Grifons; and, after fome vigorous repulfes, they effected their defign of expelling the French troops from that country. Maffena, foon afterward, evacuated the eaftern part of Italy; and the imperialifts, having gained poffeffion of St. Gothard, were enabled to complete the communication between their two grand armies. Their operations now became better combined, and their activity acquired a more decided fuperiority than at any other period of the campaign. They kept the French in awe on the Mayne, the Necker, and the Kintzing; feized all the paffages between Swifferland and Italy; befieged the citadel of Turin; and blockaded, at the fame time, the fortreffes of Tortona, Mantua, and Alexandria.

The month of July, 1799, and the beginning of Auguft, paffed over without any important enterprife; but during that time great preparations were made and meafures taken for future operations. The French, having preffed the levy of their conferipts, formed two new armies; one of which was deftined to act on the Rhine, and invade Franconia; while the other was to cover France on the fide of Dauphiny, to act offenfively in Piedmont, and to co-operate with the army which occupied the Genoefe. After thefe fupplies to the army of the French, the Auftrian forces were now no longer adequate to retain their firft acquifitions, or to purfue the career of dawning conqueft. Recourfe was therefore had to the courts of London and Peterfburgh; and the emperor, in an aulic decree, called on the ftates of the empire to pay the Roman months, and to furnifh the quintuple contingents, agreeably to the laft conclufions of the diet of Ratifbon. At the fame time, the elector of Bavaria and the duke of Wirtemberg were perfuaded to enter into the coalition, and to raife a confiderable body of troops, on condition of their being fubfidized by Great Britain.

On the 14th of Auguft, general Maffena refolved to make an attack on the whole Auftrian line; and his project was attended with fuch fuccefs, that the imperialifts were foon driven from the cantons of Schwitz and Uri; and the archduke Charles was obliged to quit Swifferland, in order to provide for the fafety of that part of his army which was ftationed on the right bank of the Rhine. Upon the departure of prince Charles, the allies propofed to recover the fmall cantons, and to turn the pofition fo long held by Maffena on the Albis, and on the lakes of Zug and Lucerne. But Maffena gaining intelligence of this project, refolved to commence hoftilities before it could be reduced to execution. Accordingly he ordered fome bridges to be thrown acrofs the Limmat, and gained fuch advantages as enabled him to inveft the town of Zurich. A terrible engagement enfued between the French and the Ruffian regiments, the latter of whom had replaced the Auftrians in front of Zurich; but victory declared on behalf of the republicans, and the Ruffian general Korfakow was compelled to retire to Eglifau, in order to pafs the Rhine. Marfhal Suwarrow was no fooner apprifed of this misfortune, than he put his divifion in motion, and, through a feries of fanguinary combats, proceeded to Glarus, where he expected to have been joined by fome Auftrian regiments; but finding himfelf difappointed, he was obliged to retreat to the country of the Grifons, after lofing about three thoufand men. He afterwards effected a junction with the troops of general Korfakow: but previoufly to his undertaking any freth enterprife, he received the unexpected and unaccountable orders from his fovereign to reconduct his army into Ruffia.

Towards the end of October, the French and imperial armies were oppofed to each other on the banks of the Maine, the Enz, the Necker, and the Rhine. The grand object of the republicans was to cover the fiege of Philipfburg, which they hoped to carry by the weight of their fire: that of the Auftrians was to raife it, and at all events to protect the duchy of Wirtemberg. Great exertions were made, and great abilities exhibited, on both fides; but the difputed fortrefs was ultimately relieved, and the French, after evacuating Manheim and Nickerrau, were compelled to repafs the Rhine.

The court of Vienna, recently fupplied with pecuniary affiftance from England, and the acceffion of Bavarians, Wirtemburgers, and other German troops in Britifh pay, was not to be diverted from its refolutions by Bonaparte's offering to conclude a pacification on the general ground of the treaty of Campo-Formio. The imperial miniflers replied to the overtures of the firft conful, that the emperor would not enter into any negociation but in conjunction with his Britannic majefty; and notwithftanding the lethargic indifference of many of the Germanic ftates, and the recent defection of the Ruffians, the Auftrians prepared to profecute the war with equal vigour and alacrity.

Maffena, being appointed to take the command of the difcomfited army of Championet, repaired with all poffible expedition to Italy, where he iffued proclamations for re-eftablifhing confidence among the troops and the inhabitants of the territory of Genoa, all of whom were in a ftate of infurrection. He effected his defign in this refpect, by the united force of feverity and conciliation; but the ftate of the army was truly deplorable. The troops, which had been ftated by the French minifter at fixty thoufand, were reduced to twenty-five thoufand, and of thefe one half were incapable of active duty; the horror excited by the hofpitals was fo great, that many of the wretched invalids chofe rather to die in their own quarters, than to be carried to fuch an infectious manfion; whole bodies of the foldiery went off without their commanders; and feveral general officers withdrew themfelves without permiffion. Whilft Maffena was endeavouring, by extraordinary exertions, to remedy or to palliate thefe misfortunes, the Englifh fleet under lord Keith appeared in the Gulf off Genoa, for the blockade of which city it was drawn up in the regular forms; while the Auftrian army, under general Melas, approached by land, and extended its front along the whole line of the republican forces.

Melas, being well acquainted with the pitiable condition of his enemy, had contented himfelf during the winter with obferving his motions, by means of a fimple cordon; while he difpofed his own army throughout Piedmont, Lombardy, the Venetian ftate, the Bolognefe, Ancona, and Tufcany. By thefe maflerly precautions, the French were fo completely deceived, that they exulted in the idea of their own fuperiority, at the very moment when the numerous corps that were to compofe the imperial army were on their march to the general rendezvous. Cities, towns, and villages, as by a fpontaneous movement, fent forth companies, regiments, and battalions; till in the courfe of a few days general Melas was enabled to aflemble ten thoufand men before Bobbio, ten thoufand in front of Tortona, and thirty thoufand at Acqui and Alexandria; leaving at the fame time in the plains of Piedmont the whole of his cavalry, with twenty thoufand infantry, and a fine park of artillery. On the 5th of April, the Auftrians made a general attack on the French troops; many of whom were driven back to Ruha, but thofe at Bergodi-Sornoni and on the heights of Cordibona firmly maintained their ground. The fecond day of the fiege was more terrible. An attack on the right of the French line was made by general Otto, who, with a body of ten

thouſand men, fell on the firſt diviſion near Bobbio, in order to open a paſſage to Genoa. The firſt diviſion, under general Miolis, was ſoon repulſed, and compelled to fall back to Quinto, where they rallied and made a ſucceſsful ſtand for the defence of the city; the ſecond, commanded by general Gazau, thought proper to retire behind the Scrivia; and although the third diviſion ſucceeded in throwing a reinforcement into Savona, they could neither ſave Vado, nor prevent the entire ſeparation of a detachment under Suchet, from the army of Genoa.

The 7th of April proved more auſpicious to the French. The imperialiſts having gained poſſeſſion of Monte Jaccio, lighted up ſeveral fires in the night, and ſounded the tocſins in all the adjacent country, in order to alarm the inhabitants of Genoa. Maſſena perceived the danger that might reſult from ſuch an artifice, and reſolved to perform ſome exploit in ſight of the Genoeſe, in order to do away the impreſſions which had been made upon their minds by the firſt advantages of the Auſtrians. Accordingly he gave orders for an immediate attack on that part of the imperial army; and his meaſures were ſo well concerted with generals Miolis, Darnaud, Hector, Pelitot, and others, that the Auſtrians were defeated with the loſs of fifteen hundred priſoners, beſides a conſiderable number in killed and wounded. On the ſame day, the ſecond diviſion of the French army retook Cazella, Rongo-di-Fornari, and Savigone; and the third diviſion reſtored the line from Voraggio to Campani. The following day was taken up, on both ſides, in general and particular diſpoſitions of the forces. The diſpoſitions that reſpected the firſt diviſion, under general Miolis, were expreſsly deſigned for defending the approaches to the city of Genoa; and the commandant of marine was inſtructed to follow, as far as poſſible, the movement projected by the commander-in-chief, in order to defend the tranſports from the ſmall craft of the Engliſh.

It has been juſtly obſerved, that this was not the blockade of a ſingle place abandoned to itſelf, but it was the right wing of the French army of Italy completely cut off, which, while it maintained its own ground, gave time to the left wing and the centre to ſet themſelves in motion, and to undertake ſome deciſive enterprize. The imperialiſts, ſtrong as they were, had not the means of carrying on a ſiege in form, unleſs they ſhould borrow artillery from the Engliſh; and it muſt certainly have been a difficult matter, had that expedient been adopted, to convert the Britiſh guns, mounted for marine ſervice, into battering cannon. The nature of the ground divided the whole of the attack into two ſeparate parts, by the courſe of the Biſagno. The forts Diamant and l'Eperon covered the line of defence on the left; and on the right it was ſupported by the fort of Richelieu, and five counter-forts, which are attached to it on the prolongation of the eminence. Maſſena having made all the diſpoſitions which ſeemed to promiſe a temporary ſecurity to Genoa, projected a grand movement, by which he deſigned to blockade Savona, retake Vado, and re-eſtabliſh his communication with general Suchet.

Early on the morning of the 9th of April, the French received intelligence that the Auſtrians were pouring down from all quarters on Genoa. Maſſena, however, made no alteration in his diviſion, but continued to make the moſt vigorous exertions for the execution of his plan; in purſuance of which he haſtened to eſtabliſh his head-quarters at Cogoletto: general Soult was to have been at Saſello in the evening, but an unexpected movement of the imperialiſts retarded his march, and laid him under the neceſſity of ſecuring his communication with Genoa. Next morning general Melas advanced againſt Maſſena with three bodies of his army: the diviſion on the right conſiſted of the brigades of Latterman, Buffy, and Sticker, commanded by count de Palfy; the centre was compoſed of the brigades of Bellegarde and Beautano, under the orders of general Bellegarde; and the left diviſion conſiſted of four Auſtrian regiments, under the count St. Julian. Meanwhile the French general Gazau took a poſition on the road leading to Pouzonne; and general Poinſot prepared to attack, on the heights of Saſello, the Auſtrian rear-guard, which was bearing on Verneria.

Poinſot executed his project with ſuch impetuoſity, that he cut off part of the regiment of Deutchmeiſter, and took three pieces of cannon, with two hundred thouſand cartridges and ſix hundred priſoners. But a diviſion of twelve hundred men under general Gardanne were attacked by the imperialiſts, and compelled to retire after a ſanguinary conflict. Meanwhile general Soult had gained ſeveral advantages, and effected a junction with Freſſinet, commander of the ſmall body who followed Maſſena on the coaſt. In an engagement which preceded this junction, the Auſtrians loſt ſeveral officers of rank, and upwards of a thouſand priſoners. The French, however, had no cauſe of exultation; for their loſs was equal to that of their enemies, and their money and proviſions had ſuffered ſuch a ſenſible diminution, that they were at length obliged to retire towards Genoa, and the forts with which it was environed.

During the fifteen days that the defence of Genoa was maintained by offenſive operations, Maſſena loſt ſuch a prodigious number of men, that he clearly perceived nothing more was to be expected from the force of his arms. He therefore reſolved to fortify himſelf in his poſitions, to diſcover ſome means of ſubſiſtence, and to exerciſe the ſtricteſt economy in the uſe of ſuch as yet remained. By means of ſome veſſels which had eſcaped the vigilance of the Engliſh fleet, he ſent letters to Corſica and Marſeilles, and about the ſame time he gained intelligence of the march of the army of reſerve under Bonaparte. This news rekindled the enthuſiaſtic ardour of his troops, and encouraged him ſtill to hold out, even under his accumulated misfortunes.

On the 30th of April, Maſſena reſolved to make a vigorous effort, with his corps of reſerve, to force the Auſtrians from their advanced poſitions. In this attempt he ſucceeded; but it was at the expence of a ſeries of deſperate actions, in which the combatants, being too near each other to make uſe of muſketry, had recourſe to their bayonets, and even to ſtones. After a moſt prodigious effuſion of blood on both ſides, the French took ſeveral thouſand priſoners, and burnt all the ſcaling-ladders which had been deſtined for the eſcalade of Genoa and the adjacent forts. At the ſame time general Soult made himſelf maſter of the poſt of Deux-Freres, and completed the defeat of the imperialiſts on that line.

Theſe deſtructive combats, however, procured no ſolid advantages to the republicans; but on the contrary augmented their misfortunes, by increaſing the number of priſoners, while they were driven to extremities for want of proviſion. The army of Bonaparte was at too great a diſtance to afford any relief to Maſſena; the city of Savona had ſurrendered to the Auſtrians; and the bombardment of Genoa, by the Engliſh fleet, overwhelmed the inhabitants with ſuch terror, that a general inſurrection was hourly apprehended. At length, on the 4th of June, about ſeven o'clock in the evening, Maſſena ſigned the treaty for the evacuation of Genoa, on the moſt honourable terms, and the Auſtrians took poſſeſſion of the city.

The French army under Bonaparte now advanced to the plain of Marengo, where the preparations on the ſide of the Auſtrians ſeemed to be deciſive for battle. At this place both the French and imperialiſts exhibited extraordinary ſkill and reſolution; and the engagement was ſupported on both ſides with ſuch aſtoniſhing firmneſs, that the balance of victory long continued to waver, and the commanders of both parties

were expoſed to the moſt imminent danger, Bonaparte having his clothes pierced with balls in ſeveral places, and Melas being twice diſmounted by his horſe falling under him. At length, however, the French conſul, availing himſelf of an error which Melas had committed, ruſhed with ſuch irreſiſtible fury upon his enemies, that they were inſtantly thrown into diſorder, and compelled to retreat with the utmoſt precipitation. This dreadful defeat induced general Melas to ſolicit an armiſtice, and the anſwer of Bonaparte was dictated by a ſpirit of moderation. Hoſtilities were therefore ſuſpended until Melas ſhould receive further orders from Vienna; and the victorious conſul returned to Milan, where he ſolemnly recognized the Ciſalpine republic as a free and independent nation.

By the armiſtice of Marengo, the French army was to occupy all the country lying between the Chieſa, the Oglio, and the Po, and the Mincio was not to be occupied by either of the armies; the caſtles of Tortona, Alexandria, Turin, Arona, and Placentia, were to be put into the hands of the French by a certain time; the Auſtrian general was to releaſe all perſons, in the fortreſſes under his command, who might have been impriſoned for political opinions; and it was particularly ſtipulated that during the armiſtice no detachments ſhould be ſent from either party into Germany.

During theſe tranſactions the other diviſions of the French army croſſed the Rhine, under the command of generals St. Suſanne, St. Cyr, Moreau, and Lecourbe. The diviſion under St. Suſanne marched to Offenburgh, and that under St. Cyr advanced toward Fribourg, while Moreau proceeded, without any conſiderable oppoſition, to the point where the various diviſions had been appointed to meet, and Lecourbe made himſelf maſter of the caſtle of Hohenweil.

General Kray, who had ſucceeded the archduke Charles as commander of the Auſtrians, was now compelled to evacuate Donaweeſchingen in order to check the progreſs of the enemy. The left wing of the French, under St. Suſanne, immediately took poſſeſſion of that place, and, extending their flanks to the main body of Moreau's army, endeavoured to eſtabliſh themſelves in the lines of Stockach, with a deſign to oppoſe the lines of the imperialiſts. After ſome petty ſkirmiſhes on both ſides, an engagement took place at Moſskirk, in which Moreau, aſſiſted by Lecourbe, made ſome impreſſion on the Auſtrian battalions, and notwithſtanding their gallant exertions, compelled them to retreat with conſiderable loſs. The ſubſequent actions of Biberach and Memmingen proved equally unfortunate; and general Kray deemed it expedient to retire to Ulm, where he was joined by ſix thouſand Bavarian and Wirtemburg auxiliaries, under the command of baron Deux Ponts.

The French now advanced to Rhieneck, little more than a league from Ulm, and ſeemed inclined to give battle to the imperialiſts; but general Kray prudently avoided that meaſure until the promiſed reinforcements ſhould arrive from Auſtria. Six battalions of infantry, drawn from the garriſon of Vienna, were on their march, and to be followed by ſix more, and five ſquadrons of cuiraſſiers; and the garriſons of ſeveral Auſtrian, Bohemian, and Moravian, cities, were appointed to form a body of reſerve on the banks of the Adige and the Danube. Under theſe circumſtances, both generals contented themſelves with mutual obſervation; but the French contrived to turn this ſtate of inaction to their advantage, by laying the whole of Franconia and Swabia under contribution. For nearly two months Moreau had ſought nothing further than to amuſe the imperialiſts by marches and counter-marches, by threatened ſieges and ſham irruptions, to alarm them for the ſafety of the hereditary ſtates, and prevent them from paying any attention to the affairs of Italy; but when the victory of Marengo had put the fate of Italy into the hands of Bonaparte, Moreau determined to act with more enterprize and vigour. Accordingly he prepared to croſs the Danube, in order to bring general Kray to a deciſive action; and ordered Lecourbe to paſs over with the right wing of his army between Dillingen and Blenheim, while the main army croſſed at a point nearer Ulm. The execution of this deſign was followed by a ſeries of actions on the famous plains of Blenheim, in which the Auſtrians loſt, in killed, wounded, and priſoners, about five thouſand men; and the French more than half that number. The diviſions under generals Sztarray and Nauendorf being cut off from the main army of the imperialiſts, general Kray was obliged to leave Ulm under the protection of a garriſon, while he retreated with the remains of his forces to Ingolſtadt. Bavaria was now laid under heavy contributions; the duke and duchefs of Wirtemberg were compelled to retire, with their family and ſuite, to Anſpach; and the whole electorate of Treves fell into the hands of the enemy; while an army of thirty thouſand French and Batavians was marching toward the Upper Rhine, with a deſign to penetrate into Franconia.

In theſe embarraſſing circumſtances the Auſtrians ſolicited an armiſtice, which was granted on the 15th of July, 1800. This truce led to a negociation; and in leſs than a fortnight count St. Julian on the part of the emperor, and the ex-biſhop Talleyrand on the part of France, ſigned preliminaries of peace, on the baſis of the treaty of Campo-Formio. The ſame diſtreſſes which induced the Auſtrian government to requeſt a ſuſpenſion of hoſtilities, urged the neceſſity of concluding a definitive treaty of peace. But there were ſtill ſome circumſtances which tended to ſupport the emperor's ſinking ſpirits, and to revive the ambition inherent in his family. Hungary, and many of the hereditary ſtates, began to exhibit an abhorrence of the intolerable oppreſſion of the republicans; and his imperial majeſty had concluded a treaty by which he became indebted to Great Britain in the ſum of two millions ſterling, not chargeable with intereſt before the expiration of ſix months from the concluſion of a peace between him and the French republic. It had alſo been ſtipulated that the war ſhould be carried on with all poſſible vigour, and that neither party ſhould conclude any treaty which did not comprehend the other. The emperor, faithful to theſe engagements, exerted himſelf to include the Britiſh nation in a treaty of general peace; and when the enſuing correſpondence between France and England proved abortive, he poſitively refuſed to ratify the preliminaries which had been ſigned at Paris, alleging that the count St. Julian had exceeded his orders.

Towards the end of Auguſt, therefore, the French government informed its generals, that the emperor had refuſed to ſubſcribe to the conditions which had been ſigned by his plenipotentiary, and that the armiſtice would be at an end on the 7th of September. The general officers and chiefs of corps were alſo exhorted to improve this interval in ſuch a manner that they might be able to encounter the enemy as ſoon as they ſhould receive orders. About the ſame time his imperial majeſty iſſued a proclamation, aſcribing the rupture of the armiſtice to the French, and expreſſing his intention of putting himſelf at the head of his army in Germany. The firſt motions of the French ſeemed to indicate an intention of carrying the chief weight of the war into Bohemia: but the grand plan of Moreau's operations was not clearly developed; this campaign being cut ſhort, by deciſive advantages gained over the imperialiſts. On the 29th of November, Moreau commenced hoſtilities near the Inn, and carried the Auſtrian works at Weſſemberg: but he was leſs fortunate in a ſubſequent engagement with the archduke John (younger brother of the emperor) in the vicinity of Haag. The Auſtrian troops were at firſt driven back by the irreſiſtible fury of their aſſailants; but victory at length

decided

decided in their favour, and the French were repulſed with great ſlaughter. On the ſame day an attack was made on an Auſtrian poſt near Roſenheim; but the French were driven back with conſiderable loſs, and the prince of Condé's corps acquired great reputation by their cool firmneſs and intrepid conduct.

Encouraged by theſe ſucceſſes, the archduke John reſolved to aſſault the French poſt at Hohenlinden, and on the 3d of December put his troops in motion for that purpoſe; but his march was ſo much retarded by a heavy fall of ſnow, that only the central column arrived at the place of deſtination at the time when all the diviſions ought to have been ready for action. The French perceived this misfortune, and reſolved to convert it to their advantage. Accordingly a diviſion of their army, under Richenpanſe, pierced between the left wing of the Auſtrians and the centre, and aſſaulted their left flank and rear at the moment when they had formed in front, and commenced an attack. The Auſtrians ſuſtained the conflict, for ſeveral hours, with their accuſtomed bravery; but their centre being repelled by the impetuoſity of the French, they were thrown into confuſion, and driven to the heights of Ramſam. In order to improve this advantage, general Moreau puſhed on to Saltzburgh, which he took after an obſtinate conflict: the ſubſequent reduction of Newmark cut off all communication between the archduke John and general Mollitor; and the Tyrol was threatened, on three ſides, with invaſion.

During theſe tranſactions, the Gallo-Batavian army under Augereau gained ſome conſiderable advantages over the imperialiſts in Franconia. On the rupture of the armiſtice, the baron d'Albini, who commanded the troops of Mayence, attacked the Batavian infantry near the bridge of Aſchaffenburg; but, after three vigorous aſſaults, he was repulſed. The Gallo-Batavian army then quitted its cantonments; and general Dumonceau undertook the ſiege of Wurtzburg, while Augereau repaired to Bamberg in order to give battle to the Auſtrians and drive them beyond the Rednitz. They occupied two advantageous heights that command Burg-Eberach, and diſputed every inch of ground with ſurpriſing gallantry; but they were ultimately forced to retreat before the enthuſiaſtic fury of their enemies. After this occurrence, the Auſtrians made ſeveral attempts to cut off the communication between Augereau and Moreau, and, if poſſible, to turn the left of Moreau's army: but they found it impoſſible to acquire any advantage. For about fourteen days, ſeveral ſkirmiſhes took place between the out-poſts; and on the 18th of December a moſt ſanguinary battle was fought between Lauff and Nuremberg. This action was ſuſtained with equal firmneſs and bravery from nine o'clock in the morning till the cloſe of the day, and the loſs on both ſides was ſaid to be nearly equal.

Meanwhile the Auſtrian army of the Danube removed its head-quarters from Straſwalden to Skwanſtadt, where the archduke Charles re-aſſumed the chief command. That prince immediately ordered his troops to remain on the defenſive; but before he could make the requiſite diſpoſitions, the French army of the Rhine advanced in five diviſions, and a general engagement enſued, in which the imperialiſts were defeated with prodigious loſs. Next morning they endeavoured to make a ſtand on the heights of Lambach; but, after an obſtinate conflict, they were again overpowered, and compelled to retire to Lintz, within ninety-two miles of Vienna.

General Moreau now formed his army into three columns; of which the right, under Lecourbe, advanced toward the mountains ſouth of Steyer on the Ens; the centre, commanded by Moreau himſelf, marched to Steyer; and the left, under Grenier, proceeded on the high road from Lintz towards Vienna. That great city was now overwhelmed with conſternation, and the diſtreſs of the loyaliſts was greatly augmented by the behaviour and expreſſions of many diſaffected perſons, who ſeemed to exult at the approach of the enemy: ſuch was the general deteſtation of the war, and ſuch the progreſs of French intrigues and principles. A party of life-guards was ordered to eſcort the imperial family to Oſen; the gallery of paintings, the imperial treaſury, and other valuable articles, were placed in waggons ready for removal; and the Auſtrian capital was preparing to ſuſtain a ſiege; when the archduke Charles brought intelligence that he had concluded an armiſtice of thirty days with general Moreau.

This armiſtice aſſigned to the French army of the Rhine a triangular portion of territory, whoſe baſe reſted on Wurtzburg and Chiavenna, and whoſe point reſted between Leoben and Packlarn on the Danube. It was not to be for a leſs duration than thirty days, at the expiration of which time hoſtilities were not to be reſumed until a farther notice of fifteen days, to be dated from the hour when the notification of the rupture ſhould be made public; and the armiſtice was to be indefinitely prolonged till the notice of a rupture. No corps or detachment, either of the French army of the Rhine or of the imperialiſts in Germany, were to be ſent to the reſpective armies in Italy, ſo long as no armiſtice ſhould take place in that country. The general in chief of the army of the Rhine engaged to tranſmit the preſent convention to the generals of the Gallo-Batavian army, that of the Griſons, and that of Italy, with a preſſing exhortation to conclude a ſuſpenſion of hoſtilities.

As ſoon as general Augereau was informed of the new armiſtice, he ſent to the Auſtrian generals Simbſchen and Klenau, to confer on the ſettlement of a line of demarkation between the Gallo-Batavian army and the imperial troops in the Upper Palatinate and Franconia. Accordingly it was agreed that the Maine and the Rednitz ſhould ſeparate the two armies as far as Lichtenfells, on the line of neutrality. This line was to comprehend Forkheim, Bamberg, Bannach, Haffalſtein, and Lichtenfells; the Gallo-Batavians were to occupy the city and diſtrict of Nuremberg; and the general in chief was to eſtabliſh his head-quarters and his park of artillery at Wurtzburg. While theſe negociations were carrying on in Germany, Italy ſtill groaned beneath the ſcourge of war. But in order to give a clear idea of its preſent ſituation, we muſt take a retroſpective view of ſome events, which have been hitherto omitted, in order to avoid an interruption of the more connected parts of our hiſtory.

By the armiſtice concluded after the battle of Marengo, the French army was to occupy all the country between the Chieſa, the Oglio, and Po; and the Auſtrians were to retain Tuſcany, with the city and citadel of Ferrara. But the Auſtrians inſiſted on keeping poſſeſſion of an extenſive territory, called the Poleſino of Ferrara; and during the diſpute which reſulted from their pretenſions, a general inſurrection of the people was concerted and encouraged in Tuſcany. Hoſtilities were on the point of being renewed, when general Brune, hearing that preliminaries had been ſigned by count St. Julian, expreſſed his intention of ſuſpending the motions of his troops until he ſhould receive farther orders from his government. A new convention was ſoon afterward agreed to at Caſtiglioni, by which general Brune conſented to wait for an anſwer from Vienna reſpecting the evacuation of the Ferrareſe by the imperialiſts. No mention was made in this treaty of diſarming the levy-en-maſſe: but this was not in a ſtate of great forwardneſs; nor, if it had been completely raiſed, could ſuch a rabble of enervated Italians have been formidable to the veteran troops of France.

The French, however, evidently ſought a pretext for an irruption into Tuſcany, that they might be enabled, in caſe of a renewal of the war, to prevent the landing of Britiſh forces in that quarter. A general officer was ſent

ſent in the name of the commander-in-chief to general Sommariva, who commanded in Tuſcany, requeſting that the armed peaſants might be immediately diſbanded, and threatening an hoſtile incurſion in caſe of refuſal. As theſe demands were not attended to, lieutenant-general Dupont entered Florence with a numerous army, while general Clement advanced to Leghorn. The inſurgents were immediately diſperſed, and the Auſtrians, to the number of two thouſand five hundred, were permitted to retire to Ancona; but the merchandiſe of the Engliſh (though permitted by the armiſtice of Marengo to retain its neutrality) was, in open violation of public faith, confiſcated for the benefit of France. The invaſion of Tuſcany, however, ſeems to have had but little effect on the imperial cabinet; for it did not occaſion any movements on the part of their armies till the expiration of the truce of Hohenlinden. Some light ſkirmiſhes had, indeed, taken place between the advanced poſts, but the campaign was not reſumed till the 24th of December.

It appears that the French were, at firſt, inclined to fall upon the Auſtrians near the lake of Garda, and there to turn the lines of the Mincio: but general Lebrune, animated by the ſucceſſes of Moreau, reſolved to attack them in front. Accordingly a bridge was thrown over the Mincio, the paſſage effected, and the left bank maintained by a detachment of French forces againſt the vigorous and repeated exertions of the imperialiſts. In the courſe of that day the French took upwards of two thouſand priſoners, and ſeveral ſtandards; and next morning the paſſage of the river was carried by the main body at Monzanbano. An order given by the lieutenant-general Delmes for a general charge by the French infantry and cavalry, was executed without firing a ſingle cannon; and, after a moſt obſtinate conflict, the Auſtrians were routed with prodigious ſlaughter. Meanwhile two French brigades were attacked by a reſerve of twelve thouſand Hungarian grenadiers; but, having received a timely reinforcement, they defeated the aſſailants, and made themſelves maſters of four pieces of cannon, a cheſt of ammunition, and about two thouſand priſoners. At Vallegio they encountered freſh difficulties, from the intrepid firmneſs of the imperialiſts; but, after the village had been three times taken and retaken, and prodigies of valour performed on both ſides, the Auſtrian commander thought proper to retreat; and the French took poſſeſſion of five pieces of cannon, two howitzers, nine hundred muſkets, and eighty horſes, beſides a prodigious number of priſoners. This defeat, and the arrival of freſh reinforcements to the enemy, induced the Auſtrians to evacuate the caſtle of Vallegio, which they had hitherto retained.

Next morning, lieutenant-general Delmas ſurrounded the redoubts of Salionga, and began to make preparations for an aſſault: but the Auſtrians, fully ſenſible of the impracticability of a ſucceſsful defence, ſurrendered at diſcretion; and fourteen pieces of cannon, two pair of colours, and a thouſand priſoners, fell into the hands of the victorious republicans. Elated by theſe ſucceſſes, the French proceeded to occupy on their left the heights of Caſtel-Nuovo, and on their right took poſt between Legnano and Verona; while ſome detachments were ordered to lay ſiege to Peſchiera, and blockade Mantua.

Meanwhile the main body of the Auſtrians had paſſed the Adige; and they had ſtrengthened with ſome troops and a numerous artillery an intrenched camp which they had formed near Verona, covering the great road between that town and Mantua. From the reports of a reconnoitring party, it appeared that great numbers of Auſtrians were drawn up along the whole line of the Adige; the pontoons were, therefore, ſent to Bouſſolingo, and preparations were made for paſſing the river at that place on the enſuing morning. An attack was to be made in two points: the firſt at the place where it was really intended that the advanced guard ſhould paſs, and the ſecond to operate as a feint. The diviſion, under Boudet, received orders to ſtorm the Auſtrian poſt at Chiuſa, and to advance to the heights of Romada; while another diviſion of infantry and cavalry ſhould paſs the Adige, and the right wing, commanded by general Dupont, ſhould take poſt at Bouſſolingo. Theſe orders were all executed on the morning of the 1ſt of January, 1801; and in the courſe of that day the whole army, excluſive of the diviſions under Boudet and Rochambeau, gained the left bank of the Adige, and marched forward with ſuch rapidity, that the Auſtrians, after throwing reinforcements into the two forts, deemed it adviſable to evacuate the town of Verona. Meanwhile Boudet made himſelf maſter of Chiuſa, Alla, and Roveredo, and formed a junction with Rochambeau, who had reduced Riva and Torboli, and concentrated his forces at Mori.

Whilſt one diviſion of the French army, under general Morencey, was charged with the blockade of the forts of Verona, the advanced guard, with the reſerves of infantry and cavalry, advanced towards Vicenza in purſuit of the Auſtrians; who defended ſeveral poſitions with extraordinary gallantry, and retreated in good order behind Montebello. The French, now purſuing an eaſy courſe of ſucceſs, croſſed the Brenta, made themſelves maſters of Trent, and chaſed the imperialiſts from Baſſano and Caſtel-Franco to Salvaroza. In this career the republicans are ſaid to have marched one hundred and thirty miles in eight days, and to have taken upwards of three thouſand priſoners. Prodigious numbers of the Auſtrians were ſlain in their retreat; and the roads near Salvaroza were ſtrewed with the bodies of dead and dying men.

On the 12th of January, the left wing of general Lebrune's army had its foremoſt columns at Azalo, and by its poſt was connected with the centre, under the command of general Souchet; the advanced guard was ſtationed at Salvaroza; and the corps of reſerve, with the dragoons and the cavalry, were drawn up in the neighbourhood of Caſtel-Franco: while the Auſtrian army lay encamped on the plain of Salvaroza; and, notwithſtanding their recent misfortunes, were preparing for another engagement.

In this poſture of affairs an Auſtrian colonel arrived at the French head-quarters, and propoſed conditions of an armiſtice, which was accordingly concluded on the 16th of January at Treviſo, within twenty miles of Venice. The line of demarkation between the two armies was to be the Tagliamento, from its efflux in the mountains of Tyrol, to the place where it diſembogues into the Adriatic. The fortreſſes of Peſchiera, Porto-Legnago, Ancona, and Ferrara, were to be ceded to the French, and the blockade of Mantua was to be continued: but by a new armiſtice, concluded at Luneville on the 6th of February, his imperial majeſty conſented to give up Mantua, as an indiſputable proof of his ſincerity.

At this juncture, the meaſures of the Auſtrian miniſtry were generally deteſted and ridiculed; the nerves of the army were unſtrung; the ſentiments and wiſhes of the officers were diſcordant; and almoſt the only point in which all ranks agreed, was a deſire that the war, which had occaſioned ſuch a prodigious waſte of blood and treaſure, ſhould be brought to a ſpeedy concluſion. Such being the ſtate of the people, and even of the military, his imperial majeſty at laſt reſolved to give peace to the empire; and a definitive treaty was accordingly concluded at Luneville, on the 9th of February, 1801, between the French republic, and the emperor and the Germanic body.

This treaty was, without doubt, extremely unpalatable to the houſe of Auſtria; as its principal articles deprived them of the rich inheritance of their Burgundian anceſtors, and almoſt excluded them from Italy. Compelled to relinquiſh the ſovereignty of the Belgic pro-

vinces, the grand-duchy of Tuſcany, and all the fine domains on the left bank of the Rhine, they were, in a great meaſure, iſolated from thoſe points of contact where they had ſo often exerted their ſtrength againſt other powers, and on which they had long aſſerted a right to interfere in the principal affairs of Europe. Many able politicians, however, were of opinion that, in the compactneſs of empire acquired by the acceſſion of Venice, Iſtria, Dalmatia, and the Venetian iſles in the Adriatic, the Auſtrian family had gained in real ſtrength an ample compenſation for the loſs of their more extenſive, but disjointed, territories.

The elector-palatine of Bavaria now likewiſe renounced the duchies of Juliers, Deux-Ponts, and their dependencies; together with the bailiwic of the palatine of the Rhine.

Such was the humbled ſtate of the emperor Francis II. at the ſigning of the peace of Luneville; and however derogatory or ſubverſive it might be thought of the eſtabliſhed rights and hereditary claims of the houſe of Auſtria, yet would it have been fortunate for the affairs of the emperor, had he ſuffered things to reſt upon the baſis of that treaty. But inſtead of which, the moment that the king of Great-Britain broke with the French republic concerning the deſtination of Malta, Francis availed himſelf of that opportunity of preparing for a freſh war, under the deluſive hopes of recovering the ceded territories, and of reſtoring the loſt laurels of his fading crown and dignity.

While the French emperor Napoleon was taking poſſeſſion of the electorate of Hanover, under pretence of repriſals againſt the king of Great-Britain for the iſland of Malta, Francis entered into a quadruple alliance with England, Ruſſia, and Sweden, to proſecute the war with vigour and effect, by croſſing the Rhine, and commencing hoſtilities in the territory of France. The allied army was to conſiſt of 500,000 effective men; and their operations, on paper, were moſt ably projected. But it unfortunately happened with theſe, as with moſt allied armies, that they were not mutually prepared, nor ready to act in concert with each other. Of this the crafty Napoleon took an early advantage. Inſtead of allowing the Auſtrians time to croſs the Rhine, and carry the war, as they had projected, *into the very heart of France*; the republican army was the firſt to croſs that river, and unite its forces with thoſe of the elector of Bavaria, who had ſecretly entered into an alliance with the French emperor.

The grand diviſion of the imperial army, under the chief command of the archduke Ferdinand, and field-mareſchal baron Mack, finding itſelf anticipated by the French in croſſing the Rhine, was compelled to fall back into the interior of Swabia, with a view to concentrate and ſtrengthen its lines. The diviſion under prince Ferdinand made choice of a ſtrong poſition for its encampment on the banks of the Danube; while that of lieutenant-general Mack ſecured itſelf under the ſtrong fortifications of the city of Ulm. The French army, under the command of the emperor Napoleon in perſon, with mareſchal Berthier, and the generals of diviſion Ney and Laſnes, came up with the archduke Ferdinand's diviſion, near Gramberg, on the 7th of October, 1805; and on the 8th, a partial action took place at Wertingen, which was followed on the 9th by the ſkirmiſh near Gunſberg, wherein the Auſtrians loſt 2500 men; and prince Ferdinand was obliged to retire to the banks of the Inn.

After this ſucceſs, the French emperor loſt no time in marching for Ulm. At day-break, on the morning of the 14th of October, the corps under mareſchal Ney attacked and took poſſeſſion of the bridge at Elchingen; and, equally early, on the morning of the 15th, the emperor Napoleon drew up his whole army in line of battle before the city of Ulm. Here he harangued each regiment, each battalion, ſeparately and cordially, addreſſing himſelf to the feelings and paſſions of his ſoldiers, and inſpiring them with courage and reſolution to die, rather than loſe the firſt great battle, which was, he ſaid, on that day to be fought; and on the ſucceſs of which, he very juſtly remarked, would in a great meaſure depend the ultimate fate of the war. He was anſwered from the ranks by ſhouts of "Victory or death!"—and the whole line were anxiouſly waiting for the dreaded onſet from the veteran corps under field-mareſchal baron Mack, when, to the utter aſtoniſhment of the whole French army, as well as of all Europe, lieutenant-general Mack, with the flower of the Auſtrian army, conſiſting of thirty-three thouſand fine troops, all picked men and real ſoldiers, who had faced death in a thouſand forms without fear or diſmay, entered into a haſty capitulation, and never even attempted to ſave the garriſon, or ſtrike a ſingle blow! How much he was deſpiſed for this puſillanimous conduct, even by his own ſoldiers and his adverſaries who wiſhed to fight, let their exclamations and ſtinging reflexions evince to all the world. On the 17th of October the articles of capitulation were ſigned; and on the 20th Napoleon Bonaparte had the pride of ſeeing this fine Auſtrian army defile before him, which laſted from two o'clock in the afternoon till ſeven in the evening; during all which time he kept field-mareſchal count Mack, with eight of the Auſtrian generals, and ſeven of the lieutenant-generals, at his ſide, to witneſs their own diſgrace; which indeed muſt have been truly heart-breaking to every man of ſentiment and courage, to ſee ſo numerous and fine an army march before the conqueror with all the honours of war, though without a ſcratch or a wound,—then ignobly to lay down their arms, and be driven, like beaſts of burden, into the interior of France, as priſoners of war! What ſoldier amongſt them would not have vigorouſly fought, and nobly died in the defence of his country, rather than have ſubmitted to ſuch indelible diſgrace and infamy? Let field-mareſchal count Mack anſwer the queſtion.

Whether the divided and disjointed organization of the Auſtrian troops under different deſtinations, was politic and judicious, or not, may be a queſtion in military ſcience; but it is nevertheleſs certain that it proved fatal to nearly the whole of that noble army, which fell like a vaſt foreſt before the keen edge of the woodman's axe. Beſides the flower of the army under the archduke Ferdinand and count Mack, fifty thouſand choice troops, called "the army of Italy," were detached under the command of the archduke Charles; to whom was oppoſed the French diviſion under general Maſſena. Here the whole campaign was ſpent in fatal ſkirmiſhes, by which the army was reduced to half its number, and no one point gained: prince Charles ſlowly and unwillingly moving from poſt to poſt through the whole Italian territory, until he was finally obliged to retreat for ſafety into the hereditary dominions of Auſtria. Another grand diviſion of the army under the command of the archduke John, and generals Jellachich and Wolfskehl, were deſtined to the defence of the eaſtern and weſtern Tyrol, and the Voralberg; yet, notwithſtanding the utmoſt bravery of theſe troops, prince John was overpowered by ſuperior numbers of the French, commanded by mareſchal Ney; and he was defeated, after an obſtinate action, at the foot of mount Brenner, in the Tyrol. The other generals, at the head of the diviſion in the Voralberg, were defeated in a ſimilar way by a ſuperior corps of the enemy under the command of mareſchal Augereau, who took Jellachich priſoner, with the greateſt part of his troops. Thus the Auſtrian army, conſiſting of nearly two hundred and fifty thouſand men, was prematurely defeated, and upwards of one hundred thouſand of them taken priſoners, by being engaged piecemeal, and under different deſtinations; but which, had they been kept together, and concentrated ſo as to have encountered

the enemy in one mighty body, it is more than probable that the event of the war would have taken a very different turn.

It now became the object of Napoleon to follow up this great blow with redoubled vigilance; and his determination was to take poſſeſſion of Vienna, the capital of Auſtria, by forced marches; and to this point, as to a centre, he commanded the four diviſions of his army to direct their courſe, in ſpite of every obſtacle that might preſent itſelf in their way. On the oppoſite ſide of the Inn, a numerous body of Auſtrian and Ruſſian troops were poſted, as if to diſpute the paſſage; but after a ſlight ſkirmiſh they fell back to Lintz, and left the French army to croſs the river without interruption, which it accompliſhed on the 28th of October. It now advanced through the Auſtrian territory, almoſt without reſiſtance, till it reached St. Polten, only twenty-ſix miles from Vienna. Here Napoleon was waited upon by a deputation from the emperor Francis, tendering him the keys of the city, and truſting to his magnanimity and juſtice, in not ſuffering private perſons, nor their property, to be violated, nor that magnificent metropolis to be defaced and pillaged by the ſoldiery. On the 13th of November, 1805, Napoleon, at the head of his whole army, took poſſeſſion of Vienna; and to his honour it muſt be recorded, that he held the preſervation of the city, and the rights of its inhabitants, moſt ſacred; though the diſaffected and inſidious among the natives came forward to plunder with haſty ſtrides; and every viper that had for ages been foſtered in the boſom of the ſtate, now erected their deleterious fangs, to glut on the vitals of the parent which gave them birth, or the government which ſecured their exiſtence, and afforded them nouriſhment and protection! But there muſt be ſome ſuch reptiles in every ſtate, and in every country, or the meaſure of guilt and iniquity could never be full.

Previous to this direful and ever to be lamented day, (for Vienna had never before been taken or entered by an hoſtile army,) the emperor Francis II. had retired to Preſburg, in Upper Hungary, in his way to Olmutz, the capital of Moravia, where he was to meet the Ruſſian emperor Alexander; and to which place his empreſs, family, and houſehold, with all his valuables that could be ſecured in time, had been before removed. And here alſo, amid the poignant diſtreſs of the empreſs and royal family, and after having loſt his whole Auſtrian dominions, Francis magnanimouſly publiſhed a declaration to his ſubjects, couched in the moſt animated terms, "that it was ſtill his determination to purſue his fortune to the laſt ſtake, and neither ſubmit to an inexorable foe, nor enter into a ſeparate peace, while he could rely on the *pledged aſſiſtance of the king of Pruſſia*, and on his invincible allies the emperor of Ruſſia, and the king of Great-Britain,—*but under circumſtances of the very laſt extremity.*" He alſo called upon his loyal and beloved ſubjects "to riſe in maſs, further to ſtrengthen and aid the undiminiſhed armies of his great allies and friends, until the emperor of the French ſhould be brought to ſuch terms and conditions of a peace, as would not tarniſh or abridge the honour and independence of the firſt and higheſt monarchy in Europe."

But the memorable event which was to decide the fate of the empire, and blaſt the laurels of the houſe of Auſtria, was now at hand: this was the battle of Auſterlitz; the only important ſtand made by the allies during the war. The emperor Francis had collected a conſiderable part of his diſcomfited army, conſiſting of about twenty-five thouſand men, under his own immediate command, aſſiſted by prince John of Lichtenſtein; and which he now united to the grand Ruſſian army, conſiſting of about eighty thouſand men, commanded by the emperor Alexander in perſon, aſſiſted by the grand duke Conſtantine, prince Pangrazion, and the generals Kutuſow and Buxhovden. The French army was commanded by the emperor Napoleon in perſon, aſſiſted by the mareſchals Soult, Laſnes, Bernadotte, Davouſt, and prince Murat, and conſiſted of one hundred and twenty thouſand men, elated with conqueſt, and enthuſiaſtic in the purſuit of victory. Early on the 2d of December, 1805, the arduous and bloody conflict began. The whole French line was inſtantly put in motion; and having a moſt decided advantage in its numerous cavalry and artillery, it galled and mowed down the ranks of the allies even before they could come into action. The horſes of the Ruſſian artillery and cavalry, worn down by ſo long a march, and deſtitute of food for three days previous to the battle, were wholly incapable of acting. The only alternative left for the allies, was to march up to within point-blank ſhot of the enemy, and after diſcharging a few rounds as they approached, to engage them on the point of the bayonet. This manœuvre was enforced with all poſſible expedition throughout the line, and a dreadful effuſion of human blood was the conſequence. The French front were compelled to give way; but being ſupplied with a ſtrong reinforcement of freſh troops, they in turn gained ground, and a dreadful havock was again made; both ſides fighting more like enraged tigers, than like men. At length the French ſucceeded in forcing the centre of the allies; and the right and left wings being too much disjointed, and deſtitute of cavalry, the enemy eaſily turned their flanks, and fell upon their rear. Every chance of recovering this misfortune was loſt; a dreadful ſlaughter enſued, and victory declared for the French. Here ended the laſt ſtruggle of Francis II. with the implacable Napoleon Bonaparte; and the emperor Alexander marched back his diſcomfited troops to the Ruſſian territory

Had, indeed, the allied powers been punctual to their engagements, and taken their ground with the ſame promptitude and alacrity as the French:—had the Engliſh, and Swedes, and Ruſſians, united with the Hanoverian and Heſſian troops, formed a vaſt army in the rear of the French, as had been ſtipulated:—and had the heſitating indeciſive Pruſſian monarch joined his unimpaired legions to them, *as pledged to the emperor Francis:*—is it reaſonable to imagine that the republican army, after all, and more than all, its unparalleled ſucceſſes, hemmed in on all ſides, and ſhut up in the moſt diſtant province of the German empire, where its enemies would have multiplied every hour, and all the neutral ſtates have joined their contingents to the imperial army,—could ever have cut its way through ranks of ſuch combined magnitude, or made good a retreat through a country, where all reſources and ſupplies might have been completely cut off?—The elector of Wirtemburg publicly declared that he only waited for the king of Pruſſia, to join, with him, his forces under the imperial ſtandard; and but for want of which, he was compelled to take an active part in favour of the enemy. But it was unfortunately the lot of Frederic William not to participate in ſo much glory:—the criſis of his fate was not yet arrived:—coveting too much, he luſted for more than was his due:—while courted and importuned on every ſide to throw the weight of his mighty army into the ſcale, he had the vanity to ſuppoſe his nod could at pleaſure ſtrike the balance. By this deluſion he eventually loſt his empire, even before he knew the extent of his own imbecility. Thus we partly trace the unfathomable ways of divine Providence, in making man the inſtrument of his own chaſtiſement,—in dealing out to all his creatures a juſt and equal retribution.—See the article PRUSSIA.

Immediately after the fatal battle of Auſterlitz, the emperor Francis, foiled in every hope, and reduced to the laſt extremity, was compelled to ſue for an armiſtice, as a prelude to a peace on ſuch terms as the conqueror might think fit to grant. Theſe, though hard, and extremely humiliating, were nevertheleſs not ſo ſevere as might have been expected from the triumphant leader of a revolutionary army. It was ſtipulated that the emperor

emperor of Auſtria ſhould for ever relinquiſh the ſtates of the republic of Venice, as ceded to him by the treaties of Campo Formio and Luneville, with the Venetian iſles, Iſtria, and Dalmatia, now to be united to the kingdom of Italy; and of which the emperor Napoleon ſhould be acknowledged king. That the electors of Bavaria and Wirtemburgh, the allies of France, ſhould reſpectively take upon them the title of king, and be thus acknowledged by the houſe of Auſtria and the German States; and who ſhould never in future exerciſe any kind of authority over them, or over the elector of Baden, or the territories claimed, or to be claimed, by all or either of them. Signed at Preſburgh the 26th of December, 1805.—For more extenſive particulars of this war, and the conſequences reſulting from it, as well as for the complete hiſtory of the French Revolution, ſee the article FRANCE, vol. vii. p. 760–905.

CONSTITUTION AND GOVERNMENT.

The German conſtitution and government appear to have been founded upon the baſis of its numerous independent ſtates, of which it is ſaid there are nearly three hundred; and, upon the authority of the *electors*, who, as we have ſeen, p. 484, aſſumed the right of electing their emperors ever ſince the demiſe of Louis IV. the laſt reigning prince of the houſe of Charlemagne in Germany. The emperor Maximilian firſt divided the empire into *ten circles*, in the year 1552; but the circle of Burgundy or the Netherlands being afterwards detached from the empire, there of courſe remain only *nine*. It is the claim of theſe electors, which originally, as well as at preſent, renders the German empire elective; and on this account, every king of the Romans, when choſen, is required ſolemnly to renounce all attempts to render the dignity hereditary in his family. The conſtitution of the empire, ſince the peace of Weſtphalia, which terminated the thirty years war againſt the proteſtants, makes no expreſs limitation with reſpect to religion, nation, ſtate, or age; but the engagement at the coronation, "to protect the pope and the holy ſee," ſeems to exclude a proteſtant from this dignity. On the intricate ſubject of the Germanic Conſtitution, as ſettled at the peace of Weſtphalia, the ingenious Pütter remarks as follows:

"Conſidering the various revolutions which were occaſioned partly by the number of important articles of that peace, and partly by the calamities of ſo long and ſo general a war, it cannot be wondered that the whole conſtitution of the Germanic empire, almoſt all at once, underwent a conſiderable change, or rather firſt acquired its proper firmneſs, which ſoon diſcovered itſelf by effects of the firſt importance. As ſuch great revolutions in general do not ariſe ſuddenly, without many preparatory circumſtances, which gradually unfold themſelves, ſo Germany had been for ſeveral centuries in ſuch a ſituation, that it might eaſily be foreſeen, that it would not, like France and other European nations, continue an undivided empire, which could not upon the whole be conſidered in any other light than as a ſingle ſtate. From the hereditary rights of the dukes and counts in their original ſtate, as ſervants of the crown, and of the rights of ſovereignty of which the ſpiritual and temporal ſtates gradually acquired the poſſeſſion, it could not be ſaid, that the emperor was the only regent in Germany, or that the whole of Germany could be conſidered as a ſingle ſtate. Every ſpiritual and temporal elector, or prince, count, or prelate, had in fact been long the actual ſovereign of his own country. Every imperial city formed a diſtinct, though ſmall, republic. Even cities which were not imperial, were almoſt in a ſimilar ſituation. Every imperial knight, or immediate nobleman, had dominion over the diſtrict of his eſtate, as his territory. Germany, therefore, had been long divided into as many ſeparate ſtates as there were electorates, principalities, counties, imperial prelacies, imperial cities, immediate nobility, and imperial villages; and it could only ſo far be ſaid, that Germany continued upon the whole one ſtate, and one empire, as all theſe particular ſtates did not diſſolve the bond which originally united them as members of the ſame empire, but continued in a mutual and perpetual connection, ſubject to the ſame fundamental laws, and to one common ſupreme head.

"The remains of a ſimilar conſtitution were evident even in France, as long as there were dukes of Burgundy and Britanny; and formerly the conſtitution of that country was almoſt the ſame as that of Germany; but the great difference which now appears between the internal conſtitution of the two nations of France and Germany, diſcovered itſelf in two principal things: firſt, that the kings of France, notwithſtanding the increaſe of the number of dukes, counts, and prelates, always preſerved their own domains, whilſt the emperor, on the contrary, loſt them all; and then, that in France, all the ſtates, as at laſt Burgundy and Britanny, were united to the crown; whilſt in Germany, on the contrary, even the hopes of redeeming thoſe domains which had been only mortgaged, were at laſt totally abandoned.

"Every thing was already, and had been for many years, in ſuch a ſituation in Germany, that it was eaſy to perceive that it would be difficult to make any further alteration; eſpecially as the attempt made by the powerful emperor Charles V. which had the faireſt proſpects of ſucceſs, was totally fruſtrated by the valiant conduct of a ſingle German prince, [Maurice,] ſupported by France. The queſtions, however, likely to ariſe concerning the ſingular conſtitution formed in Germany, which was almoſt the only one of its kind, were not ſo thoroughly determined that obſtacles could not be raiſed, and that a Ferdinand III. after the victories of Prague, Lutter on the mountain of Barenberg, and Nordlingen, might not ſtill feel a ſtrong inclination to imitate the example of Charles V. and make another attempt to reduce Germany to the dominion of a ſingle ſovereign. So far, the whole of the war of thirty years may be conſidered as a ſtruggle againſt this attempt; but it is likewiſe evident, that the peace of Weſtphalia has finally decided the queſtion, in oppoſition to the deſigns of Ferdinand, in favour of the conſtitution, as it had actually exiſted for ſo many years, and for the advantage of the ſtates of the empire. Not that the peace was the firſt foundation of their territorial ſovereignty, and the prerogatives connected with it—No—this had been continually increaſing for ſeveral centuries, and in its nature was equally as valid before the commencement of the war of thirty years, as afterwards; but the treaty of Weſtphalia firſt confirmed it, and affixed the ſeal. All doubts which had before ariſen were finally removed, and the whole conſtitution became ſolidly and permanently eſtabliſhed.

"Germany therefore, conſidered as one empire, is a political, but not, like the other European nations, a ſimple body, but a compound one, the component parts of which are diſtinct ſtates, which preſerve their connection under the emperor, as one common ſupreme head. With this idea, every difficulty which had hitherto ariſen in the diſputes concerning the Germanic empire, whether its government was monarchical, ariſtocratical, democratical, or mixed, totally vaniſhes. People were not aware that among different forms of governments there might be another higher diviſion of ſimple and compound ſtates, which had no conformity with any other than the firſt of the different ſtandards. The examples of the Seven United Provinces, the Thirteen Cantons of Swiſſerland, and the United States of North America, prove the poſſibility of ſeveral ſtates being united in one compound political body, the component parts of which do not on that account ceaſe to be ſeparate ſtates. The Germanic empire has only this peculiarity,

peculiarity, that, notwithſtanding its diſmemberment into ſo many ſeparate ſtates, it has preſerved its ancient monarchical head; and all this may be perfectly reconciled upon the ſame principle as we conſider all compound bodies, when we view them in the whole, in a different light from that in which we view them in their ſeparate parts.

"Germany, as a compound political body, conſiſts of as many different ſtates as there are ſtates of the empire, and territories, each of which has its own peculiar government, which are again diſtinguiſhed into almoſt every poſſible ſpecies, and are, more or leſs, monarchical, ariſtocratical, or democratical. In the whole, however, Germany, conſidered as an empire, has its monarchical form of government, ſo long as the perſon of the emperor is independent of all ſuperior human power: for the eſſential difference between a monarchy and republic conſiſts in this, that in the latter no ſingle individual can be independent, as crowned heads only in the former. Germany, therefore, conſidered in the whole, in reckoning the ſtates of Europe, can no more be left out of the number of empires and monarchies, than Great Britain, or Sweden; but this is no reaſon why the emperor ſhould have an abſolute monarchical power, like the king of Denmark, and others; but he remains a monarch, though he cannot act without the conſent of the diet, any more than a king of Great Britain without the concurrence of the parliament; and though his throne is not hereditary, like that of other kings, but depends upon a free election, like that formerly of Poland.

"If we conſider this compound political body again in another point of view, which is inſeparable from it, viz. its component parts, it has evidently much more reſemblance to the ſtates of the United Provinces, Swiſſerland, and North America, than to countries which are ſimple monarchies. This diſtinguiſhing characteriſtic certainly always remains, that Germany is united, not merely under a congreſs or ſtates-general, but under a common ſupreme head, endowed with monarchical though not abſolute power, and in moſt reſpects under the neceſſity of acting with the concurrence of the ſtates of the empire. This, however, does not by any means prevent the other third point, as often as the component parts come into conſideration, in which the late conſtitution of the United Provinces, may be compared with that of the Germanic empire, as far as this empire is divided into ſeparate ſtates totally diſtinct from each other.

"Every electorate, every principality, every imperial city, every territory, however inconſiderable, which is included in the number of the ſtates of Germany, has its own peculiar government, its own fundamental laws, its own taxation, adminiſtration of juſtice, police, coinage, and what is ſtill more, its own military eſtabliſhment, and the right of entering into alliances, making war, concluding peace, and ſending ambaſſadors: in ſhort, whatever ideas a perſon travelling through the various independent ſtates of Europe may form of the difference of their conſtitutions, laws, and other regulations, will equally occur to a traveller in Germany; and often teach him, in a ſtill more ſtriking manner, that there are ſtates which are totally diſtinct from each other; ſince he need not travel half a day in Germany without finding forms of government, ſometimes republican, ſometimes monarchical, ſometimes limited, ſometimes deſpotic, ſometimes hereditary, and ſometimes dependent on the freedom of election; yet without finding totally different laws in every new territory; but other coins, other poſts, and other ſoldiers; and a perſon who reſides but for a ſhort time in the country, would much more frequently experience that Germany conſiſts of ſeveral ſtates totally diſtinct from each other, than that the empire is ſtill united under one common ſupreme head. This perpetual change of ſtates is very inconvenient to ſtrangers: the difference is not only obſervable by the uniform of the troops, colour of the livery of the poſtilions; but by a change of money, which frequently differs in its value, and generally by the payment of freſh tolls.

"One circumſtance ariſing from this, and peculiar to the Germanic empire, is the diſtinction between its *mediate* and *immediate* members. In the ſame manner as two objects which we may ſuppoſe to have relation to each other, are immediately related, when there is no third object intervening; but otherwiſe only mediate. This may be illuſtrated by the example of the connection between a grandfather and his children, who may be ſaid to be mediately related; while the relation between parents and children, on the contrary, is immediate; and in this relation all perſons and affairs in Germany ſtand, under the ſovereignty of the empire, and its common head. But as a nobleman's eſtate, for inſtance, which lies in a German principality, and ſubject to a prince's ſovereignty, is only ſo far a part of the Germanic empire, as it conſtitutes a part of that principality; ſo, with reſpect to the whole empire, it can only be conſidered as a mediate member. Such eſtates, or territories, on the contrary, are immediate, which do not form any part of another ſtate, but only conſtitute a part of the empire in general. According to this idea, the whole of Germany is divided into mediate and immediate members; the latter of which are regularly at the ſame time ſtates of the empire, who have the government of their reſpective countries in their own hands; and the former are, as parts of theſe ſtates, ſubject to their territorial ſovereignty; yet there are immediate members of the empire likewiſe, which have no ſeat or voice at the diet, and are therefore not ſtates, the very nature of which eſſentially conſiſts in ſuch a ſeat and voice. Theſe are the free imperial nobility, or knighthood of the empire, and the imperial villages. Many noblemen's eſtates, convents, and cities likewiſe, have loſt their immediacy, and are become ſubject to the ſovereignty of other ſtates, and are therefore mediate; and the queſtion is ſtill in diſpute with ſome, whether they are immediate or not.

"The whole conſtitution of the Germanic empire, therefore, centers in this, that the queſtion ſtill remains reſpecting the ſovereign rights of the emperor over mediate members, either in the caſe of complaints made againſt their ordinary government, or by virtue of certain reſerved rights which exiſted before the riſe of territorial ſovereignty, and have remained throughout Germany in the emperor's power. Theſe are, in particular, his right of raiſing to a higher rank, conferring academical honours, and nominating counts palatine of his court, and notaries. Yet even theſe rights cannot be exerciſed with any legal effect, or acknowledged in moſt countries, without their being firſt ſubmitted to the examination and approbation of the territorial lord. No ſovereignty whatever can be exerciſed over immediate members of the empire, except in the name of the emperor; but with this diſtinction again, whether it is left to the emperor alone, as in the caſe of moſt imperial grants, inveſtitures, and the juriſdiction as exerciſed in the imperial courts of judicature, with reſervation of the reſort to the Auſtregues; or whether it depends upon the conſent of the diet, the two ſuperior colleges of the empire, or of the electoral college alone. This matter has been determined at different times, partly in the peace of Weſtphalia, and partly in the emperor's capitulations; though with reſpect to the latter, all the diſputes which have ariſen concerning the caſes where the electoral conſent alone is neceſſary, have not yet been wholly decided.

"Even in the peace of Weſtphalia, ſome doubts are ſtill left concerning what caſes, beſides thoſe which are expreſsly mentioned as belonging to the diet, are included in the clauſe annexed, which mentions 'other ſimilar caſes.' Even in thoſe matters which belong to the

the diet, particularly when any thing is in queſtion which is to have the force of law throughout the empire, and the weight of which is likely to fall upon the ſtates themſelves, the balance ſeems more in favour of the ſtates than of the emperor. On this account it almoſt as frequently happens, that a motion is made on the ſide of the ſtates, which they endeavour to bring to a concluſion of the empire under the emperor's authority, as that the emperor himſelf propoſes any thing which requires the conſent of the empire. In this reſpect we find that the relation between the emperor and the diet is totally different from that in which the king of Great Britain ſtands to the parliament, or the king of Sweden to the diet. There thoſe who have a ſeat and voice at the diet are only private perſons; whilſt here the ſtates are actual ſovereigns of a country, in their own right. Even the congreſs of North America conſiſts only of deputies from the united ſtates, each of whom is dependent on the ſtate which ſends him, and bound to comply with its inſtructions: the ſtates of Germany, on the contrary, are actual rulers of thoſe countries, from the poſſeſſion of which they derive their ſeat and voice at the diet. The votes themſelves are given as they pleaſe; or when they depute others for that purpoſe, as their plenipotentiaries, it remains always in their power to direct how they ſhall be given.

"Beſides the opinions or reſolutions which the ſtates may form among themſelves, it is certainly neceſſary for the emperor to give his approbation before a decree of the empire can have its legal force, or the rights of majeſty be exerciſed throughout Germany. Yet there are caſes where a joint reſolution of all the ſtates of the empire together, or of a certain number of them, may have its due efficacy without the emperor's conſent: as in this manner ſeveral of the ſtates have united, and entered into a ſort of treaty with each other, more than once, reſpecting the ſtandard of coinage, which they have ſettled themſelves.

"If we conſider the peculiarities of the Germanic conſtitution, as it was firmly eſtabliſhed by the peace of Weſtphalia, we ſhall find that one of its greateſt advantages is, that when every thing is in its proper order, each individual territorial lord has ſufficient opportunities of doing good; but that if, on the contrary, he is inclined to injure his country, either the provincial ſtates may interfere to prevent him, or elſe his ſubjects in general, or any individual among them, may ſeek redreſs from one of the ſupreme tribunals of the empire. Upon the whole, therefore, it is certainly a happy conſtitution, by which ſuch proviſion is made to prevent the apprehenſion of ill conſequences attending the territorial ſovereignty, divided as it is in ſo many hands, which of courſe cannot be ſuppoſed to be guided always with the ſame degree of wiſdom and goodneſs of heart, as might otherwiſe be expected, conſidering that the little tyrants of a confined diſtrict are often more dangerous than great tyrants in extenſive territories.

"There are two rocks however ſtill remaining, peculiar to the Germanic conſtitution, which our reigning princes, and thoſe who are in expectation of power, cannot be ſufficiently careful to avoid. The German word *landeſherr* (territorial lord) ſeems once to have conveyed an idea that they were actual lords of their country, in the ſame manner as the proprietor of an eſtate conſiders it as his own property, to be diſpoſed of and managed as he pleaſes. The anceſtors of the preſent ſtates of the empire might certainly be originally conſidered only as the poſſeſſors of large eſtates, though they have ſince gradually acquired the character of actual ſovereigns. As they are therefore now in that capacity, they muſt not any longer imagine that their territories are merely for their own uſe, that a number of ſlaves wait for their commands, and that only rights, and no obligations, are connected with their elevated rank; but they ought to recollect, that, as rulers, they have real duties to diſcharge, which ought only to tend to render their country happy, and to promote the ſecurity and welfare of their ſubjects."—See Dornford's Tranſlation of Pütter's Germanic Empire.

Such is the liberal and ſatisfactory explanation of that ſingular conſtitution of the Germanic ſtates, which has puzzled numerous writers and legiſlators; and in which the liberties and franchiſes of both lords and commons, appear to be amply provided for and legally ſecured. Innovations, however, will from time to time creep into every ſtate, and are found ſtruggling againſt eſtabliſhed forms and maxims even in the beſt regulated ſocieties; and therefore ought always to be guarded againſt with patriotic firmneſs.

The origin of electors is not well known; ſome refer it to an edict of Otho III. confirmed by Gregory V. about the year 996. But this opinion is contradicted by the whole tenor of hiſtory. From the earlieſt period in the hiſtory of Germany, the perſon who was to reign over all, was elected by the ſuffrage of all. Thus, Conrad I. was elected either by all the princes and chief men, or by the whole nation; in 1204, Conrad II. was elected by all the chief men, and his election was approved and confirmed by the people; and at the election of Lotharius II. in 1125, ſixty thouſand perſons of all ranks were preſent, and he was named by the chief men, whoſe nomination was approved by the people. Others refer it to Frederic II. who died in 1250. The firſt author who mentions the *ſeven electors* is Martinus Polonus, in this reign; and this reſtrictive privilege was probably obtained by degrees. The princes of greater authority were firſt allowed to name the perſon whom they wiſhed to be choſen emperor, and the people retained the right of approving or diſapproving the nomination; and when they had ſecured the right of voting firſt, or of *prætaxation* as it was called, it became needleſs for the inferior eccleſiaſtics or barons to attend, merely to confirm their choice; more eſpecially as their attendance would become troubleſome and expenſive. Beſides, the aſſumed privilege of the ſeven electors, who poſſeſſed the moſt extenſive territories, was ſtrongly ſupported by their numerous dependents and allies; and they were conſidered as the repreſentatives of all the orders which compoſed the higheſt claſs of German nobility. See Robertſon's Hiſt. ch. v. —Others have aſcribed the origin of electors to Ralph of Hapſburgh, founder of the houſe of Auſtria, in the year 1280. It appears from the above account that their number was unſettled, at leaſt till the time of Frederic II. in the thirteenth century. The golden bull, publiſhed by Charles IV. in 1356, fixed the number of electors to ſeven; three of them eccleſiaſtics, viz. the archbiſhops of Mentz, Treves, and Cologne; and four ſeculars, viz. the king of Bohemia, the count palatine of the Rhine, the duke of Saxony, and the marquis of Brandenburg. By the treaty of Munſter, in 1648, this order was changed; the duke of Bavaria being put in the place of the count palatine, and an eighth electorate erected for the count palatine. In the year 1692, a ninth electorate was created by the emperor Leopold, in favour of Erneſt duke of Hanover, under the title of elector of Brunſwic. Some oppoſition was made to this election; and the princes of Germany ſtood out for ſome time, and refuſed to acknowledge it. But they afterwards acquieſced in it, and it has been ſince recogniſed by all the foreign princes. The king of France did it at laſt by the treaty of Raſtadt, in 1713. The changes that have taken place in Germany within theſe laſt ten years, but chiefly after the treaty of Luneville, have diſpoſſeſſed ſome electors, and added others; ſo that the number is now ten, as ſtated in p. 395.—The electors had not only the power of chooſing the emperor, but they have actually exerciſed that of depoſing him. Thus they depoſed Adolphus of Naſſau in 1298, and Wenceſlaus in 1401. See p. 483, 485.

The

The names and offices of the electors, then, as they were confirmed and acknowledged by the treaty of Raſtadt, were as follow:

1. The archbiſhop of Mentz, chancellor of the empire when in Germany.
2. Archbiſhop of Treves, chancellor when in France.
3. Archbiſhop of Cologne, chancellor when in Italy.
4. King of Bohemia, cup bearer.
5. Elector of Bavaria, grand ſerver of feaſts.
6. Elector of Saxony, great marſhal.
7. Elector of Brandenburg, (king of Pruſſia,) great chamberlain.
8. Elector palatine, great ſteward.
9. Elector of Hanover, (king of Great Britain,) arch treaſurer.

The reſpective offices of theſe electors were eſtabliſhed by the *golden bull*, as mentioned at p. 485, whereby the electors became as it were great officers of ſtate, and their offices were made hereditary in their families.

The form of election is by the ſaid bull directed to be as follows. The elector of Mentz, in quality of great chancellor of the empire, is to ſummon the electors, upon the demiſe of an emperor, within the ſpace of one month after he receives notice of that event; and the day fixed for the election is to be within the compaſs of three months from iſſuing the ſummonſes. The electors are not required to attend perſonally, but may ſend their ambaſſadors, and on ſuch an occaſion they generally name three; but if an elector neither attends in perſon, nor appoints an ambaſſador, he forfeits his right of voting for that time only. The elector of Mentz collects the ſuffrages, which are given *viva voce*, according to the rank of the electors; and laſt of all he gives his own vote, which is required of him by the elector of Saxony. It is neceſſary that the perſon choſen ſhould have a majority of the whole body, and not merely a majority of votes; for if there are three candidates, and one has four, another three, and the third two voices, the election remains undecided. The ceremony of the election is performed at Frankfort on the Maine; but though cuſtom has fixed it at that city, it is not eſſentially neceſſary that it ſhould be held there.

As ſoon as the choice is made, the newly-elected emperor, or his proxy, muſt immediately ſwear and ſubſcribe to the capitulation of election; and before his coronation, muſt ſwear to it in perſon; and, till this is done, he cannot aſſume the government, but muſt leave it to the vicars of the empire. The *capitulation* is the contract between the emperor and the ſtates, which he ſwears faithfully to obſerve and keep: viz. 1. To defend the empire in church and ſtate. 2. To obſerve and maintain the fundamental laws of the empire. 3. To defend and uphold the rights, privileges, franchiſes, and immunities, of the princes and people, in every part of the empire. The coronation, according to the golden bull, ought to be performed at Aix-la-Chapelle, but it has been performed for many years in the place where the election is made. Until the reign of Maximilian, the emperors were crowned at Rome by the pope, and then ſtyled themſelves "Roman emperors;" but that emperor not chooſing to go to Rome, obtained from the pope a bull, which empowered him to take the title of emperor, on his being crowned in Germany. The title of king of Italy and Lombardy, if we except twenty-one fiefs of the empire which lie in the eccleſiaſtical ſtate, is merely titular.

The prerogatives of the emperor conſiſt partly in his being conſidered, by all other crowned heads and ſtates in Europe, as the *firſt* European potentate, and conſequently precedence is given him and his ambaſſadors in all foreign courts. With reſpect to the German empire, he is its ſupreme head, and as ſuch enjoys many privileges. Yet his power in the adminiſtration of the German empire, is limited both by the capitulation of the election, the other laws of the empire, and by the cuſtoms of the empire. Thoſe privileges which he has the right of exerciſing without the advice of the ſtates, are called his *reſervata*; but his greateſt power does not conſiſt in theſe, which are far from being repugnant to the liberties of the ſtates of the empire. His rights, with reſpect to eccleſiaſtical affairs, conſiſt in little more than confirming eccleſiaſtical elections, and ſending commiſſaries to the elections of archbiſhops, biſhops, and abbots, that they may be performed in due order; but the commiſſary is never perſonally preſent at theſe elections.

In temporal affairs, the emperor has the right of beſtowing perſonal dignities; ſuch as creating lords, barons, and counts, who enjoy the dignity of princes, and of knights and gentry; as alſo that of raiſing countries and territories to a higher rank; of beſtowing coats of arms, as alſo the enlarging, improving, and altering, them. He has the power of eſtabliſhing univerſities, and enabling them to confer academical degrees; of granting a right of holding fairs and markets, and of erecting any place into a ſanctuary. He can place children who are born out of wedlock upon the footing of ſuch as are legitimate; can confirm the contracts and ſtipulations of the members of the empire; and ſo far remit the oaths extorted from them, that they may commence an action at law againſt another, on account of the very thing for which the oath was adminiſtered. The emperor, however, has no right, without the conſent of the collective ſtate of the empire, to put one of thoſe ſtates under the ban; to exclude a ſtate of the empire from a ſeat and voice in its colleges; to interfere in the laws of the empire; to conclude treaties in affairs relating to the empire; to involve it in a war; to raiſe levies; or to conclude a peace in which the empire is concerned; to appoint taxes in it; to regulate the coinage; to build forts in the empire; or to determine religious diſputes.

The ſucceſſor in the adminiſtration is frequently choſen by the electors during the life of the emperor, and the perſon ſo choſen is ſtyled "king of the Romans." He is elected and crowned in the very ſame manner as the emperor; and though he has properly no kingdom, he is actually a crowned head; is ſaluted with the title of majeſty, and enjoys the title of "Perpetual Augmenter of the Empire," and "King of Germany;" and takes precedence before all the other kings of Chriſtendom: on the death of the emperor he ſucceeds, as heir apparent, without any freſh election.

Since the emperors are no longer crowned at Rome, the only meaning that is affixed to the title of king of the Romans, is, therefore, that of the preſumptive heir to the imperial dignity: the golden bull indeed, makes no ſuch proviſion for a ſucceſſor during the life of the reigning prince; but this mode of election was eſtabliſhed by an agreement entered into between the emperor and the electors, for the benefit and convenience of the empire. When the throne becomes vacant by the death of the reigning emperor, and no king of the Romans has been previouſly choſen, the elector palatine, and elector of Saxony, have the title of *vicars* of the empire, in right of their reſpective offices; the one of count palatine, the other of arch-marſhal of the empire. The emperor in his capitulation conſtantly engages to ratify and confirm, in the fulleſt manner poſſible, all acts performed by the vicars general, during the time of the interregnum.

The emperor may delegate his power to any prince of the empire, when he himſelf is not in a condition to exerciſe it, and an officer thus appointed is called "vicar of the emperor;" but the authority annexed to ſuch a poſt, is much more circumſcribed than that of the vicars of the empire, it being held during the pleaſure of the emperor, to whom this officer is accountable for the exerciſe of his delegated power.

What is implied in the term "ban of the empire," is, a cenſure pronounced in the diet, againſt a German prince, who is conſidered as having violated the obligations he lies under, as a member of the Germanic body. The conſequences ariſing to any prince, who is put under the ban of the empire, are, his being excluded, ſo long as ſuch interdiction continues, from all the privileges which he poſſeſſes by the conſtitution of the empire; and the imperial troops may be marched into his territories, quartered there, and exact contributions for their ſupport. In the reign of the emperor Charles V. Frederic elector of Saxony, having been put under the ban of the empire, was taken priſoner; and, in order to obtain the ſurrender of Wittenbergh, then the capital of Saxony, the elector was tried by a court-martial, convicted of treaſon and rebellion, and condemned to loſe his head. This proceeding was in ſuch open defiance of every principle of juſtice, that the accuſed was not brought before the court, and was ignorant of its ſitting until its ſentence was announced to him: however, the ſentence ſo pronounced by a court to which he was not amenable, was never executed, becauſe it was a flagrant violation of the conſtitution.

At preſent, however, (March 1807,) this conſtitution and form of government appears wholly or in part annihilated, inaſmuch as Francis II. formally reſigned the empire of Germany, with its title, crown, and regalia, on the 6th of Auguſt, 1806; and he now bears only the title of Francis I. emperor of Auſtria, which he holds in his own right, it being hereditary in his family. This abdication was occaſioned by the *Confederation of the Rhine*, which drew many of the Germanic ſtates from their allegiance; and becauſe of the advancement of the electors of Bavaria and Wirtemberg to the dignity of kings, over whom, and the elector of Baden, Francis was reſtrained from exerciſing any ſpecies of authority, as well as over their reſpective dominions, or the circles of Bavaria, Franconia, and Swabia.—See particulars of the treaty of Preſburg, vol. vii. p. 884.—So that at preſent there is no ſupreme government over the empire of Germany; but every ſeparate ſtate appears at preſent to be governed by its own laws, without being amenable to any ſuperior, though the emperor Napoleon muſt be conſidered as lord paramount of theſe ſtates which compoſe the Confederation of the Rhine.

RELIGION, LAWS, LITERATURE, &c.

The Germans firſt became acquainted with ſome faint principles of the Chriſtian religion toward the cloſe of the ſeventh century, by means of the Iriſh biſhop Kilian, alſo by Suidbert and Ewald, who were Engliſhmen, and Rupretcht, of Worms, who ſettled at Saltzburgh; and in the eighth century, Winifred, of England, preaching among the Thuringians, Heſſians, and Saxons, was ordained biſhop of the Germans beyond the Rhine, by the name of Bonifacius; he was afterward made archbiſhop of Germany, when, under the ſpecious pretence of propagating the doctrines of Chriſtianity, he exerted himſelf with great zeal in promoting obedience to the church of Rome, and even employed the ſecular power againſt ſuch biſhops and prieſts as refuſed to ſubmit to the Romiſh yoke and ceremonies of worſhip. Charlemagne propagated Chriſtianity among the Saxons; and ſome time after, the Bohemians and Moravians were alſo brought to embrace the Chriſtian religion, by Henry I.

The Reformation began firſt in Germany, about the year 1517; through the means of Martin Luther, an Auguſtine monk, and then a profeſſor in the newly-founded univerſity of Wittemberg in Saxony. What greatly tended to ſpread the reformation in Germany was, the long contention which had ſubſiſted between the popes of Rome, and the emperors. Charles V. although he could not brook the ſuperiority aſſumed by the pope, and made uſe of every means which ſecret intrigue and open force could ſupply to humble the Roman pontiff, yet conſidered the ſpread of the reformation in his dominions, as no leſs injurious to that overweening power which he ſo ardently coveted, and to obtain which he was ever plunged into a ſtate of reſtleſſneſs and diſquietude. He therefore appointed a diet of the empire to be held at Spire in 1529; but all the proteſtant electors and princes proteſting againſt its decrees, the year following another diet was convened at Augſburg, when the proteſtants delivered in their creed, as digeſted and drawn up by the learned Melancthon, which became known by the title of "the Augſburg confeſſion." As nothing conciliatory took place at this diet, the emperor determined upon making the ſword the dictator of opinions: a decree was iſſued condemning the tenets of the proteſtants, and forbidding them to be taught; which cauſed the proteſtant princes to aſſemble at Smalkald in Thuringia, and enter into their defenſive league. The perſecutions which at that time threatened the German proteſtants was, however, prevented by the dangers to which Charles found himſelf expoſed from Solyman II. emperor of the Turks; therefore, to gain over his proteſtant ſubjects, he conſented to their exerciſing liberty of conſcience until a general council ſhould be aſſembled to diſcuſs the points of religion. This conceſſion of the emperor cauſed the proteſtant princes to engage to render him their utmoſt aſſiſtance againſt the Turks. But at length Charles concluded a truce with Solyman II. and entered into an alliance with pope Paul III. by which he engaged to ſuppreſs hereſy, and to maintain the authority of the holy ſee. The pope then convened a general council to aſſemble in 1546, at Trent, in the Tyrolean Alps; but as the proteſtants ſaw no probability that juſtice would be done to their cauſe, in an aſſembly evidently convened for the purpoſe of condemning them by a partial inveſtigation, and the whole weight of eccleſiaſtical authority; to avert, if poſſible, the deſtruction which was preparing for them, the princes who had entered into the league at Smalkald, took up arms, and appeared in the field with a force exceeding ſeventy thouſand men; but this confederacy was ſoon broken, by the artful management of the emperor, which cauſed the treacherous defection of a principal ſupporter in their cauſe; this man was Maurice marquis of Miſnia and Thuringia, who, as a principal leader among the confederating powers, had gained the entire confidence of all. The price paid for this breach of honour was the electorate of Saxony, of which the elector Frederic was deprived. On the ſuppreſſion of this confederacy, heavy penalties and ſevere puniſhments were inflicted on all the proteſtants who had entered into the league of Smalkald; and Charles flattered himſelf that he had effectually ſuppreſſed all oppoſition to his will. The emperor, in 1547, ſummoned a diet to meet at Augſburg, at which he preſided, and opened the buſineſs with a ſpeech; but the pope, not liking ſuch a proceeding, convoked an aſſembly at Bologna. Charles not chooſing to ſuffer the diſgrace of having the Augſburgh aſſembly rendered nugatory, cauſed the buſineſs of religion to be proceeded upon there; and even granted to the proteſtants ſome kind of indulgence with reſpect to the marriage of eccleſiaſtics, and to the laity receiving the cup at the euchariſt. Theſe *conceſſions*, as they were then deemed, were to continue in force until a council ſhould be called, and the aſſembly was therefore ſtyled "the interim." On the death of Paul III. Julius III. who ſucceeded him in 1550, that ſame year re-aſſembled the council of Trent.

But the jarring intereſts of the pope and emperor prevented their acting with unanimity in the general cauſe; and the council of Trent continued to ſubſiſt until

until the year 1563, although the members were ſeldom called together, and the deciſions which it from time to time promulgated, neither obtained the unanimous approbation of the Roman catholics, nor the ſmalleſt compliance on the part of the proteſtants; being in the higheſt degree hoſtile to their principles. In 1552, the proteſtant intereſts began to revive under the conduct of the ſame Maurice, elector of Saxony, who was a man of very ſuperior abilities both as a politician and a general, and whoſe conſummate art of diſſimulation, as it had formerly deceived the proteſtants, now with equal effect deceived the emperor, whoſe conduct had given him extreme diſguſt. By the aſſiſtance of France, Maurice was enabled to raiſe a conſiderable force, with which he marched againſt the emperor, at Inſpruck in Tyrol, the common reſidence of the archdukes of Auſtria. His march was ſo rapid, that the emperor, then ſeverely attacked by the gout, was put into a litter, and conveyed over the Alps, in a dark and rainy night, and retired to Villach in Carinthia, to avoid falling into his hands; and the council of Trent, which had then been convened, was haſtily broken up; Maurice having entered his proteſt againſt its authority. At length a meeting was held at Paſſau, A. D. 1552, conſiſting of the whole body of German electors, both papiſts and proteſtants. Ferdinand king of the Romans, and brother to the emperor, attended as his repreſentative; and the emperor's tyrannic ſway had rendered him ſo odious even to the catholics, that they came with minds well diſpoſed toward their religious opponents; in conſequence of ſuch a diſpoſition, mutual conceſſions were made, and terms of compromiſe ſettled, which the emperor very reluctantly complied with.

At the beginning of the reign of Ferdinand I. a diet at Ratiſbon confirmed the proteſtants in their religious rites, and during more than half a century the empire was very little diſturbed by religious contentions, except what aroſe between the Lutherans and Calviniſts. In 1609, the proteſtants entered into a new confederacy, which was ſtyled "the evangelical union," to which another aſſociation was oppoſed which bore the name of "the catholic league," ſoon after which, John William duke of Cleves and Juliers dying without iſſue, the ſucceſſion to thoſe duchies rouſed to arms the heads of the two parties. Several competitors aroſe, and the emperor cited them all before him. The princes of the evangelical league oppoſed the emperor, and thoſe of the catholic league ſupported him: the elector of Saxony only, among the proteſtants, and who was a claimant, joined the emperor. He was grandſon of Auguſtus, who ſucceeded his brother Maurice in 1553, he being ſlain in a battle with Albert elector of Brandenburg. The proteſtant league, conſidering their force as inſufficient to oppoſe againſt their antagoniſts, applied to Henry IV. of France, who continued to ſupport their cauſe until his death. The flames of war were thus kindling toward the end of the reign of the emperor Matthias, and when his couſin Ferdinand II. was choſen emperor, they burſt forth with great fury, A. D. 1618.

The proteſtants of Bohemia then diſclaimed all allegiance to the emperor, and choſe the elector palatine, who had married the princeſs Mary of England, daughter of James I. for their king, who was diſtinguiſhed as Frederic V. but he ſuſtained his regal character a very ſhort time; for the battle of Prague, which was fought in 1620, gave ſuch a total overthrow to his party, that Frederic not only loſt his kingdom, but was deprived of his palatinate, whilſt his queen ſought an aſylum in England: the elector died in 1632. The armies of Ferdinand were now commanded by Buguoy count Tilly and the duke of Walſtein, who for a time carried victory wherever they went, and brought all Germany under the abſolute will of the emperor; which ſucceſs only ſerved to extend his ambitious views, which were now directed to obtain influence and territory in Italy. In Germany, confiding in his reſiſtleſs ſtrength, he iſſued an edict requiring the reſtitution of all benefices and church lands which had been held by proteſtants ſince the treaty of Paſſau. Cardinal Richelieu, who then governed France under the reign of Louis XIII. although he perſecuted the Hugonots in that country, yet gave every poſſible aſſiſtance to the evangelical union in Germany: a ſtateſman's religion is merely a convenient pretext to cover his political ſchemes. This miniſter was no leſs active in oppoſing the emperor's deſigns in Italy; to which, on the other hand, the conduct of the king of Spain was favourable. The proteſtants thus deprived of poſſeſſions which they held by a right derived from the treaty of Paſſau, entered into a league with Guſtavus Adolphus king of Sweden; a former alliance with Chriſtian IV. of Denmark, had proved of little avail; but to this league with Sweden, Richelieu became a very important party, for he ſtipulated to tranſmit to Guſtavus an annual ſubſidy of one million two hundred thouſand livres (150,000l.), and the king agreed to maintain an army of thirty-ſix thouſand men.

At this time the imperialiſts, commanded by Tilly, carried terror and deſtruction wherever they came. The inhuman manner in which that general waged war againſt the proteſtants, ſtamps indelible infamy on his name. In 1631 he took the city of Magdeburg by ſtorm, to which he ſet fire, and maſſacred the inhabitants without diſtinction of age, ſex, or rank. Its population at that time was computed at forty thouſand, and only eight hundred are ſaid to have eſcaped the fury of the ſoldiery, let looſe upon them by their ſavage leader. To ſtop the ſpread of theſe barbarities, Guſtavus, with his hardy and well-trained Swedes, entered Pomerania, took Frankfort on the Oder, Colburg, with other places, and defeated Tilly near Leipſic, on September 7th that ſame year: about ſeven months after, that general was killed in diſputing the paſſage of the Lech. Guſtavus, after his victory at Leipſic, was joined by all the members of the evangelical union, and marching into Bavaria, entered Munich, its capital, in triumph. He was then ſolicited by ſome, to revenge on that city the mercileſs extermination of the Magdeburghers, by giving it up to pillage, and deſtroying the emperor's fine palace; but he rejected the idea with all the magnanimity of a Chriſtian hero.

Walſtein ſucceeded to the command of the imperial army on the death of Tilly, and in November 1632, the important battle of Lutzen was fought, in which the renowned Guſtavus loſt his life, and the proteſtants their firmeſt dependence; yet a ſucceſſion of able Swediſh generals, who had fought under Guſtavus, led on the Swedes to many very glorious victories; whilſt the able adminiſtration of Oxenſtiern, the chancellor of Sweden, with the ſtrong ſupport of France, whoſe armies were commanded by marſhal Turenne and the duke d'Enguien, ſon of the prince of Condé, and who on the death of his father and his ſucceſſion to the title, was called "the great Condé," at length obliged the emperor to join in a treaty concluded at Prague, in 1635, by which he revoked the requiſitions which he had made by the edict of Ratiſbon. This treaty put an end to hoſtilities between the imperialiſts and the German princes of the evangelical union, and left the Swedes and French to contend with the emperor, who dying in 1637, his ſon Frederic III. ſucceeded him, and maintained the war for eleven years; but, having ſuffered many ſevere defeats, and his beſt generals having periſhed in the ſervice, a mean regard to his own perſonal ſafety, and the preſervation of his contracted power, induced him to aſk for peace, which not all the miſeries and deſolations produced by a war ſo long continued, ſo widely ſpread, and ſo rancorouſly waged, could have extorted from his obdurate heart. On the

24th of October 1648, the peace of Weſtphalia was ſigned at Munſter, which brought back to Germany its loſt tranquillity, ſecured the rights of conſcience, and eſtabliſhed the proteſtant religion in Germany.

By virtue of the religious ſtipulations eſtabliſhed by the treaty of Weſtphalia, no other religion but that of Roman, Lutheran, and Calviniſtic or Reformed, was to be tolerated in the empire; yet there are ſects that adhere to neither of theſe three religions, and yet enjoy the free exerciſe of their own. The determination whether a perſon be a member of this or that church, belongs only to that very church; and each ſovereign, or lord, is bound to allow his own vaſſals and ſubjects, who are of another religion, not only the public and private exerciſe of theirs, but every thing belonging to it, churches, ſchools, ſpiritualities, incomes, conſiſtories, &c. in the ſame manner as they ſtood on the firſt of January 1624: but in a country where there are ſubjects who adhere to one religion which in that year was neither publicly nor privately obſerved, it lies in the ſovereign's breaſt whether he ſhall ſuffer them to remain in the country. If he enters into a ſtipulation with them, and promiſes them a toleration, it muſt be maintained, not only by him, but by his ſucceſſors; for the rights of ſuch ſubjects muſt not be infringed. But if he will grant no toleration, he muſt allow thoſe who, at the time of the treaty of Weſtphalia, were already ſettled in his country, five years at leaſt; and thoſe who afterward came to ſettle therein, or have made any change in their religion, at leaſt three years. However, theſe regulations have in later times been wholly neglected.

Each proteſtant ſtate may make what regulations and changes it pleaſes within its own juriſdiction, in matters relating to the churches and ſchools. Hence the external forms differ greatly in the proteſtant countries of the empire. The ſovereign commonly decides all important affairs, ſettles and eſtabliſhes, removes, promotes, caſhiers, or otherwiſe puniſhes, ſuch as ſerve either in the church or ſchools: he forms eccleſiaſtical regulations, appoints feaſts and faſts, and erects colleges, which in his name ſuperintend the other affairs of the church. Conſiſtories are alſo generally appointed by the proteſtant ſtates, which for the moſt part conſiſt of lay and eccleſiaſtical counſellors; but in ſome places more, and in others fewer, things fall under their notice. In many places alſo peculiar ſynods and a church council are held. Thoſe that ſerve the church and ſchools are either appointed by the ſovereign of the country, or the conſiſtory, the elders of the church, or its members.

The power poſſeſſed by the proteſtant ſtates over their catholic ſubjects, is the ſame with that which the catholic ſtates have over their proteſtant ſubjects. In favour of thoſe, who in the year 1624 enjoyed the public exerciſe of their religion, it is provided, that the catholic biſhops, in whoſe diſtrict they belong, ſhall retain the ſame ſpiritual juriſdiction over them as they held in that period: conſequently, ſuch as were merely tolerated out of grace or favour, are alſo wholly left, in this particular, to the ſupreme juriſdiction of the lord of the country; but with this limitation, that he can require nothing of them which is contrary to the principles of their church. On the other hand, no cloiſter ſituated in the territory of any proteſtant ſuperior, or lord, can be converted to the uſe of any other order, unleſs the former order be wholly extinct; and even in that caſe, the cloiſter is to be ſupplied only with ſuch regulars as had a being, or were an order, prior to the religious diſſenſions.

In ſhort, the proteſtants compoſing one united body have mutually agreed, that whenever a Lutheran lord of a country ſhall change his religious perſuaſion to that of the reformed or Calviniſtical church, or obtain a country whoſe inhabitants are of that communion, and *vice verſa*, he ſhall preſerve to his ſubjects the free exerciſe of their religion, their whole form of church and ſchool diſcipline, and all their other privileges. But if a church ſhall of itſelf change its principles to that of the lord of the country, the public exerciſe of religion ſhall be permitted the people; but at their own expence, and without prejudicing the adherents to other tenets. The conſiſtorial counſellor, the ſuperintendents of divinity and of philoſophy, are to profeſs the religion that prevailed in the country at the concluſion of the treaty of Weſtphalia. Thus an enlarged principle of mutual toleration was inculcated throughout the ſtates of Germany, which has greatly promoted the happineſs of the people, by extirpating the ſeeds of religious perſecution.

The adminiſtration of juſtice is conducted with the ſame principles of equity as are obſerved with reſpect to religious liberty, or liberty of conſcience. The diet is that aſſembly of the ſtates in which the legiſlative power of the empire reſides; and is compoſed of the electors, princes, prelates, counts, and free or imperial cities. The emperor, when preſent, preſides in perſon; when abſent, by his commiſſary, whoſe communication of propoſals from the emperor to the aſſembly is called the *commiſſorial decree*. The elector of Mentz, as chancellor of the empire, is director of the diet; and to his chancery are all things addreſſed that are to be ſubmitted to the empire; the reading of which by his ſecretary to the ſecretaries of the other miniſters at the diet is denominated *per dictaturam*, and conſtitutes the form of tranſmitting papers or memorials to the dictature of the empire. The diet is compoſed of three diſtinct colleges, each of which has its particular director. The firſt college is that of electors; of which the archbiſhop of Mentz is director as firſt elector. The ſecond college is that of princes. It conſiſts of princes, archbiſhops, and biſhops; and of prelates, abbots, and counts, who are not conſidered as princes. Each prince, ſpiritual and temporal, has a vote, but prelates and counts vote by benches. The prelates are divided into two benches, the counts into four; and each bench has only one vote. The archduke of Auſtria and the archbiſhop of Saltzburg are alternately directors of the college of princes. The third college is that of the free cities of the empire; the director of which is the miniſter of the city in which the diet happens to ſit. In all theſe colleges, the ſentiments of the majority are concluſive, except in reſpect of fundamental laws, which affect the whole empire, or ſuch matters as relate to religion. In theſe they muſt be unanimous.

Where religion is intereſted, the proceedings are alſo different. The colleges are then conſidered as conſiſting of two bodies, the evangelic and the catholic; and if any religious point be propoſed, it muſt meet not only the unanimous concurrence of the propoſing body, but muſt have the majority of the other to eſtabliſh it. This diſtinction aroſe from the *evangelic body*, which was formed by the proteſtant ſtates and princes to guard the proteſtant intereſt in Germany, by watching over the laws for the ſecurity of their religion, and, in caſe of violation, by obtaining redreſs from the imperial throne. For in any part of the empire, as in the palatinate, where the count is a papiſt and the ſubjects are proteſtants, ſhould oppreſſions ariſe, application would be made to the evangelic body through the director. The elector of Saxony is director of the evangelic body, though he is a papiſt: but therefore his repreſentations in favour of the proteſtants have more force; and beſides, ſhould he abuſe an office which inveſts him with conſiderable weight and influence, he could be inſtantly deprived of it.

The firſt two colleges are ſtyled *ſuperior*, and in effect conſtitute the diet: for all points that come before the diet, are generally firſt deliberated in the college of electors, and paſs from that to the college of princes; in which, if any objection ariſe, a free conference takes place between the directors of each college. And ſhould

they,

they, in conſequence of this free conference, concur, they invite the third college to accede to their joint opinion; which invitation is generally complied with: but ſhould this college return a refuſal, the opinion of the other two colleges is in ſome few caſes engroſſed in the chancery, and delivered to the emperor's commiſſary as the opinion of the empire. The opinion of the third college is merely mentioned at the cloſe. However, though the ſuperior colleges do in effect conſtitute the diet, yet the received maxim is, that no two colleges conſtitute a majority, that is, the majority of voices at the diet; nor can the emperor confirm the opinion of two colleges as an opinion of the diet. By the peace of Weſtphalia, a deciſive vote was recognized as a right of the imperial cities, which the two ſuperior colleges ſhould not infringe upon; their vote being, by the fundamental law, of equal weight with that of the electors and princes. After a meaſure is approved of by the colleges, it is ſubmitted to his imperial majeſty to receive his negative or confirmation. Should he approve the point, it is publiſhed in his name as the reſolution of the empire, which ſtates are exhorted to obey, and tribunals directed to conſider as ſuch.

The diet not only makes and explains all laws, but decides ambiguous caſes. The common adminiſtration of juſtice, however, is referred to the *imperial chamber*; the members of which are a judge of the chamber, and twenty-five aſſeſſors, partly proteſtants, partly papiſts. The preſident is appointed by the emperor, the aſſeſſors by the ſtates. The court receives appeals from inferior juriſdictions, and decides dubious titles; and all cauſes before it between prince and prince, or princes and private perſons, are adjudged according to the laws of the reſpective parties, or according to the imperial law. This tribunal is under the inſpection of viſitors appointed by the ſtates; and, during their viſitation, the ſentences of the court are ſubject to reviſion. Appeals lie afterward alſo from the judgment of the viſitors to that of the diet.

The *aulic council* receives appeals from inferior juriſdictions; and to it belong the reſerved rights of the emperor; and to the imperial chamber alſo are annexed peculiar powers. The imperial chamber ſubſiſts during a vacancy of the throne under the authority of the vicars of the empire; whereas the aulic council does not exiſt until appointed by the ſucceeding emperor. It conſiſts of a preſident, vice-preſident, and ſeventeen aſſeſſors, of whom ſix are proteſtants. The vice-chancellor of the empire is alſo intitled to a ſeat; and all decrees iſſuing from the council paſs through his hands to thoſe who are to execute them. This tribunal obtains for the emperor, through the appeals from the courts of other princes, a new authority beſides that which he poſſeſſes from his reſerved rights; but electors and ſome princes, as thoſe of Hanover, Auſtria, Brunſwick, Swediſh Pomerania, Heſſe, are free from this dependence on the emperor, to whoſe aulic council their ſubjects cannot appeal; nor can it take cognizance of eccleſiaſtical or criminal cauſes, both of which appertain only to territorial juſtice.

Over each of the nine circles preſide directors, to whom the tribunals of juſtice commit the execution of their decrees. The office of *director* is permanent and hereditary, as it belongs always to the firſt prince in the circle, upon whom it confers high authority; for all the decrees of the imperial chamber and aulic council are of no avail unleſs the director will execute them. The directors of the circles are not only inſtruments of war but of peace: for in caſe of an imperial war, they are to collect the troops of the circle; and if any ſtate or prince of their reſpective circles ſuffer violation from others, they are to yield protection and enforce the peace; or, ſhould there be any tumultuous upriſings of the people, the ſuppreſſion of ſuch belongs to them.

The emperor is the executive inſtrument of the whole empire; but as it is impoſſible for the head of the empire to preſide in different tribunals at the ſame time, or to tranſport himſelf to the extremities of Germany, with the promptitude which the deciſion of proceſſes ſo frequently require, the office of *count palatine* was inſtituted. The buſineſs of this magiſtrate is to ſuperintend the adminiſtration of juſtice in the various provinces. To him an appeal lies from the ordinary tribunals, in cauſes which were not of ſufficient importance to be carried before the emperor. By him too the imperial ban is publiſhed, and by him the finances are adminiſtered. Theſe officers were firſt eſtabliſhed in Bavaria, Saxony, Swabia, and upon the Rhine.

Every prince of a ſeparate ſtate is arbitrary in laws of policy, but not of revenue; for no new tax or impoſt can be laid on his country, without the conſent of the nobles and ſubjects. For this purpoſe, on the *land tag*, or day on which his ſubjects are to be convened, which is once in the period of four or five years, and at no other time can he aſſemble them, he calls together the nobles and commiſſaries or deputies of the towns of his dominions. The nobles uſually attend in perſon, but may ſend repreſentatives. To this aſſembly the prince propoſes the taxes, &c. and a majority of voices diſpoſes of the meaſures. On the land tag, the reſpective quotas of each place are fixed, in order to diſcharge the princes contingent in caſe of a war. There is indeed no fixed ſtanding army; but the various ſtates are obliged to furniſh their quotas, when called upon by the diet in caſe of war. The whole number of forces thus to be raiſed is ſaid to be as follows: by the eccleſiaſtical princes, 74,500; by the temporal princes, 379,000; and by the emperor, 90,000, as head of the houſe of Auſtria. Total, 543,500 effective men. The whole revenue has been calculated at 20,000,000l. ſterling.—Extraordinary aids are occaſionally granted by the ſtates for the ſupport of the empire; or the forts thereof, ſuch as Philipſburg, Kehl, and Mentz; or for a war againſt the Turks, the expences of an embaſſy of the empire, the maintaining of the forts, &c. The granting of theſe aids in Germany is regulated according to what is called *Roman months*, which denomination deduces its origin from thoſe times in which the emperors, in order to receive the papal coronation, took a journey to Rome, and the German ſtates of the empire were bound to conduct them with a certain number of men, conſiſting of horſe and foot, for ſix months, at their own expence; or to pay twelve florins monthly for a horſeman, and for a footman four, which money obtained the name of Roman months. This ſtandard was afterwards retained, and the rate of each ſtate, either in men or money, is ſettled in what is called the matricula of the empire. But though certain Roman months were frequently granted the emperor, yet they were not always duly paid. A Roman month from the whole empire brings in 58,280 florins.

From the great extent of the German empire, every variety of ſoil is to be found within its circuit; and from which reſults abundant ſources of the grand ſupport of national wealth,—commerce. The middle parts of the empire are productive in corn and cattle; the ſouthern abound with excellent wines and fruits. The northern parts, from their chilneſs, are rather unfavourable to vegetation; but even there agriculture improves daily. Their mines are great ſources of wealth; they produce, excepting tin, almoſt every metal. Of quickſilver, one mine alone is computed to yield fifty thouſand pounds weight a-year. They furniſh a very fine clay for porcelain; and the ſhores abound with excellent and extenſive ſalt works. Its mineral productions are decidedly the firſt native articles for trade; after which its medicinal waters, ſalt, hemp, flax, linen, ſilk, wines, fruits, corn, cattle, ſtuffs, cloths, timber, porcelain, wrought iron and ſteel, drugs, oil, and colours, are their leading articles of commerce.

Literature

Literature and the liberal ſciences have of late years made a rapid progreſs in Germany; a happy conſequence of the meliorating reign of Joſeph II. the friend of letters, and of ſcientific men; manifeſted by opening a literary correſpondence with the learned ſocieties in England and France. The Germans excel moſtly in proſe; though that ſtyle of writing is far from having reached the perfection of which it is capable; particularly ſublime or religious ſubjects. Luther confeſſedly introduced into his proſe greater exactneſs, eaſe, and ſtrength, than any writer either before him, or for a long time after him. At his deceaſe, it again began to decline, and continued gradually to grow worſe and worſe, till, in the earlier part of the eighteenth century, it was almoſt reduced to a mere jargon of words out of foreign languages. Whoever was then deſirous of writing what might be worth reading, was compelled to have recourſe either to the Latin or to the French. Thomaſius was the firſt of the later modern Germans who endeavoured to reform his native tongue: Wolf followed his ſteps, and gave to its expreſſions the preciſion of philoſophical exactneſs; Moſheim added clearneſs, grace, and harmony; Bodmer, Breitinger, Gellert, Rabener, and others, contributed farther to its improvement, more eſpecially by ſtripping it of its borrowed tinſel, and by reſtoring its proper native powers and richneſs. This may be ſtyled the firſt period in the progreſs of German proſe. The ſecond period may be dated from about the year 1760, when firſt the German writers, Leſſing, Mendelſſohn, &c. began to be generally acquainted with the beauties of Britiſh literature. Since that time, the number of German authors who have diſtinguiſhed themſelves in every ſpecies of proſaic compoſition, is altogether aſtoniſhing, and highly worthy of praiſe.

In works of fancy, poetry, wit, and humour, the German writers have as yet had but little ſucceſs; a brilliancy of imagination, though doubtleſs to be found in ſome individuals, is by no means prevalent among them. In dramatic writings they ſeem chiefly to have failed. Comedy appears not to be much their object, and tragedy, which oftener employs the pens of their writers, is commonly compoſed in a bad taſte, the characters often unnatural, or extravagant, and the plots frequently bearing a tincture of native barbariſm. The cauſe of this failure is probably the want of encouragement; the French language prevailing in all the courts, and French plays are exhibited in preference to German. In hiſtory, the Germans diſplay far leſs of animation than of accuracy and method, and contribute little to the pleaſure, but much to the information, of their readers; their compoſitions on this ſubject conſiſting moſtly of dry matter of fact, without thoſe pleaſing reflections, and elegant deſcriptions, which ſo much enliven the works of ſome hiſtorians, particularly the Engliſh. In general we may allow that where laborious inveſtigation, ſteady perſeverance, and cool judgment, are neceſſary, the Germans are hardly ſurpaſſed by any people; as in juriſprudence, and experimental philoſophy, particularly chemiſtry; for the diſcoveries and improvements in which the world is highly indebted to German induſtry.

The ſeminaries of learning in Germany have long been in high repute. There are no leſs than thirty-eight univerſities; nineteen of which are proteſtant, ſeventeen are catholic, and two of them receive ſtudents indiſcriminately of both perſuaſions. There are alſo a number of literary ſocieties and academical inſtitutions; and education is particularly attended to even in the very loweſt ranks.

The Germans are in general tall and well-made; the women are modeſt and well-looking; and many of them will rival the greateſt beauties in other countries. Both ſexes affect to dreſs in rich clothes, according to the faſhion of England or France. Many of the principal people wear a great deal of gold and ſilver lace; the ladies of the Auſtrian court do not differ much in their dreſs from thoſe of the ſame rank in England and France. In ſome of the courts of the inferior ſtates they appear in furs, decorated with as many diamonds as they can procure. The burghers and inhabitants of ſeveral cities in Germany dreſs in a manner extremely ſtiff and antique; though their appearance of late years has much improved. The artiſans and labourers, as in the other parts of Europe, wear thoſe ſort of clothes that are beſt adapted to their various occupations.

The peculiar turn of mind of the Germans ſeems to be for philoſophy; they are diſtinguiſhed from all the nations of Europe for a cool, and generally a juſt, judgment, united with extreme induſtry. We have before obſerved, that the character and diſpoſitions of men depend much on the government under which they live. That of the Germans is in general inert and phlegmatic; they have therefore little of the fire and national pride by which the Spaniards are diſtinguiſhed. Their pride and patriotic ſentiments only extend to the part of Germany in which they are born; to the reſt of their countrymen they are as ſtrange as to any foreigners. This is owing to their organization under ſeparate and diſtinct ſtates, where perhaps different cuſtoms and faſhions prevail.

Though the character of the Germans be not ſo brilliant as that of ſome few other nations, ſtill it is not deſtitute of peculiar excellencies. The German is the man of the world; he lives under every ſky, and conquers every natural obſtacle to his happineſs. His induſtry is inexhauſtible. Poland, Hungary, and Ruſſia, are indebted for moſt of their improvements to German emigrants. Rectitude is an almoſt univerſal characteriſtic of the people of this country; nor are the manners of the peaſants, and thoſe of the inhabitants of the ſmall towns, by any means ſo corrupt as thoſe of ſeveral of the neighbouring countries: it is perhaps owing to this, that, notwithſtanding the great emigrations, the country is ſtill ſo well peopled. Upon the whole, Chriſtian forbearance on the ſide of the proteſtants, and frankneſs and good-heartedneſs on the ſide of the catholics, are the characteriſtics with reſpect to religion, which are productive of much national happineſs.—For the particular hiſtory of each ſeparate ſtate, ſee under their reſpective titles in this Encyclopædia.

GER'MANY, a townſhip of the American ſtates, in York county, Pennſylvania.

GER'MEN, *ſ.* [Latin.] A bud; a ſhoot.

GER'MERSHEIM, a town of Germany, in the circle of the Lower Rhine, and palatinate of the Rhine, ſituated at the conflux of the Queich and the Rhine: erected into a town by the emperor Rodolphus I. who died here in 1290. In January 1794, this town was taken by the French republicans; and on the 29th of May, near this place, the French were defeated by the Auſtrians, having four hundred men killed, and ſix hundred taken priſoners. It is five miles ſouth of Spire, and ſixteen ſouth-weſt of Heidelberg. Lat. 49. 10. N. lon. 25. 5. E. Ferro.

GER'MIGNY, a town of France, in the department of the Yonne: one league ſouth-eaſt of St. Florentin.

GER'MIGNY, a town of France, in the department of the Seine and Marne: one league eaſt of Meaux.

GER'MIN, *ſ.* [*germen*, Lat.] A ſhooting or ſprouting ſeed. *Out of uſe.*

> Thou all-ſhaking thunder,
> Strike flat the thick rotundity o' the world;
> Crack nature's mould, all *germins* ſpill at once
> That make ungrateful man. *Shakeſpeare.*

GER'MINANT, *adj.* Shooting; ſprouting.

To GER'MINATE, *v. n.* [*germino*, Lat.] To ſprout; to ſhoot; to bud; to put forth.—The ſeeds of all kinds of vegetables being planted near the ſurface of the

the earth, in a convenient ſoil, amongſt matter proper for the formation of vegetables, would *germinate*, grow up, and repleniſh the face of the earth. *Woodward.*

GERMINA'TION, *ſ.* [French.] The act of ſprouting or ſhooting; growth.—Suppoſe the earth ſhould be carried to the great diſtance of Saturn; there the whole globe would be one frigid zone; there would be no life, no *germination*. *Bentley.*

Botaniſts and agriculturiſts find, that different ſeeds employ certain given lengths of time in germinating, after being committed to the earth.

The *germination* of plants forms a very intereſting department of vegetable phyſiology; and the extenſive progreſs of chemical experiments, has of late thrown conſiderable light upon this curious ſubject. In 1793, M. Humboldt diſcovered, that ſimple metallic ſubſtances are very unfavourable to the germination of plants, while metallic oxyds favour it in proportion to their degree of oxydation. This fact induced him to ſearch for a ſubſtance with which oxygen might be ſo weakly combined as to be eaſily ſeparated, and he made choice of oxygenated muriatic acid gas mixed with water. The ſeeds of creſſes ſoaked in the oxygenated muriatic acid, ſhewed germs at the end of ſix hours, and in common water at the end of thirty-two hours. The action of the firſt fluid on the vegetable fibres is announced by a great number of air bubbles which cover the ſeeds, a phenomenon not exhibited by water till at the end of from thirty to forty-five minutes. Theſe experiments, announced in Humboldt's *Flora Subterranea Fribergenſis*, and in his Aphoriſms on the Chemical Phyſiology of Plants, have been repeated by others. They were made at a temperature of from 12 to 15 of Reaumur. In the ſummer of 1796, Humboldt began a new ſeries of experiments, and found that by joining the ſtimulus of caloric to that of oxygen, he was enabled ſtill more to accelerate the progreſs of vegetation. He took the ſeeds of garden creſſes, peaſe, French beans, garden lettuce, and mignonette, equal quantities of which were thrown into pure water and the oxygenated muriatic acid at a temperature of 88° Fahrenheit. Creſſes exhibited germs in three hours in the oxygenated muriatic acid, while none were ſeen in water till the end of twenty-ſix hours. In the muriatic, nitric, or ſulphuric, acid, pure or mixed with water, there was no germ at all: the oxygen ſeemed there to be too intimately united with baſes of azot or ſulphur, to be diſengaged by the affinities preſented by the fibres of the vegetable. The author announces, that theſe diſcoveries, if purſued, may one day prove of great benefit in the cultivation of plants. His experiments have therefore been repeated with great induſtry and zeal by ſeveral diſtinguiſhed philoſophers. Profeſſor Pohl at Dreſden cauſed to germinate in oxygenated muriatic acid the ſeed of a new kind of euphorbia, taken from Bocconi's collection of dried plants, one hundred and twenty years old. Jacquin and Vander Schott at Vienna threw into oxygenated muriatic acid all the old ſeeds which had been kept twenty or thirty years at the botanical garden, every attempt to produce vegetation in which had been fruitleſs, and their latent germinating powers were for the moſt part ſtimulated with ſucceſs. Even the hardeſt ſeeds yielded to this agent. Among thoſe which germinated were the yellow bonduc or nickar tree (*guilandina bonduc*), the pigeon cytiſus or pigeon pea (*cytiſus cajan*), the *dodonæa anguſtifolia*, the climbing mimoſa (*mimoſa ſcandens*), and ſome new kinds of the *homæa*. There are now ſhewn at Vienna very valuable plants, which are entirely owing to the oxygenated muriatic acid. Humboldt cauſed to germinate the *cluſia roſea*, the ſeeds of which had been brought from the Bahama iſlands by Booſe, and which before had reſiſted every effort to make them vegetate. For this purpoſe he employed a new proceſs, which ſeems likely to be much eaſier for gardeners who have not an opportunity of procuring oxygenated muriatic acid: He formed a paſte by mixing the ſeeds with the black oxyd of manganeſe, and then poured over it the muriatic acid diluted with water. Three cubic inches of water were mixed with half a cubic inch of the muriatic acid. The veſſel which contains this mixture muſt be covered, but not cloſely ſhut; elſe it might readily burſt. At the temperature of 95° the muriatic acid becomes ſtrongly oxydated; the oxygenated muriatic gas which is diſengaged paſſes through the ſeeds; and it is during this paſſage that irritation of the vegetable fibres takes place.

M. Sauſſure has alſo recently publiſhed ſome curious reſearches on the influence which oxygen gas has on the germination of plants. The greater part of naturaliſts, ſays he, who have examined the influence of atmoſpheric air on germination, have perceived, that when ſeeds are placed in contact with water and pure azotic gas they do not germinate; and that there is a production of carbonic acid, which, mixing itſelf with the azotic gas, increaſes the volume of the atmoſphere of the plant. They have ſeen that, when oxygen gas is ſubſtituted in the preceding experiment for azotic gas, there is alſo a production of carbonic acid gas; but that the atmoſphere of the plant decreaſes, and that the oxygen gas is abſorbed. He made ſeveral experiments to diſcover what takes place in theſe operations. The following are the reſults:

1. The atmoſpheric oxygen gas is not abſorbed by the ſeed in the act of germination, as ſeems hitherto to have been admitted, but is employed merely to form carbonic acid gas with the carbon of the ſeed. 2. The ſeed in germination does not, by the contact of the atmoſpheric air, form carbonic acid gas from its own ſubſtance, but only furniſhes one of the conſtituent parts of that gas, viz. carbon. 3. It furniſhes the oxygen and carbon from its own ſubſtance in the carbonic acid gas, which it produces when it is in contact only with water and pure azotic gas.

Spallanzani alſo examined this ſubject with conſiderable attention. He concludes from his experiments: 1. That the leaves and tops of vegetables, when the rays of the ſun dart upon them, increaſe the proportion of the oxygen gas of the atmoſpheric air. 2. That this augmentation is not ſo conſiderable as has been believed. 3. That the ſame parts of vegetables diminiſh the oxygen gas during the night, and cloudy days, by transforming it continually though ſlowly into carbonic acid. 4. That the flowers, whether in the ſun or ſhade, have more power to diminiſh the quantity of vital air or oxygen gas. 5. That fruits have the ſame effects in this reſpect as flowers.

Dr. G. Thilow has lately confirmed the diſcovery of Ingenhouz, that oxygen has a powerful influence on vegetation. The author's experiments were the two following:—1ſt. A weak ſickly dwarf-tree was beſprinkled with a mixture of oil of vitriol and water. The plant-lice, which rendered the plant ſickly, ſoon diſappeared, and the plant ſpeedily revived. 2d, A ſmall layer of an auricula by the ſame means, in the period of ſcarcely three weeks, was brought to a conſiderable ſize and full bloom; and this experiment would probably have ſucceeded in a ſhorter period, had not the expanſion of the plant been retarded by two nights froſt.

GER'MISCH, a town of Germany, in the circle of Bavaria, and biſhopric of Freyſing: twenty-one miles ſouth of Weilhaim.

GER'MON (Bartholomew), a celebrated French Jeſuit, born at Orleans, in 1663. He applied with great aſſiduity to his ſtudies, and acquired conſiderable reputation by his proficiency in the learned languages, his knowledge of antiquities, and of theology. He engaged in a long conteſt with fathers Mabillon and Conſtant, both belonging to the congregation of St. Maur, on the

ſubject of ancient diplomas; and publiſhed ſeveral treatiſes during the years 1703, 1706, and 1707, written in elegant Latin, and forming together three volumes, 12mo. He alſo engaged in the controverſy concerning grace; and was the author of a theological treatiſe On the Hundred-and-one Propoſitions of Queſnel condemned by the Bull Unigenitus, in 2 vols. 4to. This work was adopted by the cardinal de Biſſy, who publiſhed it in his own name.

GERMO'NIO (Anaſtaſio), an eminent canoniſt, born at Sala in Piedmont, in 1551. He engaged in the ſtudy of law, firſt at Turin, and then at Padua. At the former of theſe univerſities he received his degree from the hand of his tutor, the celebrated Pancirolus, who expreſſed great aſtoniſhment at his proficiency. He obtained a chair of canon-law at Turin, which he continued to occupy after he had been raiſed to the poſts of apoſtolical-protonotary and metropolitan archdeacon. When his archbiſhop was created a cardinal, he accompanied him to Rome, and acquired the eſteem of Sixtus V. and the ſucceeding pontiffs. Clement VIII. joined him to the congregation formed for compiling the ſeventh book of decretals, in which were to be inſerted the decrees of the council of Trent, with proper explanations; but after the work was finiſhed and ſent to the preſs, political reaſons cauſed the court of Rome to ſuſpend the publication. He refuſed two biſhoprics, but was at length induced to accept the archbiſhopric of Tarantaſia in Savoy. The duke Charles-Emanuel ſent him as his ambaſſador at the court of Madrid, where he died in 1627. Of his works, beſides his Notes on the Decretals, and Paratitles on the Digeſt and Code, are: *De Sacrorum immunitatibus Lib. tres*; *nec-non de indultis Apoſtolicis Tractatus*, printed at the Vatican, 1591, folio: *Pomeridianæ Seſſiones in quibus Latinæ Linguæ dignitas defenditur, &c.* 1580, 4to. All his works, reviſed by himſelf, were printed at Rome, 1623, folio.

GERMS, a town of Germany, in the archduchy of Auſtria: four miles weſt of Zwetl, and ſixty-two weſt-north-weſt of Vienna. Lat. 48. 32. N. lon. 32. 43. E. Ferro.

GERN, a town of Ruſſia, in the government of Tula: twenty-eight miles weſt-ſouth-weſt of Tula.

GERN, a town of Germany, in Lower Bavaria: thirteen miles ſouth-ſouth-eaſt of Dingelfingen, and fifteen weſt-north-weſt of Braunau.

To GERN, *v. n.* [from ȝeonnan, Sax. *oſcitare.*] To yawn.—And gaped like a gulf, when he did *gerne. Spenſer.*

GER'NOI, a fortreſs of Ruſſian Siberia, in the government of Kolivan, on the Irtiſch: two hundred and four miles ſouth-weſt of Kolivan. Lat. 51. 44. N. lon. 96. E. Ferro.

GERNOIAR'SKOI, a fortreſs of Ruſſian Siberia, in the government of Kolivan, on the Irtiſch: one hundred and ninety-ſix miles weſt-ſouth-weſt of Kolivan. Lat. 52. 45. N. lon. 95. E. Ferro.

GER'NON, [ȝeonne, Sax. ſtudious.] A proper name.

GERNORIETZ'KOI, a fortreſs of Ruſſian Siberia, in the government of Kolivan, on the Irtiſch: one hundred and eighty miles weſt-ſouth-weſt of Kolivan. Lat. 52. 45. N. lon. 95. E. Ferro.

GERN'RODE, an abbey of Germany, in the circle of Upper Saxony, founded in 960, and richly endowed for ladies, by Gero margraviate of Luſatia; but ſecularized in the ſeventeenth century, in favour of the houſe of Anhalt, by the treaty of Weſtphalia: and gives to that houſe a ſeat and voice among the prelates of the Rhine. The aſſeſſment is thirty-ſix florins for a Roman month: twenty-two miles weſt of Bernburg, and thirty weſt of Deſſau.

GERN'SHEIM, or GER'RENSHEIM, a town of Germany, in the circle of the Lower Rhine, and electorate of Mentz, ſituated on the Rhine: twenty-ſeven miles north-north-weſt of Heidelberg, and eighteen ſouth-ſouth-eaſt of Mentz.

GERNYOSZEG', a town of Tranſilvania, ſituated on the river of Maros: ten miles ſouth-weſt of Kereſztur.

GERO'DA, a town of Germany, in the circle of the Lower Rhine, and territory of Eichsfeld, with a rich Benedictine abbey, whoſe juriſdiction extends over five villages: eight miles north-eaſt of Duderſtadt.

GERODO'I, a town of France, in the department of the Aube, and chief place of a canton, in the diſtrict of Troyes: three leagues eaſt of Troyes.

GEROLD'SECK HO'HEN, a caſtle of Germany, in the circle of Swabia, which gives name to a ſmall county ſituated on the left ſide of the Kinzig; the aſſeſſment for the Roman month is ſixteen florins, and to the chamber of Wetzlar eight rixdollars nine kruitzers: three miles ſouth-ſouth-eaſt of Gengenbach.

GER'OLDSGRUN, a town of Germany, in the circle of Franconia, and principality of Bayreuth, with a mineral ſpring: four miles ſouth-weſt of Lichtenberg.

GER'OLDSTEIN, a town of Germany, in the circle of the Upper Rhine, and county of Katzenelnbogen: ſeven miles ſouth of Naſtede.

GER'OLSTEIN, or GEROLDSTEIN, a town of Germany, in the circle of Weſtphalia, belonging to the county of Blankenheim, ſituated on the Kill: twenty-four miles north of Treves. Lat. 50. 19. N. lon. 24. 5. E. Ferro.

GER'OLTZHOFEN, a town of Germany, in the circle of Franconia, and biſhopric of Wurzburg: nine miles ſouth-eaſt of Schweinfurt, and twenty north-eaſt of Wurſburg.

GE'RON POINT, a cape of Ireland, in the county of Antrim: fifteen miles north-north-eaſt from Antrim, and thirty-two north from Belfaſt. Lat. 55. 3. N. lon. 5. 50. W. Greenwich.

GERO'NA, or GIRONA, a town of Spain, and capital of a viguery, in the province of Catalonia, the ſee of a biſhop, ſuffragan of Tarragona. In 1694, it was taken by the French, and reſtored at the peace of Ryſwick. In 1705, it was taken by the troops of the archduke Charles; and in 1711 it was taken by the French under the command of the duke of Noailles: forty-four miles ſouth of Perpignan, and forty-ſeven north-eaſt of Barcelona. Lat. 42. 10. N. lon. 19. 21. E. Peak of Teneriffe.

GERON'TES, *ſ.* in Grecian antiquity, a ſenate of judges, inſtituted by Lycurgus: their number, according to ſome, was twenty-eight; and, according to others, thirty-two. They governed in conjunction with the king, whoſe authority they were intended to balance, and to watch over the rights of the people. Polybius defines their office in few words, when he ſays, *per ipſos, & cum ipſis, omnia adminiſtrari.* None were to be admitted under ſixty years of age, and they held their office for life.

GERON'THRÆ, in ancient geography, a town of Laconia, where a yearly feſtival, called *geronthræa*, was obſerved in honour of Mars. The god had there a temple, with a grove, into which no woman was permitted to enter during the time of the ſolemnity. *Lucan.*

GERONTOCO'MIUM, *ſ.* [γερων, an old man, and κομεω, Gr. to take care of.] An hoſpital or alms-houſe for old people.

GERONTOC'OMY, *ſ.* A part of phyſic, which ſhews the way of living for old men, in order to preſerve their health.

GEROPO'GON, *ſ.* [Greek; from γερων, an old man, and πωγων, a beard; from the whiteneſs of the ſeed-crown.] In botany, a genus of the claſs ſyngeneſia, order polygamia æqualis, natural order compoſitæ ſemiflosculoſæ, or compound flowers, with ſemiflorets or ligulate florets only, (cichoraceæ, *Juſſ.*) The generic characters are—Calyx: common ſimple, many-leaved; leaflets lanceolate-ſubulate, keeled, upright, longer than the corolla. Corolla: compound ſubimbricate, uniform; corollules hermaphrodite; outer as many as

there are leaflets in the calyx; inner fewer, ſhorter; proper one-petalled, ligulate, truncate, five-toothed. Stamina: filaments five, very ſhort; anther cylindric, tubular. Piſtillum: germ oblong; ſtyle filiform, the ſame length with the ſtamens; ſtigmas two, bowed back, filiform. Pericarpium: none; calyx oblong, upright, gaping. Seeds: of the ray ſubulate, the ſame length with the calyx; down with five patulous awns—of the diſk ſubulate, ſhorter; down feathered. Receptaculum: with briſtle-ſhaped chaffs; (naked, *Gærtner.*)—*Eſſential Character.* Calyx, ſimple; receptacle, with briſtle-ſhaped chaffs; ſeeds, of the diſk, with a feathered down—of the ray, with five awns.

Species. 1. Geropogon glabrum, or ſmooth geropogon, or old man's beard: leaves ſmooth. 2. Geropogon hirſutum, or rough geropogon: leaves hairy. 3. Geropogon calyculatum, or perennial geropogon; calyxes calycled.—Theſe plants have the ſame habit with tragopogon and ſcorzonera. The flowers in the two firſt ſpecies not yellow, but red: theſe are annual. The third ſpecies is perennial. All of them are natives of Italy; and flower in June, July, and Auguſt. For the propagation and culture, ſee TRAGOPOGON.

GER'RHÆ, in ancient geography, a people of Scythia, in whoſe country the Boryſthenes riſes. The kings of Scythia were generally buried in their territories.

GER'RI, a town of Spain, in the province of Catalonia: thirty-ſeven miles north of Balaguer.

GER'RI, a town of Africa, in Nubia, ſituated on the Nile, containing about 140 houſes: 130 miles north-north-eaſt of Sennaar. Lat. 16. 15. N. lon. 30. 34. E. Greenwich.

GER'RISH ISLAND, a ſmall iſle near Cape Neddock, cloſe to the main land of the diſtrict of Maine, in the American States.

GER'RISHEIM, a town of Germany, in the circle of Weſtphalia, and duchy of Berg: four miles eaſt of Duſſeldorp.

GER'RY, a townſhip of the American States, in Worceſter county, Maſſachuſſets. It was incorporated in 1786, and contains 14,000 acres of land, and 740 inhabitants: thirty miles north-weſt of Worceſter, and ſixty-five north-weſt by weſt of Boſton.

GERS, a river of France, which riſes near La Barthe de Neſtes in the department of the Upper Pyrenees, croſſes the department of the Gers, paſſing by Maſſeure, Seiſſan, Auch, Fleurance, Lectoure, &c. and runs into the Garonne, about a league ſouth-eaſt of Agen.

GERS, a department of France, bounded on the north by the department of the Landes, and the Lot and Garonne; on the eaſt by the department of the Upper Garonne; on the ſouth by thoſe of the Upper and Lower Pyrenees; and on the weſt by the department of the Landes. About fifty-five miles long, and from twenty-two to forty-five broad. It takes its name from the river Gers, which croſſes it from ſouth to north. Auch is the capital. This is one of the four departments formed out of Guienne.

GER'SAU, a town of Swiſſerland, and many years capital of a ſmall republic, in the canton of Schweitz. The whole territory is only about two leagues long, and one wide, and the population about one thouſand ſouls. It formerly belonged to the houſe of Auſtria, but entered into an alliance with the cantons of Uri, Schweitz, and Underwalden, in 1315, which was confirmed in 1359. The town is ſituated on the north ſide of the lake of Four Cantons: ſix miles ſouth-weſt of Schweitz.

GER'SCHITZ, a town of Bohemia, in the circle of Konigingratz: nine miles north-weſt of Konigingratz.

GERS'DORF, a town of Germany, in the circle of Upper Saxony, and principality of Querfurt: four miles north-eaſt of Juterbock.

GER'SHAM, [Heb. a ſtranger.] A man's name.

GER'SHON, a man's name.

GER'SHONITE, *ſ.* A deſcendant of Gerſhon.

GERSPACH', a town of Germany, in the circle of Swabia, and county of Eberſtein, on the Murg: two miles ſouth-eaſt of Baden, and twenty-two north-eaſt of Straſburg. On the 5th of July, 1794, the Auſtrians were defeated near this place, and the town taken poſſeſſion of by the French.

GERSS'PRENTZ, a river of Germany, in the circle of the Lower Rhine, which runs into the Main, near Stockſtad, in the electorate of Mentz.

GER'STEN (Chriſtian-Louis), profeſſor of mathematics at Gieſſen, born in that city in 1701, and died at Frankfort in 1762. His works are, 1. *Tentamina Syſtématis novi ad Mutationes Barometri, ex Natura elateris Aerei demonſtrandas.* Frankfort, 1733, 8vo. 2. *Methodus nova ad Eclipſes Terræ & Appulſus Lunæ ad Stellas ſupputandas.* Gieſſen, 1740, 4to. 3. *Exercitationes recentiores circa Roris Meteora.* Offenbach, 1748, 8vo. 4. *Methodus nova Calculi Eclipſium Terræ ſpecialis*, in the Philoſophical Tranſactions, vol. xliii. N°. 482. 5. *Mercurius ſub Sole viſus, & Obſervatus in Specula Aſtronomica.* Gieſſen, Phil. Tranſact. vol. xliv. N°. 482, and in Nov. Act. Lipſ. 1745. 6. *Quadrantis Aſtronomici muralis Idea nova & peculiaris.* Phil. Tranſact. vol. xliv. N°. 483.

GERSTRUN'GEN, a town of Germany, in the circle of Upper Saxony, and principality of Eiſenach: eight miles weſt of Eiſenach.

GERSUM'A, *ſ.* [Saxon.] A fine or income.

GERSUMARI'US, *ſ.* In law: finable; liable to be amerced or fined at the diſcretion of the lord of the manor.

GERS'WALDE, a town of Germany, in the circle of Upper Saxony, and Ucker Mark of Brandenburg: nine miles ſouth of Prenzlow.

GER'TRUDE, [of ȝæn, all, and ꝥruth, Teut. q.d. true to her truth.] A Chriſtian name of woman.

GERTRU'DENBERG, a town of Germany, in the circle of Weſtphalia, and biſhopric of Oſnabruck: one mile eaſt of Oſnabruck.

GERTRU'DENBURG, or ST. GERTRUYDENBURG, a town of Brabant, but of late years ſubjected to Holland. Such was the diſpoſition of both countries towards this place, that the Brabanters were accuſtomed to compel their dukes to promiſe their endeavours to reunite it to their duchy; and the Hollanders, on the contrary, compelled their comte to ſwear not to neglect any means in his power to preſerve it. It has a good harbour formed by the Merwe, which is here extended to a very conſiderable lake, called Bies Boſch, of about two hours paſſage croſs to Dort. It is built in the form of a creſcent, with regular fortifications, good baſtions, and ſome forts, with ſluices, by means of which they can lay the country about it under water. In ancient charters it is called *Mons Littoris*, the Mountain of the Shore. Pepin de Landen, duke of Brabant, gave it to his daughter Gertrude, in 647, who built a church dedicated to St. Amand, biſhop of Tongres; but afterwards the place becoming celebrated by the death and miracles of Ste. Gertrude, it has ſince been called *Mont de Ste. Gertrude*, or *Gertrudenburg*. It has a caſtle, built in 1321. In 1420, the inhabitants of Dort took the town and ſet fire to it, which demoliſhed the church. On the 28th of Auguſt, 1573, the confederates, under the conduct of captain Poyet, a French Calviniſt, came ſo ſuddenly upon it, that they almoſt cut the garriſon in pieces before they could act on the defenſive. In 1589, the Engliſh garriſon ſurrendered, or, as ſome aſſert, ſold it to the prince of Parma. Prince Maurice came to beſiege it on the 28th of March, 1593, and after having taken the fort of Stekelhof, which was about two muſket ſhots from the town, he approached near, made bridges over the waters and marſhes for a regular communication between his quarters, and fortified his camp with ſuch art and caution that it could not be forced, and the place was compelled to ſurrender on the 25th of June, in the ſight of comte de Mansfelt, who had advanced

advanced to its relief, and was then beſieging the prince's army. Gertrudenburg was ſummoned by the French republicans the latter end of February, 1793, and ſurrendered after three days bombardment; it was evacuated ſoon after. The officers who ſurrendered the fort were afterwards tried on a ſuſpicion of miſconduct, but were acquitted with honour. It was again taken by the French in 1795: ten miles ſouth-eaſt of Dort, and ſeven north-eaſt of Breda. Lat. 51. 42. N. lon. 22. 19. E. Ferro.

GER'VAIS (Armand-Francis), abbot of the monaſtery of La Trappe, born at Paris about the year 1660. He received his claſſical education at the college of the Jeſuits, and when he was fifteen years of age entered among the bare-footed Carmelites. Having, in 1745, publiſhed the firſt volume of a curious and intereſting General Hiſtory of the Ciſtercian Order in France, in which a ſevere attack was made upon the Bernardins, they applied to the court, by which a letter of arreſt was iſſued out againſt him, and he was immured within the abbey of Notre Dame des Reclus, in the dioceſe of Troyes, where he died in 1751, at the advanced age of ninety-one; greatly admired for his learning, and reſpected for many virtues. He was the author of, 1. The Life of St. Cyprian, 1717, 4to. 2. The Lives of Peter Abelard and his wife Heloiſe, &c. 1720, 2 vols. 12mo. 3. A Tranſlation of the genuine Letters of Abelard and Heloiſe, taken from an ancient Latin Manuſcript, with curious hiſtorical and critical Notes, 1723, 12mo. 4. The Hiſtory of Suger, Abbot of St. Denys, &c. 1721, 3 vols. 12mo. 5. A Defence of the Abbé Rancé againſt the Invectives of Father Vincent Thuiller, inſerted in the firſt Volume of the poſthumous Works of Father Mabillon, 1725, 12mo. 6. The Life of St. Irenæus, 1723, 2 vols. 12mo. 7. The Life of Ruffinus, Prieſt of the Church of Aquileia, 1724, 2 vols. 12mo. 8. The Life of St. Paul the Apoſtle of the Gentiles, &c. 1735, 3 vols. 12mo. 9. The Life of St. Epiphanius, with an Analyſis of his Works, &c. 1738, 4to. 10. The Life of St. Paulinus, Biſhop of Nola, 1743, 4to. 11. The Hiſtory of the Abbé Joachim, ſurnamed the Prophet, 1745, 2 vols. 12mo. 12. A critical Examination of the Lives of the Abbé Rancé, Reformer of the Abbey of La Trappe, written by MM. Maupou and Marſollier, 1744, 12mo. Some treatiſes againſt Father Courayer, on the ſubject of the Validity of Engliſh Ordinations, &c.

GER'VAISE (Nicholas), a French eccleſiaſtic and miſſionary, the ſon of a phyſician in Paris. Before the age of twenty he accompanied ſome miſſionaries to Siam, in which country he remained four years, making himſelf acquainted with the Siameſe language and hiſtory. Upon his return he publiſhed *Hiſtoire Naturelle & Politique du Royaume de Siam*, 4to. 1688; and in the ſame year he added, by way of ſupplement, *Deſcription Hiſtorique du Royaume de Macaçar*, 4to. 1688; 12mo. Theſe works bear the marks of a juvenile writer, but are not deſtitute of curious and valuable information. He then entered the church, and became a rector at Vannes in Brittany. The provoſtſhip of Suévre in the church of St. Martin at Tours was afterwards conferred upon him, on which account he drew up A Life of St. Martin, Biſhop of Tours, with a Hiſtory of the Foundation of his Church, 4to. 1699. In 1715 he publiſhed A Hiſtory of the Roman Senator Boëthius, with an Analyſis of his Works, and Notes and Diſſertations hiſtorical and theological, 12mo. About 1724, he went to Rome, where he was conſecrated biſhop of Horren. He afterwards embarked for the place of his miſſion in Guiana, where, with all his eccleſiaſtics, he was maſſacred by the Caribbee Indians, in November, 1729.

GER'VAS, [Teut. i. e. all faſt.] A proper name of men.

GER'VASE of TILBURY, called *Tilburenſis*, an hiſtorian of the thirteenth century, who took his name from his native place, Tilbury in Eſſex, and was nephew to king Henry II. He was greatly in favour with the emperor Otho IV. who made him marſhal of the kingdom of Arles. He wrote a large commentary on Geoffrey of Monmouth's Britiſh Hiſtory, entitled *Illuſtrationes Galfredi*, and alſo a tripartite Hiſtory of England. To him is likewiſe aſcribed the compilation of the exchequer book, entitled, *Liber Niger Scaccarii*, though, by Mr. Madox, who gave a correct edition of it, Richard Nelſon biſhop of London is ſuppoſed to have been its true author. Other works of Gervaſe are: A Hiſtory of the Holy Land; *Origenes Burgundionum*; *Mirabilia Orbis*; and a chronicle entitled *Imperialium Otiorum, Lib. III.*

GER'UND, *ſ.* [*gerundium*, Lat.] In the Latin grammar, a kind of verbal noun, which governs caſes like a verb. See GRAMMAR.—There be belonging to the infinitive mood of verbs certain voices called *gerunds*, which have both the active and paſſive ſignification. *Lilly.*—The participle with the prepoſition before it, and ſtill retaining its government, anſwers to what is called in Latin the *gerund. Lowth.*

GERUN'DA, in ancient geography, a town of the Auſetani, in the Hither Spain, on the ſouth or right ſide of the river Sambroca. *Gerundenſes*, the people. Now *Gironne* in Catalonia, on the Ter.

GER'YON, in fabulous hiſtory, a famous monſter, born from the union of Chryſaor with Callirhoe, and repreſented by the poets as having three bodies and three heads. He lived in the iſland of Gades, where he kept numerous flocks, which were guarded by a two-headed dog, called Orthos, and by Eurythion. Hercules, by order of Euryſtheus, went to Gades, and deſtroyed Geryon, Orthos, and Eurythion, and carried away all his flocks and herds to Tirynthus. *Heſiod.*

GER'ZAT, a town of France, in the department of the Puy-de-Dôme, and chief place of a canton, in the diſtrict of Clermont: four miles north-eaſt of Clermont.

GER'ZEN, a town of Germany, in the circle of Lower Bavaria: ſeven miles ſouth of Dingelfingen, and eleven eaſt of Landſhut.

GES'AMUND, a man's name.

GES'AS, a town of Sileſia, in the principality of Neiſſe: two miles and a half ſouth-eaſt from Patſchkau.

GES'CHE EL AUBE, or GIR GIR, *ſ.* A new ſpecies of graſs found by Mr. Bruce near Ras el Feel, on the borders of Abyſſinia. It begins to ſhoot in the end of April, and advances ſpeedily to its full height, which is about three feet and a half. It is ripe in the beginning of May, and decays very ſoon afterwards. The leaf is long, pointed, narrow, and of a delicate texture. The ſtock from which it ſhoots produces leaves in great abundance, which ſoon turn yellow and fall to the ground. Goats, the only cattle ſeen in that country, are very fond of it, and ſeem to prefer it to all other food. This ſpecies of graſs was thought a great acquiſition by Mr. Bruce; but we do not find that it has ever been cultivated for cattle in England.

GESE'KE, a town of Germany, in the circle of the Lower Rhine, and duchy of Weſtphalia: nine miles eaſt-ſouth-eaſt of Lipſtadt, and fourteen north of Ruden.

GE'SEM (Land of), probably the Land of Goſhen in Egypt, ſummoned by Nabuchodonoſor king of Aſſyria, to aſſiſt him againſt the Medes. *Judith*, i. 9.

GE'SHUR, or GESHURI, a part of Syria bordering upon the north of Paleſtine, and compriſed in the original boundaries of the Iſraelitiſh territory; being aſſigned to the half-tribe of Manaſſeh in Baſhan, and was part of the inheritance of the family of Jair. Its natives, the Geſhurites, were not then expelled from thence, but continued to dwell with the Iſraelites; and very probably, at ſome ſubſequent period, regained their independence. For, in the reign of king David we read of a king of Geſhur named Talmai, whoſe daughter David had married, and who proved the mother of Abſalom. It was with this ſame Talmai that Abſalom took refuge when he had aſſaſſinated his brother Amnon;

mon; here he remained in exile three years, when through the intereſt of Joab, (by whoſe hand he afterwards fell,) he was recalled by his father. Some have ſuppoſed there was a city of the name of Geſhur ſituated in this country; but it does not appear ſo from Scripture, which we have cloſely followed in this ſtatement: neither were the Geſhurites whom David invaded ſituated as ſome have imagined; they were ſituated ſouth of Judah, towards Shur and Egypt, though very probably of the ſame race with the above, and their ſeparation might be occaſioned by the terror of the Iſraelitiſh arms, when they firſt entered Paleſtine. *Deut.* iii. 14. *Joſh.* xiii. 2, 11–13. 2*Sam.* iii. 3. xiii. 37–38. xv. 8. 1 *Chron.* ii. 23. iii. 2.

GESH'URITES, *ſ.* The inhabitants of Geſhur.

GE'SIS, a town of Germany, in the county of Feldkirck: four miles eaſt of Feldkirck.

GES'MOLD, a town of Germany, in the circle of Weſtphalia, and biſhopric of Oſnabruck: twelve miles ſouth-eaſt of Vorden.

GES'NER (Conrad), a phyſician and naturaliſt, born at Zurich, in 1516. During his youth he had to ſtruggle with that indigence to which ſcholars without fortune are often liable. With difficulty he obtained ſchool-learning in his native place; and viſiting Straſburg for his improvement, he was obliged to become the domeſtic ſervant of one of the profeſſors, who taught him Hebrew. He was afterwards ſent with ſome public aſſiſtance into France, where he enlarged his ſphere of ſtudy, and engaged in the inſtruction of others. On his return, he ventured to indulge an amorous attachment, and married in his twentieth year. He taught boys their grammar for a maintenance, and at his leiſure ſtudied books of medicine. He had already imbibed from an uncle that ardour for botanical purſuits which was the ruling paſſion of his life. A ſtipend was given him to ſtudy at Baſil, and at that univerſity he improved himſelf in medical knowledge and in Greek. Being invited to Lauſanne, he there obtained the Greek profeſſorſhip, and began to publiſh in botany and materia-medica. He then viſited Montpellier, and, after a ſhort ſtay, went again to Baſil, where he took the degree of doctor of phyſic, with which he returned to his native city. Thenceforth Zurich was the place of his fixed abode; and, beſides the practice of phyſic, he was employed in giving public lectures on philoſophy, ethics, and phyſics. Theſe, however, were a ſmall part of his labours. He took ſeveral journeys for the purpoſe of examining and collecting plants and other objects of natural hiſtory, of which he was the firſt perſon upon record who formed a muſeum. He cultivated a botanical garden, which he enlarged and improved, till he was unfortunately cut off by the plague in 1565, aged forty-nine.

Geſner, as a botaniſt, was the firſt who had a clear notion of method, and who diſcerned the exiſtence of genera comprehending many ſpecies, and claſſes containing many genera. He alſo diſtinguiſhed various natural claſſes in his book On the Collection of Plants. By his diſcoveries of new plants, or inveſtigation of doubtful ones, he at leaſt doubled the old catalogues, and at his death had prepared drawings of fifteen hundred ſpecies: of theſe, ſome are as elegant and accurate as any later ones, expreſſing the botanic character, and all the parts. He very diligently ſtudied the medicinal virtues of plants, frequently making experiments upon himſelf, as well as collecting practical obſervations from common uſe. Some of the moſt powerful remedies were introduced by him into practice; and he, firſt of the moderns, reſcued opium from the rank of poiſons, and ſhewed it to be a ſudorific, and a medicine of great efficacy. His principal writings under this head were: 1. *Apparatus & Delectus ſimplicium Medicamentorum; & de Compoſitione Medicamentorum.* 2. *Catalogus Plantarum, Nomina Latine, Græce, Germaniæ, & Gallice, proponens.* 3. *Enumeratio Medicamentorum purgantium, &c.* 4. *Tabulæ Collectionum in Genere, in Uſum Pharmacopolorum.* 5. *De ſecretis Remediis Theſaurus.* 6. *De Stirpium aliquot Nominibus veteribus & novis.* 7. *Hortorum Germaniæ Deſcriptio.* He alſo edited the *Hiſt. Stirpium & Adnotationes in Dioſcoridem* of Valerius Cordus, adding many new and fine plates of his own; and publiſhed an Epitome of Matthiolus, with ſuch additions of deſcriptions and plates as to make it a moſt valuable work. His medical writings are chiefly compriſed in thoſe on botany and materia-medica; but there are beſides, his *Libelli tres Medicinales; de Sanitate tuenda; contra Luxum Conviviorum; & contra Notas Aſtrologicas in Venis ſecandis*; and *Libellum de Lacte & Operibus lactariis.* After his death appeared his *Epiſtolarum Medicinal. Lib.* III. edited by Caſpar Wolfius, to which a fourth book was afterwards added. They are replete with valuable obſervations, medical and botanical. He alſo edited ſeveral pieces of the ancient medical writers, and publiſhed a collection of chirurgical writers in one folio volume. In the other branches of natural hiſtory, his great work, *Hiſtoria Animalium*, takes the lead. This he had intended to compriſe in ſix books, of which he publiſhed four: on viviparous quadrupeds; on oviparous quadrupeds; on birds; and on fiſhes and aquatics. The two remaining were to have been on ſerpents, and on inſects. His collections in this performance are a rich treaſure of all the knowledge then poſſeſſed on theſe ſubjects. He wrote alſo *De Foſſilibus, Gemmis, Lapidibus, Metallis*, &c. *De Thermis & Fontibus medicatis Helvetiæ & Germaniæ*; and *Deſcriptio Montis fracti ſive Piloti.* In philology his labours were not leſs conſiderable. The principal were: a *Lexicon Græco-latinum*; and a *Bibliotheca univerſalis, ſeu Catalogus Librorum locupletiſſimus omnium Scriptorum, Lingua Latina, Græca, & Hebraica, exſtantium & non-exſtantium*, folio.

GES'NER (John James), profeſſor in the Caroline college at Zurich, born in that city in 1707, and died there in 1787. He diſtinguiſhed himſelf by ſeveral valuable works on numiſmatics, and left an extenſive collection of coins and medals to his brother, profeſſor John Geſner. He was author of the following works: 1. *Theſaurus Univerſalis omnium Numiſmatum veterum Græcorum & Romanorum*, Turic. 1733, 4 vols. folio. 2. *Specimen Rei Numariæ*, ibid. 1735. 3. *Numiſmata Regum Macedoniæ omnia quæ Laboribus celeberrimorum Vivorum Crophii, Lazii, Golzii, Patini, Spanhemii, Harduini, Begeri, Wildii, Haymii, Liebii, &c. ex regiis aliiſque numiſmatophylaciis hactenus edita ſunt, additis ineditis & nondum deſcriptis, quotquot comparare licuit, integra Serie hiſtorica Tabulis Æneis repræſentata digeſſit, deſcripſit & Notis variorum doctiſſimorum Vivorum illuſtrata edidit J. J. Geſner*, Turic, 1738, folio. 4. *Numiſmata Græca Populorum & Urbium*, ibid. 1739–1754, folio. 5. *Numiſmata Regum Syriæ, Ægypti, Arſacidarum, Populorum & Urbium Græciæ, Imperatorum Romanorum, Latina & Græca*, ibid. *ſine anno*, folio. 6. *Numiſmata antiqua Imperatorum Romanorum Latina & Græca*, ibid. 1748.

GES'NER (John Matthias), Britannic profeſſor of rhetoric at Gottingen, born in 1691, at Roth, in Anſpach, where his father John Samuel was a clergyman. He received the firſt part of his education at the gymnaſium of Anſpach, and ſoon diſtinguiſhed himſelf by a ſtrong attachment to ancient literature, as well as to the oriental languages. He ſtudied theology at Jena; and in 1710 began to give ſpecimens of his talents and learning by various publications. On the eſtabliſhment of the univerſity of Gottingen in 1734, he was invited thither to be profeſſor of rhetoric; and when the royal ſociety was eſtabliſhed there in 1751, he was the firſt member of the hiſtorical claſs; in 1753 he was appointed a counſellor of ſtate, and in 1761 perpetual director. This office, however, he did not long enjoy; as he died on the 3d of Auguſt the ſame year. His principal works are: 1. *Philopatris Dialogus Lucianeus, cum Diſputa-*

tione de illius Ætate & Auctore, Jena, 1714, 8vo. 2. *Inſtitutiones Rei Scholaſticæ*, ibid. 1715, 8vo. 3. *Commentatio de Annis Ludiſque ſæcularibus veterum Romanorum*, ibid. 1717, 4to. 4. *Chreſtomathia Ciceroniana*, or, Select Paſſages from the Works of Cicero, ibid. 1717, 8vo. 5. *Baſilii Fabri Theſaurus Eruditionis ſcholaſticæ recenſitus, emendatus & locupletatus*, Lipſ. 1726, folio. 6. *Chreſtomathia Pliniana*, or Select Paſſages from Pliny's Natural Hiſtory, 1728, 8vo. 7. *Primæ Lineæ Artis oratoriæ*, Anſpach, 1730, 8vo. 8. *Diſputatio de Philopatride, Dialogo Lucianeo*, Lipſ. 1730, 4to. 9. *Chreſtomathia Græca, ſive Loci illuſtres ex optimis Scriptoribus delecti*, ibid. 1731. 10. *Scriptores Rei ruſticæ veteres Latini, Cato, Varro, Columella, Palladius, Vegetius, & Gargilius Martialis, cum Editionibus prope omnibus & MSS. pluribus collati, adjectæ Notæ Virorum clariſſimorum integræ, tum editæ & Lexicon Rei ruſticæ*, Lipſ. 1735, 2 vols. large 4to. with plates. 11. *Plinii Secundi Panegyricus*, Goetting. 1735, 8vo. 12. *Quintiliani de Inſtitutione oratoria, Lib.* XII. ibid. 1738, 4to. 13. *Plinii Cæcilii Secundi Epiſtolarum Libri* X. *Ejuſdem Panegyricus, cum Annotationibus perpetuis*, Lipſ. 1739, 8vo. 14. *Carminum Libri* III. Vratiſl. 1743, 8vo. 15. *J. G. Heinceii Fundamenta Stili cultioris, adjectis Annotationibus, Geſneri*, Lipſ. 1743, 8vo. 16. *Opuſcula varii Argumenti*, Vratiſl. 1743, four parts, 8vo. 17. *Encheiridion, ſive Prudentia privata & civilis T. Pomponii Attici, &c. in Uſum Prælectionum*, Goett. 1745, 12mo. 18. *Theſaurus Latinæ Linguæ et Eruditionis Romanæ*, Lipſ. 1747–8, 4 vols. folio. 19. *Index etymologicus Latinitatis, &c.* Lipſ. 1749, 8vo. 20. *Primæ Lineæ Iſagoges in Eruditionem univerſalem*, Lipſ. 1757, 8vo. tom. ii. ibid. 1774–5, 8vo. 21. *Claudiani Opera, Varietate Lectionis et perpetua Annotatione illuſtrata*, Lipſ. 1759, 8vo. 22. *Angeli Mariæ Card. Quirini et Geſneri Epiſtolæ mutuæ*, Norimb. 1760, 8vo. 23. *Chreſtomathia Tragica, tres integras Tragœdias continens; Æſchyli Prometheum, Sophoclis Ajacem, Euripedis Phœniſſas*, Goetting. 1762, 8vo. 24. *Orphei Argonautica, Hymni, Libellus de Lapidibus et Fragmenta, &c. curante G. C. Hambergero*, Lipſ. 1764, 8vo. The celebrity which Geſner had acquired, in conſequence of the many valuable works which he publiſhed, was ſtill farther increaſed by this poſthumous edition of Orpheus, as he has rendered intelligible, by ſhort and comprehenſive notes, a work otherwiſe difficult and obſcure. 25. *Theſaurus Epiſtolicus Geſnerianus, edidit C. A. Klotz*, Halae, 1768, 8vo.

GES'NER (Solomon), a German Lutheran divine in the ſixteenth century, born at Boleſlaw in Sileſia, in 1559. After having made ſome progreſs in the ſtudy of rhetoric and the mathematics, he removed to Straſburgh, where he obtained an academic exhibition, which he diligently employed in the ſtudy of philoſophy, the mathematics, rhetoric, theology, and the Hebrew, Chaldee, and Syriac, languages. In 1592 he received an invitation to fill the theological chair in the univerſity of Wittemberg. By the cloſeneſs of his application to his various engagements, he brought on a complication of diſorders, to which he fell a ſacrifice in 1605, in the forty-ſixth year of his age. He publiſhed, 1. The Prophecy of Hoſea, with the Latin Verſion of St. Jerome, from the Hebrew, and that of B. A. Montanus from the Chaldee Paraphraſe of Jonathan, illuſtrated by the Commentary of St. Jerome, and additional Notes. 2. A General Diſquiſition on the Pſalter, treating of the dignity, the uſe, the argument, and the connection, of the Pſalms. 3. Polemical Diſſertations on the Book of Geneſis. 4. The Orthodox Doctrine concerning the Perſon and Office of Jeſus Chriſt. 5. A Collection of Sermons on the Sufferings of Chriſt. 6. *De Conciliis, Lib.* IV. of which the two firſt contain general remarks, and an hiſtorical view of all the councils, and the two laſt a refutation of the two books of Bellarmine on the ſame ſubject; academic diſputations, controverſial treatiſes, &c.

GESS'NER (Solomon), an eminent paſtoral poet, and landſcape painter, born in 1730, at Zurich in Swiſſerland. His father, who was a bookſeller and printer, brought him up to his own buſineſs, but did not neglect giving him a liberal education. At the age of twenty-two he made a tour through Germany, for the purpoſe both of his own improvement, and of extending the connections of his father's buſineſs, in which he was now admitted as a partner. The acquaintance of many of the German literati, to whom he obtained an introduction during the courſe of this journey, ſtimulated the paſſion he had already imbibed for letters; and ſoon after his return, in 1753, he publiſhed a ſhort poem, entitled Night. This was followed by his paſtoral romance of Daphnis, in three cantos. They were both favourably received, and were judged to diſplay great talents for rich deſcription and tender ſentiment, though marked with the exuberances and irregularities of juvenile fancy. Some of the fictions in theſe pieces ſhewed him to be an imitator of the manner of Ovid; but his maturer taſte led him to a ſtrain of ſimplicity, and a natural ſtyle of painting, which are his chief characteriſtics. This character is peculiarly exemplified in his next and favourite work, his Idyls, formed, as he affirms, upon the model of Theocritus, but infinitely ſurpaſſing that poet in delicacy and true tenderneſs, and in the pure morality they inculcate. The Idyls were greatly admired in all the countries where their language was native, and brought a large addition to the author's reputation. This was carried to its height by his next performance, The Death of Abel, which appeared in 1758. In this piece the dignity of a religious epic, like the Paradiſe Loſt, is attempted to be united with the ſimplicity and ſuavity of paſtoral. Its ſucceſs was highly flattering: beſides the repeated editions it underwent at Zurich in the original, it was tranſlated into moſt European languages.

Geſſner afterwards publiſhed ſome minor poems, of which The Firſt Navigator is one of the moſt admired. He alſo eſſayed his powers in the paſtoral drama, but with no extraordinary ſucceſs. Almoſt all his poetical effuſions were the product of his youth, and written before he had completed his thirtieth year. About that period he married the daughter of Mr. Heidegger, a gentleman who poſſeſſed a valuable collection of paintings of the Flemiſh ſchool; and this circumſtance gave a new turn to his purſuits. He had at an early age learned to draw, and had acquired ſome attachment to the arts of deſign. This was now revived, and he began ſuddenly to attempt imitating what he admired. In a Letter on Landſcape Painting, he has given an inſtructive account of the ſteps by which he was led to a proficiency in that art. For ſome time he only ventured upon decorations of books printed at his office; but at length he attained more confidence, and in 1765 publiſhed ten landſcapes, etched and engraved, as well as deſigned, by himſelf. Twelve others appeared in 1769, and he continued to execute ornaments for the works which iſſued from his preſs. Theſe efforts raiſed his fame as an artiſt almoſt to a parity with that he had gained as a writer; and he has deſervedly obtained a diſtinguiſhed place among the votaries of the fine arts in Swiſſerland. Hence his paintings in water-colours, and his ſeveral drawings, are eagerly ſought by connoiſſeurs. He died by a ſtroke of apoplexy, in 1783, in the fifty-eighth year of his age.

The private character of Geſſner was in a high degree amiable and exemplary. As a huſband, a father, and a friend, his virtues were equally conſpicuous. His caſt of mind was penſive, and even melancholy; his manners gentle. In converſation he was mild and affable, and, where the ſubject admitted of it, often highly animated, riſing into great elevation of ſentiment, and beauty of expreſſion. But in every part of his deportment, there was that unaffected ſincerity, that ſimpli-

city

city and modeſty, by which true genius is ſo generally diſtinguiſhed. With qualities ſuch as theſe, Geſſner could not fail to be loved and reſpected; and uniting to taſte and literature the talents requiſite for active life, he was raiſed by the ſuffrages of the citizens of Zurich to the firſt offices in the republic; the duties of which he diſcharged with ſcrupulous fidelity. The fame of the accompliſhed and virtuous magiſtrate of Zurich, ſpread to the remoteſt parts of Europe. The empreſs of Ruſſia, Catharine II. ſent him a gold medal as a mark of her eſteem: and ſtrangers from all countries viſiting Swiſſerland courted his ſociety, and gave him the moſt flattering proofs of their reſpect and admiration. His Death of Abel is his grand production; but his Idyls are alſo generally known and admired; we tranſcribe the character given of them by Dr. Blair: "Of all the moderns, Geſſner, a poet of Swiſſerland, has been the moſt ſucceſsful in his paſtoral compoſitions. He has introduced into his Idyls, (as he entitles them) many new ideas. His rural ſcenery is often ſtriking, and his deſcriptions lively. He preſents paſtoral life to us with all the embelliſhments of which it is ſuſceptible, but without any exceſs of refinement. What forms the chief merit of this poet, is, that he wrote to the heart, and has enriched the ſubjects of his Idyls with incidents that gave riſe to much tender ſentiment. Scenes of domeſtic felicity are beautifully painted. The mutual affection of huſbands and wives, of parents and children, of brothers and ſiſters, as well as of lovers, are diſplayed in a pleaſing and touching manner. Not underſtanding his language, I can be no judge of his ſtyle, but in the ſubject and conduct of his paſtorals, he appears to me to have out-done all the moderns."—"The ſtyle of Geſſner, (obſerves his tranſlator,) on which Dr. Blair declines giving an opinion, appears to me to be pure, eaſy, and perſpicuous, altogether free from thoſe inverſions and contortions which are found in the Death of Abel, as tranſlated by Mrs. Collyer, and which give it ſo forced and unnatural an air. The ſtyle of the Idyls particularly is poliſhed with the utmoſt care, and diſcovers an elegance, yet ſimplicity of expreſſion, perfectly ſuited to the characters and manners which are deſcribed."

GESNE'RA, or GESNERIA, *ſ.* [ſo named by Plumier in honour of Conrad Geſner of Zurich, the famous botaniſt and natural hiſtorian.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order perſonatæ, (campanulaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, ſuperior, five-cleft, ſharp, permanent. Corolla: one-petalled, incurved and recurved; tube thickiſh, with a contracted neck and funnel-form throat; border five-cleft, blunt; upper diviſions concave; three lower flat, ſpreading. Stamina: filaments four, ſhorter than the corolla; antheræ ſimple. Piſtillum: germ inferior, flatted; ſtyle filiform, the ſame in ſituation and length with the ſtamens; ſtigma capitate. Pericarpium: capſule roundiſh, and crowned with the patulous calyx, ſub-bilocular; partition in the middle longitudinally interrupted. Seeds: extremely numerous, and very ſmall; receptacles on each ſide faſtened to the partition. If the capſule be cut tranſverſely near the top, it appears to be one-celled; if through the middle, two-celled. *Swartz.*—*Eſſential Character.* Calyx, five-cleft, ſitting on the germ; corolla, incurved and recurved; capſule, inferior, two-celled.

Species. 1. Geſneria humilis, or low geſneria: leaves lanceolate, ſerrate, ſeſſile; peduncles branched, many-flowered. All the ſpecies are natives of South America and the Weſt Indies. The firſt is of much humbler growth than the third ſpecies; the leaves much ſmaller; and the flowers deeper cut at their brims. It was found growing naturally by Dr. Houſtoun at Carthagena in New Spain; and by ſir Hans Sloane in Jamaica.

2. Geſneria acaulis, or ſtemleſs geſneria: leaves lanceolate-ovate, ſerrate, ſubpetioled, crowded at the end; peduncles three-flowered, ſhorter than the leaf. Stem round, woody, having a clay-coloured bark, with ſome furrows in it, riſing three or four inches high, having at the top very many oblong leaves, ſtanding very thick, without any order, on foot-ſtalks a quarter of an inch in length, covered with a reddiſh wool-like moſs. They are ſeven inches long, and an inch and half broad near the farther end, whence they narrow to a point, and they alſo grow gradually narrower to the foot-ſtalk. From the axils come out ſmall peduncles, branched, ſuſtaining ſcarlet flowers an inch long, which are followed by a ſhort, fungous, cornered, ſeed-veſſel, having no diſtinct cells, containing many ſmall, oblong, yelloviſh, ſeeds. Browne calls it "ſmall tufted geſneria, with ſcarlet flowers;" and obſerves that the ſtem is always ſimple, creeping along the rocks, and bearing a pretty large tuft of leaves at the extremity, with ſingle flowers ſpringing from each axil. Swartz deſcribes the ſtem as very ſhort at firſt, but as it advances becoming frequently a foot in length, and in this ſtate covered with withered leaves and calyxes. Native of Jamaica.

3. Geſneria tomentoſa, or woolly geſneria: leaves ovate-lanceolate, crenate, hirſute; peduncles lateral, very long, corymbiferous. This riſes with a ſhrubby ſtalk to the height of ſix or ſeven feet, dividing into two or three irregular branches, covered with a ruſſet wool; leaves ſeven or eight inches long, and two and a half broad in the middle, having a ruſſet woolly midrib; they are placed on every ſide the branches without order, and on ſhort footſtalks. This plant bears ſome affinity to the ſaxifrages in the ſituation of theſe receptacles, and in the opening of the capſule. It is called by Browne, "hairy erect geſneria, with open flowers." It is a native of Jamaica, and was cultivated by Mr. Miller in 1759.

4. Geſneria craniolaria, or craniolaria geſneria: leaves wedge-ſhaped, oblong, tooth-laciniate; peduncles terminating; corollas bell-ſhaped. This ſort grows naturally at the Havannah, and in ſome of the other iſlands in America. It riſes with a ſhrubby ſtalk to the height of ten or twelve feet, dividing upwards into a few branches, which are garniſhed with ſpear-ſhaped leaves, cut on their edges as in the genus Craniolaria, (ſee vol. v. 323,) whence the trivial name is derived. The flowers are produced from the ſide of the branches, growing ſeveral together on the ſame foot-ſtalk; they are ſhaped like thoſe of the foxglove, of a greeniſh yellow-colour, with brown ſpots on the inſide; the flowers have a ſwelling tube, which is recurved, and the brim is ſlightly divided into five unequal ſegments: theſe appear in July, but are not ſucceeded by ſeeds in England.

5. Geſneria grandis, or large geſneria: leaves broad-lanceolate, very long, toothletted, rough-haired above, rugged beneath; peduncles terminating; ſtem arboreſcent. 6. Geſneria ſcabra, or rough geſneria: leaves ovate-lanceolate, ſerrate, rugged; peduncles axillary; corollas cylindric, recurved. 7. Geſneria corymboſa, or corymbed geſneria: leaves ovate, acute, ſerrate, ſcarioſe, ſharp; peduncles many-parted; flowers in corymbs. 8. Geſneria exſerta, or lengthened geſneria: leaves ovate-lanceolate, crenate, ſmooth; peduncles three-flowered; genitals twice the length of the corolla; capſules ovate. 9. Geſneria calycina, or calycine geſneria: leaves lanceolate-ovate, acuminate, ſerrate, ſmooth; peduncles three-flowered; genitals longer than the corolla; calyxes bell-ſhaped; capſules cylindric. 10. Geſneria ventricoſa, or ventricoſe geſneria: leaves elliptic, acuminate, crenate, ſmooth; peduncles four-flowered or thereabouts; ſegments of the calyx awl-ſhaped, elongated; corollas ventricoſe. 11. Geſneria pulchella, or fair geſneria: herbaceous; leaves ternate, ovate, acute, ſerrate, villoſe; peduncles axil-

lary, one-flowered. 12. Geſneria pumilla, or dwarf geſneria: ſtemleſs; leaves ovate-wedge-ſhaped, crenate, ſubſeſſile; peduncles ſub-biflorous, ſhorter than the leaves.—All theſe are natives of Jamaica, and the tenth of ſome other iſlands in the Weſt Indies; they were all obſerved by Swartz. They are ſhrubby, except the eleventh, which is annual according to Swartz, but perennial as marked by others. Browne deſcribes this as having a ſlender even ſtem, ſeldom riſing above ten or fourteen inches in height; and throwing out a beautiful ſingle reddiſh flower from the axil of each of the upper leaves; filaments longer than the corolla, and ſomewhat twiſted, as they riſe. Monſ. Lamarck ſaw it in flower in the garden belonging to Monſ. l'Heritier, who named it Cyrilla pulchella; which ſee. He firſt received it in flower by means of Brouſſonet from England, where it was introduced in 1778 by Mr. William Forſyth.

Propagation and Culture. Theſe plants are propagated by ſeeds, which muſt be procured from the countries where they grow naturally. They ſhould be brought over in their capſules, for as they are very ſmall and light, when they are ſeparated from the partition to which they adhere, they ſoon loſe their vegetative quality. The ſeeds ſhould be ſown in pots filled with light earth, and plunged into a hot-bed of tanner's bark as ſoon as they arrive, for they ſometimes lie long in the ground; thoſe ſown in autumn come up the following ſpring; therefore when they happen to arrive here at that ſeaſon, the pots in which the ſeeds are ſown ſhould be plunged into the tan-bed in the ſtove, and during the winter the earth ſhould be now and then gently watered to prevent its drying too much, but it muſt not be too moiſt. In the ſpring the pots ſhould be removed out of the ſtove, and plunged into a freſh hot-bed, which will bring up the plants ſoon after. When theſe are fit to remove, they ſhould be each planted into a ſeparate pot, and plunged into a good hot-bed of tan, obſerving to ſhade them till they have taken new root; then they muſt be treated in the ſame way as other tender plants from the ſame countries. In autumn they muſt be plunged into the tan-bed in the ſtove, where, during the winter, they ſhould have but little water given to them; for if they receive much wet, it will deſtroy them. In this ſtove the plants muſt conſtantly remain, for they will not thrive if they are kept out of the tan. In the ſummer they ſhould have free air admitted to them at all times when the weather is warm; and they muſt be frequently refreſhed with water during that ſeaſon, but it muſt not be given to them in too great plenty. As the plants advance in growth they will require larger pots, but there muſt be care taken not to over-pot them, for they will not thrive in large pots. With this management the plants will flower the ſecond year, and may be continued three or four years, but they are not of long duration in their native country. The fourth ſort ſeldom flowers till the third year; and, as it does not produce ſeeds here, it is with difficulty preſerved in the European ſtoves. The eleventh ſort deſerves to be cultivated in the flower-gardens of America: it thrives beſt in a cool gravelly ſoil, well furniſhed with moiſture, and intermixed with rich mould. See DIGITALIS and CRANIOLARIA.

GES'SANT, *adj.* In heraldry, a term uſed when a lion's head is borne over a chief.

GES'SENE, a town of Bohemia, in the circle of Boleſlau: nine miles north-eaſt of Tumau.

GES'SES, *ſ.* The furniture belonging to a hawk.

GES'SIGO POINT, a cape of Ireland, in the county of Sligo: eleven miles north-weſt of Sligo. Lat. 54. 22. N. lon. 8. 33. W. Greenwich.

GES'SO, a town of Italy, in the kingdom of Naples, and province of Abruzzo Citra: fifteen miles north-eaſt of Civita Borella.

GES'SOPS, a town of United America, in the ſtate of Maryland: eight miles eaſt-ſouth-eaſt of Fort William.

GEST, a town of France, in the department of the Mayne and Loire: three leagues and a half of St. Florent-le-Viel.

GEST, *ſ.* [*geſtum*, Lat.] A deed; an action; an atchievement:

Who fair them quites, as him beſeemed beſt,
And goodly can diſcourſe with many a noble *geſt*. *Spenſer.*

Show; repreſentation.—*Geſts* ſhould be interlarded after the Perſian manner, by ages, young and old.—The roll or journal of the ſeveral days, and ſtages prefixed, in the progreſſes of our kings, many of them being ſtill extant in the herald's office; [from *giſte*, or *giſe*, Fr.] *Hanmer.*

I'll give you my commiſſion
To let him there a month, behind the *geſt*,
Prefix'd for's parting. *Shakeſpeare.*

A ſtage; ſo much of a journey as paſſes without interruption. *It is now in all ſenſes obſolete.*—He diſtinctly ſets down the *geſts* and progreſs thereof. *Brown.*—A bed or couch.

GES'TA, a town of Sweden, in the province of Weſt Gothland: twenty-three miles north-eaſt of Uddevalla.

GESTA'TION, *ſ.* [*geſtatio*, Lat.] The act of bearing young in the womb; or the progreſs of the fœtus from the time of conception to that of parturition. When the ovum firſt deſcends into the womb, it is ſaid to be about the ſize of a poppy-ſeed; that in ten days it weighs half a grain; in thirty days, twenty-one grains; in three months, about three ounces; and, at the end of nine months, the perfect child is found of different ſizes, and from four to nine pounds in weight; ten or eleven pounds are very rare. See the article CONCEPTION, vol. v. p. 12.

The true time of *geſtation* in a woman, is nine ſolar months, each of which is reckoned to be about thirty days ten hours and a half; but it often happens that the child is born at ſeven months, and ſometimes at ten, or even at eleven. C. Teſſier, of the National Inſtitute at Paris, has recently made diligent reſearches into the obſcure ſubject of geſtation; and he read a paper before the council and grand ſitting, to ſhew that pregnancy in women might be prolonged a quarter beyond the uſual time. A child, therefore, ſays M. Teſſier, born beyond the eleventh month of the widowhood of the mother, ought not to be *always* an impeachment of her chaſtity. And ſuch was the ſentence paſſed by a celebrated decree of the parliament of Paris, which declared as legitimate a prince of Condé born eleven months after the death of his father. An inſtance of the ſame kind, which occurred at Rome, is related by Aulus Gellius. A woman of a moſt reſpectable character, brought forth a child in the eleventh month after the death of her huſband. The woman was accuſed of having violated her chaſtity; but the emperor Adrian, under whoſe reign the affair happened, decreed that it was poſſible for pregnancy to be extended to that period. The following are the author's words:—"Præterea ego de partu humano, præterquam quæ ſcripta in libris legi, hoc quoque veniſſe uſu Romæ comperi. Fœminam bonis atque honeſtis moribus non ambigua pudicitia, in undecimo menſe, poſt mariti mortem, peperiſſe; factumque eſſe negotium propter rationem temporis, quaſi marito mortuo poſtea concepiſſet, quoniam decem viri in decem menſibus gigni hominem, non in undecimo ſcripſiſſent: ſed divum Hadrianum, cauſa cognita, decreviſſe in undecimo quoque menſe partum edi poſſe: idque ipſum ejus rei decretum nos legimus. In eo decreto Hadrianus id ſtatuere ſe dicit requiſitis veterum philoſophorum et medicorum ſententiis." *A. Gell. Noct. Att. lib.* iii. *cap.* 16.

Table

Table of the Period of Geſtation, and of the Duration of Life, of ſeveral Quadrupeds.

Animals.	Months of Geſtation.	Years of Life.	Authors.
Elephant	24	150 to 200	Ariſtotle.
Camel	12	40 to 50	The ſame.
Buffalo	12	20 to 25	Cajetano.
Aſs	12	25 to 30	Buffon.
Mare	11½	25 to 30	Ariſtotle.
Cow	9	14 to 15	The ſame.
Stag	8½	35 to 40	Treatiſe on Hunting.
Roebuck	5½	12 to 15	Buffon.
Sheep	5	12 to 15	The ſame.
Goat	5	11 to 13	The ſame.
Dog	2	11 to 15	The ſame.

Table of the Period of Incubation, and of the Duration of Life, of ſeveral Birds.

Birds.	Days of Incubation.	Years of Life.	Authors.
Swan	42	200 nearly	Aldrovandi.
Parrot	40	100 nearly	Wolmaer.
Gooſe	30	80 and more	Willughby.
Eagle	30		
Buſtard	30	Not aſcertained by any naturaliſt.	
Duck	30		
Turkey	30		
Peacock	26 to 27	25 to 28	Ariſtotle. Pliny.
Pheaſant	20 to 25	18 to 20	Treatiſe on Pheaſants.
Crow	20	100 and more	Heſiod.
Nightingale	19 to 20	17 to 18	Buffon.
Pullet	18 to 19	16 to 18	Buffon.
Pigeon	17 to 18	16 to 17	Several obſ.
Linnet	14	13 to 14	Willughby.
Canary bird	13 to 14	13 to 14	Treatiſe on Birds.
Goldfinch	13 to 14	18 to 20	Buffon.

It appears by this table, that the ſwan and parrot, which employ the longeſt time in incubation, are alſo thoſe which live longeſt: the longevity of the former of theſe birds has been carried to two hundred years, and that of the latter to one hundred. In regard to the oſtrich, the life of which the ancients carried beyond one hundred years, we can find no relation between this period and that of the incubation, as the female ſeldom ſits on the eggs, which are hatched by the heat of the ſun. The caſe is the ſame with the crane and the heron, to which the ancients aſſigned a life equally long; but we have no obſervations in regard to their incubation. The gooſe, which employs thirty days in incubation, lives beyond the age of eighty. The eagle, buſtard, duck, and turkey, are the next in the table in regard to the period of incubation; but it has never yet been compared by any ornithologiſt with the duration of their life. All the other birds noticed in the table live nearly in proportion to the time of their incubation; but, as theſe obſervations were made chiefly on domeſtic or captive birds, it is probable that there may be ſome difference between them in a wild ſtate. In regard to birds in a wild ſtate, it is almoſt impoſſible to obtain any correct information. Very few authors have ſpoken of the duration of their life; and whenever they have been caught, they endeavour to judge of their age by marks which are very ambiguous.

By comparing theſe two tables, a very great analogy will be found between the time of the geſtation of quadrupeds, and that of the incubation of birds, in regard to the duration of life. Thus we obſerve that, among quadrupeds, the elephant, which lives from 150 to 200 years, goes with young twenty-four months; and that the camel, which goes with young twelve months, lives forty or fifty years. Among birds, the ſwan which ſits forty-two days, and the parrot which ſits forty days, are thoſe which live longeſt, their life exceeding one hundred years. In looking over this table, the ſame relation appears to be preſerved. The horſe and aſs, which have the ſame period of geſtation, live nearly the ſame time; that is to ſay, twenty-ſix or thirty years. The domeſtic fowl and pigeon, which have nearly the ſame period of incubation, attain to the ſame age; and the caſe is the ſame with the goat and the ſheep, as well as with the canary-bird and the linnet. There are, however, two very ſtriking exceptions. The ſtag, among quadrupeds, goes with young a month leſs than the mare, and yet lives about ten years longer: and, among the birds, the crow, which ſits only twenty days, lives far beyond one hundred years, according to Heſiod, and ſeveral other obſervers.

Theſe exceptions ſtill further prove that our knowledge reſpecting this part of natural hiſtory is very limited, and prove the neceſſity of making further obſervations. Beſides, the difficulty of aſcertaining the exact duration of the life of quadrupeds is equally great as that experienced in aſcertaining the duration of the life of birds, ſince theſe obſervations can be made only on a ſmall number of individuals, taken, for the moſt part, in a ſtate of domeſticity. If, notwithſtanding theſe exceptions, ſome relation has been ſuppoſed to be found between the time employed for perfect growth, and the duration of life, it appears, from a view of this table, that there is a more direct connection between it and the time of geſtation: nature alſo ſeems to have preſerved a kind of connection between the time employed in geſtation and that of incubation, in regard to the duration of the life of birds and quadrupeds.

GES'TE, or GEISTE, a river of Germany, in the duchy of Bremen, which runs into the Weſer, near its mouth.

To GESTI'CULATE, *v. n.* [*geſticulor*, Lat. *geſticuler*, Fr.] To play antic tricks; to ſhew poſtures.

GESTICULA'TION, *ſ.* [French; *geſticulatio*, Lat.] Antic tricks; various poſtures.—One who pretended to expreſs the ſame ſentence as many ways by *geſticulation*, as even Cicero himſelf could by his eloquence. *Wollaſton.*

GESTICULO'SE, *adj.* Full of geſtures. *Scott. Not much uſed.*

GES'TINEN, a town of Swiſſerland, in the canton of Uri: fifteen miles ſouth of Altorff.

GES'TION, *ſ.* The act of doing; the management of any buſineſs. *Cole. Not uſed.*

GESTRI'CIA, a province of Sweden, about ſeventeen leagues long, and ten wide, bounded on the north by Helſingland, on the eaſt by the Gulf of Bothnia, on the ſouth by Upland, Weſtmanland, and Dalecarlia, and on the weſt by Dalecarlia. The mines, forges, foreſts, lakes, and rivers, furniſh the principal riches and ſupport of the inhabitants, who do not much concern themſelves with agriculture. Geſle is the capital.

GES'TUNGSHAUSEN, or GESHAUSEN, a town of Germany, in the circle of Upper Saxony, and principality of Coburg: ſeven miles eaſt of Coburg.

GESTU'OSE, *adj.* Full of geſtures; full of antics. *Scott. Not much uſed.*

GEST'URE, *ſ.* [*gero*, *geſtum*, Lat. *geſte*, Fr.] Action or poſture expreſſive of ſentiment.—Humble and reverend *geſtures* in our approaches to God, expreſs the inward reverence of our ſouls. *Duty of Man.*—Movement of the body.—Every one will agree in this, that we ought either to lay aſide all kinds of *geſture*, or at leaſt to make uſe of ſuch only as are graceful and expreſſive. *Addiſon.*

Grace was in all her ſteps, heav'n in her eye,
In ev'ry *geſture* dignity and love! *Milton.*

To GEST'URE, *v. a.* To accompany with action or poſture.—He undertook ſo to *geſture* and muffle up himſelf in his hood, that none ſhould diſcern him. *Wotton.*

GESVAL'DO, a town of Italy, in the kingdom of Naples,

Naples, and province of Principato Ultra: twelve miles north-weſt of Conza.

GE-TCHAO, a town of China, of the third rank, in the province of Chang-tong: twenty-ſeven miles eaſt-ſouth-eaſt of Lu.

To GET, *v. a.* pret. *I got*, anciently *gat*; part. paſſ. *got*, or *gotten*: [ȝeꝑan, ȝeꝑꝑan, Sax.] To procure; to obtain.—Of that which was our father's he hath *gotten* all this glory. *Gen.* xxxi. 1.—We *gat* our bread with the peril of our lives. *Sam.* v. 9.—David *gat* him a name when he returned from ſmiting of the Syrians. 2 *Sam.* viii. 13.—The word *get* is variouſly uſed: we ſay to *get* money, to *get* in, to *get* off, to *get* ready, to *get* a ſtomach, and to *get* a cold. *Watts.*—To force; to ſeize:

The king ſeeing this, ſtarted from where he ſat,
Out from his trembling hand his weapon *gat*. *Daniel.*

All things, but one, you can reſtore;
The heart you *get* returns no more. *Waller.*

To win by conteſt.—He *gat* his people great honour, and he made battles, protecting the hoſt with his ſword. 1 *Macc.* iii. 3.—To *get* the day of them of his own nation, would be a moſt unhappy day for him. 2 *Mac.* v. 6.

Henry the ſixth hath loſt
All that which Henry the fifth had *gotten*. *Shakeſpeare.*

To have poſſeſſion of; to have. This ſenſe is commonly in the compound preterite.

Then forcing thee, by fire he made thee bright;
Nay, thou haſt *got* the face of man. *Herbert.*

To beget upon a female.—Children they *got* on their female captives. *Locke*—If you'll take 'em as their fathers *got* 'em, ſo and well; if not, you muſt ſtay 'till they *get* a better generation. *Dryden.*

The god of day, deſcending from above,
Mixt with the day, and *got* the queen of love. *Granville.*

To gain as profit.—Though creditors will loſe one-fifth of their principal and uſe, and landlords one-fifth of their income, yet the debtors and tenants will not *get* it. *Locke.*—To gain a ſuperiority or advantage:

If they *get* ground and 'vantage of the king,
Then join you with them like a rib of ſteel. *Shakeſpeare.*

To earn; to gain by labour.—If it be ſo much pains to count the money I would ſpend, what labour did it coſt my anceſtors to *get* it? *Locke.*—To receive as a price or reward.—Any tax laid on foreign commodities in England raiſes their price, and makes the importer *get* more for them; but a tax laid on your home-made commodities leſſens their price. *Locke.*—To learn.—*Get* by heart the more common and uſeful words out of ſome judicious vocabulary. *Watts.*—To procure to be.—I ſhall ſhew how we may *get* it thus informed, and afterwards preſerve and keep it ſo. *South.*—To put into any ſtate.—Nature taught them to make certain veſſels of a tree, which they *got* down, not with cutting, but with fire. *Abbot.*

Take no repulſe, whatever ſhe doth ſay;
For, *get* you gone, ſhe doth not mean, away. *Shakeſpeare.*

To prevail on; to induce.—Though the king could not *get* him to engage in a life of buſineſs, he made him however his chief companion. *Spectator.*—To draw; to hook.—With much communication will he tempt thee, and ſmiling upon thee *get* out thy ſecrets. *Eccleſ.* xiii.—After having *got* out of you every thing you can ſpare, I ſcorn to treſpaſs. *Guardian.*—To betake; to remove; implying haſte or danger.—Ariſe, *get* thee out from this land. *Gen.* xxxi. 13.—Leſt they join alſo unto our enemies, and fight againſt us, and ſo *get* them up out of the land. *Exodus* i. 10.—He with all ſpeed *got* himſelf with his followers to the ſtrong town of Mega. *Knolles's Hiſtory.*—To remove by force or art.—They would be glad to *get* out thoſe weeds which their own hands have planted, and which now have taken too deep root to be eaſily extirpated. *Locke.*—To put.—*Get* on thy boots; we'll ride all night. *Shakeſpeare.*

To GET *off*. To ſell or diſpoſe of by ſome expedient.—Wood, to *get* his halfpence *off*, offered an hundred pounds in his coin for ſeventy in ſilver. *Swift.*

To GET *over*. To conquer; to ſuppreſs; to paſs without being ſtopped in thinking or acting.—'Tis very pleaſant to hear the lady propoſe her doubts, and to ſee the pains he is at to *get over* them. *Addiſon.*—To remove this difficulty, Peterborough was diſpatched to Vienna, and *got over* ſome part of thoſe diſputes. *Swift.*

To GET, *v. n.* To arrive at any ſtate or poſture by degrees with ſome kind of labour, effort, or difficulty: uſed either of perſons or things.—The ſtranger ſhall *get* up above thee very high, and thou ſhalt come down very low. *Deut.* xxviii. 43.—The fox bragged what a number of ſhifts and devices he had to *get* from the hounds; and the cat ſaid he had but one, which was to climb a tree. *Bacon.*—The removing of the pains we feel is the *getting* out of miſery, and conſequently the firſt thing to be done in order to happineſs. *Locke.*

So have I ſeen ſome fearful hare maintain
A courſe, 'till tir'd before the dog ſhe lay;
Who, ſtretch'd behind her, pants upon the plain,
Paſt pow'r to kill, as ſhe to *get* away. *Dryden.*

Impriſon'd fires, in the cloſe dungeons pent,
Roar to *get* looſe, and ſtruggle for a vent;
Eating their way, and undermining all,
'Till with a mighty burſt whole mountains fall. *Addiſon.*

To fall; to come by accident.—Two or three men of the town are *got* among them. *Tatler.*—To find the way; to inſinuate itſelf.—A child runs to overtake and *get* up to the top of his ſhadow, which ſtill advances at the ſame rate that he does. *Locke.*

So high he's mounted in his airy hopes,
That now the wind is *got* into his head,
And turns his brains to frenzy. *Dryden.*

To move; to remove:

Get home with thy ſewel make ready to ſet;
The ſooner, and eaſier carriage to get. *Tuſſer.*

To have recourſe to.—Lying is ſo cheap a cover for any miſcarriage, and ſo much in faſhion, that a child can ſcarce be kept from *getting* into it. *Locke.*—To go; to repair.—A knot of ladies, *got* together by themſelves, is a very ſchool of impertinence. *Swift.*—To put one's ſelf in any ſtate.—Without God's aſſiſtance we can no more *get* quit of our affliction, than but by his permiſſion we ſhould have fallen into it. *Wake.*—As the obtaining the love of valuable men is the happieſt end of this life, ſo the next felicity is to *get* rid of fools and ſcoundrels. *Pope.*—To become by any act what one was not before:

The laughing ſot, like all unthinking men,
Bathes and *gets* drunk; then bathes and drinks again.
Dryden.

To be gainer; to receive advantage:

Like jewels to advantage ſet,
Her beauty by the ſhade does *get*. *Waller.*

To GET *off*. To eſcape.—The gallies, by the benefit of the ſhores and ſhallows, *got off*. *Bacon.*

Whate'er thou doſt, deliver not thy ſword;
With that thou may'ſt *get off*, tho' odds oppoſe thee.
Dryden.

To GET *up*. To riſe from repoſe.—Sheep will *get up* betimes in the morning to feed againſt rain. *Bacon.*—To riſe from a ſeat. To remove from a place.—*Get* you *up* from about the tabernacle of Korah, Dathan, and Abiram. *Numb.* xvi.

To

To get, in all its ſignifications, both active and neutral, implies the acquiſition of ſomething, or the arrival at ſome ſtate or place by ſome means; except in the uſe of the preterite compound, which often implies mere poſſeſſion: as, *he* has got *a good eſtate*, does not always mean that he has acquired, but barely that he poſſeſſes it. So we ſay *the lady* has got *black eyes*, merely meaning that ſhe has them. *Johnſon.*

GE'TA (Septimius), ſecond ſon of the emperor Severus, and brother of Caracalla, born at Milan in 189, and ſucceeded to the title of Auguſtus in 208. Though he was not free from many vices, his milder diſpoſition made him a greater favourite with the people than his brother; and this circumſtance doubtleſs inflamed their mutual hatred. On the death of their father Severus, in 211, both princes ſucceeded to a joint ſovereignty; but it was impoſſible that ſuch a ſtate ſhould be laſting. It was terminated in the very next year by the deteſtable Caracalla, who murdered his brother in their mother's arms.—See the article ROME.

GE'TÆ, or GETU'LIANS, in ancient geography, a branch of the Scythians, who ſettled on the weſtern boundary of the Indus, thence called by ſome writers *Indo-Scythia*. They are repreſented as a brave and warlike people, who firſt expelled the ancient Greeks from this weſtern border of Hindooſtan, after they had been ſettled there by Alexander the Great. See GEOGRAPHY, p. 383, of this volume.

GETH'BRECK, *ſ.* A breach of the peace. *Phillips. Obſolete.*

GE'THER, [Heb. the vale of contemplation.] A man's name.

GETH'ILD, [Saxon.] The name of a woman.

GE'THIN (Lady Grace), an Engliſh lady of virtuous diſtinction, daughter of ſir George Norton, of Abbots-Leigh in Somerſetſhire, born in 1676. She had all the advantages of a liberal education; and became the wife of ſir Richard Gethin, of Gethin Court, in Ireland. She poſſeſſed great accompliſhments, but did not live to diſplay them; for ſhe died in the 21ſt year of her age. She was buried in Weſtminſter-abbey; and, for perpetuating her memory, proviſion is made for a ſermon to be preached in Weſtminſter-abbey, yearly, on Aſh-Wedneſday, for ever. She wrote a work which, ſoon after her death, was methodized, and publiſhed under the title of *Reliquiæ Gethinianæ*, Lond. 1700, 4to. with her portrait.

GETHIOI'DES, *ſ.* in botany. See ALLIUM PALLENS.

GETHSEM'ANE, the name of the garden where Jeſus Chriſt frequently reſorted with his diſciples; and where he was betrayed. It was ſituated without the walls of Jeruſalem, near the brook of Cedron, or Kideon. *Matth.* xxvi. 36. *John*, xviii. 1.

GETHYL'LIS, *ſ.* [Γηθυλλις, or γηθυον, is the name of a plant in Ariſtophanes, Athenæus, &c. ſo named, as ſpringing from γη, the earth.] In botany, a genus of the claſs hexandria, order monogynia, natural order ſpathaceæ, (narciſſi, *Juſſ.*) The generic characters are—Calyx: none, unleſs a ſheath obliquely truncate. Corolla: one-petalled, ſuperior; tube long, filiform, radical; border expanding flat, ſix-parted; diviſions oblong. Stamina: filaments ſix, inſerted into the mouth of the tube, ſhorter than the border, uſually divided; antheræ linear, ſpirally bent in. Piſtillum: germ inferior; ſtyle ſimple, longer than the ſtamens; ſtigma capitate. Pericarpium: berry club-ſhaped, blunt, radical, (ſeſſile in the bulb itſelf, and proceeding from it,) ſomewhat fleſhy, one-celled. Seeds: neſtling, one upon another in three rows, globular, ſmooth.—*Eſſential Character.* Calyx, none; corolla, ſix-parted; berry, club-ſhaped, radical, one-celled.

Species. 1. Gethyllis villoſa, or hairy gethyllis: leaves linear-filiform, ſpiral, villoſe; ſegments of the corolla ovate-oblong. 2. Gethyllis ciliaris, or fringed gethyllis: leaves linear, ſpiral, ciliate; ſegments of the corolla ovate-oblong. 3. Gethyllis ſpiralis, or ſpiral gethyllis: leaves linear, ſpiral, ſmooth; ſegments of the corolla oblong. 4. Gethyllis lanceolata, or lanceolate gethyllis: leaves lanceolate, flat; ſegments of the corolla lanceolate.

All theſe plants have the habit or air of Colchicum, but are ſufficiently diſtinguiſhed from it, by having a monopetalous corolla, and a berry for a fruit. There is but one flower on a naked ſtalk; and the fruit has a grateful odour, with a pleaſant taſte. They are natives of the Cape of Good Hope, where they were obſerved by Thunberg, who has figured and deſcribed them. The third ſpecies only has been long known in Europe; that was cultivated in 1780, by the late Dr. Fothergill. The two firſt were introduced here by Mr. Francis Maſſon, in 1777 and 1778.

GETPEN'NY, *ſ.* [an old term for] A theatrical piece, that ſucceeded.—The Gunpowder plot, there was a *getpenny!* I have preſented that to an eighteen or twenty-pence audience nine times in an afternoon. *Ben Jonſon's Bartholomew Fair.*

GET'STORFF, a town of Germany, in the archduchy of Auſtria: ſix miles ſouth-eaſt of Meiſſai.

GET'TENDORFF, a town of Germany, in the archduchy of Auſtria: five miles ſouth of Aigen.

GET'TER, *ſ.* One who procures or obtains. One who begets on a female.—Peace is a very lethargy, a *getter* of more baſtard children than war's a deſtroyer of men. *Shakeſpeare.*

GET'TING, *ſ.* Act of getting; acquiſition.—Wiſdom is the principal thing, therefore get wiſdom; and with all thy *getting* get underſtanding. *Prov.* iv. 7.—Gain; profit.—Who hath a ſtate to repair may not deſpiſe ſmall things; and it is leſs diſhonourable to abridge a petty charge than to ſtoop to petty *gettings*. *Bacon.*

GET'TYSBURGH, a town of the American States, in York county, Pennſylvania, ſituated at the head of Rock Creek, one of the head waters of the Monococy. It is nine miles north of the Maryland line, eight miles from Millerſtown, fifteen from Abbotſtown, thirty-ſix from Williamſport in Maryland, and one hundred and eighteen weſt by ſouth of Philadelphia.

GET'ZENDORFF, a town of Germany, in the archduchy of Auſtria: four miles ſouth of Ziſtertzdorff.

GET'ZENDORFF, a town of Germany, in the archduchy of Auſtria, ſituated on the river Reiſenpach: twelve miles ſouth-eaſt of Vienna, and ten weſt of Bruck.

GEVAU'DAN, before the revolution a mountainous country of France, in Languedoc, of which Mende was the capital.

GEV'ELSBERGH, or GRETTLESBERG, a town of Germany, in the circle of Weſtphalia, and county of Mark: ſix miles ſouth-eaſt of Blanckenſtein.

GEV'ES, a town of Africa, ſituated on a river of the ſame name, ſouth of the river St. Domingo.

GEVEZE', a town of France, in the department of the Ille and Vilaine, and chief place of a canton, in the diſtrict of Rennes: two leagues and a half north-north-weſt of Rennes, and one and a half ſouth of Hedée.

GEVIEZ', a town of Moravia, in the circle of Olmutz: twelve miles ſouth-weſt of Muglitz.

GE'UL, a river of Germany, which runs into the Meuſe, about five miles below Maeſtricht.

GE'UL, a town of Germany, in the duchy of Limburg, near the Meuſe: five miles north of Wyck.

GE'UM, *ſ.* [of Pliny. Derivation uncertain.] AVENS, or HERB-BENNET; in botany, a genus of the claſs icoſandria, order polygynia, natural order ſenticoſæ, (roſaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, ten-cleft, uprightiſh; ſegments alternately very ſmall, ſharp. Corolla: petals five, rounded; claws the length of the calyx, narrow, inſerted into the calyx. Stamina: filaments numerous, ſubulate, length of the calyx, into which they

are inſerted; antheræ ſhort, broadiſh, blunt. Piſtillum: germs numerous, collected into a head; ſtyles inſerted into the ſide of the germ, (terminating, *Gært.*) hairy, long; ſtigmas ſimple. Pericarpium: none; common receptacle of the ſeeds oblong, (columnar, *Gærtner,*) hirſute, placed on the reflex calyx. Seeds: numerous, compreſſed, hiſpid, awned, with a long ſtyle. — *Eſſential Character.* Calyx, ten-cleft; petals, five; ſeeds, with a kneed awn.

Species. 1. Geum Virginianum, or American avens: flowers upright; awns hooked, naked; ſtem-leaves ternate, the upper ones lanceolate; petals ſhorter than the calyx. Stem a foot and half or two feet high, branching at the top into ſmall peduncles, each terminated by a ſmall white flower. This ſpecies differs from G. urbanum, which it otherwiſe much reſembles, in having white petals ſhorter than the calyx; the flowers nodding during flowering time; the peduncles being thicker towards the flower; the ſeeds hairy, and the root-leaves ſub-bipinnate.

Parkinſon mentions an avens from New England, brought by John Newton a chirurgion of Colliton; but he ſays it differs from G. rivale only in being taller and greater. It flowers in July and Auguſt; and is a native of North America.

2. Geum ſtrictum, or upright avens: flowers upright; awns hooked, naked; ſtem-leaves primate; leaflets and ſtipules gaſh-cleft; petals longer than the calyx. This alſo has the habit of G. urbanum; but the fruit is twice as large. Native of North America; it flowers in May and June.

3. Geum urbanum, common avens, or herb-bennet: flowers upright; awns hooked, naked; ſtem-leaves ternate; root-leaves lyrate-pinnate. Stalks from one to two feet high, nearly upright, ſomewhat flexuoſe, ſlightly angular, hairy, branched at the top; ſeeds about one hundred and ten, ovate, of a pale ferruginous colour, covered with two ſkins; the outer leathery, the inner membranaceous, very thin, pale ſtraw-colour. Common in moſt parts of Europe, in woods and hedges; flowering from May to September. The roots have a mildly aſtringent aromatic taſte, ſomewhat like that of cloves, whence this plant has the name of caryophyllata in Scopoli, Bauhin, &c. They ſhould be gathered in dry warm ſituations, for in ſhady moiſt places they have little virtue. Gathered in the ſpring, and put freſh into ale, they give it a pleaſant flavour, and prevent its turning ſour. Infuſed in wine it is eſteemed a good ſtomachic; but in water Haller affirms it to have been attended with bad effects, when given in malignant fevers, producing delirium. Chewed in the mouth, the roots take off from a diſagreeable breath.

The variety β, with larger flowers, was obſerved by Dr. Liſter in Tedford wood on the Lincolnſhire wolds: cultivated by Ray in his garden at Cambridge, from the neighbouring woods.

4. Geum Japonicum, or Japan avens: flowers upright; fruits hirſute; awns naked; leaves with three lobes or more. Stalk round, flexuoſe, upright, hirſute, a foot high or more, ſometimes, but ſeldom, a little branched at the top. Native of Japan.

5. Geum rivale, or water avens: flowers nodding; awns hooked, villoſe; petals retuſe, roundiſh-wedge-ſhaped; leaves pinnate. Root creeping, reddiſh, aſtringent, aromatic, ſmelling like cloves; ſtem a foot high, upright, round and branched, bending at the top, but becoming erect as the fruit ripens; leaves lyrate, much larger than in G. urbanum, jagged, gaſh-ſerrate and hirſute; receptacle of the ſeeds oblong and peduncled, whereas that of G. urbanum is ovate and ſubſeſſile; the tip alſo of the awns is hairy, not naked as in the other. Native of moſt countries of Europe, in moiſt paſtures and woods, indicating (according to Linnæus) a barren ſoil, not fit for corn; alſo in the Levant, and North America. With us it is more common in the north, as on the water of Leith, near Edinburgh, and other places in Scotland on mooriſh grounds; Settle, Ingleton, &c. in Yorkſhire, and Lancaſhire, and by ſides of rivers and on mountains in many places of the northern counties; about Chevely and Wood-Ditton in Cambridgeſhire, where it was firſt found by Dr. Chevallier, the late maſter of St. John's College; in Wolverton wood near Lynn; at Marham near Swaffham, and near Norwich, in Norfolk; near Sudbury, in a bog; near Aſton, in Warwickſhire; alſo in Wales, by Mr. Thomas Glynn, before 1633; about Snowdon, &c. It flowers from the end of May to autumn. The powdered root is beneficial in diarrhœas and hæmorrhages, and is much uſed by the Canadians in the cure of tertian agues: it will cure malt-liquor of its ropyneſs.

γ. This ſpecies varies with yellow flowers, and they frequently become double and proliferous. Near Strickland in Weſtmoreland, obſerved by Mr. Lawſon; alſo at Brearcliff.

6. Geum hybridum, or mule avens: flower nodding; calyx leafy, longer than the polypetalous corolla. This ſeems to be a mule plant produced between the foregoing and ſubſequent ſpecies. It grows much taller than G. rivale, and is in every reſpect a larger plant.

7. Geum montanum, or mountain avens: ſtem one-flowered; awns ſtraight, villoſe; leaves pinnate, hairy; outmoſt leaflet very large and roundiſh; the lower ones gradually ſmaller. Root-leaves in a tuft, on petioles of different lengths; theſe are hairy, and have ſeveral pairs of leaflets on them; the loweſt very ſmall, the ſucceeding ones gradually larger, and the pair immediately under the great terminating leaflet much bigger than any of the reſt; the extreme leaflet is two or three inches in length and breadth, obſcurely lobed, gaſh-ſerrate, and veined. Grows in the mountains of Swiſſerland, Auſtria, Sileſia, Dauphiné, and Arragon; where it flowers in June and July; with us, from May to September.

β. Small mountain avens is made a diſtinct ſpecies by Mr. Miller, who ſays that it is a very low plant, with flower-ſtalks about three inches long, bending on one ſide, each terminated by one bright yellow flower, about the ſame ſize with thoſe of the common ſort. Found on Monte Baldo, &c.

8. Geum potentilloides, or Siberian avens: ſtem one or two-flowered; awns ſtraight, naked; calyxes of the fruit upright; leaves pinnate, toothed. Native of Siberia; and flowers in June.

9. Geum reptans, or creeping avens: ſtems one-flowered; awns ſtraight, villoſe; leaves pinnate, gaſhed, hairy; runners creeping. Root large and woody; ſtems ſome almoſt upright, flowering, hirſute; others procumbent, creeping; all round, having palmate, ſeſſile, alternate leaves, otherwiſe naked; the flowering ſtems are but little longer than the leaves, and bear uſually one flower, ſeldom two, and very ſeldom three. Native of Swiſſerland, Auſtria, Sileſia, Savoy, and Piedmont; flowering in June and July.

Propagation and Culture. The third ſort, being common in a wild ſtate, is admitted only into botanic gardens. They are all hardy plants, which require a ſhady ſituation, but will thrive in any ſoil. They may eaſily be propagated by ſeeds, which ſhould be ſown in autumn; for when they are ſown in the ſpring, they do not grow the ſame year. See DRYAS and SAXIFRAGA.

GEV'REY, a town of France, in the department of the Côte-d'Or, and chief place of a canton, in the diſtrict of Dijon: ſeven miles ſouth of Dijon.

GE'USS (John Michael), profeſſor of mathematics in the univerſity of Copenhagen, born at Krummendyk in Holſtein, in 1745. He received his early education under the care of his father, a clergyman of that place, and he diſtinguiſhed himſelf by his writings on mathematical ſubjects, and particularly by his Theory of the Art of conſtructing Mines. In the compoſition of this work

work he was assisted by the manuscripts of Belidor, which he found means to obtain, though they had been suppressed in France, after the death of that celebrated engineer. This work, which appeared in 1776, excited great attention; and his Treatise on the Art of constructing Mines, the first part of which was published at Copenhagen the same year, was received with no less approbation. Geuss also translated from Danish into German Olafsen and Povelsen's Voyage to Iceland. It was published at Copenhagen 1774–5, in 2 vols. 4to. He sent several valuable communications to Brehm's *Ingenieur-und-Artillerie Magazin*; and gave an edition of *Logarithmi Buggiani Numerorum ab Unitate ad* 10000; *& Sinuum atque Tangentium ad singula minuta prima, cum eorundem Differentiis.* Havn. 1784, 8vo. This ingenious mathematician died on the 29th of November, 1786.

GEUSZ'NITZ, a town of Germany, in the circle of Upper Saxony, and bishopric of Naumburg: three miles east of Zeitz.

GEUTZ, a town of Germany, in the circle of Upper Saxony, and duchy of Anhalt Côthen, near Côthen.

GEW'GAW, *s.* [ȝeȝaꝛ, Sax. *joyau*, Fr.] A showy trifle; a toy; a bauble; a splendid plaything.—Prefer that which Providence has pronounced to be the staff of life, before a glittering *gewgaw* that has no other value than what vanity has set upon it. *L'Estrange.*

Some loose the bands
Of ancient friendship, cancel nature's laws
For pageantry and tawdry *gewgaws.* *Philips.*

GEW'GAW, *adj.* Splendidly trifling; showy without value.—Let him that would learn the happiness of religion, see the poor *gewgaw* happiness of Feliciana. *Law.*

GEWINE'DA, *s.* [Saxon.] The ancient convention of the people, to decide a cause: *et pax quam aldermanis Regis in quinque burgorum* gewineda *dabit emendatur* 12 *libris.* LL. Æthelred. cap. 1.

GEWITNES'SA, *s.* The giving of evidence in our ancient British law. *Brompton.*

GEWO'LD (Christopher), a lawyer and historian of the seventeenth century, born in Franconia. He was one of the aulic counsellors of Maximilian first elector of Bavaria, who confided to him the inspection of the archives of the duchy. Gewold profited of this advantage to give to the public several historical records before unknown. Of these were: 1. *Genealogia Serenissimorum Bojariæ Ducum*, 1605, folio. 2. *Chronicon Monasterii Reichersspergensis, &c.* 1611, 4to. This is inserted by Ludwig in his *Scriptores Rerum Germanicarum.* 3. *Henrici Monachi in Rebdorf Annales*, 1618, 4to. 4. *Wigulæi Hunds Metropolis Salisburgensis*, 1620. He also published, 5. *Delineatio Norici veteris, ejusque Confinium*, 1619, 4to. 6. *Commentarius de Septemviratu Romani Imperii*, 1621, 4to.

GEX, before the revolution a small country of France, situated between Mount Jura, the Rhône, the lake of Geneva, and Switzerland, ceded to France, from the dukes of Savoy, in 1601. It now forms part of the department of the Ain.

GEX, a town of France, and principal place of a district, in the department of the Ain, situated at the foot of the mountain of St. Claude: three leagues north-north-west of Geneva, and twelve north-east of Nantua. Lat. 46. 21. N. lon. 23. 44. E. Ferro.

GE'YER, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg, situated in the midst of mines. Here are manufactures of vitriol, sulphur, alum, and arsenic; six miles west-south-west of Wolkenstein.

GE'YERSBERG, a town of Bohemia, in the circle of Konigingratz: twenty-eight miles east-south-east of Konigingratz, and twenty-eight east-north-east of Chrudim.

GEY'RACH, a town of Germany, in the duchy of Stiria: nine miles south-south-east of Cilley.

GEYSRUCK'EN JAF'FELAK, a mountain of Germany, which separates Upper Carniola from the county of Cilley: six miles north-east of Stein.

GEYSS, or GEY'SA, a town of Germany, in the circle of the Upper Rhine, and bishopric of Fulda, situated on the Ulster: fifteen miles north-east of Fulda, and twenty south-south-west of Eisenach.

GEYS'ZING, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg: two miles east of Altenberg.

GEZA'EL, a town of Asiatic Turkey, in the Arabian Irak, on the Euphrates: one hundred and twenty miles west-north-west of Bassora.

GEZ'AN, or DSJESAN, a seaport of Arabia Felix, on the Red Sea, which carries on a considerable trade in sena and coffee: twenty-three miles west of Abu-Arisch.

GE'ZER, or GOB, a city of Palestine, situated in the tribe of Ephraim, and a city of the Levites of the family of Kohath. It was the seat of one of the kings of Canaan, previous to its conquest by the Israelites, the last of which was named Horam; and its inhabitants were permitted to dwell with their conquerors, though subject to tribute. In the reign of David, two battles were fought with the Philistines at this place; (compare 2 *Sam.* xxi. 18, 19. and 1 *Chron.* xx. 4, 5.) and in the reign of Solomon it was taken by the king of Egypt, who destroyed it with fire, and slew the Canaanites that dwelt there: this was for a present to his daughter, Solomon's wife; though Solomon rebuilt it at the expence of his own subjects. *Josh.* x. 33. xvi. 10. xxi. 21. *Judges*, i. 29. 1 *Kings*, ix. 15–17.

GEZIRAT', a town of Asiatic Turkey, in the province of Diarbekir: sixty miles south-east of Diarbek.

GEZIRET' IDDAHAB', or ISLAND OF GOLD, an island of Egypt, in the Nile; two miles south of Foua.

GEZ'ULA, or GAZULA, a country of Africa, the most southern province of the empire of Morocco. The inhabitants are considered as the most ancient people of Africa; the country produces a great deal of barley, and pasture for cattle; there are mines of iron and copper, of which they make various utensils, which they exchange for cloth, spices, horses, and other things of which they stand in need. Strangers are well received, and every year there is a well-regulated fair, which continues two months, for the sale and exchange of cattle and merchandise in general. These people are free, being allies rather than subjects of Morocco. Their arms consist of sabres, large sharp two-edged swords, and lances. They are numerous, but have no towns, generally living in camps or villages.

GFOLL, a town of Germany, in the archduchy of Austria: eight miles west-north-west of Crems.

GHALEF'KA, a decayed town of Arabia Felix, once a flourishing city, and the sea-port of Zebid, from which it is distant five miles. The harbour is now filled up, so that no ship, however small, can enter it. Not only has the sea receded, while the banks of coral are continually augmenting; but such a quantity of sand has been here accumulated by the drifting winds, that it actually rises into a hill of considerable height.

GHA'NA, or GHIN'NY, a strong town of Africa, in the kingdom of Wangara, of which it is the capital, situated on the Niger. Lat. 16. 10. N. lon. 13. 2. W. Greenwich; according to major Rennel's corrected statement in the Appendix to Park's Travels, p. lix.

GHAS'SAN, an ancient kingdom of Arabia, founded by the tribe of Azd, who settled in Syria-Damascus upon the banks of a river called Ghassan, whence the kingdom derived its name. Having expelled the Dajaamian Arabs, who were of the tribe of Salih, they made themselves masters of a very considerable territory, and established a monarchy, which subsisted, according to the most accurate computation, six hundred and sixteen years.

GHAST'FUL, *adj.* [ȝaꝛt and fulle, Sax.] Dreary; dismal; melancholy; fit for walking spirits. *Obsolete.*

Here will I dwell apart,
In *ghaſtful* grave, 'till my laſt ſleep
Do cloſe mine eyes. *Spenſer's Paſtorals.*

GHAST'LINESS, *ſ.* Horror of countenance: reſemblance of a ghoſt; paleneſs.

GHAST'LY, *adj.* [ȝarτ, Sax.] Like a ghoſt; having horror in the countenance; pale; dreadful; diſmal. —Thoſe departed friends, whom at our laſt ſeparation we ſaw diſfigured by all the *ghaſtly* horrors of death, we ſhall then ſee aſſiſting about the majeſtic throne of Chriſt, with their once vile bodies transfigured into the likeneſs of his glorious body, mingling their glad acclamations with the hallelujahs of thrones, principalities, and powers. *Boyle.*

Why looks your grace ſo heavily to-day?
—Oh! I have paſt a miſerable night;
So full of ugly ſights, of *ghaſtly* dreams,
So full of diſmal terror was the time. *Shakeſpeare.*

Horrible; ſhocking; dreadful:

I, who make the triumph of to-day,
May of to-morrow's pomp one part appear,
Ghaſtly with wounds, and lifeleſs on the bier! *Prior.*

GHAST'NESS, *ſ.* [ȝarτ, Sax.] Ghaſtlineſs; horror of look. *Not uſed.*

Look you pale, miſtreſs?—
Do you perceive the *ghaſtneſs* of the eye? *Shakeſpeare.*

GHAUTS, an extenſive chain of mountains in Hindooſtan, which riſe to a ſurpriſing height, and oppoſe to the weſtern country a mural front, interſected with *ghauts*, i. e. *paſſes*. They are the ſame which the Welſh call a *bwlch*. From the word *ghaut*, the whole chain derives its name. They give entrance from the coaſt into the lofty, fertile, and populous, plains of boundleſs view, which they ſeem to ſupport in the manner as buttreſſes do a terrace, formed on an immenſe ſcale. Theſe run along the ſea ſhore from Surat to Cape Comorin, at ſome places ſixty miles diſtant, but generally about forty, and in one place not more than ſix. They have leſſer hills at their baſes, clothed with beautiful foreſts, particularly of the valuable teek-tree. The plains are bleſt, from their ſalubrious ſituation, with a cool and healthy air. From the ſides of the mountains precipitate magnificent cataracts, forming torrents and ſtreams, the means of facilitating the conveyance of the timber, and of giving a thouſand picturesque ſcenes amidſt the foreſts. The Ghauts are diſtinguiſhed into the weſtern and the eaſtern. The firſt extend uninterruptedly from Surat to the paſs of Palicaudchery, when near Coimbetore they ſuddenly turn, deeply undulating, to the north. Then, at the paſs of Gujethetty, they wind north and north-eaſterly as high as Amboor and Mugglee, the laſt about eighty miles due weſt from Madras. From whence they ſeem to take a northerly courſe ſo as to comprehend Aurungabad, then croſs the Tapteè, and continue weſterly, at irregular diſtances from the river, till they arrive within a ſhort ſpace from Cape Comorin: thus they appear to form an inſurmountable barrier between the Myſore country and the coaſt of Malabar.

The whole chain, eſpecially in the Concan, has the effect of a connected wall, inacceſſible to the ſummit, unleſs by paths worked by the hand of man; and is not to be aſcended even by a ſingle traveller, without the fatiguing labour of many hours; ſteep precipices, roaring cataracts, and hoarſe reverberating echoes, terrify the paſſenger on each ſide; often violent tornados ariſe, and hurry men and cattle into the deep immeaſurable abyſs. But having attained the ſummit, the trouble is repaid by the magnificent proſpect to the weſt, of the far ſubjacent country, broken into hills, and clothed with beautiful vegetation; the coaſt, the iſlands, and an immenſity of ocean. Theſe Indian Apennines mark with preciſion the limits of the winter and ſummer, or rather the wet and dry ſeaſons, in India. They extend full thirteen degrees of latitude; and, from their prodigious altitude, being from three to four thouſand feet high, they arreſt the great body of clouds in their paſſage, and, according to the monſoons, or periodical winds from the north-eaſt or ſouth-weſt, give, alternately, a dry ſeaſon to one ſide, and a wet one to the other; ſome clouds indeed paſs over, which give a rainy ſeaſon at a very conſiderable diſtance to the leeward; they being too high and too light to condenſe and fall in rain within a ſmall diſtance of this great range.

GHE'BRES, a religious ſect in Hindooſtan, ſimilar to the Perſees or worſhippers of fire. They profeſs the doctrine of Zoroaſter, whom Bryant ſuppoſes to have worſhipped the ſun under the title of Zor-aſter; whence the name. See GABRES, p. 151, of this volume.

GHE'DI, a well-built little town between the Naviglio and Seriola, in Italy; with 3000 inhabitants.

GHEI'RA, a town of Aſiatic Turkey, in the province of Natolia: twenty miles ſouth-weſt of Degnizlu.

GHEI'VE, a town of Aſiatic Turkey, in the province of Natolia: twenty miles eaſt-north-eaſt of Iſnik.

GHE'LEN (Sigiſmond). See GELENIUS, p. 291, of this volume.

GHEME, a town of Italy, in the Novareſe: thirteen miles north-north-weſt of Novara.

GHENT, a large and celebrated city, the capital of Flanders, ſituated on the conflux of the rivers Scheldt, Lis, Moeze, and Lieve, which, with a great number of canals, cut through it every way, divide the town into twenty-ſix ſmall iſlands. The Nervii choſe it for their city, and after them the Vandals, who gave it the name of *Wanda*, from whence the name of *Gand*, or *Ghent*, is probably derived. Odoacer, grand foreſter of Flanders, ſurrounded it with walls; ſince which it has been frequently enlarged, particularly in 1397, under Philip the Bold, twenty-fifth comte of Flanders. The inhabitants were always warlike, and they have had frequent wars both againſt their neighbours and alſo againſt their princes.—See the article FLANDERS, vol. vii. p. 444.

It is related, in the annals of the province, that, in the year 1381, ſixty thouſand Flemings, under the conduct of Philip d'Arteville, revolted againſt Louis comte of Flanders, their ſovereign. This prince demanded ſuccour of Charles VI. king of France, then a boy, who, by the advice of the duke of Burgundy, came to Courtray, in perſon, at the head of his army, and attacked the rebels at Roſebeeck, near that city, and killed forty thouſand of the Flemings, with Arteville their leader. Arteville was the ſon of a brewer, and was at firſt compelled by force to join the malcontents, but being once engaged he acted with great ſpirit, though with too much cruelty, ordering no quarter to be given to the French, except to their little king Charles, whom he directed, if taken, to be brought to him, that, being bred up at Ghent, he might learn to ſpeak good Flemiſh. This action, on the part of the French, was followed by the moſt outrageous act of ſeverity.

The emperor, Charles V. was born in this town the 5th of February, 1500; but the inhabitants have little reaſon to reſpect his memory, for, loading them with frequent impoſitions, they revolted in 1539, and demanded ſuccour of Francis I. king of France, who paid no attention to their requeſts. The emperor departed from Spain, and, paſſing through France, chaſtiſed them with extreme rigour; he put to death ſix and twenty of the principal citizens, baniſhed a great number, confiſcated their eſtates, took away their artillery, their arms, and their privileges, and condemned them to pay a fine of more than twelve hundred thouſand crowns; ordered the magiſtrates to walk in public proceſſion, with cords about their necks; and built a citadel to prevent them from again revolting; ſo that from one of the fineſt cities in Europe it became a perfect ſolitude; ſince that time it has loſt much of its ancient ſplendour, but it is even

now

now conſiderable. In this city was concluded the famous treaty, on the 8th of November, 1676, called the *Treaty of Ghent*, conſiſting of five-and-twenty articles, the principal of which were, that the Spaniſh and foreign troops ſhould depart out of the country; that the provinces of Holland and Zealand ſhould remain united with the others; that the catholic religion ſhould be maintained, and the ancient privileges of the country be ſecure; which treaty was approved and ratified by Philip II. king of Spain. A ſhort time after, the duke of Arſchot was appointed governor of Flanders, and made a magnificent entry into the city; but the citizens, inſtigated by Imbiſe, Reyhove, and ſome others, aſſembled three days after, and inſiſted on a reſtoration of thoſe privileges which had been taken from them by Charles V. and being refuſed, they ſeized the duke, the biſhops of Bruges and Ypres, and ſome other noblemen, and held them priſoners for ſome time. They went ſo far as to take an oath to the prince of Orange, ſubſcribed to the union of Utrecht, and Imbiſe was made the principal echevin of Ghent; but, in 1584, they returned to their obedience under their legitimate ſovereign, and Imbiſe, the author of all the diſturbances, was depoſed, and publicly beheaded, on the 4th of Auguſt, 1585.

Louis XIV. king of France, took Ghent on the 9th of March, 1678, after a ſiege of ſix days; but reſtored it to Spain at the treaty of Nimeguen the ſame year, with whom it continued till the allies took it, with the citadel, in the year 1706, after the battle of Ramillies. The French ſeized it by ſtratagem the 5th of July, 1708, under the conduct of brigadier la Faille, but they remained in poſſeſſion only a ſmall time; for the allies, under prince Eugene and the duke of Marlborough, beſieged it again the 24th of December, and forced it to capitulate the 30th of the ſame month; the commander, comte de la Motte, lieutenant-general of France, with the garriſon, conſiſting of fourteen thouſand men, being made priſoners.

Ghent was erected into a biſhopric in 1559, by pope Paul IV. at the ſolicitation of Philip II. king of Spain, ſubject to the archbiſhop of Malines; beſides the cathedral, it has ſix pariſh churches, and a great many religious houſes; the ſtreets are large, and the market-places ſpacious, particularly the Friday's market, in the midſt of which is a ſtatue of Charles V. in his imperial habit, the effect of which is in a great meaſure deſtroyed by being erected on a column. The ancients have indeed left us ſome inſtances of this impropriety: but their errors ought not to be imitated; and moſt of theſe ſtatues were erected when purity of taſte began to decline. That attention which, in order to be excited, requires local elevation, does little honour to its object. The preſervation of this ſtatue may be conſidered as a proof that, if mankind be not always mindful of the benefits, they are at leaſt equally diſpoſed to forget the injuries, which they receive from princes; for ſurely few ſovereigns, after what has been related above, ever deſerved the hatred of a people more than Charles V. did that of the citizens of Ghent. This city was alſo unfortunately the object of imperial vengeance in the late conteſts between the Netherlands and the emperor; it ſuffered much in November, 1789, from an attempt made by the Auſtrian troops, under general Arberg, to burn and pillage it. Many houſes were deſtroyed, but the violent rain prevented the flames from ſpreading. The cruelties perpetrated by the ſoldiers were dreadful; ninety-ſeven perſons, many of whom were children, were maſſacred by them. They were however defeated by the citizens, who attacked the military in their barracks, to which they would have ſet fire, had not the officers laid down their arms, and ſurrendered at diſcretion. It redounds to the honour of the Flemings, that they ſpared theſe barbarous wretches, and treated them as priſoners of war.

Ghent has conſiderable trade in corn, with cloth, linen, and ſilk manufactures, much aſſiſted by two navigable canals, one to Sas de Ghent, the other to Bruges, Oſtend, &c. The magiſtracy is compoſed of burgomaſters, echevens, and common-council. John, the third ſon of Edward III. king of England, was born in this city, and thence called *John of Gaunt*. On the 14th of November, 1792, the French republicans took poſſeſſion of this city; the inhabitants of which expreſſed a deſire to be united to France. It is thirty miles ſouth-weſt of Antwerp, and thirty-five north of Lille. Lat. 51. 4. N. lon. 21. 17. E. Ferro.

GHERE'DE, a town of Aſiatic Turkey, in the province of Natolia: twenty-eight miles eaſt of Boli.

GHERGIS'TEN MOUNTAINS, a chain of mountains of Aſia, ſituated to the north of the country of Candahar, about fifteen leagues north of Candahar.

GHERGONG', the capital of the kingdom of Aſſam, in Aſia. It has four gates; and the city is encompaſſed with a bound-hedge of bamboos. The rajah's palace is ſurrounded by an elevated cauſey, planted on each ſide with a cloſe hedge of bamboo, which ſerves inſtead of a wall. On the outſide there is a ditch or foſs, which is always full of water. In the centre of the palace there is a ſaloon one hundred and fifty cubits long, and forty broad, ſupported by ſixty-ſix pillars. The rajah's ſeat is adorned with lattice-work and carving. Within and without have been placed plates of braſs, ſo highly poliſhed, that when the rays of the ſun ſtrike upon them, they ſhine like mirrors. It is an aſcertained fact, that 3000 carpenters and 12,000 labourers were conſtantly employed on this work for two years before it was finiſhed. Ghergong ſtands on the banks of the Burhampooter, 448 miles eaſt from Patna. Lat. 26. 26. N. lon. 95. 35. E. Greenwich.

GHERI'AH, a ſea-port of Hindooſtan, on the weſtern or Pirate Coaſt, in the country of Concan; ſtrongly fortified by the pirate Angria, from whom it was taken by admiral Watſon and colonel Clive, in 1756: eighty miles north-north-weſt of Goa. Lat. 16. 45. N. lon. 73. 7. E. Greenwich.

GHER'KIN, *ſ.* [from *gurcke*, Germ. a cucumber.] A ſmall pickled cucumber. *Skinner.*

GHER'MA, or GERMA, a town of Africa, in the deſert country of Berdoa. Lat. 24. 50. N. lon. 18. 20. E. Greenwich.

GHERMAN'SLI, a town of Aſiatic Turkey, in the province of Natolia: thirty-ſix miles weſt of Burſa.

GHER'ZE, a town of Africa, in the country of Tripoli: fifty miles ſouth of Meſurada.

To GHESS, *v. n.* [See *To* GUESS. *Gheſs* is by critics conſidered as the true orthography, but *gueſs* has univerſally prevailed.] To conjecture.—It ſeem'd a ſecond paradiſe, I *gheſſe*. *Spenſer.*

GHEUR'EL, a town of Aſiatic Turkey, in the province of Natolia: twenty-eight miles weſt-north-weſt of Angura.

GHEUT'SI, a town of Aſiatic Turkey, in the province of Caramania: ſixteen miles eaſt of Cogni.

GHEYS'SIQUAS, a nation of Hottentots, bordering on Caffraria, in the ſouth of Africa, and near the Cape of Good Hope. See the article HOTTENTOTS.

GHI'LAN, or KILAN, a province of Perſia, bounded on the north by the province of Adirbeitzan and Schirvan, on the north-eaſt by the Caſpian Sea, on the eaſt by the Caſpian Sea and the province of Mezanderan, on the ſouth by the Perſian Irak, and on the weſt by Curdiſtan and Adirbeitzan; about 200 miles from eaſt to weſt, and 150 from north to ſouth. It is one of the moſt beautiful and fertile provinces in all Perſia, producing ſilk, olives, rice, tobacco, and moſt excellent fruits of all kinds, and in ſo great quantity as not only to ſupply their own wants, but ſufficient to furniſh a great part of Perſia and Armenia. Whole foreſts are ſeen of mulberry, box, and walnut, trees. Every peaſant has a garden to his cottage, filled with orange-trees, citrons, figs, and vines. The inhabitants are Mahometans, of the

the ſect of Omar, brave, haughty, and induſtrious. This province was ceded to Ruſſia, with all its dependencies, by a treaty concluded at Peterſburg, in 1723, between the emperor and the ſchah; but no ſteps ſeem to have been taken on the part of Ruſſia till the year 1780, when the empreſs annexed it to the Ruſſian dominions. Reſhd is the capital.

GHILI'NI (Jerom), a man of letters, born in 1589, at Monza, in the Milaneſe. He ſtudied firſt in civil and canon law; but having married, and ſettled at Aleſſandria, (the native place of his father,) he for ſome years employed himſelf in the private purſuits of literature. Becoming a widower, he took the eccleſiaſtical habit, and reſumed the ſtudy of canon law, in which he became a doctor. He had an abbacy in the kingdom of Naples, and was made apoſtolical prothonotary. He was afterwards preſented to a theological canonry in the church of St. Ambroſe at Milan. In 1670, he was living at Aleſſandria in a very advanced age; but when he died is unknown. He was a member of the Academy of Incogniti at Venice. He publiſhed, 1. Poems. 2. Caſes of Conſcience. 3. Annals of Aleſſandria and its circumjacent Territory, folio, Milan, 1666; and a work entitled *Teatro di Uomini Letterati*, 2 vols. 4to. Venice, 1647.

GHINA'LA, or GUINALA, a town and kingdom of Africa, on the river Grande. Lat. 10. 20. N. lon. 12. 20. W. Greenwich.

GHINTA, *ſ.* [ſo named by Schreber, in honour of *Lucas Ghini*, a famous phyſician and botaniſt of Bologna, in the ſixteenth century.] In botany, a genus of the claſs diandria, order monogynia, (didynamia, *Sw.*) natural order of perſonatæ, (vitices, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, tubular, permanent; mouth expanded, five-toothed, acuminate. Corolla: one petalled, irregular; tube long, narrow; border two-lipped, upper lip largeſt, roundiſh, concave, aſcending; lower three-parted, ſegments roundiſh, the middle one largeſt, bent down, emarginate. Stamina: filaments four, inſerted into the tube above the baſe, two longer than the others; antheræ with oblong cells, one at the end, fertile in the longer filaments, barren in the ſhorter; the other inſerted towards the middle of the filament, in ſhape of a ſcale. Piſtillum: germ roundiſh; ſtyle the length of the tube; ſtigma four-lobed. Pericarpium: drupe turbinate, angular, longer than the calyx, which is permanent. Seed: nut angular, four or five-celled, with one ſeed in each cell; (four-cornered, four-ſpined at the end, four-celled, with ſolitary kernels, *Swartz.*)—*Eſſential Character.* Calyx five-toothed, teeth acuminate; corolla two-lipped; ſtamina four, with two barren anthers at the end of the ſhorter filaments; pericarpium a drupe, containing a four or five-celled nut, with a ſeed in each cell; (a fleſhy four-celled nut, *Sw.*)

Species. 1. Ghinia ſpinoſa, or prickly ghinia: fruits four-ſpined. Stem ſlender, woody, branching, near three feet high; leaves oval, ſharply indented, light green, on ſhort foot-ſtalks; flowers diſtant, ſeſſile, in a looſe ſpike, on ſlender, naked, axillary, peduncles, ſix or ſeven inches in length; corollas ſmall, bright blue; ſeeds two, terminated by ſhort awns, and incloſed in the calyx. It is an annual plant, and native of the Weſt Indies, Antigua, Curaçoa, &c. The ſeeds were ſent to Mr. Miller from Vera Cruz, by Dr. Houſton.

2. Ghinia mutica, or ſmooth ghinia: fruits without ſpines. This alſo is an annual plant, about a foot and a half in height. Native of Guiana, and the iſland of Cayenne.

GHI'NUC, a town of Aſiatic Turkey, in the province of Natolia: twenty-four miles north-weſt of Sinob.

GHI'O, or SHEMLIK, a town of Aſiatic Turkey, in the province of Natolia: twenty miles north-eaſt of Burſa.

GHIR, a river of Africa, which riſes in mount Atlas, and empties itſelf into a lake in the Deſert of Hair.

GHIR'GIN, or GUANGUIN, a town of Africa, in the kingdom of Congo: thirty miles north-eaſt of Cape Roxo.

GHIR'NAH, a river of Hindooſtan, which runs into the Taptee: thirty-ſix miles ſouth-weſt of Burhampour.

GHIVI'RA, a town of Italy, in the duchy of Milan: thirty miles north-weſt of Milan.

GHIZ'NI, or GAZNA, a town of Aſia, in the country of Cabul, once the capital of a powerful empire of the ſame name; the city is called *the Second Medina*, from the great number of illuſtrious perſons who have been interred there: 150 miles eaſt of Candahar, and fifty-four ſouth of Cabul. Lat. 33. 40. N. lon. 61. 20. E. Greenwich.

GHO'BA, the place to which the Aſſyrian army were chaſed by the Iſraelites in the days of Judith. *Judith* xv. 5.

GHO'BAN, a town of Perſia, the reſidence of an Arabian ſchiech, near the mouth of the Euphrates.

GHO'ER, a town of the Dutch States, in Overiſſel, on the Regge: ten miles north-north-eaſt of Borkeloe.

GHOST, *ſ.* [from the Saxon GAST, which in the "Ælfrici Grammatica" is interpreted by *Spiritus*; *Anima.*] However the Saxon and Engliſh word may originally have been applied to expreſs what we term "Wind," the word "Ghoſt" has now a different ſenſe. And here we do not refer to the vulgar acceptation, when the ignorant and ſuperſtitious talk of "Ghoſts," by which they mean terrific phantoms. We will explain the word in the high and dignified ſenſe in which it is now underſtood.

St. Paul, 2 Cor. iv. 16. ſpeaks of our "Inward Body." ESTIUS and VORSTIUS thus interpret the paſſage:—*Hominem interiorem* appellat Spiritum, ſive Animam; vel Animam rationalem cum potentiis ei propriis: i. e. "The Apoſtle calls the Spirit, or Soul, or Rational Soul, with its appropriate faculties, *the Inward Man.*" This Spiritual Inhabitant of the Human Body is what we now underſtand when we uſe the word "Ghoſt" on ſolemn occaſions: ſo that the "Ghoſt of a Man," or "Spirit of a Man," are ſynonymous.

When, after his reſurrection, our Lord appeared to his diſciples, to convince them that they ſaw a real Body, he ſaid, "Behold, my hands and my feet, that it is I myſelf: handle me, and ſee: for a Spirit hath not fleſh and bones, as ye ſee me have." St. Luke xxiv. 39. Here our Lord preciſely diſtinguiſhes between that which conſtitutes the body, and that which is the nature of Man's "Ghoſt, or Spirit." Fleſh and Bones compoſe the one; but ſuch ſubſtance our "Inward Ghoſt or Spirit" does not in itſelf poſſeſs, though whilſt united with the body it feels the influence and weight of the carnal frame. At the diſſolution of the Body, the Inward Ghoſt or Spirit is freed from incumbrance. It departs for a ſeaſon to that region which is the abode of "Ghoſts or Spirits" ſeparated from Mortal Bodies. But at the final conſummation of all things, when the Reſurrection enſues, the "Ghoſt" of each perſon ſhall be re-united with his Body; which Body will not then be groſs, mortal, and corruptible, but pure, immortal, and incorruptible, ſo that the "Ghoſt" inhabiting it ſhall no more experience the preſſure from it, which we each of us perceive affecting us, when we attend to the Rational and Irrational Parts of our Frame, in all their workings, their conflicts, their different tendencies, their contrary gratifications, where the "Ghoſt or Spirit" has been trained to virtue and religion.

Taking the word "Ghoſt" in the ſignification of ſomewhat, which though "Subſtance," is yet not "Bodily Subſtance," or rather, not "Material Subſtance," but refined, and pure, as Light, or Fire, or Wind, all of which are "Subſtances," though not "Material Subſtances," we apply the term to the Third Perſon of the ONE GODHEAD, and denominate the HOLY SPIRIT by the appellation "HOLY GHOST."

We reject *Credulity* as a mark either of haſty judgment, or of weak underſtanding. To *popular* ſtories of Ghoſts and Goblins we give no credit. But we certainly do hear, on ſome occaſions, ſuch poſitive aſſertions made by

by moſt ſenſible and moſt reſpectable perſons, ſome of whom we know at this very time, that we can ſcarcely deny the fact, that the Spirits of departed friends do ſometimes appear.

GHOST'LINESS, *ſ.* Spiritual tendency; quality of having reference chiefly to the ſoul.

GHOST'LY, *adj.* Spiritual; relating to the ſoul; not carnal; not ſecular.—Save and defend us from our *ghoſtly* enemies. *Common Prayer.*—The graces of the ſpirit are much more precious than worldly benefits, and our *ghoſtly* evils of greater importance than any harm which the body feeleth. *Hooker.*—Having a character from religion; ſpiritual.—The *ghoſtly* father now hath done his ſhrift. *Shakeſpeare.*

Hence will I to my *ghoſtly* friar's cloſe cell,
His help to crave, and my dear hap to tell. *Shakeſpeare.*

GHOU'MEL, or GOMEL, a town of Africa, in the kingdom of Foulis, on the Joto, the reſidence of the king. Lat. 16. 12. N. lon. 11. 15. W. Greenwich.

GHOUR'BOND, a town of Aſia, in the country of Cabul: forty-two miles north-weſt of Cabul. Lat. 34. 55. N. lon. 67. 52. E. Greenwich.

GHOU'RI, a town of Aſia, in the kingdom of Balk. Lat. 35. 40. N. lon. 66. 56. E. Greenwich.

GHU'LA EL AIJAIB, a town of Arabia Felix: ten miles north-north-eaſt of Chamir.

GOULPAI'GAN, a town of Perſia, in the province of Irak: 100 miles north-north-weſt of Iſpahan.

GHUN'FUDE, a conſiderable city of Arabia, ſituated on the Red Sea, in the juriſdiction of the governor of Mecca, ſubject to the Turks. All the ſhips which are employed in carrying coffee to Jidda, are obliged to anchor here, in order to pay the duty, and obtain certificates thereof, before they are permitted to ſail: 145 miles ſouth of Mecca. Lat. 19. 7. N.

GHU'NI, one of the ſmaller Cape Verd iſlands, little more than a rock.

GIAB'BAR, a fortreſs of Aſiatic Turkey, in the province of Diarbekir: 120 miles ſouth-ſouth-weſt of Diarbek.

GIA'DEN, a town of Arabia: ſixty miles weſt-ſouth-weſt of Mecca.

GI'AFAR, ſurnamed *Sadek*, or *the Juſt*, a muſſulman doctor of great reſpectability, born at Medina in the 83d year of the Hegira, where he died, aged ſixty-five, in 148, correſponding with 764 of the Chriſtian era. He is the reputed author of the leſſer *Gefre*, a book compoſed of prophecies relating to the deſtiny of Muſſulmaniſm, and the great events that are to take place before the conſummation of all things, and of myſteries which will not be fully developed until the coming of Mehedi, towards the end of the world. He is alſo ſaid to be the author of the *Ketab Corradt*, or Book of Lots, which is one of the principal directories of the Muſſulmans in their divinations. But Giafar Sadek's Traditions are what are held in the higheſt repute, and chiefly conſecrate his memory as a doctor of Iſlamiſm. Theſe he is ſaid to have received from his father, and from Atha, one of the companions of Mahomet, and to have tranſmitted them to Thouri, to Ben Ainah, to Abou Hanifah, and to Malec, of whom the two laſt are the chiefs of the two ſects reputed orthodox among the Muſſulmans.

GI'AGAS, a tribe of predatory or wandering ſavages of Africa, ſomewhat ſimilar to the Bedouins, but of a more ferocious nature. They are alſo denominated *Iajas*, and ſeem from the brutality of their manners to be the ſame as the Imbi and the Gallas. We are indebted to a traveller, who reſided among them many years, for what we know reſpecting their cuſtoms and way of life. Their chief has the title of Great Giaga. He has an army of twenty thouſand men, under the command of twelve captains, each of whom has the charge of one of the gates of the camp; whilſt the chief has his pavilion, or place of reſidence, in the centre. He undertakes no enterpriſe without firſt conſulting their national god, which is called *mokiſſo*, and from whom he pretends to know the event of every action. This ceremony continues during a whole day: and he is aſſiſted by fifty women, and two ſorcerers, who form a circle round him, make a variety of geſtures, and repeat certain incantations. They dye his forehead, temples, breaſt, and belly, with a kind of powder, conſecrated by magical words; put into his hands his *caſingola*, or hatchet; and ſay to him, "Go, march againſt the enemy, and ſpare not, for the *mokiſſo* will attend thee." A male child is then brought, the head of which he ſplits. This boy is followed by four men, two of whom he ſlays with his own hand; the other two are put to death by his orders without the camp. A general entertainment then ſucceeds; ten cows are killed, five without and five within the camp; with an equal number of goats and dogs; and the fleſh of theſe animals is eaten with great feſtivity and triumph.

The dreſs of the Great Giaga conſiſts in having his hair very long, braided with many knots, and intermixed with ſhells; a girdle compoſed of the eggs of an oſtrich; and a plain *pagne* of ſtuff, manufactured from the fibres of the palm-tree. His body is marked with various figures, and every day anointed with human greaſe. He wears a piece of copper two inches in length acroſs his noſe; and another of the ſame ſize depends from each ear. He has about thirty wives, who follow him when he travels, one of whom carries his bows and arrows, and four of the others his cups and veſſels of liquor. When he drinks, they kneel, ſing, and clap their hands. He gives an exhortation to his troops every day; and if any one of them turns his back to the enemy, he ſuffers death, and is eaten by his comrades. However laborious and fatiguing their march may be, they no ſooner encamp, than they fortify the place with ſtrong paliſades. They employ a particular corps of their ſtouteſt men for this purpoſe. Their tents or huts are placed in a regular manner, and cloſe to each other; and they depoſit at the door their bows, arrows, and other weapons; ſo that, on the leaſt alarm, every man is completely armed and ready in a moment.

The Giagas have no idol nor other god than their *mokiſſo*. The manner in which they recruit their armies, is by the captives taken in war, and others whom they carry off in the courſe of their expeditions, like the mamalukes in Egypt. Theſe youths are no ſooner inrolled amongſt them, than they hang a collar round their necks in token of ſervitude, and which is to be worn till they have brought home the head of an enemy. It is then taken off, and they are declared free men. Nothing has ſo much influence on their minds, as the hope of being delivered from the collar, the badge of ſlavery; and to attain which, they will brave every danger, and ſurmount every obſtacle.

When a perſon of diſtinction dies, the body is waſhed, anointed with ointments, and decked in the moſt coſtly manner; and two of the women whom he chiefly loved, after having their arms broken, are placed by the ſide of the deceaſed, and in that manner buried with him in the ground. As ſoon as they are thus depoſited, the grave, which is commonly a deep vault, is filled with earth, and if theſe wretched women are not immediately ſuffocated, they expire amidſt lingering torments. Cuſtoms not unſimilar exiſt even at this day in Hindooſtan.

Theſe barbarians never make war but for the ſake of plunder; they only ſtop their march that they may have time to conſume their booty; and when that is exhauſted, they immediately recommence their predatory incurſions and military operations. But the worſt of all is, that not content with the property which they are able to carry off, they generally deſtroy, burn, or demoliſh, all immoveable poſſeſſions, and leave nothing behind them but a barren and deſolate wilderneſs. They never ſhew any deſire of ſettling in a country, unleſs they be extremely

extremely fatigued with their expeditions, or fatiated with plunder and ſlaughter. It may be readily conceived, that the inhabitants of a territory which this wandering tribe frequent, are in no very agreeable ſituation; and they are, therefore, ſeldom mentioned: all that we know of them is, that they have ſome rational form of government, and that their conſtitution is monarchical.

GI'AGH, *ſ.* in chronology, a cycle of twelve years; in uſe among the Turks and Cathayans. Each year of the giagh bears a name of ſome animal: the firſt that of a mouſe; the ſecond that of a bullock; the third of a lynx or leopard; the fourth of a hare; the fifth of a crocodile; the ſixth of a ſerpent; the ſeventh of a horſe; the eighth of a ſheep; the ninth of a monkey; the tenth of a hen; the eleventh of a dog; and the twelfth of a hog. They alſo divide the day into twelve parts, which they call *giaghs*, and diſtinguiſh them by the names of animals. Each giagh contains two of our hours, and is divided into eight kehs, as many as there are quarters in our hours.

GI'AH, a city of Paleſtine, belonging to the tribe of Benjamin; ſituated near the wilderneſs of Gibeon, and the hill of Ammah. 2 *Sam.* ii. 24.

GIAHED'H, a famous muſſulman doctor, called *Abou Othman Amoud*, or *Amrou Ben Mahboub*, a native of Baſſora, whence he removed to Bagdat. He was the diſciple of Abou Iſhak al Nadhám, and chief of the ſect of the Motazales, eminent for their ſubtilty in philoſophy and ſcholaſtic theology. He was the author of ſeveral treatiſes in metaphyſics, which the Arabs call *Elm al Kelam*, or the ſcience of words, or terms. The Schiites, or the followers of Ali, who are the friends of the Motazales, made him a preſent of a large ſum of money, in order to engage his pen in their defence; which led him to compoſe a work, in which he collected a vaſt maſs of traditions and anecdotes, all favourable to the cauſe of Ali. He died at Bagdat in the year 225 of the Hegira, or 840 of the Chriſtian era. His reputation was ſo high, that one ſect of the Motazales bears after him the name of *Giahediah*.

GIAID'HOFF, a town of Germany, in the duchy of Stiria: eight miles ſouth-ſouth-weſt of Graz.

GIALALI'NA, *ſ.* [Italian.] Earth of a bright gold colour, found in the kingdom of Naples, much valued by painters. *Woodward.*—This is the Italian name of the pigment otherwiſe called *Naples yellow*.

GIALU', a town of Tranſilvania: eight miles ſouth-ſouth-weſt of Clauſenburg.

GIAMA'NI, a town of Perſia, in the province of Chuſiſtan: twenty-eight miles ſouth-ſouth-weſt of Suſa.

GIAM'BEUX, *ſ.* [*jambes*, Fr.] Legs, or armour for legs; greaves:

The mortal ſteel diſpiteouſly entail'd,
Deep in their fleſh, quite through the iron walls,
That a large purple ſtream adown their *giambeux* fall.
Spenſer.

GIAM'OBASH, a town of Aſiatic Turkey, in the province of Natolia: twenty miles ſouth-ſouth-eaſt of Smyrna.

GI'ANAB, a town of Perſia, in the province of Kerman: fifty miles eaſt of Sirgian.

GIANNO'NE (Peter), an eſteemed modern hiſtorian, born in the kingdom of Naples, about 1680. He diſtinguiſhed himſelf by writing in Italian a Hiſtory of Naples, in 4 vols. 4to. 1723, divided into forty books. Its freedom with reſpect to the origin of the papal power gave ſuch offence to the court of Rome, that, with its uſual unforgiving ſpirit, it raiſed ſuch a perſecution againſt the author, that he long wandered as a fugitive, and at laſt obtained an aſylum with the king of Sardinia, who, however, found it neceſſary to diſguiſe his protection under the appearance of a confinement. He died in Piedmont, in 1748. An extract was made of all the matter relating to eccleſiaſtical affairs in his hiſtory, and printed in Holland, under the title of *Anecdotes Eccleſiaſtiques*. After his death a quarto volume of his Poſthumous Works was publiſhed, containing among other things his profeſſion of faith, and a defence of his hiſtory.

GI'ANT, *ſ.* [in Greek Γιγας, in Latin GIGAS, in Hebrew NOPHEL, or NEPHILIM, which may ſignify a MONSTER, or a TERRIBLE MAN, who beats and bears down other men.] The Scripture ſpeaks of Giants who lived before the flood; they are called NEPHILIM, mighty men, which were of old men of renown, *Gen.* vi. 4. AQUILA, inſtead of *Gigantes*, renders this word *Nephilim* Επιπιπτοντες, "men who attack, who fall with impetuoſity upon their enemies;" a tranſlation, ſays one, which renders very well the whole force of the Hebrew term. SYMMACHUS tranſlates it Βιαιοι, violent men, cruel, whoſe only rule of their actions is violence and force of arms.

The Scripture calls them ſometimes REPHAIMS. For example: Chedorlaomer and his allies beat the Rephaims, or Giants, at Aſhteroth Karnaim, *Gen.* xiv. 5. The Emims, ancient inhabitants of the land of Moab, were of gigantic ſtature, they were of the number of the Rephaims, or Giants, *Deut.* ii. 10, 11. The Rephaims and the Perizzites are joined together as old inhabitants of the land of Canaan, *Gen.* xv. 20. Job ſays, that "the ancient Rephaims mourn or groan under the waters," *Job* xxvi. 5. i. e. "Theſe Giants of the old world, who once carried themſelves inſolently towards God and men, but were quickly ſubdued by the divine power, and drowned with a deluge, do now mourn or groan from under the waters where they were buried, or in their ſubterranean and infernal habitations." But this paſſage is otherwiſe explained by ſome. Solomon, in Prov. ii. 18. ſays, that "the paths of a debauched woman lead to the Rephaims;" that is, "to hell, where the rebellious giants are; and that he who deviates from the ways of wiſdom, ſhall go and dwell in the aſſembly of the Giants in hell." *Prov.* xxi. 16.

The ANAKIMS, or the ſons of ANAK, were the moſt famous Giants of PALESTINE. They dwelt at Hebron, and thereabouts. Their ſtature was ſo much above what was common, that the Iſraelites, who were ſent to view the promiſed land, told the people at their return, that they had ſeen Giants of the race of Anak in this country, who were of ſo monſtrous a ſize, that the Iſraelites, in compariſon, were but graſshoppers to them. *Num.* xiii. 33.

The Septuagint ſometimes tranſlate the Hebrew word GIBBOR, "Giant," though literally it ſignifies no more than a ſtrong man, a man of valour and bravery, a warrior. For example: they ſay that Nimrod was "a Giant before the Lord," *Gen.* x. 8, 9. That the "Sun riſes like a Giant to run its courſe," *Pſal.* xix. 5. That the "Lord will deſtroy the Giant and the warlike man," *Iſa.* iii. 2. That he will "call his Giants in his wrath, to take vengeance of his enemies," *Iſa.* xiii. 3. That he will "deſtroy the power of Egypt by the ſword of his Giants;" that is, "of his warriors," *Ezek.* xxxii. 12. xxi. 27.

As to the exiſtence of Giants, ſeveral writers, both ancient and modern, have imagined, that the Giants ſpoken of in Scripture were indeed men of an extraordinary ſtature, but not ſo much above what was common as they have fancied, who deſcribe Giants as three or four times larger than men are at preſent. They were, ſay they, men famous for the violences which they committed, and for their crimes, rather than for their ſtrength, or the greatneſs of their ſtature.

It is very probable, that the firſt men were all of a ſtrength and ſtature much ſuperior to thoſe of mankind at preſent, ſince they lived a much longer time; long life being commonly the effect of a ſtrong and vigorous conſtitution. And that formerly there were men of a ſtature much above that of common men, cannot be denied,

nied, at leaſt not without contradicting the Holy Scriptures. The Iſraelites who traverſed the Holy Land, told their brethren, that they had ſeen Giants in this country of Anak's race, unmeaſurably large, as noticed above, *Num.* xiii. 33. Moſes ſpeaks of Og the king of Baſan's bed, which was nine cubits long, and four wide; that is, fifteen feet four inches and a half long, *Deut.* iii. 11. Goliah was ſix cubits and a ſpan in height; that is to ſay, ten feet ſeven inches, 1 *Sam.* xvii. 4. Theſe ſorts of Giants were ſtill common in Joſhua's and David's times, when the life of men was already ſo much ſhortened, and, as may be preſumed, the ſize and ſtrength of human bodies were very much diminiſhed. Beſides the Giants mentioned in Scripture, ſeveral hiſtorians make mention of Giants; as Herodotus, Diodorus Siculus, Pliny, Homer, Plutarch, &c. *Cruden.*

The excellent DERHAM, in his note on b. 5. c. 4. of his admirable work entitled "Phyſico-Theology," after having referred to examples of uncommon ſtature in more early times, adds, "In 1684, I myſelf meaſured an Iriſh youth, ſaid to be not nineteen years old, who was ſeven feet and near eight inches; and, in 1697, a woman who was ſeven feet three inches in height."

Captain WALLIS, one of thoſe perſevering navigators round the world, to whom we are indebted for enlargement of knowledge, gives us this account of the natives of Patagonia: "As I had two meaſuring rods with me, we went round and meaſured thoſe that appeared to be talleſt among them. One of theſe was ſix feet ſeven inches high; ſeveral more were ſix feet five, and ſix feet ſix inches." *Hawkeſworth's Voyages*, vol. i. 374.

Patrick Cotter, commonly called O'Brien, the Iriſh giant, who died in September laſt (1806), was eight feet and a half high; and there is now ſhown in London a youth about the age of that mentioned by Derham, and as tall.

In a memoir read before the Academy of Sciences at Rouen, M. Le Cat, the anatomical profeſſor, gave the following account of giants that are ſaid to have exiſted in different ages: "Profane hiſtorians have given ſeven feet of height to Hercules their firſt hero; and in our days we have ſeen men eight feet high. The giant who was ſhown in Rouen, in 1735, meaſured eight feet ſome inches. The emperor Maximin was of that ſize; Shenkius and Platerus, phyſicians of the laſt century, ſaw ſeveral of that ſtature; and Goropius ſaw a girl who was ten feet high. The body of Oreſtes, according to the Greeks, was eleven feet and a half; the giant Galbara, brought from Arabia to Rome under Claudius Cæſar, was near ten feet; and the bones of Secondilla and Puſio, keepers of the gardens of Salluſt, were but ſix inches ſhorter. Funnam, a Scotſman, who lived in the time of Eugene II. king of Scotland, meaſured eleven feet and a half; and Jacob le Maire, in his voyage to the ſtraits of Magellan, reports, that on the 17th of December, 1615, they found at Port Deſire ſeveral graves covered with ſtones; and having the curioſity to remove the ſtones, they diſcovered human ſkeletons of ten and eleven feet long. The chevalier Scory, in his voyage to the Peak of Teneriffe, ſays, that they found in one of the ſepulchral caverns of that mountain the head of a Guanche which had eighty teeth, and that the body was not leſs than fifteen feet long. The giant Ferragus, ſlain by Orlando nephew of Charlemagne, was eighteen feet high. Rioland, a celebrated anatomiſt, who wrote in 1614, ſays, that ſome years before there was to be ſeen in the ſuburbs of St. Germain, the tomb of the giant Iſores, who was twenty feet high. In Rouen, in 1509, in digging in the ditches near the Dominicans, they found a ſtone tomb containing a ſkeleton whoſe ſkull held a buſhel of corn, and whoſe ſhin-bone reached up to the girdle of the talleſt man there, being about four feet long, and conſequently the body muſt have been ſeventeen or eighteen feet high. Upon the tomb was a plate of copper, whereon was engraved, 'In this tomb lies the noble and puiſſant lord, the chevalier Ricon de Vallemont, and his bones.' Platerus, a famous phyſician, declares, that he ſaw at Lucerne the true human bones of a ſubject which muſt have been at leaſt nineteen feet high. Valence in Dauphiné boaſts of poſſeſſing the bones of the giant Bucart, tyrant of the Vivarais, who was ſlain by an arrow by the count de Cabillon his vaſſal. The Dominicans had a part of the ſhin-bone, with the articulation of the knee, and his figure painted in freſco, with an inſcription, ſhowing that this giant was twenty-two feet and a half high, and that his bones were found in 1705, near the banks of the Morderi, a little river at the foot of the mountain of Cruſſol, upon which, tradition ſays, the giant dwelt.

"January 11, 1613, ſome maſons digging near the ruins of a caſtle in Dauphiné, in a field which had long been called *the giant's field*, at the depth of eighteen feet diſcovered a brick tomb thirty feet long, twelve feet wide, and eight feet high; on which was a grey ſtone, with the words *Theutobochus Rex*, cut thereon. When the tomb was opened, they found a human ſkeleton entire, twenty-five feet and a half long, ten feet wide acroſs the ſhoulders, and five feet deep from the breaſt-bone to the back. His teeth were about the ſize each of an ox's foot, and his ſhin-bone meaſured four feet.—Near Mazarino, in Sicily, in 1516, was found a giant thirty feet high; his head was the ſize of an hogſhead, and each of his teeth weighed five ounces.—Near Palermo, in the valley of Mazara, in Sicily, a ſkeleton of a giant thirty feet long was found, in the year 1548; and another of thirty-three feet high, in 1550; and many curious perſons have preſerved ſeveral of theſe gigantic bones.—The Athenians found near their city two famous ſkeletons, one of thirty-four and the other of thirty-ſix feet high.—At Totu, in Bohemia, in 758, was found a ſkeleton, the head of which could ſcarcely be encompaſſed by the arms of two men together, and whoſe legs, which they keep in the caſtle of that city, were twenty-ſix feet long. The ſkull of the giant found in Macedonia, September 1691, held 210 pounds of corn.

"The celebrated ſir Hans Sloane, who treated this matter very learnedly, does not doubt theſe facts; but thinks the bones were thoſe of elephants, whales, or other enormous animals, now perhaps extinct."

REBEL GIANTS, or GIGANTES, in pagan mythology, were the ſons of Cœlus and Terra. According to Heſiod, they ſprang from the blood of the wound which Cœlus received from his ſon Saturn; and Hyginus calls them ſons of Tartarus and Terra. They are repreſented as men of uncommon ſtature, with ſtrength proportioned to their gigantic ſize. Some of them, as Cottus, Briareus, and Gyges, had each fifty heads and one hundred arms, and their lower extremities were ſerpents inſtead of legs. They were of a terrible aſpect, their hair hung diſhevelled about their ſhoulders, and their beard was ſuffered to grow uncropped. Pallene and its neighbourhood was the place of their reſidence. The defeat of the Titans, to whom they were nearly related, incenſed them againſt Jupiter, and they all conſpired to dethrone him. Accordingly they are fabled to have reared Mount Oſſa upon Pelion, and Olympus upon Oſſa; and from thence to have attacked the gods with huge rocks, ſome of which fell into the ſea and became iſlands, and others fell on the earth and formed mountains. Jupiter ſummoned a council of the gods; when being informed that it was neceſſary to obtain the aſſiſtance of ſome mortal, he by the advice of Pallas called up his ſon Hercules; and with the aid of this hero he exterminated the giants Enceladus, Polybotes, Alcyon, Porphyrion, the two ſons of Alœus, Ephialtus, Othus, Eurytus, Clytius, Tythyus, Pallas, Hippolitus, Agrius, Thoon, and Typhon, the laſt of whom it was more difficult to vanquiſh than all the others. Jupiter having thus gained a complete victory, he caſt the rebels down to Tartarus, where they were to receive the full puniſhment of their enormous crimes.

See the highly-prized cameo of Jupiter's victory over the Giants, in Plate III. of GEMS, p. 305, of this volume. But, according to ſome of the poets, he buried them alive under Mount Etna.

GI'ANTS-CAU'SEWAY, a lofty baſaltic promontory in the county of Antrim, on the north-eaſt coaſt of Ireland, which exhibits the moſt magnificent arrangement of baſaltic columns in the known world. The principal cauſeway conſiſts of an irregular arrangement of many hundred thouſands of columns, almoſt all of a pentagonal figure, but ſo cloſely and compactly ſituated on their ſides, though perfectly diſtinct from top to bottom, that ſcarcely any thing can be introduced between them. The columns are of an unequal height and breadth. How deep they deſcend below the ſtrand, has not been aſcertained. This grand arrangement extends nearly two hundred yards, entirely viſible at low water. The breadth of the principal or grand cauſeway, which runs out in one continued range of columns, is, in general, from twenty to thirty feet; at one place or two it may be nearly forty. The tops of theſe innumerable columns being nearly of an equal height, they form a grand and ſingular parade, rather inclining to the water's edge. But from high-water mark, as it is perpetually waſhed by the beating of the waves on every return of the tide, the platform lowers conſiderably, and becomes dangerous to be walked on without the greateſt care. At the diſtance of 150 yards from the cliff, it turns a little to the eaſt, and then ſinks into the ſea. The figure of theſe columns is almoſt unexceptionably pentagonal, or compoſed of five ſides; yet what is very extraordinary, and particularly curious, there are not two columns in ten thouſand to be found, that either have their ſides equal among themſelves, or whoſe figures are alike. Nor is the compoſition of theſe columns or pillars leſs deſerving the attention of the curious ſpectator. They are not of one ſolid ſtone in an upright poſition; but compoſed of ſeveral ſhort lengths, curiouſly joined, not with flat ſurfaces, but articulated into each other like ball and ſocket, or like the joints in the vertebræ of ſome of the larger kinds of fiſh, the one end at the joint having a cavity, into which the convex end of the oppoſite is exactly fitted. This is not viſible, but by diſjoining the two ſtones. The depth of the concavity or convexity is generally about three or four inches. And what is ſtill farther remarkable of the joint, the convexity, and the correſpondent concavity, is not conformed to the external angular figure of the column, but exactly round, and as large as the ſize or diameter of the column will admit; and conſequently as the angles of theſe columns are in general extremely unequal, the circular edges of the joint are ſeldom coincident with more than two or three ſides of the pentagonal, and from the edge of the circular part of the joint to the exterior ſides and angles they are quite plain. It is ſtill farther remarkable, that the articulations of theſe joints are frequently inverted; in ſome the concavity is upwards, in others the reverſe. The length alſo of theſe particular ſtones, from joint to joint, is various: in general, they are from eighteen to twenty-four inches long; and, for the moſt part, longer toward the bottom of the columns than nearer the top, and the articulation of the joints ſomething deeper. The ſize likewiſe of the columns is as different as their length and figure; in general, they are from fifteen to twenty inches in diameter. There are really no traces of uniformity or deſign diſcovered throughout the whole combination, except in the form of the joint, which is invariably by an articulation of the convex into the concave of the piece next above or below it; nor are there any traces of a finiſhing in any part, either in height, length, or breadth, of this curious cauſeway. If there is here and there a ſmooth top to any of the columns above water, there are others juſt by, of equal height, that are more or leſs convex or concave, which ſhow them to have been joined to pieces that have been waſhed away or broken off. Some of theſe columns are between thirty and forty feet high, from the top of the ſloping bank below them; and, being longeſt in the middle of the arrangement, ſhortening on either hand in view, they have obtained the appellation of *organs*, from a rude likeneſs in this particular to the exterior tubes of that inſtrument; and as there are few broken pieces on the ſtrand near it, it is probable that the outſide range of columns that now appears is really the original exterior line, to the ſeaward, of this collection. But how far they extend internally into the bowels of the incumbent cliff, is unknown. See the article BASALTES, vol. ii. p. 768–772, and the correſpondent engraving.

GI'ANT's HEAD, a cape on the eaſt coaſt of the iſland of St. Chriſtopher, a little to the eaſt of Ragged Point.

GI'ANTESS, *ſ.* A woman of unnatural bulk and height.—I had rather be a *giantefs*, and lie under mount Pelion. *Shakeſpeare.*

GI'ANTLIKE, or GIANTLY, *adj.* Gigantic; vaſt; bulky.—Single courage has often, without romance, overcome *giantly* difficulties. *Decay of Piety.*

GI'ANTSHIP, *ſ.* Quality or character of a giant:

His *giantſhip* is gone ſomewhat creſt fallen,
Stalking with leſs unconſcionable ſtrides,
And lower looks. *Milton's Agoniſtes.*

GI'AR, a town of Perſia, in the province of Farſiſtan: ſeventy miles eaſt of Schiras.

GIAR'GA, a town of the iſland of Corſica: nine miles eaſt of Calvi.

GIAR'ITCHAS, a cluſter of ſmall iſlands amongſt the Moluccas, in the Indian Sea, in lat. 0° 25′ north. They are of a moderate height, in ſome parts covered with trees of the ſpice or aromatic kind.

GIAR'MAL, a town of Hungary: twenty miles eaſt-ſouth-eaſt of Levens.

GIARU'RA, a town of Aſia, in the kingdom of Candahar: twenty-five miles ſouth-weſt of Candahar.

GIASAN', a town of Perſia, in the province of Segeſtan: twenty-five miles north-eaſt of Kin.

GI'AT, a town of France, in the department of the Puy-de-Dôme, and chief place of a canton, in the diſtrict of Riom: nine leagues weſt-ſouth-weſt of Riom, and nine weſt of Clermont.

GIAVEN'NA, a town of Italy, in the principality of Piedmont, and marquiſate of Suſa, ſituated at the foot of the Cottian Alps, near the Sangon. The air is ſalubrious, and the ſituation agreeable; it is ſurrounded with an ancient wall, with four gates; the abbot of St. Michael de l'Ecluſe is the ſpiritual and temporal lord of this and the neighbouring towns, in which they number about five thouſand inhabitants: ten miles ſouth-eaſt of Suſa, and fourteen and a half weſt of Turin.

GIA'VI, a town of the iſland of Sardinia: twenty-one miles eaſt-ſouth-eaſt of Algeri.

GIB'BAWAYS, an Indian tribe reſiding in Upper Canada, on the eaſt ſide of Detroit river, oppoſite to Fort Gibraltar.

GIB'BE, *ſ.* Any worn-out animal. *Hanmer.*

For who that's but a queen, fair, ſober, wiſe,
Would from a paddock, from a but, a *gibbe*,
Such dear concernings hide? *Shakeſpeare.*

GIB'BEN, a town of the duchy of Courland: thirty-two miles north-eaſt of Piltyn.

To GIB'BER, *v. n.* [from *jabber.*] To ſpeak inarticulately:

The ſheeted dead
Did ſqueak and *gibber* in the Roman ſtreets. *Shakeſpeare.*

GIB'BERISH, *ſ.* [derived by Skinner from *gaber*, Fr. to cheat; by others conjectured to be formed by corruption from *jabber*. But as it was anciently written *gebriſh*, it is probably derived from the chemical jargon of *Geber* and his tribe.] Cant; the private language of rogues and

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and gipſeys.—Some, if they happen to hear an old word, albeit very natural and ſignificant, cry out ſtraightway, that we ſpeak no Engliſh, but *gibberiſh*. *Spenſer*.

GIB'BET, *ſ.* [*gibet*, Fr.] A gallows; the poſt on which malefactors are hanged, or on which their carcaſes are expoſed. A gibbet differs from a common gallows, in that it conſiſts of one perpendicular poſt, from the top of which proceeds one arm; except it be a double gibbet, which laſt is formed in the ſhape of a Roman capital T.—Haman ſuffered death himſelf upon the very *gibbet* that he had provided for another. *L'Eſtrange*.—Any traverſe beams. A great cudgel or ſtick, ſuch as they throw up in trees, to beat down the fruit.

To GIB'BET, *v. n.* To hang or expoſe on a gibbet.—I'll *gibbet* up his name. *Oldham*.—To hang on any thing going traverſe: as the beam of a gibbet.—He ſhall come off and on ſwifter than he that *gibbets* on the brewer's bucket. *Shakeſpeare*.

GIB'BET-MA'KER, *ſ.* One that makes gibbets.—Ho! the *gibbet-maker!* he ſays, that he hath taken them down again. *Titus Andronicus*.

GIB'BETHON, a city of Paleſtine, ſituated in the tribe of Dan; and one of the cities of the Levites of the family of Kohath. This city was afterwards poſſeſſed by the Philiſtines, and remained ſubject to them until the reign of Nadab king of Iſrael, who, whilſt in the act of beſieging it, fell by the treachery of Baaſha, who ſucceeded him in the kingdom. Here alſo Omri was proclaimed king of Iſrael. *Joſh.* xix. 44. xxi. 23. 1 *Kings* xv. 27. xvi. 15–17.

GIB'BIER, *ſ.* [French.] Game; wild-fowl.—Theſe impoſts are laid on all butcher's meat, while, at the ſame time, the fowl and *gibbier* are tax-free. *Addiſon on Italy*.

GIB'BON (Edward), a moſt diſtinguiſhed modern Engliſh hiſtorian, born at Putney, in 1737. His father, Edward Gibbon, eſq. was of an ancient family at Burton near Petersfield in Hampſhire, and had a ſeat in two parliaments. Edward was the only child reared by his parents; and his conſtitution was ſo infirm in childhood, that his life was often deſpaired of. In his ninth year he was ſent to the ſchool of Dr. Woodeſon, at Kingſton-upon-Thames. After a reſidence of two years with this maſter, in which he acquired the rudiments of Latin, he returned to his friends; and he has recorded his twelfth year, in which he read a variety of Engliſh books of poetry, romance, hiſtory, and travels, "as the moſt propitious to the growth of his intellectual ſtature." He then was entered at Weſtminſter-ſchool; but repeated attacks of ill health prevented him from making a regular progreſs in the claſſical ſtudies of the place; and he was more the nurſeling of an affectionate aunt, with whom he boarded, than the adventurous ſchool-boy. After ſeveral changes of ſituation, in which he was chiefly the object of medical care, his conſtitution began to acquire firmneſs; and his father, with the idea of puſhing him forwards to manly acquiſitions, placed him as a gentleman-commoner in Magdalen-college, Oxford, before he had completed his fifteenth year. He had already imbibed an extraordinary portion of hiſtorical knowledge by multifarious reading, which had ſtood in the place of the grammatical and philological ſtudies uſed in a literary progreſs at that period of life. "I arrived at Oxford," ſays he, "with a ſtock of erudition that might have puzzled a doctor, and a degree of ignorance of which a ſchool-boy would have been aſhamed." In this ſtate it is evident that he was ill prepared to receive the benefits, whatever they may be, of an univerſity education; and this circumſtance might perhaps operate as ſome counterpoiſe to the very bitter philippic he has pronounced againſt the conduct of public and private inſtruction at Oxford. The fourteen months he ſpent there, he ſtigmatiſes as the moſt idle and unprofitable of his whole life. To a total neglect of religious inſtruction he has attributed the moſt remarkable incident of his early days, which took place at this time. From childhood he had been addicted to diſputation on topics of divinity. His leiſure from other purſuits induced him to turn his attention to the controverſies between the papiſts and proteſtants; and as he entered into the field "without armour," he fell before the weapons of *authority* which the catholics ſo well know how to wield. His converſion to that faith was chiefly effected by reading the works of Boſſuet; and it was not till a perfect confidence in that author's tenets had taken place in his mind, that he had an interview in London with a popiſh prieſt, at whoſe feet, in June, 1753, he ſolemnly abjured the proteſtant religion. He immediately wrote a long letter to his father, in which he avowed and juſtified the ſtep he had taken. In reply to ſome reproaches that have been caſt upon him for this change of religion, he has ſaid, with proper confidence, "I am proud of an honeſt ſacrifice of intereſt to conſcience: I can never bluſh if my tender mind was entangled in the ſophiſtry that ſeduced the acute and manly underſtandings of Chillingworth and Bayle." In order to reclaim him, he was ſent by his offended father to reſide among the Calviniſts at Lauſanne in Swiſſerland, and was placed under Mr. Pavilliard, a calviniſt miniſter. There is ſomething very characteriſtic in the ſketch that gentleman has given of his pupil as he firſt appeared to him: "A little thin figure, with a large head, diſputing, and urging with the greateſt ability, all the beſt arguments that had ever been uſed in favour of popery." By the well-directed efforts of this tutor, aided by his own ſound reaſon and mature reflections, his faith in the Romiſh articles gradually gave way, and on Chriſtmas-day, 1754, he received the ſacrament in the proteſtant church. His reſidence at Lauſanne was alſo of high importance to his progreſs in knowledge, and the formation of regular habits of ſtudy. He made himſelf perfectly maſter of the French and Latin languages, and of the art of logic; and read with great attention many excellent authors, from which he made large ſelections. His ruling paſſion, that of reading, now fully developed itſelf, and he wanted no incitements to induſtry from a tutor. Belles-lettres, and the hiſtory of man and the human mind, were his favourite objects of ſtudy: mathematics he ſlightly touched upon, but ſoon relinquiſhed; and he congratulates himſelf that he eſcaped from them "before his mind was hardened by the habit of rigid demonſtration, ſo deſtructive of the finer feelings of moral evidence." This is an uncommon view of the effect of mathematical ſtudies, and which he never would have made, had the light of true mathematical demonſtration ſhed its effulgence over his mind. An extraordinary inſtance of his ardour for information is, that while an unknown youth at Lauſanne, he ventured to open a correſpondence on learned topics with ſome celebrated foreign profeſſors. In the midſt of theſe literary occupations, love unſuſpectedly found an entrance into his heart. The perſonal and mental accompliſhments of an amiable and celebrated woman, were not to be reſiſted. The circumſtances are ſo elegantly and undiſguiſedly related by Mr. Gibbon himſelf, as to give public intereſt to private connexion: we ſhall therefore ſtate the paſſage in the writer's own words: "I heſitate, from the apprehenſion of ridicule, when I approach the delicate ſubject of my early love. By this word I do not mean the polite attention, the gallantry without hope or deſign, which has originated in the ſpirit of chivalry, and is interwoven with the texture of French manners. I underſtand by this paſſion the union of deſire, friendſhip, and tenderneſs, which is inflamed by a ſingle female; which prefers her to the reſt of her ſex, and which ſeeks her poſſeſſion as the ſupreme or the ſole happineſs of our being. I need not bluſh at recollecting the object of my choice; and though my love was diſappointed of ſucceſs, I am rather proud that I was once capable of feeling ſuch a pure and exalted ſentiment. The perſonal attractions of mademoiſelle Suſan Curchod were

embellished by the virtues and talents of her mind. Her fortune was humble, but her family was respectable. Her mother, a native of France, had preferred her religion to her country. The profession of her father did not extinguish the moderation and philosophy of his temper, and he lived contented with a small salary and laborious duty, in the obscure lot of minister of Crassy, in the mountains that separate the Pays de Vaud from the county of Burgundy. In the solitude of a sequestered village, he bestowed a liberal and even learned education on his only daughter. She surpassed his hopes by her proficiency in the sciences and languages; and in her short visits to some relations at Lausanne, the wit, the beauty, and the erudition, of mademoiselle Curchod, were the theme of universal applause. The report of such a prodigy awakened my curiosity: I saw, and loved. I found her learned without pedantry, lively in conversation, pure in sentiment, and elegant in manners; and the first sudden emotion was fortified by the habits and knowledge of a more familiar acquaintance. She permitted me to make her two or three visits at her father's house. I passed some happy days there in the mountains of Burgundy, and her parents honourably encouraged the connection. In a calm retirement the gay vanity of youth no longer fluttered in her bosom: she listened to the voice of truth and passion, and I might presume to hope that I had made some impression on a virtuous heart. At Crassy and Lausanne I indulged my dream of felicity; but on my return to England I soon discovered that my father would not hear of this strange alliance, and that without his consent I was myself destitute and helpless. After a painful struggle I yielded to my fate; I sighed as a lover, I obeyed as a son; my wound was insensibly healed by time, absence, and the habits of a new life. My cure was accelerated by a faithful report of the tranquillity and cheerfulness of the lady herself; and my love subsided in friendship and esteem. The minister of Crassy soon afterwards died, his stipend died with him; his daughter retired to Geneva, where, by teaching young ladies, she earned a hard subsistence for herself and her mother: but in her lowest distress she maintained a spotless reputation and a dignified behaviour. A rich banker of Paris, a citizen of Geneva, had the good fortune and good sense to discover and possess this inestimable treasure; and in the capital of taste and luxury she resisted the temptations of wealth as she had sustained the hardships of indigence. The genius of her husband has exalted him to the most conspicuous station in Europe. In every change of prosperity and disgrace, he has reclined on the bosom of a faithful friend; for mademoiselle Curchod became the wife of M. Necker, the minister and legislator of the French monarchy."

It is impossible not to pause after the perusal of this passage, to contemplate the strange reverses of fortune which we meet with in the events of real life; and to be filled with melancholy reflexions on the subsequent fate and fortunes of Susan Curchod and her husband. See the article FRANCE, vol. vii. p. 747–777. In the midst of these serious emotions, however, it is impossible not to admire the writer who describes his own youthful love with the same stately and unbending dignity of style, in which he related the conversion of Constantine, the imposture of Mohammed, the conquests of Timur, the laws of Justinian, or the licentious amours of Theodora, in his highly distinguished work.

His banishment at Lausanne, which he has justly regarded as the incident to which he was chiefly indebted for all he afterwards gained as a thinker and writer, terminated in April, 1758. He was received by his father with affection and friendship; and he found in a mother-in-law a new relative, who in time conciliated his goodwill and confidence. Though the gaieties of London for a time gave an interruption to his literary course, yet he soon began to lay the foundation of a copious library, and prepared for his first appearance before the public as an author. He undertook the arduous task of writing a work which required great elegance of style, in a foreign language, which, indeed, had for some years been more familiar to him than his native tongue. His *Essai sur l'Etude de la Littérature*, was printed in 1761, in one volume 12mo. It was a very respectable juvenile performance, and was highly praised in foreign journals, and by his friends abroad. That it should bear no marks of being written by a foreigner, was not to be expected; but it displayed a very uncommon degree of facility and correctness in that language for one to whom it was only the acquisition of a few years. It however excited little attention at home, where French works were less read than they are at present.

Mr. Gibbon about this time took a captain's commission in the south battalion of the Hampshire militia; in which he afterwards became lieutenant-colonel commandant. Of the progress of his military acquirements he thus speaks: "The loss of so many busy and idle hours was not compensated by any elegant pleasure; and my temper was insensibly soured by the society of our rustic officers. In every state there exists, however, a balance of good and evil. The habits of a sedentary life were usefully broken by the duties of an active profession: in the healthful exercise of the field I hunted with a battalion, instead of a pack; and at that time I was ready, at any hour of the day or night, to fly from quarters to London, from London to quarters, on the slightest call of private or regimental business. But my principal obligation to the militia, was the making me an Englishman, and a soldier. After my foreign education, with my reserved temper, I should long have continued a stranger in my native country, had I not been shaken in this various scene of new faces and new friends: had not experience forced me to feel the characters of our leading men, the state of parties, the forms of office, and the operation of our civil and military system. In this peaceful service I imbibed the rudiments of the language and science of tactics, which opened a new field of study and observation. I diligently read, and meditated, the *Memoires Militaires* of Quintus Icilius, (Guichardt,) the only writer who has united the merits of a professor and a veteran. The discipline and evolutions of a modern battalion gave me a clearer notion of the phalanx and the legion; and the captain of the Hampshire grenadiers (the reader may smile) has not been useless to the historian of the Roman empire."

While thus engaged in military service, Mr. Gibbon's tent and quarters were often encumbered with the unusual furniture of Greek and Latin books; and though in a school so unfavourable to literature, his bent of mind was continually turned to study. On May 8, 1762, he thus delineates his own character: "This was my birthday, on which I entered into the twenty-sixth year of my age. This gave me occasion to look a little into myself, and consider impartially my good and bad qualities. It appeared to me, upon this inquiry, that my character was virtuous, incapable of a base action, and formed for generous ones; but that it was proud, violent, and disagreeable in society. These qualities I must endeavour to cultivate, extirpate, or restrain, according to their different tendency. Wit I have none. My imagination is rather strong than pleasing. My memory both capacious and retentive. The shining qualities of my understanding are extensiveness and penetration; but I want both quickness and exactness. As to my situation in life, though I may sometimes repine at it, it perhaps is the best adapted to my character. I can command all the conveniences of life, and I can command too that independence, (that first earthly blessing,) which is hardly to be met with in a higher or a lower fortune. When I talk of my situation, I must exclude

exclude that temporary one, of being in the militia. Though I go through it with ſpirit and application, it is both unfit for and unworthy of me."

From his military engagements Mr. Gibbon was ſet free by the general peace of 1762; and the firſt uſe he made of his liberty was to pay a viſit to Paris, in the beginning of 1763. After paſſing ſome months with the gay and the learned in that capital, he viſited Lauſanne, where almoſt a year was employed in cultivating ſociety, and in laying in materials for a profitable journey into Italy. This took place in 1765; and he thus in glowing language deſcribed his ſenſations on entering Rome: "After a ſleepleſs night, I trod, with a lofty ſtep, the ruins of the forum; each memorable ſpot where Romulus ſtood, or Tully ſpoke, or Cæſar fell, was at once preſent to my eye; and ſeveral days of intoxication were loſt or enjoyed before I could deſcend to a cool and minute inveſtigation." It was, he informs us, on the 15th of October, 1764, as he ſat muſing amidſt the ruins of the capitol, *while the bare-footed friars were ſinging veſpers in the temple of Jupiter*, that the idea of writing the decline and fall of this city firſt ſtarted into his mind. To treat ſome great hiſtorical ſubject had long been his favourite deſign, and he had fluctuated amid a variety which preſented themſelves. Of theſe, perhaps, the moſt promiſing was the hiſtory of the republic of Florence under the houſe of Medicis; but we cannot lament that he finally fixed upon a more extenſive theme. He firſt, however, actually proceeded ſome way in another intereſting deſign, and compoſed in the French language the firſt book of a Hiſtory of the Swiſs Liberty; but this, probably on account of its ſtyle, was condemned by a literary ſociety of foreigners in London, to whom it was read, and he committed it to the flames. In 1767, he aſſiſted his friend Deyverdun in compiling a critical work, entitled *Mémoires Littéraires de la Grande Bretagne*, of which a ſecond volume was publiſhed in the enſuing year; but its ſucceſs was not great. Hitherto he had ſhewn a ſingular, and in him injudicious, preference of the French language in writing; but in 1770 he tried his powers in his native tongue by a pamphlet of Critical Obſervations on the ſixth Book of the Æneid, intended as a refutation of Dr. Warburton's extraordinary hypotheſis concerning the meaning of the fabled deſcent of Æneas. This piece was printed anonymouſly, and did not captivate the public attention; yet it has been pronounced by able judges a very ingenious and elegant work of criticiſm, not unworthy of the author's ſubſequent fame. He himſelf has confeſſed that his perſonal attack upon the celebrated veteran whoſe opinion he oppoſed, was too ſevere, though provoked by the aſſuming arrogance which always characteriſed that writer.

In 1770 Mr. Gibbon's father died, and left him poſſeſſor of an eſtate much involved. He ſeems ſcarcely ever to have extricated himſelf from perplexities ariſing from this cauſe: yet he has obſerved, that upon the whole his circumſtances were well ſuited to the great taſk he undertook as an author; and that either poorer or richer he ſhould probably never have accompliſhed it. Leiſure and books were on the one hand neceſſary; on the other, the ſtimulus of a handſome increaſe of property. The circle of his acquaintance in London was large; but he compenſated the hours devoted to them by early riſing and cloſe application. His ſtudies were, however, more ſeriouſly interrupted by a ſeat in parliament, which he obtained for the borough of Liſkeard in 1774, through the favour of his kinſman Mr. (afterwards lord) Eliot. Of his proweſs in the houſe of commons he thus ſpeaks: "I took my ſeat at the beginning of the memorable conteſt between Great Britain and America, and ſupported, with many a ſincere and ſilent vote, the rights, though not perhaps the intereſt, of the mother country. After a fleeting illuſive hope, prudence condemned me to acquieſce in the humble ſtation of a *mute*. The great ſpeakers filled me with deſpair, the bad ones with terror. I was not armed by nature and education with the intrepid energy of mind and voice,

Vincentum ſtrepitus, et natum rebus agendis.

Timidity was fortified by pride, and even the ſucceſs of my pen diſcouraged the trial of my voice. But I aſſiſted at the debates of a free aſſembly; I liſtened to the attack and defence of eloquence and reaſon; I had a near proſpect of the characters, views, and paſſions, of the firſt men of the age. The cauſe of government was ably vindicated by lord North, a ſtateſman of ſpotleſs integrity, a conſummate maſter of debate, who could wield with equal dexterity the arms of reaſon and of ridicule. He was ſeated on the treaſury bench between his attorney and ſolicitor general, the two pillars of the law and ſtate, *magis pares quam ſimiles*; and the miniſter might indulge in a ſhort ſlumber, while he was upholden on either hand by the majeſtic ſenſe of Thurlow, and the ſkilful eloquence of Wedderburne. From the adverſe ſide of the houſe an ardent and powerful oppoſition was ſupported, by the lively declamation of Barré, the legal acuteneſs of Dunning, the profuſe and philoſophic fancy of Burke, and the argumentative vehemence of Fox. By ſuch men every operation of peace and war, every principle of juſtice or policy, every queſtion of authority and freedom, was attacked and defended; and the ſubject of the momentous conteſt was the union or ſeparation of Great Britain and America. The eight ſeſſions that I ſat in parliament were a ſchool of civil prudence, the firſt and moſt eſſential virtue of an hiſtorian."

In the beginning of 1776, the firſt volume, quarto, of his Decline and Fall of the Roman Empire, was given to the public. His expectations of its ſucceſs were very moderate, and it is not to be wondered at that he was much elated with the ſucceſs it really met with, which he thus deſcribes: "The firſt impreſſion was exhauſted in a few days; a ſecond and a third edition was ſcarcely adequate to the demand; and the bookſeller's property was twice invaded by the pirates of Dublin. My book was on every table, and almoſt on every toilette." Of all the applauſe he received, none ſeemed to flatter him ſo much as that of the two celebrated hiſtorians Hume and Robertſon, who, inſtead of viewing his riſing fame with jealouſy, promoted it with liberal commendation. But, in the midſt of this triumph, his two chapters concerning the growth and progreſs of Chriſtianity raiſed a ſtorm againſt him, which he ſeems not to have foreſeen, and, when it fell, to have regarded with ſome alarm. A number of antagoniſts aroſe, of different degrees of hoſtility and acrimony; ſome, enliſted in the defence of a church which was to reward their zeal; ſome, the voluntary champions of a revered faith. As he profeſſed to have touched upon this ſubject only as an hiſtorian, he declined entering upon it as a controverſialiſt; and the only reply he made was to Mr. Davis, who had in very unmeaſured terms attacked "not the *faith*, but the *fidelity*, of the hiſtorian." His Vindication againſt this opponent was greatly admired, as a model of keen and poliſhed retort; and it was generally admitted that he ſucceſsfully repelled the principal charges, and returned them upon his foe. With reſpect to the general ſpirit and deſign of the two chapters, we ſhall only obſerve, that the ſuggeſtion of ſecondary cauſes, by which the ſpread of Chriſtianity was peculiarly favoured, had been already adopted by ſome undoubted believers in its divine origin: and that, although there can be no doubt that Gibbon was a real enemy to revelation under the maſk of a believer, yet, while penal laws ſubſiſt againſt an open declaration of opinion, however requiſite this might appear, the practice of a prudential diſguiſe cannot ſo much be wondered at.

A ſecond viſit to Paris ſoon followed the publication of his firſt volume, and he appeared in no haſte to reſume his hiſtorical taſk. After it was begun again, a ſhort

interruption took place from his compoſing, at the requeſt of the miniſters a *Mémoire Juſtificatif*, intended as an anſwer to the manifeſto of the court of France on its declaration of hoſtilities. This piece, written in French, was admired both for its ſtyle and its reaſoning, and was delivered as a ſtate paper to the courts of Europe. For this ſervice, joined to his literary celebrity, he received the appointment of one of the lords of trade, by which a handſome addition was made to his income, and little to his engagements. At the beginning of 1781, the ſecond and third volumes of the Hiſtory appeared; and though many readers judged them to be inferior in point of compoſition to the firſt, yet, upon the whole, they ſupported his reputation. At a new election he had loſt his ſeat for Liſkeard, but he was brought in, upon a vacancy, for Lymington. It was not long, however, before lord North's miniſtry was diſſolved, and the abolition of the board of trade, by Mr. Burke's bill, followed. The prize being now loſt, Gibbon ſeemed to think his parliamentary career terminated; and the defalcation of his income no longer permitted him to ſupport the ſame ſtyle of living. He took a reſolution, therefore, of removing his reſidence to his favourite Lauſanne in Swiſſerland, as a place where he might purſue his ſtudies without interruption, and enjoy all the pleaſures of an elegant retreat at much leſs expence than in England. This plan he put in execution in the autumn of 1783. He was joint-poſſeſſor with his friend Deyverdun of a handſome and charmingly-ſituated houſe, and commenced a mode of living happily compounded of the man of letters and the gentleman of eaſy fortune. During the four following years he completed the three remaining quarto volumes of his Hiſtory, which were publiſhed together in April, 1788. He has deſcribed his ſatisfaction on finiſhing this great work, in the following words: "As I have preſumed to mark the moment of conception, I ſhall now commemorate the hour of my final deliverance. It was on the day, or rather night, of the 27th of June, 1787, between the hours of eleven and twelve, that I wrote the laſt lines of the laſt page, in a ſummer-houſe in my garden. After laying down my pen, I took ſeveral turns in a *berceau*, or covered walk of acacias, which commands a proſpect of the country, the lake, and the mountains. The air was temperate, the ſky was ſerene, the ſilver orb of the moon was reflected from the waters, and all nature was ſilent. I will not diſſemble the firſt emotions of joy on the recovery of my freedom, and, perhaps, the eſtabliſhment of my fame. But my pride was ſoon humbled, and a ſober melancholy was ſpread over my mind, by the idea that I had taken an everlaſting leave of an old and agreeable companion, and that whatſoever might be the future date of my Hiſtory, the life of the hiſtorian muſt be ſhort and precarious." He came to England to ſuperintend the printing, and then returned to that abode of Lauſanne, which had now become doubly endeared to him by the force of habit.

Of a work ſo well known as Gibbon's Hiſtory of the Decline and Fall, it would be ſuperfluous here to enter into any critical examination. It ſeems generally acknowledged, that it is a performance of vaſt and accurate reſearch, and of enlarged and philoſophical thinking; that it abounds in ſplendid paſſages and curious diſcuſſions; and that its ſtyle, though ſometimes affected and obſcure, through the deſire of avoiding common modes of expreſſion, is ſuch as diſplays a thorough maſtery of the whole compaſs of the Engliſh language. A familiarity with French models has occaſionally produced violations both of ſound ſenſe and of moral propriety; and his hiſtoric muſe, while ſhe retains her dignified garb, often loſes her ſober demeanour. The work has, however, taken a ſecure place among the Engliſh claſſics, and will ever form a diſtinguiſhed object in the literary hiſtory of the eighteenth century.

The remainder of Mr. Gibbon's life, being only that of a private gentleman, affords little matter for the biographer. The ſtorms of the French revolution, which began to menace the quiet regions of Swiſſerland, gradually looſened his attachment to Lauſanne, and made him look towards a refuge in England. He viewed that great event with all the alarm and deteſtation of one habituated to the higher orders of ſociety, and radically hoſtile to democratical ſway. He thus explicitly declares his ſentiments on the occaſion. "I beg leave to ſubſcribe my aſſent to Mr. Burke's creed on the revolution of France. I admire his eloquence, I approve his politics, I adore his chivalry, and I can almoſt excuſe his reverence for church eſtabliſhments." Many paſſages of his letters to his moſt confidential friend, lord Sheffield, ſhew that in his terror or indignation he had acquired a thorough averſion to even the moſt moderate and reaſonable reforms. In ſuch a ſtate of mind the authority of his opinion can ſtand for little; and his politics were always too perſonal to command much deference. His return to England, in 1793, was, however, the immediate reſult of a call of friendſhip which does honour to his heart: it was to conſole the friend above-mentioned under a heavy domeſtic loſs. He ſpent ſome months with that friend and in other viſits, when his attention was forcibly called to the progreſs of a diſeaſe which though it had long produced little inconvenience, was now become ſuddenly alarming. Mr. Gibbon had been three times tapped for an hydrocele; this diſorder, which was originally a ſlight rupture, had been coming on for more than thirty years; and he at laſt perhaps fell a victim to his own delicacy, ſince he declined ſurgical aid, and would not ſuffer his ſervant or any one to ſpeak of his diſorder till it got to an alarming height. He died on the 16th of January, 1794, three days after the third puncture. His body was opened on the fifth day after his death. It was then found, except that a degree of mortification, not very conſiderable, had taken place on a part of the colon; which, with the whole omentum, of a very enlarged ſize, had deſcended into the ſcrotum, forming a bag that hung down nearly as low as the knee. Since that part had been inflamed and ulcerated, Mr. Gibbon could not bear a truſs; and when the laſt ſix quarts of fluid were diſcharged, the colon and omentum deſcending lower, they, by their weight, drew the lower mouth of the ſtomach downwards to the os pubis; and this probably was the immediate cauſe of his death.

Mr. Gibbon has given a picture of his own character, which is probably near the truth. "I am endowed with a cheerful temper, a moderate ſenſibility, and a natural diſpoſition to repoſe rather than to activity: ſome miſchievous appetites and habits have perhaps been corrected by philoſophy or time. The love of ſtudy ſupplies each day, each hour, with a perpetual ſource of independent and rational pleaſure." He was eaſy in ſociety, and fond of it: he was beloved by his friends, and had in an eminent degree the manners and ſentiments of a gentleman. Early indulgence and habit had made the conveniences and elegances of cultured life eſſential to his comfort, and he was not one who could have been content with the conſciouſneſs of mental ſuperiority in an humble ſtate. After his death, two quarto volumes of his miſcellaneous works were publiſhed by lord Sheffield. Of theſe, the moſt valuable part is the Memoirs of his Life and Writings, compoſed by himſelf, whence the preceding narrative has been chiefly extracted. They are written in a very pleaſing manner, with much apparent frankneſs. Many of his private letters are ſubjoined, which are lively and entertaining, in the true epiſtolary ſtyle. The ſecond volume contains a journal of his ſtudies, with remarks upon books, chiefly in French; together with his ſmaller publications already mentioned.

The perſon and manners of Mr. Gibbon are thus deſcribed by M. Fred. Matthiſſon, a German writer of ſome celebrity: "I yeſterday waited on Mr. Gibbon. His

His figure is very ſtriking. He is tall, of athletic make, and rather aukward when he moves. His face forms one of the moſt ſingular phyſiognomical phenomena, owing to the irregular proportion of the parts to the whole. The eyes are ſo little as peculiarly to contraſt with his high and finely arched forehead; while the noſe, inclining to flatneſs, almoſt vaniſhes between the cheeks, which project exceedingly. The double chin hanging down very low renders the elliptical ſhape of his long face ſtill more remarkable: yet, in ſpite of theſe irregularities, Mr. Gibbon's countenance has an uncommon expreſſion of dignity, which, at firſt ſight, beſpeaks the profound and acute reaſoner. Nothing exceeds the glowing animation of his eyes. In his converſation and manner, he is quite the polite gentleman; civil, but cold. He ſpeaks French with elegance; and, which is truly ſurpriſing in an Engliſhman, pronounces it nearly like a Pariſian man of letters. He liſtens to his own accents with great complacency, and talks ſlowly, as if carefully examining each phraſe before he gives it utterance. With the ſame compoſed countenance he ſpeaks on agreeable and on diſagreeable ſubjects, on joyful and on melancholy events. During the whole of our converſation, the muſcles of his face remained unaltered; though a very ludicrous incident, which he had occaſion to relate, might naturally have drawn a ſmile from him. In his houſe, the ſtricteſt punctuality and order prevail; and his domeſtics muſt expect to be diſmiſſed if they perform not their buſineſs almoſt at the ſtated moment. Of this exactneſs, he ſets them the example himſelf. His day is divided like that of king Alfred. As the clock ſtrikes, he goes to buſineſs, to dinner, or ſees company; always taking the utmoſt care not to ſpend one minute beyond the time ſet apart for the occaſion." Upon the whole, with all his faults and failings, foibles and miſtakes, Mr. Gibbon might be conſidered as one of the firſt literary characters which illumined and adorned the eighteenth century.

The moſt ſerious objection to Gibbon's great work, is his attack upon Chriſtianity; the looſe and diſreſpectful manner in which he mentions many points of morality regarded as important on the principles of natural religion; and the indecent alluſions and expreſſions which too often occur in his remarks upon Scripture doctrine. His particular friend Mr. Hayley, in a fine poetical Eſſay on Hiſtory, after a ſplendid panegyric on the arduous labours of Mr. Gibbon, laments the irreligious ſpirit by which he was actuated, and his eminent work diſgraced:

Think not my verſe means blindly to engage
In raſh defence of thy profaner page!
Though keen her ſpirit, her attachment fond,
Baſe ſervice cannot ſuit with Friendſhip's bond;
Too firm from Duty's ſacred path to turn,
She breathes an honeſt ſigh of deep concern,
And pities Genius, when his wild career
Gives *Faith* a wound, or *Innocence* a tear.

GIB'BONS (Grinling), an ingenious ſculptor, born in Holland of Engliſh parents, or was the ſon of a Dutchman ſettled in England. Nothing is known of his education; but he brought himſelf into notice by his exquiſite ſkill in carving ornaments in wood. He was recommended to Charles II. who gave him a place in the board of works, and employed him in the decoration of his palaces. The foliage in the chapel at Windſor is by his hand, as alſo the carving of the ſtone pedeſtal of the equeſtrian ſtatue of the king in the principal court. Though he occaſionally undertook human figures, he did not excel in them. Carving was his peculiar art, and in it he arrived at the eminence of an original genius. After he became known by royal patronage, he was employed in a great variety of works. He carved the foliage in the choir of St. Paul's and the font of St. James's church. At the houſes of Burleigh and Chatſworth are a great number of his productions, of extraordinary beauty and delicacy of workmanſhip. The fineſt monument of his ſkill occurs in a chamber belonging to the earl of Egremont at Petworth, enriched from the ceiling between the pictures with feſtoons of flowers and dead game. This artiſt, who is one of the few of whom England in the laſt century could boaſt, died at London in 1721.

GIBBONS (Orlando), an excellent muſical compoſer, born at Cambridge in 1583. He was made organiſt of the Chapel-royal at the age of twenty-one, and in 1622 had a doctor's degree of muſic from Oxford, chiefly on the recommendation of his friend, the learned Camden. Being ordered, in 1625, to attend the ſolemnity of the marriage of Charles I. and Henrietta of France at Canterbury, he caught the ſmall-pox, which proved fatal to him. He was buried in the cathedral of that city. Gibbons was without queſtion the beſt church compoſer of his time, and many of his works, conſiſting of ſervices and anthems, are ſtill in uſe among the beſt of ſimilar compoſitions. They are characteriſed by pure harmony, ſimplicity, and grandeur. Beſides his ſacred muſic, he publiſhed, Madrigals of five Parts for Voices and Viols, 1612. The family of the Gibbons were muſical: his brothers Ellis and Edward were organiſts, one of Briſtol, the other of Saliſbury; and his ſon Chriſtopher was principal organiſt to Charles II.

GIB'BONS, GIBBS, or GIBSON, contractions and corruptions of *Gilbertſon*, q. d. the ſon of Gilbert.

GIBBOS'ITY, *ſ.* [*gibboſité*, Fr.] Convexity; prominence; protuberance.—When ſhips, ſailing contrary ways, loſe the ſight one of another, what ſhould take away the ſight of ſhips from each other, but the *gibboſity* of the interjacent water? *Ray.*

GIB'BOUS, *adj.* [*gibbus*, Lat. *gibbeux*, Fr.] Convex; protuberant; ſwelling into inequalities.—The bones will riſe, and make a *gibbous* member. *Wiſeman.*

A pointed flinty rock, all bare and black,
Grew *gibbous* from behind the mountain's back. *Dryden.*

Crookbacked.—I demand how the camels of Bactria came to have two bunches on their back, whereas the camels of Arabia have but one? How oxen, in ſome countries, began and continue *gibbous*, or haunch-backed? *Brown.*

[In aſtronomy.] This term is applied to repreſent that ſtate or ſhape of the enlightened part of the moon, being that in which ſhe appears more than half full or enlightened, which is the time between the firſt quarter and the full moon, and from the full moon to the laſt quarter; appearing then *gibbous*, that is, convex on both ſides of the enlightened part; thus contradiſtinguiſhed from the ſtate when ſhe is leſs than half full, then ſaid to be horned, or a creſcent.

GIB'BOUSNESS, *ſ.* Convexity; prominence.—To make the convexity of the earth diſcernible, ſuppoſe a man lifted in the air, that he may have a ſpacious horizon; but then, becauſe of the diſtance, the convexity and *gibbouſneſs* would vaniſh away, and he would only ſee a great circular flat. *Bentley.*

GIB'BY, one of the Papuan iſlands, ſituated under the equator, to the ſouth-eaſt of Patany Hook, and about ſix leagues diſtant from it. Its length is near five leagues; but its breadth is ſmall, and its appearance is like two hills divided by a low iſthmus. It is full of inhabitants, and abounds with nutmeg-trees and other ſpices.

GIB-CAT, *ſ.* An old worn-out cat.—I am as melancholy as a *gib-cat*, or a lugg'd bear. *Shakeſpeare.*

GIB'CLIFF, [or *Guy-Cliff*, from Guy of Warwick, the famous hero, who lived as an hermit there; or from Guy Beauchamp, earl of Warwick.] A place in Warwickſhire.

To GIBE, *v. n.* [*gaber*, old French, to ridicule.] To ſneer;

ſneer; to join cenſorioufneſs with contempt.—They laugh and *gibe* at our party. *Hooker.*

Why that's the way to choke a *gibing* ſpirit,
Whoſe influence is begot of that looſe grace
Which ſhallow laughing hearers give to fools. *Shakeſp.*

To GIBE, *v. a.* To reproach by contemptuous hints; to flout; to ſcoff; to ridicule; to treat with ſcorn; to ſneer; to taunt:

When rioting in Alexandria, you
Did pocket up my letters, and with taunts
Did *gibe* my miſſive out of audience. *Shakeſpeare.*

GIBE, *ſ.* Sneer; hint of contempt by word or look; ſcoff; act or expreſſion of ſcorn; taunt.—If they would hate from the bottom of their hearts, their averſion would be too ſtrong for little *gibes* every moment. *Spectator.*

But the dean, if this ſecret ſhould come to his ears,
Will never have done with his *gibes* and his jeers. *Swift.*

GIB'EAH, a city of Paleſtine, belonging to the tribe of Judah, ſituated in the mountains of that province. *Joſh.* xv. 57.

GIB'EAH, or GEBAH, a city of Paleſtine, belonging to the tribe of Benjamin, remarkable in Scripture as the place where began the conteſt between the tribe of Benjamin and the reſt of Iſrael, which terminated nearly in the total deſtruction of the former, together with the utter ruin of this city, which was burnt by Iſrael. It was rebuilt by the Benjamites that eſcaped, and proved the birth-place of Saul firſt king of Iſrael; whence it is frequently ſtyled "Gibeah of Saul." Here the ark of God remained from the time of its return from the Philiſtines, until it was removed from thence by order of David. Here the ſeven ſons of Saul were put to death, in conſequence of their father having violated the privileges of the Gibeonites. *Judges*, xix. 20. 1 *Sam.* x. 26. xiii. 15, 16. 2 *Sam.* vi. 3, 4. xxi. 1–9.

GIB'EATH, a city of Paleſtine, belonging to the tribe of Benjamin; probably the ſame with Gibeah above. *Joſh.* xviii. 28.

GIB'EHASC, a town of Arabia Felix, in the province of Hadramaut: one hundred and forty miles north-north-eaſt of Hadramaut.

GIB'ELIN, a town of Aſia, in Paleſtine: eight miles eaſt of Gaza.

GIB'ELINS, or GIBELLINS, a famous faction in Germany and Italy, oppoſed to another called the GUELPHS, who were partizans of the emperors and popes in their endleſs diſputes concerning eccleſiaſtical affairs. See the article GERMANY, in this volume.

GIBEL'LO, a town of Italy, in the Pallavicin: two miles and a half north-eaſt of Buſſeto.

GIB'EON, a city of Paleſtine belonging to the tribe of Benjamin, ſituated near the wilderneſs of that name; and was a city of the Levites of the houſe of Aaron or Kohath. It was the only city in Canaan that tamely ſubmitted to Iſrael when they invaded that country; for its inhabitants, the Hivites, by means of falſe pretences, prevailed upon Joſhua to treat with them, which he could not afterwards revoke any farther than ſubjecting them to perpetual ſervitude, which they willingly accepted; and ſo ſacred was this bond between them and Iſrael, that when Saul in his zeal ſlew the Gibeonites, the land of Iſrael ſuffered a famine for three years during the reign of David, who appeaſed the Divine vengeance by delivering ſeven of Saul's ſons to be put to death by the Gibeonites, who hanged them. Here Aſahel, brother of Joab, was ſlain by Abner; and here God appeared to Solomon at the commencement of his reign. *Joſh.* ix. xi. 19. xviii. 25. xxi. 17 2 *Sam.* ii. 24. iii. 30. xxi. 1–9. 1 *Kings*, iii. 5.

GIB'EONITE, *ſ.* An inhabitant of Gibeon.

GI'BER, *ſ.* A ſneerer; one who turns others to ridicule by contemptuous hints; a ſcoffer; a taunter.—You are well underſtood to be a more perfect *giber* of the table, than a neceſſary bencher of the capitol. *Shakeſpeare.*

GI'BERT (Balthaſar), an eminent profeſſor of belles-lettres, born at Aix in 1662. His father, who was an advocate in the parliament of Provence, ſent him to ſtudy firſt at Paris, and then at Soiſſons, under the fathers of the Oratory. Returning to Paris, he attended the college of Harcourt and the Sorbonne; and at the age of twenty-two was appointed to teach philoſophy at the college of Beauvais. In 1688 he was made profeſſor of rhetoric in the college of Mazarin at Paris, which office he filled during more than fifty years, with great reputation. He died in 1741, at the age of ſeventy-nine. Gibert made himſelf known as a writer by ſeveral eſteemed works. Theſe are, 1. *De la Veritable Eloquence.* 2. *Reflexions ſur la Rhetorique.* 3. *Jugemens des Savans ſur les Auteurs qui ont traité de la Rhetorique*, 3 vols. 12mo. 4. *Obſervations ſur le Traité des Etudes de Rollin.* 5. *Rhetorica juxta Ariſtotelis Doctrinam, Dialogis explanata*, for the uſe of his pupils; and the ſame in French, enlarged and corrected, under the title of, *La Rhetorique, ou les Règles de l'Eloquence.* He alſo pronounced Orations on ſeveral public occaſions, which were printed.

GI'BERT (John-Peter), a French eccleſiaſtic, born at Aix in Provence, in 1660. He early commenced his ſtudies at the Jeſuits' college in his native city, and was thence transferred to the univerſity, where in regular courſe he was admitted to the degrees of doctor in law, and in divinity. Having attracted the notice of M. du Chalucet, biſhop of Toulon, that prelate engaged him to teach theology in the ſeminary of that place, for ſome time; but afterwards the affairs of his family obliged him to return to Aix, where he purſued the ſame plan in the univerſity of that city. His predominant inclination for ſtudious retirement, however, ſoon led him to relinquiſh that employment; and in 1703 he left his native place, and removed to Paris, where he recommended himſelf to general eſteem by the unaffected ſimplicity of his manners, his candour, and readineſs to oblige. He died in 1736, turned of ſeventy-ſix years of age. His works conſiſt of, 1. The Duties of a Chriſtian, as laid down in the 118th Pſalm, 1705, 12mo. 2. Caſes of Practice, relating to the Sacraments, 1709, 12mo. 3. *Doctrina Canonum in Corpore Juris incluſorum, circa Conſenſum Parentum ad Matrimonium Filiorum minorum, Diſquiſitio hiſtorica, &c.* 1709, 12mo. 4. Memoirs relating to the Sacred Scriptures, Scholaſtic Theology, and the Hiſtory of the Church, 1710, 12mo. 5. Eccleſiaſtical Inſtitutions, according to the Cuſtoms of France, 1720, 4to. reprinted with important additions in 1736, 2 vols. 4to. 6. The Cuſtoms of the Gallican Church with reſpect to Cenſures and Irregularity, generally and particularly conſidered, &c. 1724, 4to. 7. Tradition, or the Hiſtory of the Church, with reference to the Sacrament of Marriage, 1725, 3 vols. 4to. 8. Canonical Conſultations relating to the Sacraments, 1725, 12 vols. 12mo. 9. *Corpus Juris Canonici per Regulas naturali Ordine diſpoſitas, Uſuque temperatas, et aliunde deſumptas, &c.* 1736, 3 vols. folio; together with Notes on Fevret's Treatiſe on Abuſes, and father Cabaſſut's *Juris Canonici Theoria et Praxis, &c.*

GIBER'TI (Giammateo), a learned prelate of the church of Rome, born at Palermo, the natural ſon of Franceſco Giberti, a Genoeſe, admiral of the pope's fleet. He viſited Rome at the age of twelve, where he ſoon diſtinguiſhed himſelf by the quickneſs of his parts, and his amiable diſpoſition and manners. Pope Clement VII. appointed him his datary, and employed him in legations to the king of France and other potentates. In 1523 he gave him the government of Tivoli, and in 1524 created him biſhop of Verona. Such, however, was the confidence he placed in Giberti, that he ſtill kept him at Rome, and made much uſe of his counſel.

This, it is ſuppoſed, was a principal motive with the pontiff for adhering to the French party, by which he was ſo great a ſufferer. This prelate was one of the hoſtages given by the pope in 1527 to the imperial army, on which occaſion he underwent much ill treatment, and was more than once threatened with a ſhameful death. The friendſhip of cardinal Pompeo Colonna procured his reſtitution. After this ſtorm he retired to his biſhopric; and his palace was open to all men of worth and learning. He eſtabliſhed in it a magnificent Greek preſs, in which were printed at his own expence ſeveral works of the fathers; and in order to render his editions correct, he employed ſeveral Greek copyiſts. He received the deſerved homage of the men of letters in his time, and is mentioned with great veneration in the poems of Fracaſtorio. This worthy prelate died in 1543. His works, which have been publiſhed collectively, chiefly conſiſt of the conſtitutions and regulations for the government of his church. Many of his Italian letters are found in different epiſtolary collections.

GIBIEUF' (William), a learned French prieſt, was a native of Bourges, admitted to the degree of doctor by the faculty of the Sorbonne, in 1612. Cardinal Berulle, the ſuperior of the order of the Carmelites in France, conſtituted him his vicar-general. He was the intimate friend of Des Cartes, and other diſtinguiſhed men of literature; and rendered himſelf reſpected for his piety and virtues, as well as for his learned attainments. He died at St. Magliore, in 1650. Among other works, he was the author of a treatiſe On the Liberty of God, and of the Creature, 1630, 4to. which was very favourably received among the learned men of his time.

GI'BINGLY, *adv.* Scornfully; contemptuouſly:

His preſent portance,
Gibingly and ungravely he did faſhion
After th' inveterate hate he bears to you. *Shakeſpeare.*

GIB'LETS, *ſ.* [According to Minſhew from *gobbet*, *gobblet*; according to Junius more properly from *gibier*, game, Fr.] The parts of a gooſe which are cut off before it is roaſted.

GIBOL'DEHAUSEN, a town of Germany, in the circle of the Lower Rhine, and territory of Eichsfeld: ſix miles north of Duderſtadt.

GI'BON, a town of the iſland of Cuba: twenty-two miles north-north-eaſt of Bayamo.

GIBRA'LEON, a town of Spain, in the country of Seville, on the river Odiel, with a harbour for ſmall fiſhing veſſels. It contains about one hundred and fifty houſes, divided into two pariſhes. Alphonſo king of Caſtile took it from the Moors in 1257, and peopled it with Chriſtians; it is ſituated about ten miles from the Atlantic: forty-four miles weſt of Seville. Lat. 37. 20. N. lon. 9. 45. E. Peak of Teneriffe.

GIBRAL'TAR, a town and fortreſs of Spain, in Andaluſia, but for a century paſt belonging to Great Britain, ſituated on a tongue of land, backed by an immenſe rock, at the ſouthern extremity of Europe. To the ancients it was known by the name of *Calpe*, one of the pillars of Hercules. Theſe pillars, or obeliſks, in the earlieſt ſtages of navigation, were made uſe of for beacons; and two of the moſt celebrated in ancient hiſtory ſtood upon each ſide of the entrance into the Mediterranean Sea, called *Fretum Gaditanum*; now the Strait of Gibraltar, which ſeparates Europe from Africa. The pillar on the African ſide was called *Abyla*; as that on the European ſide, in Iberia or Spain, was named *Calpe*, which Bryant derives from a cave in the rock beneath. He alſo ſhews that this pillar was called by the Arabians *Gibel-Tar*; "the tower of the rock or hill:" whence the name of Gibraltar. From the ſummit of this rock there is a moſt extenſive proſpect over part of Spain and Africa; and on it is maintained a watch-tower, to give notice of all ſhips and veſſels paſſing at ſea.

The ſtrait of Gibraltar, through which the Atlantic Ocean paſſes into the Mediterranean, extends from weſt to eaſt about thirteen leagues. In this ſtrait there are three remarkable promontories or capes on the Spaniſh ſide, and as many oppoſite to them on the African or Barbary ſide. The firſt of theſe, on the ſide of Spain, is cape Trafalgar, oppoſite to which is cape Spartel; and in the neighbourhood of this ſtood the fortreſs of Tangier, once in the poſſeſſion of the Engliſh. The next on the Spaniſh ſide is Tariſa; and over againſt it lies Malabata, near the town of Alcaſſar, where the ſtrait is about five leagues broad. Laſtly, Gibraltar, facing the mountain of Abyla, near the fortreſs and town of Ceuta, which form the eaſtern mouth of the ſtrait.

The value of this important fortreſs, in point of ſituation, appears to have been firſt noticed in the year 712. At that period of the Saracen war with Spain, the general of the caliph Al Walid, landed with an army of twelve thouſand men on the iſthmus between Calpe and the continent; and that he might ſecure an intercourſe with Africa, he ordered a caſtle to be built on the face of that hill, the ruins of which ſtill remain. It continued in the poſſeſſion of the Saracens till the beginning of the 14th century, when it was recovered by Ferdinand king of Caſtile. In 1333, however, it was obliged to ſurrender to the ſon of the emperor of Fez, who came to the aſſiſtance of the Mooriſh king of Granada. An attempt was made upon it in 1349 by Alonzo king of Caſtile; but when the fortreſs had been reduced to the laſt extremity, a peſtilential fever broke out in the Spaniſh camp, which carried off the king himſelf, and great part of his army; after which the enterpriſe was abandoned. The fortreſs continued in the poſſeſſion of the Saracen deſcendants of the prince of Fez till 1410, when it was taken by Joſeph III. king of Granada. A deſign of attacking it was formed by Henry de Guzman in 1435; but the enterpriſe having miſcarried through his imprudence, he was defeated and ſlain. It was, however, taken, after a gallant defence, by his ſon John de Guzman in 1462; ſince which time it has remained in the hands of the Chriſtians. In 1540, it was ſurpriſed and pillaged by Piali Hamet, one of Barbaroſſa's corſairs; but the pirates having fallen in with ſome Sicilian galleys, were by them defeated, and all either killed or taken.

In the reign of Charles V. emperor and king, the fortifications of Gibraltar were modernized, and ſuch additions made as to render them almoſt impregnable. It was firſt taken by the Engliſh, in the reign of queen Anne, and ſince that time has remained in their poſſeſſion; and probably will always do ſo, unleſs ceded by treaty, as it appears impoſſible to reduce it but by treachery.—It fell into the hands of the Engliſh on the following occaſion: In 1704, in conſequence of the reſolution adopted by the court of Britain to aſſiſt the archduke Charles in his pretenſions to the Spaniſh crown, admiral ſir George Rooke was ſent with a powerful fleet into the Mediterranean, when an attempt on Gibraltar was firſt reſolved upon. On the 21ſt of July, eighteen hundred troops were landed upon the iſthmus under the command of the prince of Heſſe Darmſtadt; and on the refuſal of the governor to ſurrender, preparations were made for attacking the place. Early in the morning of the 23d, a canonade was opened from the fleet, and kept up ſo briſkly, that in five or ſix hours the Spaniards were driven from their guns at the new mole-head. The admiral, perceiving that by gaining this part of the fortification, the reduction of the reſt would be facilitated, ordered out ſome armed boats to take poſſeſſion of it. On their approach the Spaniards ſprung a mine, which demoliſhed part of the works, killed two lieutenants and forty private ſoldiers, wounding about ſixty more. Notwithſtanding this diſaſter, the aſſailants kept poſſeſſion of the work, and took a ſmall baſtion, half-

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way between the mole and the town. Upon this the governor thought proper to capitulate, and the prince of Heſſe took poſſeſſion of the gates on the 24th. The garriſon, conſiſting of one hundred and fifty men, marched out with the honours of war; and the Spaniards who choſe to remain, were honourably protected in their religion and property. The works were found very ſtrong, and the place well provided with ammunition and military ſtores. The prince of Heſſe was made governor; and eighteen men of war were left at Liſbon under the command of ſir John Leake, to ſuccour the garriſon if there ſhould be occaſion.

The loſs of ſuch an important fortreſs having alarmed both the courts of Madrid and Paris, orders were ſent to the marquis de Villadarias, a Spaniſh grandee, to retake it, in which he was to be aſſiſted by a naval force from Toulon. The prince of Heſſe, therefore, immediately applied to ſir John Leake for aſſiſtance; but before the latter had time to comply with his requeſt, a French fleet arrived, and debarked ſix battalions to the aſſiſtance of the Spaniards; after which they proceeded to the weſtward, leaving only ſix frigates in the bay. The trenches were opened on the 11th of October, about which time ſir John arrived with twenty ſail of Engliſh and Dutch ſhips; but hearing that the French were about to attack him with a ſuperior force, he judged it proper to return and refit. Having very prudently left orders at Liſbon to make preparations for this purpoſe in his abſence, he was enabled to accompliſh the work with ſuch expedition, that on the 29th of the ſame month he returned, and took by ſurpriſe in the bay three frigates, a fire-ſhip, two Engliſh prizes, a tartan, and a ſtore-ſhip. After this exploit he landed ſome reinforcements, ſupplied the garriſon with ſix months proviſion and ammunition; at the ſame time detaching on ſhore a body of five hundred ſailors to aſſiſt in repairing the breaches which had been made by the enemy's fire. In the mean while the Spaniards fitted out a ſtrong ſquadron from Cadiz, with a deſign to intercept the convoys of proviſions which might be ſent to the garriſon; flattering themſelves at the ſame time, that, on the arrival of their fleet, ſir John would be forced to retire, and the garriſon be obliged to ſurrender to their repeated attacks. The land army therefore continued their fire with additional fury, diſmounted many of the cannon, and did eſſential injury to the works in ſeveral different places. The prince of Heſſe, however, was by no means deficient in his endeavours to diſappoint their expectations; and at this critical juncture the fleet they had long expected arrived in the bay, December 7, 1704, with a proportionable quantity of ammunition and proviſions.

Sir John Leake having thus powerfully reinforced the garriſon, thought his preſence in the bay no longer neceſſary, and therefore ſet ſail for Liſbon, where he arrived about the end of the year. In the beginning of January 1705, the Spaniards were reinforced by a conſiderable body of infantry, and on the 11th of the month made an attack on the extremity of the King's Lines, but were repulſed. The garriſon was now farther reinforced by ſix companies of Dutch troops and two hundred Engliſh ſoldiers, together with ſome proviſions and ſtores. The aſſailants, however, perſiſted in the ſiege. The marquis de Villadarias was ſuperſeded by the mareſchal Teſſe, a Frenchman, with whom admiral Pointis was deſired to co-operate in blocking up the bay. The mareſchal therefore joined the army with four freſh battalions, beſides eight companies which had been ſent before. On the part of the Engliſh a reinforcement was ordered under the command of ſir Thomas Dilkes and ſir John Hardy, to join admiral Leake at Liſbon; which junction being effected, the whole fleet, conſiſting of twenty-eight Engliſh, four Dutch, and eight Portugueſe, men of war, having on-board two battalions of land forces, ſet ſail from Liſbon. Fortunately for the beſieged, the inceſſant rains and ſtorms had retarded the operations of the land forces, and greatly diſtreſſed the fleet of the enemy. Eight ſhips of the latter were forced from their anchors by the ſtrong weſterly wind, and obliged to drive to ſea. At this critical period ſir John Leake, with the allied fleet, entered the ſtraits; and perceiving five ſail making out of the bay, and a gun fired at them from the garriſon, he immediately gave chace. Three French men of war were taken, and the admiral's ſhip and another driven on-ſhore, where they were burnt. The reſt, on hearing the report of the guns, made the beſt of their way to Toulon.

The garriſon was now ſo well ſupplied, that mareſchal Teſſe withdrew his troops from the trenches, and and formed a blockade, drawing an intrenchment acroſs the iſthmus to prevent the garriſon from ravaging the country. The prince of Heſſe ſtill remained in the garriſon, where he repaired the batteries, and made ſome additions to the fortifications; after which he joined the archduke Charles at Liſbon. As the latter, however, was reſolved to try his fortune with the earl of Peterborough in Valencia and Catalonia, the prince was ſent back to Gibraltar to prepare part of the garriſon for embarkation, and ſoon after was followed by the whole fleet. Major-general Ramos was now appointed governor of Gibraltar, in which only two new battalions were left, as nothing was to be apprehended from the enemy. The new governor ſoon reſigned his command to colonel Roger Elliot, during whoſe time Gibraltar was made a free port by a ſpecial order from the queen.

In 1720, the Spaniards ſeem to have threatened another attack. Ceuta, the Spaniſh fortreſs in Barbary, had been for many years beſieged by the Moors; and a powerful armament, commanded by the marquis de Lada, was now aſſembled in Gibraltar-bay, under pretence of relieving that fortreſs, but with a ſecret deſign of ſurpriſing Gibraltar; for which purpoſe he had provided ſcaling ladders, &c. The armament, however, had not been fitted out with ſuch ſecrecy but that the Britiſh miniſtry had intelligence of it. On this they ſent orders to colonel Kane, governor of Minorca, to embark with part of his garriſon for Gibraltar under convoy of the fleet in the Mediterranean. On his arrival he compelled the Spaniſh commander to abandon his deſign, juſt as the fortreſs was to have ſuſtained a general aſſault. Notwithſtanding this diſappointment, the Spaniards continued to keep a watchful eye over Gibraltar; and, in 1726, they aſſembled an army in the neighbourhood of Algezira, or Old Gibraltar, encamping, on the 20th of January following, on the plain below St. Roch, and erecting a battery on the beach to protect their camp. Though admiral Hopſon was then at anchor in the bay of Gibraltar, yet, as he had received no intelligence of the actual commencement of hoſtilities between Great Britain and Spain, he was obliged to allow the boats of the latter to paſs with proviſions, arms, and ammunition, between Algezira and the camp. The operations of the Spaniards, however, ſeemed ſo evidently to tend towards an attack, that the governor thought proper to order ſuch of that nation as were in the town to leave it, and to forbid their galleys to anchor on that ſide of the bay.

The count de Las Torres commanded the Spaniſh forces, amounting to near twenty-thouſand men; and ſoon after forming his camp, he advanced along the neutral ground to within reach of the garriſon. On the 22d of February, the Spaniards opened their fire with ſeventeen pieces of cannon beſides mortars; and on the 3d of March they opened a new battery of twenty-two guns on the Old Mole; and on the 8th another of fifteen guns, bearing alſo upon the ſame Mole, the guns of which had annoyed the weſtern flank of their approaches. All this time the garriſon had kept up a conſtant and well-directed fire from the batteries, which

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bore upon the works of the enemy; but the ordnance in general being old, were frequently burſting, by which they ſuffered more than from the fire of the beſiegers. The Spaniards were greatly diſtreſſed by the fleet under admiral Hopſon and ſir Charles Wager, who, ſince the beginning of the ſiege, had intercepted their home-bound ſhips, and at the ſame time greatly benefited the garriſon by bringing the prizes into the bay. Finding the Spaniards, however, obſtinately bent on their enterpriſe, they formed a deſign, on the 2d of April, to bombard Algezira, from whence the Spaniards were ſupplied with various articles of ammunition; but the fleet happening to be becalmed, the deſign was afterwards unaccountably abandoned; and on the arrival of a reinforcement from Minorca, they ſailed to the weſtward. The enemy ſtill continued to augment their batteries, and erect new ones; and, on the 3d of May, the governor received intelligence that a general aſſault was intended; to repel which he took every proper precaution. Hoſtilities, however, ceaſed on the 12th, when news arrived that the preliminaries of a general pacification were ſigned; ſince which time to the year 1779, no farther attempts were made on Gibraltar.

In the courſe of the American war, the Spaniſh monarch having joined his forces to thoſe of France, a freſh attack upon this important fortreſs was concerted; and on the 16th of July 1779, the port was completely blocked up by a ſquadron of two ſeventy-four-gun ſhips, ſeveral frigates, galleys, &c. Ten days afterwards they began to form a camp on the plain below St. Roch, three miles from the fortreſs. The garriſon at this time conſiſted of 5382 men, including officers, with a company of engineers and artificers; but the greateſt expectations were formed from the abilities and valour of general Elliot the governor. From this time to the beginning of 1780, the enemy continued the blockade both by ſea and land, but without doing any damage to the works or garriſon. In the mean time, however, the uſual ſupplies of proviſions being cut off, the garriſon began to feel all the horrors of famine. Had matters remained long in this ſtate, it is plain that the fortreſs muſt have fallen into the hands of the enemy. They were, however, effectually relieved in conſequence of the victory gained by admiral Rodney over the Spaniſh fleet commanded by Don Juan de Langara. The former had been furniſhed with a ſtrong ſquadron, in order to relieve this important fortreſs; with which having ſet ſail, he in a few days fell in with a Spaniſh fleet of ſixteen tranſports bound from Bilboa to Cadiz, and laden with proviſions and naval ſtores, convoyed by a man-of-war of ſixty-four guns, four frigates, and two armed veſſels. Of theſe only a ſingle tranſport eſcaped, the reſt being all captured on the 8th of January, 1780; and the loſs of them, at the ſame time that it promiſed to be very ſerviceable to the garriſon, was equally detrimental to the enemy, who were in great want both of proviſions and ammunition for their ſhipping. This advantage, however, was only a prelude to the memorable yet awful deſtruction of the combined French and Spaniſh veſſels and gun-boats in the bay of Gibraltar, on the 13th of September 1782, for the particular deſcription of which ſee the article ENGLAND, vol. vi. p. 769. This was the laſt ſtruggle of the Spaniſh monarch for the recovery of Gibraltar; and which might ſerve to ſhew the futility of all further attempts to reduce ſo impregnable a fortreſs.

The town of Gibraltar is ſituated at the foot of the rock, and is defended on the ſide towards the bay by the batteries of the line-wall, the foot of which is waſhed by the ſea. Along this wall is the king's baſtion, by the fire from which the floating batteries were deſtroyed in the memorable action of the 13th of September 1782. In this baſtion lieutenant-general ſir Robert Boyd was interred, agreeably to his own requeſt, in a tomb erected by himſelf. At the back of the town is the *Calpe* or Rock of Gibraltar, which is one thouſand three hundred feet above the level of the ſea. On the ſummit of the rock, perhaps near the ſpot where the Herculean pillar ſtood, is the ſignal-houſe, commanding a very extenſive proſpect; and a new ſignal-houſe was erected by governor O'Hara in the year 1800, at the ſouthern extremity of the rock, which affords a more circumſpect view of the ſtrait. The rock towards the town and bay is of a gradual though rugged deſcent; but on the ſide towards the ſtrait it is exceſſively ſteep; notwithſtanding which, a long flight of ſteps has been cut in the rock, reaching quite down to the ſea, and called, from its ſituation, the Mediterranean Stairs.

The different galleries and fortifications called King's, Queen's, and Prince's, Lines, St. George's Hall, &c. are works of uncommon ingenuity and extreme labour, and have added conſiderably to the natural ſtrength of Gibraltar; other works alſo have been recently added, which appear to render the fortreſs truly impregnable. The town is well paved, and contains ſome very elegant houſes. There is one principal ſtreet leading from South Port to Water Port; all the others are ſide ſtreets, very ſmall and narrow. Charles the Fifth's wall commences at South Port, and extends to the top of the rock, near to the old Signal-houſe, ſhutting in what is called the town, from that extremity of the rock which advances into the ſea, and called Europa Point. A very good road, ſkirted with trees, parallel to which runs an aqueduct, reaches from South Port to this extreme part of Gibraltar, which is alſo called "the South," where there are good barracks, and an extenſive naval hoſpital. Theſe, with ſeveral other buildings, form what may be termed a ſecond town, where there is a ſtrong fort covering the New Mole, made to facilitate the anchorage of veſſels at the mouth of the bay. The bay itſelf forms a very beautiful and capacious baſon, in breadth about five miles, and in length about nine; with ſeveral ſmall rivers running into it from the Spaniſh coaſt. The water in the middle is more than a hundred fathoms in depth, ſo that a ſquadron may lie there in the utmoſt ſafety. On the eaſtern ſide of the bay the town and fortifications of Gibraltar are erected; and on the weſtern ſide the Spaniſh town of Algezira, or Old Gibraltar; with a fort and tower on ſome ſmall iſlands in front of it.

The garriſon of Gibraltar, in war time, conſiſts of from three to four thouſand men, with upwards of three hundred pieces of cannon. The town has three gates, with one Engliſh and one Spaniſh church, and a ſynagogue for the Jews, who find their way into every place where money circulates. The number of Engliſh, beſides the garriſon, is about two thouſand; and of Spaniards, Portugueſe, Genoeſe, and Jews, about as many. Moors are conſtantly coming in from the coaſt of Barbary with cattle, game, fiſh, and fruit. Theſe people call the town by the ancient name of *Dgebel-Thareh*. The rock and fortreſs of Gibraltar is joined to Spain by an iſthmus of low land, which widens progreſſively as it approaches the Spaniſh lines. Theſe extend entirely acroſs the iſthmus, and are flanked by two Spaniſh forts, the principal of which is called St. Philip. The Spaniſh lines are defended likewiſe by a number of guns, planted along them, and entruſted to the care of a garriſon, miſerably lodged and badly ſerved. The ſpace between the foot of the rock and theſe lines is known by the name of "Neutral Ground;" and is the only approach to Gibraltar by land.

The town and garriſon of Gibraltar, in war time, have been wholly ſupplied with freſh water from ciſterns, and an aqueduct, which are filled by the rain, until very lately ſome wells have been ſunk in the rock at immenſe labour, to procure a more certain ſupply of this invaluable neceſſary of life. But if water be ſcarce, wine, on the other hand, is in ſuch abundance, and ſo cheap, that in no part of the world exiſts a higher temp-

tation to intoxication. It is indeed diſguſting to ſee ſo many people lying in the ſtreets in the moſt degrading ſtate of inebriety. Drunkenneſs appears to be no crime, except in thoſe who are on duty; and every man coming off a working party is ordered to be paid eightpence on the ſpot, which he immediately proceeds to ſpend in a kind of bad wine, called *black-ſtrap*. Houſes for the ſale of this pernicious liquor are found at every ſtep, and furniſh no ſmall part of the revenue.

The ſituation of officers in Gibraltar during the time of war, is extremely confined, and almoſt a ſtate of impriſonment, from which it is impoſſible to ſtir, with no other amuſement or reſource than what they can create among themſelves. There has been, however, a garriſon library moſt judiciouſly ſet on-foot, which, to a mind ſuſceptible or deſirous of information, is an inſtitution of the moſt advantageous and laudable kind. A committee of officers is appointed, to whom the choice of the books is left; and in the ſelection none are admitted but the moſt approved productions. All intereſting new publications are purchaſed, and likewiſe a regular ſucceſſion of the beſt Engliſh newſpapers. Every officer, on his arrival at Gibraltar, contributes one week's pay to the fund, which conſtitutes him a ſubſcriber, paying only the additional ſum of four dollars annually. By means of this trifling ſubſcription, the library is well ſupplied; and a new building is now erected, calculated on purpoſe for literary purſuits.

In time of peace, the garriſon is more fertile in amuſement, an intercourſe being then permitted with the Spaniſh territories, whereby the troops are amply and cheaply furniſhed with every thing they can want. But when war, deſtroying all friendly communication, cuts off theſe ſupplies, the coaſt of Barbary becomes the only reſource; and it is a very precarious one; for, when the plague rages there, which is ſo often the caſe, the moſt rigorous and ſtrict meaſures are neceſſarily taken, to prevent its introduction into the garriſon, of which it would moſt undoubtedly prove the ruin. To guard againſt this dreadful malady, a lazaretto is eſtabliſhed on the neutral ground, where quarantine is performed. In the event of war on the one ſide, and peſtilence on the other, it often happens that the garriſon is compelled to live entirely on ſalt proviſion; not having even the advantage or comfort of vegetables, which are at all times ſcarce, and very dear. During the ſummer, the climate is exceſſively arid, and the reflection of the ſun from the rock almoſt melting, and very diſtreſſing to the eyes. In winter the weather is often very cold, and the damps from the heavy rains ſo great, as to render fire neceſſary for two or three months in the year. Notwithſtanding theſe inconveniences, the climate is far from being unhealthy; nor is the condition of the garriſon by any means the worſt in the world. —The rock of Gibraltar is diſtant ſixteen miles north from Ceuta, and ſeventy ſouth from Seville. Lat. 36. 8. N. lon. 11. 19. E. Peak of Teneriffe.

The poſſeſſion of Gibraltar is eſteemed of the higheſt importance to Great Britain. It not only gives us the command of the Straits and their navigation, but affords refreſhment and accommodation to our fleets in time of war, and to our merchant ſhips at all times; which, to a maritime power, is of the utmoſt advantage. From its ſituation, it divides the power of both the kingdoms of France and Spain; that is, it prevents the facility of communication by ſea between the different parts of theſe kingdoms; the great and good policy of which has been often experienced by the navy of England. It awes alſo the piratical ſtates of Barbary, and in like manner the marauding emperor of Morocco; inſomuch, that our commerce is more ſecure than that of any other European power, which gives us infinite advantages in point of freight. It is likewiſe highly favourable to our trade in every part of the Mediterranean, and gives us the entire command of the entrance into and out of that extenſive inland ſea.

Much has been ſaid of the foſſil bones found in the rock of Gibraltar; and the general idea which exiſts concerning them is that they are found in a petrified ſtate, and incloſed in the ſolid calcareous rock; but major Imrie, in his Mineralogical Account of the Rock of Gibraltar, recently publiſhed, has ſhewn this to be a miſtake, which could ariſe only from inaccurate obſervation and falſe deduction. His words are: "In the perpendicular fiſſures of the rock, and in ſome of the caverns of the mountain (all of which afford evident proofs of their former communication with the ſurface), a calcareous concretion is found, of a reddiſh brown ferruginous colour, with an earthy fracture, and conſiderable induration, incloſing the bones of various animals, ſome of which have the appearance of being human. Theſe bones are of various ſizes, and lie in all directions, intermixed with ſhells of ſnails, fragments of the calcareous rock, and particles of ſpar; all of which materials are ſtill to be ſeen in their natural uncombined ſtates, partially ſcattered over the ſurface of the mountain. Theſe having been ſwept, by heavy rains at different periods, from the ſurface into the ſituations above deſcribed, and having remained for a long ſeries of years in thoſe places of reſt, expoſed to the permeating action of water, have become inveloped in, and cemented by, the calcareous matter which it depoſits. The bones, in this compoſition, have not the ſmalleſt appearance of being petrified; and if they have undergone any change, it is more like that of calcination than that of petrifaction, as the moſt ſolid parts of them generally admit of being cut and ſcraped down with the ſame eaſe as chalk.

"Bones combined in ſuch concretions are not peculiar to Gibraltar: they are found in ſuch large quantities in the country of Dalmatia, and upon its coaſts in the iſlands of Cherſo and Oſero, that ſome naturaliſts have been induced to go ſo far as to aſſert, that there has been a regular ſtratum of ſuch matter in that country, and that its preſent broken and interrupted appearance has been cauſed by earthquakes, or other convulſions, experienced in that part of the globe. But, of late years, a traveller (abbé Alberto Fortis) has given a minute deſcription of the concretion in which the bones are found in that country: and by his account it appears, that with regard to ſituation, compoſition, and colour, it is perfectly ſimilar to that found at Gibraltar. By his deſcription, it alſo appears that the two mountain rocks of Gibraltar and Dalmatia conſiſt of the ſame ſpecies of calcareous ſtone; from which it is to be preſumed, that the concretions in both have been formed in the ſame manner and about the ſame periods."

Major Imrie found here the complete jaw-bone of a ſheep; it contained its full complement of teeth, the enamel of which was perfect, and its whiteneſs and luſtre in no degree impaired. In the hollow parts of ſome of the large bones was contained a minute cryſtallization of pure and colourleſs calcareous ſpar; but, in moſt, the interior part conſiſted of a ſparry cruſt of a reddiſh colour, ſcarcely in any degree tranſparent.

Upon the weſt ſide of the mountain, towards its baſe, ſome ſtrata occur, which are heterogenial to the mountain rock: the firſt, or higheſt, forms the ſegment of a circle; its convex ſide is towards the mountain, and it ſlopes alſo in that direction. This ſtratum conſiſts of a number of thin beds; the outward one, being the thineſt, is in a ſtate of decompoſition, and is mouldering down into a blackiſh brown or ferruginous coloured earth. The beds, inferior to this, progreſſively increaſe in breadth to ſeventeen inches, where the ſtratification reſts upon a rock of an argillaceous nature. This laſt bed conſiſts of quartz of a blackiſh blue colour, in the ſepta or cracks of which are found fine quartz cryſtals,

colourleſs, and perfectly ſimilar to thoſe found in the rocks near Briſtol, and called *Briſtol ſtones*. Theſe cryſtals are compoſed of eighteen planes, diſpoſed in hexangular columns, terminated at both extremities by hexangular pyramids. The largeſt of thoſe that major Imrie ſaw did not exceed one-fourth of an inch in length: they in general adhere to the rock by the ſides of the column, but are detached without difficulty. Their great degree of tranſparency has obtained them the name of *Gibraltar diamonds*.

The ſubterraneous galleries in the rock of Gibraltar, begun by general lord Elliot, and finiſhed by general O'Hara, are very extenſive; they pierce the rock in ſeveral places and in various directions, and at various degrees of elevation; all of them have a communication with each other, either by flights of ſteps cut in the rock, or by wooden ſtairs where the paſſages are required to be very perpendicular. The centinels may now be relieved during a ſiege from one poſt to another in perfect ſafety; whereas, previouſly to the conſtructing of theſe galleries, a vaſt number of men were killed while marching to their ſeveral ſtations. The width of theſe galleries is about twelve feet, their height about fourteen. The rock is broken through in various places, both for the purpoſe of giving light and for placing the guns to bear on the enemy. In different parts there are ſpacious receſſes, capable of accommodating a conſiderable number of men. To theſe receſſes they give names, ſuch as St. Patrick's Chamber, St. George's Hall, &c. The whole of theſe ſingular ſtructures have been formed out of the ſolid rock by blaſting with gunpowder. A place called Smart's Reſervoir is occaſionally opened for inſpection, which is a great curioſity, and not generally permitted to be ſhewn. It is a ſpring at a conſiderable depth in the body of the rock, and is above ſeven hundred feet above the level of the ſea; you deſcend into the cavern that contains it by a rope ladder, and with the aid of lighted candles proceed through a narrow paſſage over cryſtallized protuberances of the rock till you come to a hollow, which appears to have been opened by ſome convulſion of nature. Here, from a bed of gems, ariſes the ſalutary fount, clear as the brilliant of the eaſt, and cold as the icicle. When reſtored to the light of day, you perhaps obtain the key of St. George's Hall, which is upwards of an hundred feet in length, its height nearly the ſame. It is formed in a ſemicircular part of the rock; ſpacious apertures are broken through, where cannons of a very large calibre command the iſthmus, the Spaniſh lines, and a great part of the bay. The top of the rock is pierced through, ſo as to introduce ſufficient light into every part of it.

GIBRAL'TAR, a town of South America, in the country of Terra Firma, and province of Venezuela, ſituated on the eaſt coaſt of the lake of Maracaibo; in the environs of which is gathered the beſt cocoa of the province, and an excellent kind of tobacco grows, of high eſteem in Old Spain. The air is exceedingly unwholeſome in the rainy ſeaſon, on which account the merchants and planters generally retire at that time to Maracaibo. It is defended by ſome fortifications, but was taken by the French and burned in the year 1670: fifty miles ſouth-ſouth-eaſt of Maracaibo. Lat. 10. 4. N. lon. 49. 50. W. Ferro.

GIB'SON (Richard), an Engliſh painter, commonly called the *Dwarf*, was page to a lady at Mortlake; who, obſerving that his genius led him to painting, had the generoſity to get him inſtructed in the rudiments of that art. He devoted himſelf to ſir Peter Lely's manner, and copied his pictures to admiration, eſpecially his portraits: his paintings in water-colours were alſo eſteemed. He was in great favour with Charles I. who made him his page; and he had the honour to inſtruct in drawing queen Mary and queen Anne, when they were princeſſes. He married Miſs Anne Shepherd, who was alſo a dwarf; on which occaſion king Charles honoured their marriage with his preſence, and gave away the bride. Mr. Waller wrote a poem on this occaſion, entitled, The Marriage of the Dwarfs. Fenton, in his notes on this poem, obſerves that he had ſeen this couple painted by ſir Peter Lely; and that they were of an equal ſtature, each being three feet ten inches high. However, they had nine children, five of whom arrived at maturity, well proportioned, and of the uſual ſtandard of mankind. But what nature denied this couple in ſtature, ſhe gave them in length of days: for Mr. Gibſon died in the ſeventy-fifth year of his age; and his wife, having ſurvived him almoſt twenty years, died in 1709, aged eighty-nine.

GIB'SON (Edmund), a learned Engliſh prelate, born at Bampton in Weſtmoreland, in 1669. He was initiated in grammar learning at the free ſchool in his native town, whence, at the age of ſeventeen, he was ſent to Queen's college, Oxford. During the year 1691 he was admitted to the degree of bachelor of arts; and alſo offered to the public the firſt fruits of his ſtudies, in a new edition of William Drummond's *Polemo-Middiana*, and James V. of Scotland's *Cantilena Ruſtica*, 4to. In 1692, by the advice of Dr. Mill, the learned editor of the Greek Teſtament, he publiſhed a Latin tranſlation, together with the original, of that valuable remain of Saxon antiquity, the *Chronicon Saxonicum*, in 4to. accompanied with notes on the whole. Before the expiration of the ſame year, likewiſe, he gave the public, in 4to. *Librorum Manuſcriptorum in duabus inſignibus Bibliothecis, altera Teniſiona Londini, altera Dugdaliana Oxonii, Catalogus*, with a dedication to Dr. Teniſon, at that time biſhop of Lincoln, and afterwards archbiſhop of Canterbury; which proved the foundation of the author's ſubſequent fortune under the auſpices of that prelate. His next publication was a more correct edition than had before appeared of Quintilian *De Arte Oratoria*, 1693, 4to. which was followed, in 1694, by a new edition of Somner's Treatiſe on the Roman Ports and Forts in Kent; and the ſame author's *Julii Cæſaris Portus Iccius illuſtratus*, 8vo. with a new diſſertation in defence of the author. During the laſt-mentioned year, Mr. Gibſon commenced maſter of arts; and within the two following years he was elected a fellow of his college, and admitted into deacon's and prieſt's orders. His embracing the clerical life, however, did not prevent him from devoting a conſiderable part of his ſtudies to the hiſtory and antiquities of his country; and about the year 1695 he publiſhed an Engliſh tranſlation of Camden's Britannia, folio. This work was patroniſed by lord Somers, who, ſoon after its appearance, offered the author a living of two hundred pounds a-year in the iſle of Thanet, which, on account of his ill-health, he declined. In 1696 Mr. Gibſon was appointed librarian at Lambeth, by Dr. Teniſon, then archbiſhop of Canterbury, who received him into his family; and in the following year he was appointed morning preacher at Lambeth church, and produced *Vita Thomæ Bodleii, Equitis Aurati*, together with *Hiſtoria Bibliothecæ Bodleianæ*, both prefixed to the *Catalogi Librorum Manuſcriptorum, in Anglia & Hibernia, in unum Collecti*, 2 vols. folio. In 1698 he publiſhed, in folio, *Reliquiæ Spelmannianæ*; being the Poſthumous Works of Sir Henry Spelman, relating to the Laws and Antiquities of England, together with the Life of the Author. He was now made domeſtic chaplain to the archbiſhop, through whoſe means he obtained the lecture-ſhip of St. Martin's in the Fields; and, in 1700, was preſented to the rectory of Stiſted in Eſſex, a peculiar of the archbiſhop's. Mr. Gibſon had not been long chaplain to Dr. Teniſon, before he undertook the defence of his rights, as preſident of the convocation, during the conteſts between the two houſes relating

relating to the forms and extent of their reſpective powers. While this controverſy was exiſting, the degree of doctor of divinity was conferred upon Mr. Gibſon by the archbiſhop, in 1702; and in the following year he was preferred to the rectory of Lambeth, and made precentor and reſidentiary of the cathedral church of Chicheſter. Soon afterwards he was appointed maſter of the hoſpital of St. Mary, with licence to retain his precentorſhip, reſidentiaryſhip, and the rectory of Lambeth. In 1710 he was promoted to the archdeaconry of Surrey; the duties of which he diſcharged with uncommon diligence. In 1713, Dr. Gibſon publiſhed his famous *Codex Juris Eccleſiaſtici Anglicani*; or, The Statutes, Conſtitution, Canons, Rubrics, and Articles, of the Church of England, methodically digeſted under their proper Heads, &c. in folio. Upon the death of archbiſhop Teniſon in 1715, and the tranſlation of Dr. Wake to Canterbury from the ſee of Lincoln, Dr. Gibſon, in conſequence of the recommendation of the new metropolitan, was nominated his ſucceſſor, and conſecrated towards the beginning of the following year. In 1721 he was appointed dean of the royal chapel, and in 1723, upon the death of biſhop Robinſon, was tranſlated from Lincoln to the ſee of London. For this important ſituation in the church, Dr. Gibſon's abilities and benevolent demeanour peculiarly qualified him. So ſenſible were the miniſtry, at this time, of his talents and diligence, that for ſeveral years, and more eſpecially during the long declining ſtate of health of archbiſhop Wake, almoſt every thing relating to the affairs of the church was, in a great meaſure, confided to the care of the biſhop of London. Soon after his tranſlation to this biſhopric, he procured an endowment from the crown for a regular courſe of ſermons on Sundays, to be preached in the royal chapel at Whitehall, by twelve clergymen of the univerſities of Oxford and Cambridge, ſelected in equal numbers from each univerſity, and appointed by the biſhop of London for the time being. He wrote and printed ſeveral paſtoral letters, addreſſed to the clergy and laity, intended to oppoſe the growth of infidelity and enthuſiaſm; as well as viſitation charges, occaſional ſermons, and ſmall tracts againſt the prevailing vices of the age. Theſe have been often reprinted in England, and alſo in Ireland, by the particular recommendation of archbiſhop Synge; and we are informed that, in the decline of his life, biſhop Gibſon received more ſatisfaction from the repeated calls for theſe practical pieces, than from the honours conferred on him by his larger works. He died at Bath in 1748, when about ſeventy-nine years of age, with true Chriſtian fortitude, and in perfect tranquillity of mind. Mr. Whiſton has recorded the following extraordinary inſtance of his generoſity; that he freely gave two thouſand five hundred pounds, which were left him by Dr. Crow, one of his chaplains, to Dr. Crow's own relations, who were in indigent circumſtances. Beſides the works which we have enumerated, his lordſhip printed a collection of Diſcourſes publiſhed by Mr. Addiſon, and others of the laity, againſt atheiſm and infidelity, and in defence of the Chriſtian religion; which he introduced with a well-written preface, exhibiting a conciſe view of the ſentiments of Mr. Boyle, Mr. Locke, and ſir Iſaac Newton, concerning Chriſtianity. He alſo made a collection of the beſt pieces that were written againſt popery during the reign of James II. and publiſhed them with a preface in 1738, in 3 vols. folio.

GIB'STAFF, *ſ.* A long ſtaff to gage water, or to ſhove forth a veſſel into the deep. A weapon uſed formerly to fight beaſts upon the ſtage.

GID'DILY, *adv.* With the head ſeeming to turn round. Inconſtantly; unſteadily:

To roam
Giddily, and be every where but at home,
Such freedom doth a baniſhment become. *Donne.*

Careleſsly; heedleſsly; negligently:

The parts that fortune hath beſtow'd upon her,
Tell her, I hold as *giddily* as fortune. *Shakeſpeare.*

GID'DINESS, *ſ.* The ſtate of being giddy or vertiginous; the ſenſation which we have when every thing ſeems to turn round.—Megrims and *giddineſs* are rather when we riſe after long ſitting, than while we ſit. *Bacon.*

Vain ſhow and noiſe intoxicate the brain,
Begin with *giddineſs*, and end in pain. *Young.*

Inconſtancy; unſteadineſs; mutability; changeableneſs.—There be that delight in *giddineſs*, and count it a bondage to fix a belief. *Bacon.*—Quick rotation; inability to keep its place.—The indignation of Heaven rolling and turning us, 'till at length ſuch a *giddineſs* ſeized upon government, that it fell into the very dregs of ſectaries. *South.*—Frolic; wantonneſs of life:

Thou, like a contrite penitent,
Charitably warn'd of thy ſins, do'ſt repent
Theſe vanities and *giddineſſes*. *Donne.*

GID'DRI, a town of European Turkey, in the province of Albania: eight miles north of Aleſſio.

GID'DY, *adj.* [ȝiddiȝ, Sax. Johnſon ſuppoſes this word to come from *gad*, to wander, to be in motion; *gad, gid, giddy.*] Vertiginous; having in the head, a whirl, or ſenſation of circular motion; ſuch as happens by diſeaſe or drunkenneſs:

Them rev'ling thus the Tentyrites invade,
By *giddy* heads and ſtagg'ring legs betray'd. *Tate.*

Rotatory; whirling; running round with celerity:

As Ixon fix'd, the wretch ſhall feel
The *giddy* motion of the whirling mill. *Pope.*

Inconſtant; mutable; unſteady; changeful.—It may be gnats and flies have their imagination more mutable and *giddy*, as ſmall birds likewiſe have. *Bacon.*

The *giddy* vulgar, as their fancies guide,
With noiſe ſay nothing, and in parts divide. *Dryden.*

That which cauſes giddineſs:

The frequent errors of a pathleſs wood,
The *giddy* precipice, and dang'rous flood. *Prior.*

The ſylphs through myſtic mazes guide their way,
Through all the *giddy* circle they purſue. *Pope.*

Heedleſs; thoughtleſs; uncautious; wild.—How inexcuſeable are thoſe *giddy* creatures, who, in the ſame hour, leap from a parent's window to a huſband's bed. *Clariſſa.*

Too many *giddy* fooliſh hours are gone,
And in fantaſtic meaſures danc'd away. *Rowe.*

Tottering; unfixed:

Upon the *giddy* footing of the hatches,
Methought that Glo'ſter ſtumbled. *Shakeſpeare.*

Intoxicated; elated to thoughtleſſneſs; overcome by any overpowering inticement.—Art thou not *giddy* with the faſhion too, that thou haſt ſhifted out of thy tale into telling me of the faſhion. *Shakeſpeare.*

Like one of two contending in a prize,
That thinks he hath done well in people's eyes;
Hearing applauſe and univerſal ſhout,
Giddy in ſpirit, gazing ſtill in doubt;
Whether thoſe peals of praiſe be his or no. *Shakeſpeare.*

To GID'DY, *v. n.* To turn quick. *Obſolete.*

A ſodaine north-wind fetcht,
With an extreme ſea, quite about againe,
Our whole endeavours; and our courſe conſtrain
To *giddie* round. *Chapman.*

GIDDYBRA'INED, *adj.* Careleſs; thoughtleſs.—Turn him out again, you unneceſſary, uſeleſs, *giddybrain'd*, aſs! *Otway.*

GIDDY-

GIDDYHEAD'ED, *adj.* Without thought or caution; without ſteadineſs or conſtancy.—That men are ſo miſaffected, melancholy, *giddyheaded*, hear the teſtimony of Solomon. *Burton.*

And ſooner may a gulling weather ſpy,
By drawing forth heav'n's ſcheme deſcry
What faſhion'd hats or ruffs, or ſuits, next year,
Our *giddyheaded* antic youth will wear. *Donne.*

GID'DYPACED, *adj.* Moving without regularity:

More than light airs, and recollected terms,
Of theſe moſt briſk and *giddypaced* times. *Shakeſpeare.*

GIDE'LI, a town of Aſia, in the province of Cabuliſtan: fifty miles ſouth-eaſt of Cabul.

GID'EON, judge of Iſrael in the thirteenth century before Chriſt. He was the ſon of Joaſh, a perſon of great conſideration in the tribe of Manaſſeh, who lived in the city of Ophrah. At the time when the memorable events in Gideon's life commenced, the Iſraelites had been for ſeven years oppreſſed and plundered by the Midianites. Gideon was therefore commiſſioned to diſperſe the army of the Midianites, Amalekites, and their allies, which in immenſe numbers had penetrated into the valley of Jezreel, with the intention of plundering and ravaging the country. Gideon collected a body of thirty-two thouſand men from the tribes of Manaſſeh, Aſher, Zebulon, and Naphtali, with whom he advanced to meet the daring invaders. Gideon formed a ſtratagem calculated to throw the vaſt hoſt of his enemies into inextricable confuſion. He divided his choſen troops into three companies, furniſhing each man with a trumpet, and an earthen pitcher containing a lamp or a torch, with directions to follow his example in the uſe of them. A little after midnight, theſe three companies were led towards different quarters of the enemy's camp; when at a concerted ſignal they broke their pitchers, diſplayed their lighted torches, ſounded their trumpets, and ſhouted at intervals, "The ſword of the Lord and of Gideon!" This ſtratagem produced an alarm and conſternation in the enemy's camp, which involved them in complete ruin. For when, ſtarting out of their ſleep, they perceived the glare of the lights breaking in upon them on three ſeveral ſides, and heard the continued ſound of the trumpets, and the loud ſhouts of the different companies, they were filled with amazement and horror, and conceiving themſelves ſurpriſed by a multitude of foes, their diſorder became irretrievable: "And the Lord ſet every man's ſword againſt his fellow, even throughout the whole hoſt." By the terror which had ſeized them, they were rendered incapable of diſtinguiſhing their friends from their enemies, and, attacking each other, a dreadful ſlaughter enſued. The remains of the mighty hoſt which eſcaped the carnage of this fatal night, fled on all ſides; when Gideon commenced his purſuit of them, ſummoning the troops which had been diſbanded to cut off their retreat, and calling upon the Ephraimites, and the other tribes neareſt the ſcene of action, to join in completing their deſtruction. Gideon was judge of Iſrael for forty years, during which time none of their enemies dared to moleſt them; and he died in a good old age, about the year 1236 before Chriſt. *Judges*, vi. vii. viii.

GI'DI-SHEH'RI, a town of Aſiatic Turkey, in the province of Natolia: eight miles ſouth of Beiſhehri.

GIDO'LA, a town of Ruſſia, in the government of Viborg: twenty miles north of Viborg.

GI'DOM, ſituated in Paleſtine, the place where the Benjamites were purſued by the other tribes of Iſrael with great ſlaughter, two thouſand of them being ſlain there. *Judges*, xx. 45.

GI'DY, a town of France, in the department of the Loiret, and chief place of a canton, in the diſtrict of Orleans: two leagues north of Orleans.

GIEBICHEN'STEIN, a town of Germany, in the circle of Lower Saxony, and duchy of Magdeburg: one mile north of Halle.

GIEDKULISZ'KI, a town of Samogitia: twenty-four miles ſouth of Roſienne.

GIEDROY'CE, a town of Lithuania, in the palatinate of Wilna: twenty-four miles north-north-weſt of Wilna.

GIEDUN'GEN, a town of Norway, in the dioceſe of Chriſtianſtadt: eighteen miles north-weſt of Stavanger.

GIEL'LUM, a town of Norway, in the dioceſe of Aggerhuus: fifty-three miles north of Chriſtiania.

GI'EN, a town of France, and principal place of a diſtrict, in the department of the Loiret, ſituated on the Loire, and containing about 4200 inhabitants: eleven leagues ſouth-eaſt of Orleans, and ſeven ſouth of Montargis. Lat. 47. 41. N. lon. 20. 17. E. Ferro.

GIEN'GEN, an imperial town of Germany, in the circle of Swabia, ſituated on the river Brentz: its aſſeſſment in the matricula of the empire is thirty-ſix florins, and its tax to the imperial chamber twenty-ſeven rix-dollars ſix kruitzers: twenty miles weſt of Donauwert, and twenty eight north-weſt of Augſburg. Lat. 48. 37. N. lon. 27. 51. E. Ferro.

GIEN'SOR, a town of Africa: ten miles ſouth of Tripoli.

GI'ER, a river of France, which runs into the Rhône, four leagues below Lyons.

GI'ER-E'AGLE, *ſ.* [ſometimes it is written *jereagle*.] A term for the gerfalcon. See the article FALCO, vol. vii. p. 189.—Theſe fowls ſhall not be eaten, the ſwan and the pelican, and the *gier-eagle*. *Lev.* xi. 18.

GIERA'CE, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra; the ſee of a biſhop, ſuffragan of Reggio: it contains thirteen churches and four monaſteries. Near it are ſome ſulphureous baths: thirty-four miles north of Reggio, and ſixty-two ſouth-ſouth-weſt of St. Severina.

GIERANO'NY, a town of Lithuania, in the palatinate of Wilna: twenty miles north-eaſt of Lida.

GIES'CHENHAGEN, a town of Germany, in the duchy of Holſtein: one mile north-weſt of Segeberg.

GIE'SIM, a town of Africa, in Nubia, between Sennaar and Abyſſinia: 150 miles eaſt-ſouth-eaſt of Sennaar.

GIES'MANSDORF, a town of Sileſia, in the principality of Neiſſe: three miles weſt-north-weſt of Neiſſe.

GIES'SEN, a town of Germany, in the circle of the Upper Rhine, and principality of Upper Heſſe. It is ſtrong, and defended by a good citadel and arſenal, and ſituated in a fertile country, on the Lahn; an univerſity was founded here in 1605: ſix miles eaſt of Wetzlar, and thirty-ſix north-eaſt of Mentz. Lat. 50. 25. N. lon. 26. 22. E. Ferro.

GIE'ZIN, a town of Samogitia: twenty-two miles eaſt-ſouth-eaſt of Roſienne.

GIFFAUMO'NT, a town of France, in the department of the Marne, and chief place of a canton, in the diſtrict of Vitry-le-François: four leagues ſouth-eaſt of Vitry.

GIF'FEN (Hubert), or *Obertus Giſanius*, an eminent philologiſt, born at Buren, in the country of Gueldres. He ſtudied at Louvain, Paris, and Orleans, at which laſt he graduated in law in 1567. He then went to Italy in the train of the French ambaſſador to Venice; and afterwards viſited Germany, where he taught philoſophy and juriſprudence at Straſburg, Altdorf, and Ingolſtadt. He was a proteſtant in his youth, but quitted that ſect for the catholic religion previouſly to his being invited to the imperial court, where the emperor Rodolph beſtowed upon him the offices of counſellor and referendary. Being ſent on a commiſſion into Bohemia, he died at Prague in 1604, aged about ſeventy. He wrote comments upon Homer, upon Ariſtotle's Politics and Ethics, and upon Lucretius. There are ſix Letters by this author in the *Sylloge Epiſt. Virorum Clariſſ.* He wrote alſo *Comment. de Imperatore Juſtiniano*; and *Index Hiſtor. Rerum Romanarum.*

GIF'FORD, [of giran, Sax. to give, or of *gib* and *fort*, Teut. *q. d.* one that is not weary of giving.] A ſurname.

GIF'HORN, a town of Germany, in the circle of Lower Saxony, and principality of Luneburg Zell, ſituated on the Allier: nineteen miles eaſt of Zell.

GIFO'NI, a town of Italy, in the kingdom of Naples, and Principato Citra: ſeven miles eaſt-north-eaſt of Salerno.

GIFT, *ſ.* A thing given or beſtowed; ſomething conferred without price.—They preſented unto him *gifts*, gold, and frankincenſe, and myrrh. *Mat.* ii. 11.

Recall your *gift*, for I your pow'r confeſs;
But firſt take back my life, a *gift* that's leſs. *Dryden.*

The act of giving:

Creator bounteous and benign,
Giver of all things good, but faireſt this
Of all thy *gifts*. *Milton.*

The right or power of beſtowing.—No man has any antecedent right or claim to that which comes to him by free *gift*. *South.*—Oblation; offering.—Many nations ſhall come with *gifts* in their hands, even *gifts* to the king of heaven. *Tob.* xiii. 11.—A bribe.—Thou ſhalt not wreſt judgment, thou ſhalt not reſpect perſons, neither take a *gift*, for a *gift* doth blind the eyes of the wiſe. *Deut.* xvi. 19.—Power; faculty.—He who has the *gift* of ridicule, finds fault with any thing that gives him an opportunity of exerting his talent. *Addiſon.*

She was lovely to attract
Thy love, not thy ſubjection, and her *gifts*
Were ſuch as made for government well ſeem'd
Unſeemly to bear rule. *Milton.*

"Look not a GIFT horſe in the mouth." The Latins ſay, *Noli equi dentes inſpicere donati*. The Italians, *A cavallao daio non guardar in bocca*. The French, *A cheval donné il ne faut pas regarder aux dents*. The Spaniards, *A cavall dáio no le mirem el diénte*. The tendency of all which is to ſhew, that whenever we find fault with the value of a free gift, we not only betray an avaricious diſpoſition, but are likewiſe guilty of a certain degree of ingratitude.

GIFT, *ſ.* in law, a conveyance which paſſeth either lands or goods. A *gift* is of larger extent than a *grant*, being applied to things moveable and immoveable; yet, as to things immoveable, when ſtrictly taken, it is applicable only to lands and tenements given in tail; but gifts and grants are ſaid to be alike in nature, and often confounded. *Wood's Inſt.* 260. The conveyance of lands by gift is properly applied to the creation of an eſtate-tail, as feoffment is to that of an eſtate in fee, and leaſe to that of an eſtate for life or years. It differs in nothing from a feoffment but in the nature of the eſtate paſſing by it: for the operative words of conveyance in this caſe are *do*, or *dedi*—*I give*, or *have given*; and gifts in tail are equally imperfect without livery of ſeiſin as feoffments in fee-ſimple. *Lit.* 59. And this is the only diſtinction that Littleton ſeems to take when he ſays, "it is to be underſtood that there is feoffor and feoffee; donor and donee; leſſor and leſſee:" *Lit.* 57; viz. feoffor is applied to a feoffment in fee-ſimple, donor to a gift in tail, and leſſor to a leaſe for life or years or at will. In common acceptation *gifts* are frequently confounded with *grants*. 2 *Comm.* 316. c. 20.

Gifts or grants for the transferring of perſonal property are thus to be diſtinguiſhed from each other: that gifts are always gratuitous; grants are upon ſome conſideration or equivalent: and they may be divided with regard to their ſubject matter into gifts or grants of chattels real, and gifts or grants of chattels perſonal. Under the former head may be included all leaſes for years of land, aſſignments and ſurrenders of theſe leaſes; and all the other methods of conveying an eſtate leſs than freehold. See the articles DEED, CONVEYANCE, ESTATE. Theſe however very ſeldom carry the outward appearance of a gift, however freely beſtowed; being uſually expreſſed to be made in conſideration of blood, or of natural affection; or of five ſhillings or ten ſhillings nominally paid to the grantor: and in caſe of leaſes, always reſerving a rent, though it be but a pepper-corn; any of which conſiderations will in the eye of the law convert the gift, if executed, into a grant: if not executed, into a contract. 2 *Comm.* 440. c. 30.

Grants or gifts of chattels perſonal are the act of transferring the right and the poſſeſſion of them, whereby one man renounces, and another immediately acquires, all title and intereſt therein: which may be done either in writing, or by word of mouth, atteſted by ſufficient evidence, of which the delivery of poſſeſſion is the ſtrongeſt and moſt eſſential. But this conveyance, when merely voluntary, is ſomewhat ſuſpicious: and is uſually conſtrued to be fraudulent, if creditors or others become ſufferers thereby; and particularly, by ſtat. 3 Hen. VII. c. 4. all deeds of gifts of goods, made in truſt to the uſe of the donor, ſhall be void, becauſe otherwiſe perſons might be tempted to commit treaſon or felony without danger of forfeiture: and the creditors of the donor might alſo be defrauded. And by ſtat. 13 Eliz. c. 5, every grant or gift of chattels as well as lands with an intent to defraud creditors or others, ſhall be void as againſt ſuch perſons to whom ſuch fraud would be prejudicial, but as againſt the grantor or giver himſelf, ſhall ſtand good and effectual: and all perſons, partakers in, or privy to, ſuch fraudulent grants, ſhall forfeit the whole value of the goods, one moiety to the king, and the other to the party grieved; and alſo on conviction ſuffer half a year's impriſonment. 3 *Rep.* 82.

A true and proper gift or grant is always accompanied with delivery of poſſeſſion, and takes effect immediately: as if A. gives to B. 100l. or a flock of ſheep, and puts him in poſſeſſion of them directly, it is then a gift executed in the donee; and it is not in the donor's power to retract it, though he did it without any conſideration or recompence, *Jenk.* 109; unleſs it be prejudicial to creditors, or the donor were under any legal incapacity, as infancy, coverture, dureſs, or the like: or if he were drawn in, circumvented, or impoſed upon, by falſe pretences, ebriety, or ſurpriſe. But if the gift does not take effect by delivery of immediate poſſeſſion, it is then not properly a gift, but a contract; and this a man cannot be compelled to perform, but upon good and ſufficient conſideration. 2 *Comm.* 441. c. 30.

As to gifts in law, when a man is married to a woman, all her goods and chattels by gift in law become the huſband's; but then he is liable for her debts: ſo if a man is made executor, the law gives him all the goods and chattels of the teſtator, ſubject to his debts. 1 *Inſt.* 351. A man by deed did give and grant, bargain and ſell, alien, enfeoff, and confirm, to his daughter certain lands: but no conſideration of money was mentioned, nor was the deed inrolled; there was likewiſe no conſideration of natural affection expreſſed, (other than what was implied in naming the grantee his daughter,) and there was no livery indorſed, or any found to have been made; nor was the daughter in poſſeſſion at the time of the deed made: and in the king's-bench it was adjudged by the court that the deed was good, and carried the eſtate to the daughter by way of covenant to ſtand ſeiſed, &c. 1 *Mod.* 157.

GIFT'ED, *adj.* Given; beſtowed:

Made of my enemies the ſcorn and gaze,
To grind in brazen fetters, under taſk,
With my heav'n-*gifted* ſtrength. *Milton's Agoniſtes.*

Endowed with extraordinary powers. It is commonly uſed ironically.—There is no talent ſo pernicious as eloquence, to thoſe who have it not under command: women, who are ſo liberally *gifted* by nature in this particular, ought to ſtudy the rules of female oratory. *Addiſon.*

GIFT'ROPE,

GIFT'ROPE, *ſ.* The rope with which the boat is faſtened to the bow of the ſhip when taken in tow.

GIG, *ſ.* [etymology uncertain.] Any thing that is whirled round in play.—Playthings, as tops, *gigs*, battledores, ſhould be procured them. *Locke.*—[*Gigia*, Iſlandic.] A fiddle. *Now out of uſe.* A quick tune or dance.

GIGALO'BIUM, *ſ.* in botany. See MIMOSA.

GIGAN'TIC, *adj.* [*gigantes*, Lat.] Suitable to a giant; big; bulky; enormous; likewiſe wicked; atrocious:

The ſon of Hercules he juſtly ſeems,
By his broad ſhoulders and *gigantic* limbs. *Dryden.*

The Cyclopean race in arms aroſe;
A lawleſs nation of *gigantic* foes. *Pope.*

GIGAN'TICNESS, *ſ.* The ſtate or quality of being gigantic.

GIGANTOM'ACHY, *ſ.* [from γιγας, a giant, and μαχομαι, Gr. to fight.] The fabulous war of the giants againſt heaven.

GIGEAU', a town of France, in the department of the Herault: ſeven miles ſouth of Montpellier.

GIG'GEO (Anthony), a learned Italian eccleſiaſtic, of the congregation of Oblati, founded by St. Charles Borromeo at Milan, and was admitted to the degree of doctor by the Ambroſian college in that city. He was the author of a Latin tranſlation of the Commentaries of R. R. Solomon, Aben Ezra, and Levi Gerſom, on the Book of Proverbs, publiſhed at Milan in 1620, 4to. and he alſo drew up a Chaldee and Targumic Grammar, adapted to the corrupted ſtate of the Chaldee dialect in the later Targums, which is preſerved in manuſcript in the Ambroſian library. But the work which principally contributed to his reputation was, *Theſaurus Linguæ Arabicæ, ſeu Lexicon Arabico-Latinum*, 1632, in four volumes, folio, which is held in great eſteem. As a recompence for the learning and induſtry which it diſcovered, pope Urban VIII. nominated him to an honourable poſt in the college *de Propaganda* at Rome; but he died when on the point of ſetting out for that city, in the ſame year in which his grand work made its appearance.

To GIG'GLE, *v. n.* [*gichelen*, Dut.] To laugh idly; to titter; to grin with merry levity:

We ſhew our preſent joking *giggling* race,
True joy conſiſts in gravity and grace. *Garrick.*

GIG'GLER, *ſ.* A laugher; a titterer; one idly and fooliſhly merry:

A ſad wiſe valour is the brave complexion,
That leads the van, and ſwallows up the cities:
The *giggler* is a milk-maid, whom infection,
Or the fir'd beacon, frighteth from his ditties. *Herbert.*

GIG'GLET, or GIGLET, or GIGLOT, *ſ.* [from *giggle.*] A wanton girl.—Away with thoſe *giglets* too. *Shakeſpeare.*

GIG'LET, *adj.* Wanton:

Young Talbot was not born
To be the pillage of a *giglet* wench.
The fam'd Caſſibelan was once at point,
Oh *giglet* fortune! to maſter Cæſar's ſword. *Shakeſpeare.*

GIGLETLI'KE, *adj.* Like a giglet; like a wanton girl.

GI'GLIO, a ſmall iſland in the Mediterranean, near the coaſt of Italy, belonging to Sienna: eleven leagues ſouth-ſouth-eaſt from the iſland of Elva. Lat. 42. 23. N. lon. 28. 40. E. Ferro.

GIG'MILL, *ſ.* A mill to dreſs woollen cloth.

GIGNAC', a town of France, in the department of the Herault, and chief place of a canton, in the diſtrict of Lodève, on the Herault: three leagues and a half ſouth-eaſt of Lodève, and four and a half weſt of Montpellier. Lat. 43. 39. N. lon. 21. 13. E. Ferro.

GI'GNY, a town of France, in the department of the Jura, and chief place of a canton, in the diſtrict of Orgelet, on the Surain: two leagues and a half ſouth-weſt of Orgelet, and four and a half ſouth of Lons-le-Saunier.

GI'GO, an iſland of Scotland, near the weſt coaſt; about five miles long, and one broad: eleven miles eaſt-ſouth-eaſt from the iſland of Ila, and a little to the weſt of the peninſula of Kintyre, in the county of Argyle. Lat. 55. 40. N. lon. 2. 35. W. Edinburgh.

GI'GOT, *ſ.* [French.] The hip joint. It ſeems to mean in Chapman a joint for the ſpit.—They broil'd on coales, and eate; the reſt, in *gigots* cut, they ſplit. *Chapm.*

GI'GOTBRANCH, *ſ.* That branch of a bridle which has the form of a leg.

GIGS, *ſ.* in farriery, a diſeaſe incident to horſes; a ſwelling on the inſide of the lips.

GI'HON, ſituated in Paleſtine, near Jeruſalem; the place where Solomon was anointed and proclaimed king of Iſrael by order of his father David. 1 *Kings* i. 33–45.

GI'HON, the name of one of the rivers that watered Paradiſe, ſaid by Moſes to compaſs the land of Ethiopia, or Cuſh. *Gen.* ii. 13.

GI'JON, a ſea-port town of Spain, in the province of Aſturia, with an ancient caſtle, formerly the capital of Aſturia, and the reſidence of king Pelagius and his immediate ſucceſſors: eighteen miles north of Oviedo. Lat. 43. 32. N. lon. 11. 5. E. Peak of Teneriffe.

GILAR'ZA, a town of the iſland of Sardinia: fifteen miles ſouth-eaſt of Boſa.

GILATTEL'KE, a town of Tranſilvania: fourteen miles north of Clauſenburg.

GIL'BERT, [of gilb, Sax. a college, and *berichten*, Teut. to inſtruct.] A proper name.

GIL'BERT (ſir Humphrey), one of the gallant adventurers of queen Elizabeth's reign, deſcended from an ancient family in Devonſhire, and born about 1539. His mother, after becoming a widow, married Mr. Raleigh, by whom ſhe had the celebrated ſir Walter, ſo that theſe congenial ſpirits were half-brothers. He firſt bore arms in the expedition to Havre, in 1563; and in that and ſeveral ſubſequent enterprizes he ſo well approved his courage and conduct, that he was ſent over to Ireland to aſſiſt in quelling the diſorders of that country, and roſe there to the chief command in the province of Munſter. As a reward for his ſucceſsful ſervices he received knighthood in 1570. In 1571, he ſerved as a burgeſs in parliament for Plymouth. His thoughts were now occupied with thoſe ſchemes for the advancement of maritime diſcovery, and the improvement of trade and navigation, which were become the moſt laudable topics of diſcuſſion in the houſe of commons; and in 1576, he publiſhed a Diſcourſe to prove a Paſſage by the North-weſt to Cathaia and the Eaſt Indies. This is ſaid to be a ſolid and ſcientific performance, written in a plain ſtyle and good method. It is probable that he himſelf deſigned to make attempts for the diſcovery of this ſuppoſed paſſage; but an anterior project was that of ſettling ſome of the countries in the northern part of America. For this purpoſe, in 1583, with the aſſiſtance of his friends, and his brother ſir Walter Raleigh, he fitted out a ſmall fleet, with which he proceeded to Newfoundland. He took poſſeſſion of the harbour of St. John, in the queen's name, and granted leaſes of the circumjacent country, as patentee, to thoſe of his company who choſe to take them. He periſhed at ſea, ſitting in the ſtern of his veſſel, with a book in his hand, and was heard to cry, "Courage, my lads! we are as near heaven at ſea as at land." He deſerves to be recorded among the benefactors to his country, for his project of ſettling Newfoundland, the fiſhery of which coaſt is of ſo much advantage to this country.

GIL'BERT (William), a phyſician and experimental philoſopher, born in 1540, at Colcheſter, of which town his father had been recorder. After ſtudying at the Engliſh univerſities, he travelled abroad for improvement. Returning to his native country, he ſettled in London about 1573, became a member of the college of phyſicians, and practiſed in his profeſſion with great reputation. Queen Elizabeth appointed him her firſt phyſician,

ſician, and gave him a penſion; and king James continued him in the ſame reſpectable poſt. He died in 1603, and was buried at Colcheſter. Dr. Gilbert has perpetuated his name by a work in natural philoſophy, which affords one of the earlieſt examples of the method of treating ſuch ſubjects on the baſis of experimental enquiry. This was his book *De Magnete, magneticiſque Corporibus, & de magno Magnete Tellure, Phyſiologia nova*, Lond. 1600, folio. This performance, the compoſition of which had occupied many years of his life, is the firſt complete ſyſtem of magnetiſm. This work has been much commended; and lord Bacon inſtances it as a very meritorious attempt to found a philoſophical theory upon experiment, according to his own principles. It may be added, that the celebrated Halley afterwards applied Gilbert's hypotheſis of a great internal magnet in the earth, to explain the variation and dipping of the needle. Dr. Gilbert's attention to the nautical art was farther evinced by his invention of two very ingenious inſtruments for aſcertaining the latitude of any place without aſſiſtance from the heavenly bodies. Long after his death a work of his was publiſhed from two manuſcript copies in the library of ſir William Boſwell, entitled *De Mundo noſtro ſublunari Philoſophia nova*, Amſt. 1651, 4to.

GIL'BERT (Jefferay, lord chief baron), born in 1674. He was appointed one of the judges of the king's bench in Ireland in 1715; and, before the end of that year, was promoted to the rank of chief baron of the exchequer, which he held till the early part of the year 1722, when he was called to England. During the time that he preſided in the court of exchequer in Ireland, he was involved in a very arduous conteſt reſpecting the right of appeal to the Britiſh houſe of lords in equity cauſes, in which he incurred the cenſure of the houſe of lords in Ireland, for "betraying the ancient undoubted rights and privileges of that houſe;" and, with his brother barons, he was ordered into the cuſtody of the uſher of the black rod. The ground of this diſpute was completely done away by the act of the 23d of Geo. III. which declares, that "the right claimed by the people of Ireland to have all actions and ſuits at law or in equity which may be inſtituted in that kingdom, decided in his majeſty's courts therein finally, and without appeal from thence, ſhall be and is thereby eſtabliſhed and aſcertained for ever."

In May 1722, ſir Jefferay Gilbert took his ſeat as one of the barons of the exchequer in England, in the room of ſir James Montague. On the 7th of January 1724, he was made one of the commiſſioners of the great ſeal, together with ſir Joſeph Jekyll and ſir Robert Raymond: the ſeal continued in commiſſion till the 1ſt of June in the year ſucceeding, when ſir Peter King was conſtituted lord keeper; and, on the ſame day, ſir Jefferay became, on the appointment of ſir Robert Eyre to the chief juſticeſhip of the common pleas, lord chief baron, which office he filled during nearly one year and a half, when he died at Bath. Thus it appears that he ſat as judge in different courts for above ſeven years in Ireland, and five in England. His moſt valuable production left to poſterity is "The Law of Evidence," an improved edition of which was publiſhed by Mr. Capel Loſft, in 2 vols. 8vo. 1791.

GIL'BERT's ISLAND, an iſland near the ſouth-weſt coaſt of Terra del Fuego. Lat. 55. 13. S. lon. 71. 7. W. Greenwich.

GIL'BERT's TOWN, a town of the American States, in Virginia: thirty miles north of Charlotteſville.

GILBER'TIA, *ſ.* in botany, a genus of the claſs decandria, order monogynia.—Calyx four or five toothed: coroſla four or five petalled; nectary cylindrical, truncate; antheræ inſerted into the margin of the nectary; capſule four-celled, the cells one-ſeeded.

Species. 1. Gilbertia decandra: leaves alternate, oblong, entire, tapering to both ends; racemes axillary. Native of the Mauritius.

2. Gilbertia ovata: leaves alternate, obovate, obtuſe, entire; peduncles one-flowered, axillary; fruit downy. 3. Gilbertia heterophylla: leaves alternate, obovate, entire, and ſinuate; peduncles one-flowered, axillary; fruit glabrous. Natives of Bourbon.

4. Gilbertia oppoſitifolia: leaves oppoſite, elliptic, rather obtuſe, entire; peduncles axillary, three-flowered. Found at the Mauritius. This genus is the Quiviſia of Cavanilles and Juſſieu.

GIL'BERTINE, *ſ.* A religious of an order thus called from St. Gilbert of Sempringham, in the county of Lincoln, who founded the ſame about the year 1148: the monks of which obſerved the rule of St. Auguſtine, and were accounted canons; and the nuns that of St. Benedict. The founder of this order erected a double monaſtery for men and women, but parted by a very high wall. St. Gilbert himſelf founded thirteen monaſteries of this order, viz. four for men alone, and nine for men and women together, which had in them ſeven hundred brethren and fifteen hundred ſiſters. At the diſſolution there were about twenty-five houſes of this order in England and Wales.

GIL'BERTINE, *adj.* [from the *ſ.*] Of the above order.—Thirteen religious houſes of the ſame order had in them ſeven hundred *Gilbertine* brethren, and eleven hundred ſiſters. *Weever.*

GILBO'A, the name of a range of mountains ſituated in Paleſtine, near which the Iſraelites under king Saul were totally defeated by the Philiſtines. In this battle the three ſons of Saul, Jonathan, Abinadab, and Malchiſhua, were ſlain in the field; and Saul being greatly wounded, at length fell a voluntary victim to his own ſword. 1 *Sam.* xxxi.

To GILD, *v. a.* pret. *gilded*, or *gilt*, [gilban, Sax.] To waſh over with gold; to cover with foliated gold:

Purchaſing riches with our time and care,
We loſe our freedom in a *gilded* ſnare. *Roſcommon.*

Her joy in *gilded* chariots when alive,
And love of ombre, after death ſurvive. *Pope.*

To colour with any yellow matter:

Thou did'ſt drink
The ſtale of horſes, and the *gilded* puddle,
Which beaſts would cough at. *Shakeſpeare.*

To adorn with luſtre:

No more the riſing ſun ſhall *gild* the morn,
Nor ev'ning Cynthia fill her ſilver horn. *Pope.*

To brighten; to illuminate.—The lightſome paſſion of joy was not that trivial, vaniſhing, ſuperficial, thing, that only *gilds* the apprehenſion, and plays upon the ſurface of the ſoul. *South.*—To recommend by adventitious ornaments:

For my part, if a lie may do thee grace,
I'll *gild* it with the happieſt terms I have. *Shakeſpeare.*

Yet, oh! th' imperfect piece moves more delight:
'Tis *gilded* o'er with youth to catch the ſight. *Dryden.*

GILD, *ſ.* [gilban, Sax. to pay.] A tax, a tribute, a contribution; a ſociety, a fraternity.

GILD'ABLE, *adj.* Liable to pay a gild.

GILD'ALE, *ſ.* A drinking-bout where every one pays an equal ſhare. *Scott.*

GIL'DAS, ſurnamed THE WISE, a Britiſh monk in the ſixth century, and the moſt ancient Britiſh writer now extant, born in the year 520. He is alſo by many authors ſurnamed BADONICUS, to diſtinguiſh him from a GILDAS ALBANIUS, who is ſuppoſed to have lived at an earlier period. He was a diſciple of Iltutus, abbot of Morgan, and became a monk of Bangor, where he diligently applied himſelf to the learning of the times; and particularly to the ſtudy of the Scriptures, in order to qualify himſelf for the duties of a public preacher. In 581, he wrote his *Epiſtola de Excidio Britanniæ, & Caſtigatione*

gatione Ordinis Eccleſiaſtici, containing a lamentation over the miſeries of his countrymen, and ſevere reproofs of the corruption and profligacy of manners in which all ranks were ſharers, and of which he draws a melancholy picture. Archbiſhop Uſher refers this epiſtle to the year 564; but Cave, on the authority of Ralph de Dicetus, Polydore Virgil, Bale, &c. gives it the date which we have adopted. This curious remain of Britiſh eccleſiaſtical antiquities was firſt printed by Polydore Virgil, in 1525, 8vo. from an imperfect and corrupt copy; which edition was followed in the eighth volume of the *Biblioth. Patr.* It was afterwards publiſhed in 1568, by John Joſſeline, from another manuſcript not much more correct than the former. The lateſt and beſt edition of it was publiſhed by the learned Dr. Thomas Gale, from a more ancient and perfect manuſcript than either of the preceding, in 1691, in the firſt volume of his *Hiſtoriæ Britannicæ, Saxonicæ, &c.* Gildas alſo wrote ſeveral Letters, of which there are numerous fragments in an old collection of Canons, preſerved among the manuſcripts in the Cotton library. Other pieces which have been aſcribed to him by Bale, Pitts, &c. are conſidered by the beſt judges to be either clearly ſuppoſititious, or the productions of other authors. In the latter number is the *Hiſtoria de Geſtis Britonum*, which was written by Nennius. With reſpect to the time of Gildas's death there is alſo much difference among writers, ſome ſtating it to have taken place at the abbey of Glaſtonbury, in the year 570; while according to others, he died at the abbey of Bangor, in 590.

There was another GILDAS, whom Bale calls the fourth of that name, who was of Iriſh extraction, but born in Wales, where he embraced the monaſtic life, and flouriſhed in 820 and the following years. He wrote a Kalendar of the Saints, which is to be found among the manuſcripts of the Cotton library, the preface of which is inſerted by archbiſhop Uſher in his *Epiſt. Hibernic.* p. 55. Leland alſo makes mention of another GILDAS, who was a poet, and who is ſaid to have drawn up the prophecies of Merlin in Latin verſe, and to have compoſed a number of epigrams, which Giraldus Cambrenſis pronounced to be not inelegant.

GIL'DEHAUSZ, a town of Germany, in the circle of Weſtphalia, and county of Bentheim: three miles ſouth-weſt of Bentheim.

GIL'DER, *ſ.* One who lays gold on the ſurface of any other body.—*Gilders* uſe to have a piece of gold in their mouth, to draw the ſpirits of the quickſilver. *Bacon.*—A coin, from one ſhilling and ſixpence to two ſhillings:

I am bound
To Perſia, and want *gilders* for my voyage. *Shakeſpeare.*

GILD'ING, *ſ.* The art of laying gold on any ſurface by way of ornament; for as mankind could not have every thing that they wiſhed for of gold, they were contented with covering over, or incruſting, many articles with this precious metal. For that purpoſe the gold was hammered into plates, with which various articles of furniture, and even the walls of apartments, were in early ages covered. It was this exceſs of vanity that incurred the cenſure of the philoſopher: "When we cover our houſes with gold," ſays Seneca, "what elſe do we do than rejoice in deception? for we know that coarſe wood is concealed under that gold." It was perhaps in imitation of this ancient luxury, that the rajah of Ghergong was induced to line his palace with plates of poliſhed braſs. See the article GHERGONG.

At firſt the plates of gold adapted to this uſe were thick, ſo that gilding in this manner was very expenſive; but in proceſs of time the expence was much leſſened, in proportion as the art was diſcovered of making theſe gold plates thinner. Articles, however, ornamented in this manner were ſtill coſtly, becauſe the valuable metal was always liable to be loſt or purloined. Yellow golden ſize, and bronze, were then tried; but theſe did not fully produce the required effect, as they wanted that ſplendour peculiar to the precious metal, and appeared languid and dull. It was not till modern times that artiſts thought of overlaying with ſilver, or ſome cheaper white metal, thoſe things which they wiſhed ſhould have the appearance of gold, and then covering them over with a yellow tranſparent varniſh, in order to give to the white metal the colour of gold, and to that colour the ſplendour of metal. This ingenious proceſs, which is employed all over Europe in gilding wooden frames, coaches, and various articles, and which was formerly uſed in the preparation of the ſplendid leather tapeſtry, was invented towards the end of the ſixteenth century. Anderſon, in his "Origin of Commerce," ſays, that it was introduced into England by one Evelyn, in 1633; and quotes, in ſupport of this aſſertion, The preſent State of England, printed in 1683. This invention, however, does not belong to the Engliſh, but to the Italians, and properly to the Sicilians. Antonino Cento, an artiſt of Palermo, found out the gold varniſh now in uſe, and in 1680 publiſhed an account of the method of preparing it, which is as follows: "Take gum lac, and having freed it from its impurities, put it into a ſmall linen bag, and waſh it, in pure water, till the water no longer becomes red; then take it from the bag and ſuffer it to dry. When it is perfectly dry, pound it very fine; becauſe the finer it is pounded it will diſſolve the more readily. Then take four parts of ſpirit of wine, and one of the gum, reduced, as before directed, to an impalpable powder, ſo that for every four pounds of ſpirit you may have one of gum: mix theſe together, and, having put them into an alembic, graduate the fire ſo that the gum may diſſolve in the ſpirit. When diſſolved, ſtrain the whole through a ſtrong piece of linen cloth; throw away what remains in the cloth, as of no uſe, and preſerve the liquor in a glaſs bottle cloſely corked. This is the gold varniſh employed for gilding any kind of wood."

For the purpoſe of gilding metals, the artizan either covers the metal directly with a leaf of gold, or he forms an amalgam of gold and quickſilver, with which he rubs the metal, and afterwards volatilizes the quickſilver by means of heat. This has been uſually called *water-gilding*; a term probably at firſt confined to ſuch proceſſes only as demand the uſe of a ſolution of gold in aqua regia, now called *nitro-muriatic acid*. The ſucceſs of this operation depends in a great meaſure on the attention that is paid to render perfectly clean the ſurface of the metal which is to be united to the gold, becauſe then the junction is more perfect. Silver, copper, braſs, and pinchbeck, may be gilded with eaſe by either of the two above-mentioned methods; but ſteel and iron oppoſe many obſtacles, and cannot be gilded in a permanent manner by any of the proceſſes hitherto diſcovered. The reaſon is, that the ſurface of ſteel and iron cannot be kept perfectly clean during the operation. In this proceſs, therefore, it is neceſſary to begin with heating the iron or ſteel upon which it is propoſed to apply the gold. This circumſtance requires particular attention on the part of the artiſt; for if he does not heat it enough, he runs the riſk of not obtaining a ſufficient power of adheſion; and if he heats it too much, he is liable to ſubject the metal to the commencement of oxydation, beſides incurring the danger of deſtroying the temper of ſharp ſteel inſtruments, as ſwords, daggers, &c. that are to be heated.

Gilding with the Amalgam and Nitrat of Mercury.—The difficulty of the operation, and the danger of its failure, are augmented, if it is intended to gild iron or ſteel by means of the amalgam; for as the metal has no affinity with the mercury, an intermediate matter is required to diſpoſe its ſurface to receive it. For this purpoſe the parts that are to be gilded are wetted with a ſolution of mercury in nitrous acid, which mordant is denomi-

nated by artiſts *mercurial water*. The acid, which has a greater affinity for the iron than for the mercury, attacks the former, and depoſits a thin layer of mercury inſtead of that of iron, which it takes away. This layer effects the union of the amalgam which is then applied with the iron; which combination would not have taken place without it. But by this proceſs the ſurface of the iron is injured by the action of the nitric acid, and the union is ſo ſlight that a brilliant and durable gilding can never be produced by this method.

Gilding with the Amalgam and the Sulphat of Copper.—Sometimes with a camel-hair pencil a ſolution of ſulphat of copper is applied to that part of the ſteel which is propoſed to be gilded. By a chemical affinity, exactly ſimilar to that juſt deſcribed, a thin layer of copper is precipitated upon the iron. The copper having an affinity for the mercury, is capable of ſerving as an intermediate ſubſtance, and effecting a kind of union between the amalgam and the iron. But in both of theſe proceſſes the ſurface of the ſteel is always injured by the action of the acid, and in both a degree of heat muſt likewiſe be employed ſufficient to volatilize the mercury. In conſequence of theſe diſadvantages moſt artiſts adopt the firſt proceſs, which conſiſts in applying the gold-leaf to the metal when hot, and in fixing it by the action of the burniſher. This proceſs is troubleſome, but the ſurface of the iron is leſs liable to be injured by it.

Improved Proceſs for gilding Iron or Steel.—This proceſs is as yet but little known. Into a ſolution of gold in nitro-muriatic acid pour about twice the quantity of ether; this mixture ſhould be made with care, and in a large veſſel. Shake the two liquids together, and as ſoon as the mixture has ſettled, the ether will be ſeen ſeparating from the nitro-muriatic acid, and floating on the ſurface. The acid becomes colourleſs, and the ether acquires a colour, becauſe it takes away the gold from the acid. The two liquids are poured into a glaſs funnel, the pipe of which muſt be very ſmall, and muſt be ſtopped till the two fluids have ſettled, when they will be completely ſeparated from each other. Being then opened, the acid which, on account of its weight, is lowermoſt, runs out the firſt; when it is entirely drawn off, ſtop the funnel, which then contains only the ſolution of gold in ether; this is put into a phial, well corked, and kept for uſe. To gild iron or ſteel with this preparation, firſt poliſh the ſurface with the fineſt emery, or rather with colcothar moiſtened with brandy. Then, with a ſmall bruſh or pencil, apply the auriferous ether; the liquid ſoon evaporates, and the gold remains. Heat, and afterwards rub it with the burniſher. By means of this ſolution of gold in ether, the artiſt may, with a pen or pencil, trace all kinds of figures upon iron, which is the method employed for plating the wares of Sohlingen. As every artiſt may not have at hand the receipts for the beſt method of preparing nitro-muriatic acid and ether, we ſhall here ſubjoin them.

For the Solution of Gold in Nitro-muriatic Acid.—Into a ſufficient quantity of nitrous acid put as much ſal-ammoniac as it is capable of diſſolving cold, and even in a cool place. Into this acid put gold reduced to filings or thin leaves, and place it in a ſituation where it will become warm till the metal is completely diſſolved. The ſolution aſſumes a yellow colour, being that of the gold, and ſtains the ſkins of animals purple.

Method of preparing Sulphuric Ether.—Into a large retort put one pound and a half of highly-rectified ſpirit of wine, to which pour ſlowly two pounds of the moſt concentrated ſulphuric acid, ſlightly agitating the mixture as you add the acid. The mixture will become warm, and the vapours that will be abundantly diſengaged will have a pungent ſmell. When you have poured in all the ſulphuric acid, add half a pound of ſpirit of wine, which will rince the neck of the retort on its paſſage; mix the whole well, and let it ſtand for ſome time, previouſly cloſing the mouth of the retort. Place it afterwards on a ſand-bath; adapt to it a large recipient, and kindle the fire: it ſhould be ſlow and moderate, and the heat ought not to be communicated to the recipient. Continue the operation till a ſulphuric ſmell is emitted from the globe of the recipient. Unlute and collect the produce, which is a mixture of ether, acidulated water, ſpirit of wine, ſulphuric acid, and a carbonic matter. To rectify this, put it again into a retort; and after adding a ſmall quantity of alkali to abſorb the acid, place the retort on the ſand-bath, which heat very moderately; the firſt half of the liquid that paſſes over is extremely pure ether. The reſidue of the firſt diſtillation may be employed to prepare a farther quantity of ether. It will be ſufficient to pour upon it ſome good ſpirit of wine, but leſs in quantity by one-third than the firſt time; diſtil, rectify, &c. Thoſe who may find a difficulty in preparing ether may ſubſtitute for that liquid an eſſential oil, as ſpirit of lavender, oil of turpentine, &c. theſe liquids poſſeſs the property of ſeparating gold from a nitro-muriatic ſolution.

Of gilding Silver cold.—Independently of the preceding methods, ſilver may be gilded cold, and with great eaſe, by means of the following proceſs. Diſſolve ſome gold in nitro-muriatic acid, and dip linen rags in the ſolution. Burn the rags, carefully preſerving the aſhes, which will be very black, and, by retaining the gold are found much heavier than common aſhes. Rub them on the ſurface of the ſilver you intend to gild, for which purpoſe a piece of leather or cork may be employed. This action attaches the particles of gold to the ſurface of the ſilver; waſh the latter, when you will perceive ſome ſlight traces of gilding; which will appear much more diſtinctly when rubbed with the burniſher. This proceſs is uſually called *dry-gilding*.

Of gilding Braſs.—The ſurface of delicate inſtruments made of braſs may be preſerved a conſiderable time uninjured, by gilding them in the following manner. Procure a ſolution of ſaturated gold, and after having evaporated it to the conſiſtence of oil, leave it to cryſtallize. Diſſolve the cryſtals in pure water, and after plunging into this ſolution the articles that are to be gilded, waſh them in pure water, and ſubmit them to the action of the burniſher. Repeat the proceſs till they are completely gilded. The ſolution of the cryſtals of nitro-muriat of gold is preferable to a ſimple ſolution of the metal, becauſe the latter always contains a portion of acid at liberty, which attacks more or leſs powerfully the ſurface of the braſs, and deſtroys its poliſh.

Method of Gold-varniſhing Braſs.—A varniſh, very much reſembling the gold varniſh of Palermo deſcribed above, may be applied to braſs, by covering it with a ſolution of gum-lac in ſpirit of wine. It preſerves its brilliancy as long as the varniſh laſts. The articles prepared in this way muſt not be rubbed with too hard a bruſh, or with chalk; they muſt only be wetted with linen rags. This varniſh is prepared in the following manner. Diſſolve two ounces of very pure gum-lac in forty-eight ounces of alkohol, and place the ſolution upon a ſand-bath in a moderate heat. To prevent part of the ſpirit of wine from evaporating, as well as the veſſel from burſting if too cloſely ſtopped, cover the neck with a bladder, in which ſeveral holes muſt be made with a pin. In another veſſel, and in the ſame quantity of ſpirit of wine, diſſolve an ounce of gum-tragacanth, in grains. Mix the two ſolutions when complete; put into it three grains of ſanders wood, and let the whole ſtand for twelve hours in a moderate heat. Filtre through paper, and keep it for uſe in a very clean phial. Sanders wood is preferable to any other ſubſtance for giving a gold colour to the varniſh made with lac. If you intend it to be pale, and not to alter the colour of the braſs, omit this colouring principle; and if you want a higher gold yellow, add half as much more wood as the quantity ſpecified above.

Painting with gold upon porcelain or glaſs, is done with the powder of gold, which remains behind after diſtilling the aqua regia, or nitro-muriatic acid, from a ſolution of that metal. It is laid on with borax and gum water, burned in, and poliſhed. The gilding of glaſs is commonly effected by covering the part with a ſolution of borax, and applying gold leaf upon it, which is afterwards fixed by burning.

The gilders of wood and other compoſitions deſigned to ſupply the place of carved work, make uſe of two methods: the one called *oil-gilding*, or gilding in oil, becauſe the gold is made to adhere by means of an oily compoſition; the other is commonly called *burniſhed gold*, on account of the burniſh it is capable of receiving, which is one of the principal advantages it poſſeſſes over the other method.

Gilding in oil is performed by means of a paint ſold under the name of gold ſize. It conſiſts of drying oil, that is to ſay, linſeed oil boiled upon litharge, and mixed with yellow ochre. It is ſaid to improve in its quality by keeping. This is laid upon the work; and when it has become ſo dry as to adhere to the fingers without ſoiling them, the gold leaf is laid on, and preſſed down with cotton. This method of gilding is proper for work intended to be expoſed to the weather.

The method of gilding in burniſhed gold, conſiſts in covering the work with parchment ſize and whiting, thinly laid on at five or ſix different times. This is covered with a yellow ſize made of Armenian bole, a little wax, and ſome parchment ſize; but in this, as in moſt other compoſitions uſed in the arts, there are variations which depend on the ſkill of the artiſt. When the ſize is dry, the gold is applied upon the ſurface previouſly wetted with clear water. A certain number of hours after this application, but previous to the perfect hardening of the compoſition, the gold may be very highly burniſhed with a tool of agate made for that purpoſe. This gilding is fit only for work within doors; for it readily comes off upon being wetted.

The edges of the leaves of books are gilded by applying a compoſition of one part Armenian bole, and one quarter of a part ſugar-candy, ground together with white of eggs. This is burniſhed with a dog's tuſk, or ivory poliſher, while the book remains in the preſs, and the gold is laid on by means of a little water.

The gold prepared for painting, or enamelling, is called *ſhell-gold* or *gold-powder*, and may be obtained by amalgamating one part of gold with eight of quickſilver, and afterwards evaporating the latter, which leaves the gold in the form of powder; or otherwiſe the metal may be reduced to powder by mechanical trituration. For this purpoſe, gold-leaf muſt be ground with honey or ſtrong gum-water for a long time; and when the powder is ſufficiently fine, the honey or gum may be waſhed off with water.

Leather may be gilded either with leaf-braſs or ſilver, but moſt commonly by the latter; in which caſe a gold-coloured varniſh is laid over the metal, as directed above. Tin-foil is now very frequently uſed inſtead of ſilver-leaf, for this leſs perfect kind of gilding; but it muſt only be uſed upon ſuch works as do not poſſeſs flexibility. Among the falſe gilding may alſo be reckoned that which is made with the thin leaves of copper or braſs, called *Dutch-leaf*, upon the ſurface of paper in diverſe figures and flowers, and denominated *gilt imboſſed paper*, commonly uſed for the coverings of children's books, and for ornaments of various kinds.

By ſeveral ancient ſtatutes, the gilding of any metal but ſilver, and church ornaments; or ſilvering any thing except the apparel of peers, &c. and metal for knights' ſpurs, is liable to forfeiture of ten times the value, and a year's impriſonment. None ſhall gild rings or other things made of copper or latten, on pain to forfeit five pounds to the king, and damages to the party deceived. For gilding ſilver wares, no perſon may take above four ſhillings and eight-pence for a pound of troy weight, under penalties. 5 *Hen.* IV. c. 13. 2 *Hen.* V. c. 4. 8 *Hen.* V. c. 3.

GILD'MERCHANT, *ſ.* One of thoſe merchants which have privilege to hold pleas of lands among themſelves. *Scott.*

GIL'DO, ſon of Nabal, and brother to the tyrant Firmus, ſerved the emperor Theodoſius in his brother's revolt in 373 with ſo much fidelity, that the forfeited patrimony of the family was beſtowed upon him, and he was raiſed to the dignity of the chief command in Africa. When diſſenſions aroſe between the eaſtern and weſtern empires, Gildo was perſuaded by the miniſter Eutropius to revolt from Honorius his legal ſovereign, and acknowledge Arcadius. In the mean time a deadly feud aroſe between Gildo and his younger brother Maſcezel, in which the latter had been obliged to take refuge at the court of Honorius. Gildo inſtantly ſatiated his vengeance upon the two children of his brother, whom he barbarouſly murdered. Maſcezel, burning for revenge, was employed by Stilicho to lead a choſen but ſmall body of Europeans to the invaſion of Africa. They landed in 398, and encamped in the face of the army of Gildo, which was ſoon overthrown and defeated. Gildo eſcaped to the ſea-ſhore, where he embarked with an intention of ſeeking a foreign refuge, but being driven by adverſe winds to the harbour of Tabraca, he was ſeized by the inhabitants and thrown into priſon. There, an act of ſuicide ſaved him from the fate he had to expect from an injured brother. His revolt was conſidered as an event of ſo much importance to the empire, that the poet Claudian made the "Gildonic war" the ſubject of one of his tributes to the honour of the hero Stilicho; but it is come down to us in a mutilated ſtate.

GILD'RENT, *ſ.* Certain rent payable to the king from any gild or fraternity.

GIL'EAD (Land of), or MOUNT GILEAD, a part of Paleſtine, ſituated eaſt of Jordan, which, previous to its conqueſt by Iſrael, formed a part of the kingdom of the Amorites, whoſe laſt king, Sihon, in attempting to hinder their paſſage through his territory, loſt both his kingdom and his life. Gilead being part of their firſt acquiſition in Paleſtine, Moſes immediately, in compliance with their requeſts, divided one half to the tribe of Gad; the other to the half-tribe of Manaſſeh in Baſhan; as a part of their reſpective inheritances. It is frequently ſtyled Mount Gilead from the range of mountains forming its eaſtern boundary; and its uncommon fertility is celebrated throughout Scripture; hence we read of the balm and the flocks of Gilead, of its being a place for cattle, and of the Iſhmaelites and Midianites trading here for ſpicery, balm, and myrrh, even in the days of the patriarch Jacob. It is alſo remarkable for ſeveral events: here Jacob was overtaken by his uncle Laban; here the Ammonites encamped againſt Iſrael in the days of Jephtha; here Iſh-boſheth the ſon of Saul was proclaimed king by Abner in oppoſition to David; and here the armies of Iſrael and of Abſalom pitched, when Abſalom rebelled againſt David his father. It is alſo celebrated in the Maccabean wars for the battles fought by them under Judas, and is diſtinguiſhed by the names of *Galaad* or *Galead*. Several eminent perſons were natives of this place: Jair, who judged Iſrael twenty-two years; Jephtha, who judged Iſrael ſix years; and Barzillia, David's friend. Elijah the prophet alſo dwelt here. *Gen.* xxxi. 23. xxxvii. 25. *Numb.* xxxii. 1. *Deut.* ii. 26, &c. iii. 1–17. *Joſh.* xiii. 24–31. *Judges*, x. 3, 17. xi. 1, 29. 2 *Sam.* ii. 9. xvii. 26, &c. 1 *Macc.* v.

GIL'EAD, the ſon of Machir, and grandſon of Manaſſeh, had his inheritance allotted him in the mountains of Gilead, whence he took his name.

GIL'EAD (Balm of). See AMYRIS.

GIL'EADITE, *ſ.* An inhabitant of Gilead; a deſcendant of Gilead.

GILES, [*ægidius*, Lat. a ſhield, of αιγις, Gr. a goat's ſkin.] A proper name of men.

GILES OF VITERBO, a learned Italian prelate, deſcended from an obſcure family in the city whence he took his ſurname; and when eighteen years of age he embraced the monaſtic life among the hermits of St. Auguſtine. He diſtinguiſhed himſelf by the progreſs which he made in different branches of literature, and was appointed ſucceſſively profeſſor of philoſophy and theology in his order. He alſo acquired a high reputation for pulpit oratory, and is ſpoken of as one of the moſt able preachers of his time. He was employed by pope Julius II. to open the council aſſembled at the Lateran in the year 1512; and in 1517 was ſent legate into Germany by pope Leo X. on which occaſion he was promoted to a cardinal's hat. Afterwards he was ſent legate into Spain, and employed in many important negociations. He was at different periods nominated biſhop of Viterbo, Neni, Caſtro, Sutri, and patriarch of Conſtantinople. He died at Rome in 1532. Among the works which he left behind him are, 1. Remarks on the firſt three Chapters of Geneſis. 2. Commentaries on ſome of the Pſalms. 3. Dialogues. 4. Epiſtles. 5. Poems in Latin, &c. Fathers Martenne and Durand, in the third volume of their *Ampliſſima Collectio veterum Monumentorum*, have inſerted many letters of this prelate and his correſpondents, which are intereſting on account of the particulars contained in them relating to the events of the period in which he lived.

GIL'GAL, [Heb. rolling.] A town of Paleſtine, ſituated on the weſt bank of Jordan, eaſtward of Jericho, and probably in the tribe of Benjamin. Here the Iſraelites encamped immediately after their paſſage through Jordan; placing twelve ſtones taken from thence in this place; from Gilgal alſo they took the like number to place in the bed of Jordan, in commemoration of that event. Here alſo the ordinance of circumciſion was renewed by Joſhua, from which circumſtance it obtained the name of *Gibeah-haaraloth*, (i. e. the hill of the foreſkins,) and alſo Gilgal; God having declared, he had rolled away the reproach of Egypt from off them. Here likewiſe they kept the paſſover; and it continued to be the head-quarters of the Iſraelitiſh army during the conqueſt of Canaan. Though in Scripture it is not expreſsly ſtiled a city, yet it may be preſumed that was the caſe, as the prophet Samuel came here yearly to adminiſter juſtice. Here he proclaimed Saul king; and here he deſtroyed Agag king of the Amalekites; here alſo the men of Judah met king David on his return from his victory over Abſalom. *Joſh.* iv. 19, 20. v. 1–10. x. 15–43. 1 *Sam.* vii. 16. xi. 15. xv. 33. 2 *Sam.* xix. 15.

GIL'GAL HAM'NITHIM, *ſ.* [Heb. the rolling of the dead.] A tradition among the Jews, that at the coming of the Meſſiah, all the dead bodies of the Iſraelites, wherever they were buried, ſhall roll under ground to the holy land, and thence be raiſed up at the reſurrection. *Scott.*

GIL'GE, a town of Pruſſia, in the province of Smaland; twenty-eight miles north-weſt of Konigſberg.

GIL'GENBURG, a town of Pruſſia, in the province of Oberland: eighty miles ſouth-ſouth-weſt of Konigſberg.

GILIBER'TIA, or GILBERTIA, of Gmelin, the ſame with the QUIVISIA of Cavanilles and Juſſieu. See GILBERTIA.

GIL'IMER, or GELIMER, a deſcendant of the famous Genſeric, and the laſt king of the Vandals in Africa. See the article VANDALS.

GIL'ITZSTAIN, a town of Germany, in the duchy of Carinthia: ten miles eaſt-north-eaſt of St. Veit.

GILL (John), a learned Engliſh nonconformiſt divine, of the baptiſt denomination, born at Kettering in Northamptonſhire, in 1697. His father, who was of the ſame perſuaſion, ſent him early to a neighbouring grammar-ſchool, where he ſoon outſtript his companions in his claſſical acquirements. He was then taken home to aſſiſt in the buſineſs of his father; though he poſſeſſed an unconquerable love of learning, and diligently improved the hours of leiſure from buſineſs, not only to preſerve, but greatly to extend, his acquaintance with claſſical literature. Without any other aſſiſtance than Buxtorf's Grammar and Lexicon, he ſurmounted the difficulties of the Hebrew tongue, ſo as to be able to read the Hebrew Bible with great eaſe and pleaſure. In the mean time he had peruſed ſuch books on theological and controverſial ſubjects, as confirmed him in the calviniſtic principles in which he had been educated, and the diſtinguiſhing tenet of the ſect to which his father belonged; and as his mind was under the influence of ſtrong religious impreſſions, he was baptiſed, and received into communion with the baptiſt church at Kettering, in 1716. He had not been long a member of this church, before he commenced preaching in private, and was ſoon afterwards called by the congregation to the occaſional exerciſe of the miniſtry in public. In 1719 he was made paſtor of the baptiſt congregation in Horſlydown, in London, when in the twenty-ſecond year of his age; the duties of which ſituation he diſcharged for upwards of fifty-one years; and at the ſame time purſued his literary ſtudies with wonderful aſſiduity, as is ſufficiently apparent from his voluminous and laborious productions. When he had, in 1748, publiſhed the third volume of his Expoſition of the New Teſtament, the degree of doctor of divinity was conferred upon him by the Mariſchal college of Aberdeen. In 1767, Dr. Gill extracted, for Dr. Kennicott's uſe, the variations from the modern printed texts in the paſſages of the Old Teſtament quoted in the Talmuds, both of Jeruſalem and Babylon, and in the Rabboth; for which Dr. Kennicott, in the ſtate of his collation printed during the ſame year, acknowledged himſelf highly indebted to him. By his very laborious application, however, Dr. Gill brought on a decay of nature, to which he fell a ſacrifice in 1771, in the ſeventy-fourth year of his age. His ſentiments were ſtrictly calviniſtic; and his moral conduct not only unimpeachable, but exemplary. He was the author of, 1. An Expoſition of the Old and New Teſtament, in 9 vols. folio, publiſhed at different periods from 1746 to 1766. 2. A Body of Divinity, 1769 and 1770, in 3 vols. 4to. 3. The Cauſe of God and Truth, 1735, in defence of Calviniſm againſt the Arminians. 4. A Supplement to Mr. Whiſton's Eſſay towards reſtoring the true Text of the Old Teſtament, 1723, 8vo. intended to vindicate the divine authority and ſpiritual ſenſe of Solomon's Song. 5. The Prophecies of the Old Teſtament reſpecting the Meſſiah, conſidered, and proved to be literally fulfilled in Jeſus, 1728, 8vo. chiefly written in anſwer to Collins's Scheme of literal Prophecy conſidered. 6. A treatiſe On the Doctrine of the Trinity, 1731, 8vo. 7. A Diſſertation on the Antiquity of the Hebrew Language, Letters, Vowel Points, and Accents, 1767, 8vo. together with numerous ſingle ſermons, controverſial tracts on baptiſm, &c.

GILL, a townſhip of the American States, in Hampſhire county, Maſſachuſetts, on the weſt bank of Connecticut river.

GILL, *ſ.* [*agulla*, Span. *gula*, Lat.] The apertures at each ſide of a fiſh's head.—Fiſhes perform reſpiration under water by the *gills*. *Ray.*

The leviathan,
Stretch'd like a promontory, ſleeps or ſwims,
And ſeems a moving land, and at his *gills*
Draws in, and at his trunk ſpouts out, a ſea. *Milton.*

The flaps that hang below the beak of a fowl.—The turkeycock hath great and ſwelling *gills*, and the hen hath leſs. *Bacon.*—The fleſh under the chin.—Like the long bag of fleſh hanging down from the *gills* of the people in Piedmont. *Swift.*—[From *gilla*, barbarous Latin.] A meaſure of liquids, containing the fourth part of a pint.—Every bottle muſt be rinced with wine:

a *gill*

a *gill* may be enough. *Swift.*—A kind of meaſure among the tinners.—They meaſure their block-tin by the *gill*, which containeth a pint. *Carew.*—In the northern counties it is half a pint of liquid meaſure.—[From *Gillian*, the old Engliſh way of writing *Julian*, or *Juliana*.] The appellation of a woman in ludicrous language.—Each Jack with his *Gill*. *Ben Jonſon.*—The name of ground-ivy. See GLECHOMA. Malt liquor medicated with ground-ivy. A place hemmed in with two ſteep brows or banks, a rivulet running between them. *Ray.*—You may continue along this *gill*, and paſſing by one end of the village and its church for half a mile, it leads to an opening between two hills covered with fir-woods. *Gray's Letters.*

GILL'-HOUSE, *ſ.* A houſe where ardent ſpirit is ſold by the gill:

Thee ſhall each alehouſe, thee each *gill-houſe*, mourn,
And anſw'ring ginſhops ſourer ſighs return. *Pope.*

GIL'LEM's BAY, a bay on the ſouth coaſt of the iſland of St. Chriſtopher: half a league weſt of Baſſeterre.

GIL'LES (Peter), born at Albi, in 1490, diſtinguiſhed himſelf as a ſcholar and a traveller. After acquiring the knowledge of the learned languages and the philoſophy of the times, he viſited the coaſts of Provence, and thence travelled into Italy, making obſervations in natural hiſtory and antiquities. After his return, he paſſed ſome time with George d'Armagnac biſhop of Rhodes, afterwards cardinal, who engaged him to compoſe his book *De Vi et Natura Animalium*; dedicated to Francis I. in 1533; and ſome time after, that prince ſent him to travel in the Levant. He neglected, however, to furniſh him with proper ſupplies, ſo that, after undergoing many hardſhips, he was obliged to enliſt in the troops of ſultan Solyman II. for a ſubſiſtence. From Conſtantinople he returned in the train of the French ambaſſador in 1550, and went to Rome to his patron the cardinal d'Armagnac, where he died in 1555. Beſides the work already mentioned, he publiſhed ſome tranſlations from the Greek; and alſo two geographical pieces, *De Boſphoro Thracio*, *Lib.* III. and, *De Topographia Conſtantinopoleos*, *Lib.* IV. which are eſteemed as learned and accurate performances.

GIL'LES (Peter), a Swiſs proteſtant divine, who flouriſhed in the ſeventeenth century. He was miniſter of the reformed church at La Tour, in the valley of Lucerne, and author of ſome controverſial pieces in defence of the proteſtants againſt the catholics; and alſo of, An Eccleſiaſtical Hiſtory of the Churches of the Vaudois, publiſhed at Geneva in 1644, in 4to.

GILLESKA'AL, a town of Norway, in the dioceſe of Drontheim: two hundred and forty miles north of Drontheim.

GIL'LET, *ſ.* [the diminutive of *gill*.] A woman, in droll ſtyle.

GIL'LIFLOWER, *ſ.* ſee DIANTHUS; STOCK, ſee CHEIRANTHUS; QUEEN's, OR DAME's VIOLET, ſee HESPERIS.

GIL'LINGHAM, a ſmall ancient town in Dorſetſhire, ſituated on the Stour, near the foreſt of its own name; where, anno 1016, Edmund Ironſide vanquiſhed the Danes. It has a fair on Trinity Monday, and September 1. It is one of the largeſt pariſhes in the county, being forty-one miles in circuit, containing ſixty-four thouſand acres, trending chiefly on the borders of Wilts and Somerſet, four miles north-weſt of Shaftſbury. It has a manufacture of linen, but the chief produce is grazing and the dairies. Near it are the traces of an ancient reſidence of Norman or Saxon kings, 320 feet long, and 240 broad, ſurrounded by a rampart of earth. Henry I. reſided here, and king John repaired it at the expence of the county. Edward I. ſpent his Chriſtmas here in 1270; but the whole of the materials are removed, and the foundation of the houſe only can be traced, which was in the form of the letter L, in length one hundred and eighty feet, by eighty broad, and the foot of the letter forty-eight by forty. The area of the houſe contained 168,000 ſquare feet. It ſtood half a mile from the church, on the road to Shaftſbury, encompaſſed by a moat, now dry, in ſome places nine feet deep and twenty broad. The rampart appears to have been thirty feet thick. Here is a free-ſchool well endowed, a workhouſe, and two ſtone bridges. In 1694 it received damage to the amount of near 4,000l. by a fire. The church is a large ancient fabric.

GIL'LINGHAM, in Kent, diſtant one mile from Brompton, three from Chatham, and on the ſame ſide of the Medway. Part of Chatham dock is ſituated in this pariſh; and here is a caſtle well furniſhed with guns that command the river. At this place ſix hundred Norman gentlemen, who came over in the retinue of the two princes Alfred and Edward, were barbarouſly murdered by earl Godwin. The archbiſhop of Canterbury had here an elegant palace, the ancient hall of which is now converted into a barn. Near it are the remains of the chapel, &c. and a great part of the whole of its original outer walls may be traced.

GILLO'RI, an iſland of the American States, on the coaſt of Weſt Florida, divided from Dauphin Iſland by a narrow channel, through which a boat may paſs with ſome difficulty; and between Gillori and the main land, on the weſt ſide of Mobile Bay, there is a chain of ſmall iſlands, through which is a paſſage of four feet, called Paſſe au Heron.

GILL'SAY, a ſmall iſland of Scotland, between Lewis and North Viſt.

GIL'LY LOU'GH, a lake of Ireland, in the county of Sligo: two miles weſt of Sligo.

GIL'LY-SUR-LOI'RE, a town of France, in the department of the Saône and Loire, and chief place of a canton, in the diſtrict of Bourbon Lancy, ſituated on the Loire: one league and a half ſouth of Bourbon Lancy.

GIL'MANTOWN, a townſhip of the American States, in Strafford county, New Hampſhire, ſouth-weſterly of lake Winnipiſeogee, and fifty-two miles north-weſt of Portſmouth. It was incorporated in 1727, and contained 775 inhabitants in 1775; and in 1790, 2613.

GI'LOH, a city of Paleſtine, belonging to the tribe of Judah, ſituated in the mountains of that province. It was the birth-place of Ahithophel, Abſalom's wife counſellor. *Joſh.* xv. 51. 2 *Sam.* xv. 12.

GIL'OLO, one of the Molucca iſlands, in the Eaſtern Indian Ocean; about ſeventy leagues long, and two hundred and fifty in circumference, ſubject to the Dutch. It is ſaid the air is very hot and unwholeſome, that the country is very fertile in rice and ſago. The natives are repreſented to be well made, but ſavage and cruel, living without laws or fixed habitations. It neither bears cloves or nutmegs. The equinoctial line runs through the ſouthern part of it. Lon. 128. E. Greenwich.

GIL'ONITE, *ſ.* An inhabitant of Giloh.

GIL'PIN (Bernard), an excellent Engliſh divine, diſtinguiſhed by the title of *Apoſtle of the North*, deſcended from a reſpectable family in Weſtmoreland, and born at Kentmire in that county, in 1517. At ſixteen years of age he was ſent to the univerſity of Oxford, and entered a ſcholar on the foundation at Queen's college. In 1539 he took his degree of bachelor of arts; and in 1541 that of maſter of arts; and about the ſame time was elected fellow of his college, and admitted into holy orders. Mr. Gilpin's attachment to an academic life, determined him to prolong his ſtay at Oxford till he reached the thirty-fifth year of his age. In the mean time he had commenced bachelor in divinity in the year 1549. In 1552 his friends obtained for him the vicarage of Norton, in the dioceſe of Durham, which with much

difficulty he was prevailed upon to accept; but before he went to reſide on it, he was appointed to preach before his majeſty at Greenwich. While Mr. Gilpin was in London, he frequently viſited Tonſtal biſhop of Durham, who was his uncle, and at that time a priſoner in the Tower under a ſentence of miſpriſion of treaſon. From London Mr. Gilpin repaired to his pariſh, where he made it his principal endeavour to inculcate moral virtue, and to diſſuade from thoſe vices which he obſerved moſt prevalent. Yet a diffidence of himſelf aroſe, which gave him ſome uneaſineſs. He thought that he had engaged too ſoon in his office; and that he could not ſufficiently diſcharge it. He therefore reſigned his living, and determined to go abroad. He went firſt to Mechlin, and then to Louvain; and made frequent excurſions to Antwerp, Ghent, Bruſſels, and other places in the Low-countries, but chiefly reſided at Louvain, where he was introduced to perſons of the greateſt reputation for their learning.

After Mr. Gilpin had reſided two years in Flanders, he left Louvain and went to Paris, where his firſt care was to ſuperintend the printing of biſhop Tonſtal's Treatiſe on the Euchariſt, which he did to that prelate's entire ſatisfaction. In Paris he continued about twelve months; and having fully ſatisfied all his ſcruples on the ſubject of religion, and being firmly convinced of the truth of the general doctrines of the Reformation, he returned to England in 1556. Immediately upon his arrival he haſtened to viſit biſhop Tonſtal, who received him with great friendſhip, and gave him the archdeaconry of Durham, to which the rectory of Eaſington was annexed. He now repaired to his pariſh, which he found in great diſorder; but with a firm reſolution of doing what good he could in it, he ſet himſelf in earneſt to reprove vice, to encourage virtue, and to explain the nature of true religion, with a freedom by no means ſuited to thoſe dangerous times. Againſt non-reſidence and pluralities he inveighed with the greateſt earneſtneſs, and cenſured with equal freedom the vices of the clergy, by which they diſgraced their order, and eſſentially injured the intereſts of religion. This ſo much irritated the clergy in the dioceſe, that a charge of hereſy, conſiſting of thirteen articles, was drawn up againſt him; and he was accuſed in form before the biſhop of Durham. But Tonſtal, by ſkilful management, found a method of diſmiſſing the cauſe ſo as to protect his nephew, without endangering himſelf. The malice of his enemies, however, would not ſuffer Mr. Gilpin to remain in peace, and they made uſe of the baſeſt arts to inflame the people againſt him. By theſe means they created him ſo much trouble, that he found himſelf incapable of undergoing the fatigue of both his places, and begged leave of the biſhop to reſign either his archdeaconry or his pariſh; but his lordſhip would not ſuffer them to be ſeparated, which occaſioned Mr. Gilpin to reſign them both, and to enter the biſhop's family in the capacity of his domeſtic chaplain. Mr. Gilpin did not remain long unbeneficed; for a vacancy taking place about this time in the rich rectory of Houghton-le-ſpring, he was preſented to that incumbency. This living was of conſiderable value, but the duty of it was proportionally laborious. It was ſo extenſive, that it contained no leſs than fourteen villages; all of which had been ſhamefully neglected. Upon his arrival, the people crowded about him, and heard him with great attention, perceiving him to be a teacher of a very different kind from thoſe to whom they had hitherto been accuſtomed; and by his truly paſtoral and affectionate treatment, he quickly gained their confidence, reſpect, and attachment. Mr. Gilpin had not been long ſettled at Houghton, before biſhop Tonſtal was deſirous of ſtill farther improving his fortune, by preſenting him to a vacant prebend in the cathedral of Durham. But Mr. Gilpin, reſolving not to accept of it, told the biſhop, "That by his bounty he had already more wealth, than, he was afraid, he could give a good account of. He begged, therefore, that his lordſhip would beſtow this preferment on one by whom it was more wanted." Mr. Gilpin now lived in a retired manner, devoting himſelf with unwearied induſtry to the inſtruction and reformation of his flock, and cautiouſly avoiding every opportunity of giving offence to the neighbouring clergy. The exemplarineſs of his conduct and manners, however, was a ſtriking ſatire on their negligence and irregularities; and their malice determined them, if poſſible, to remove ſo diſagreeable a contraſt. With this deſign they drew up a ſecond ſet of articles againſt him, and brought him once more before the biſhop of Durham; who again found means to protect his nephew. But from this period the biſhop's favour towards him viſibly declined; probably, becauſe he apprehended that his farther patroniſing his kinſman, who, he thought, in many inſtances, carried his piety and zeal to exceſs, might tend to involve himſelf in ſuſpicions and inconveniences. To ſhew his diſlike of his conduct, he ſtruck him out of his will, of which he had before made him the executor. This was not leſs than Mr. Gilpin expected. He was ſorry, indeed, to ſee the biſhop diſguſted; acknowledged his great obligations to him; and would have given up any thing to ſatisfy him, excepting his conſcience. The malice of Mr. Gilpin's enemies had now its full force. Enraged at their ſecond defeat, they cauſed thirty-two articles to be drawn up againſt him, and tranſmitted them to the mercileſs Bonner, biſhop of London. Mr. Gilpin was ſpeedily appriſed of the meaſures taken againſt him, and earneſtly entreated to provide for his ſafety by withdrawing from the kingdom. But their perſuaſions were ineffectual; for having long been preparing himſelf to ſuffer for the truth, he now determined not to ſhrink from it. He therefore waited with great compoſure for the arrival of Bonner's meſſengers, after having ordered his ſervant to provide a long garment for him, in which he might go decently to the ſtake. Within a few days he was apprehended; but before he reached London an account of queen Mary's death met him on the road, by which event he was delivered from any farther perſecution. Mr. Gilpin, thus providentially reſcued from his enemies, returned to Houghton through crowds of people, who expreſſed the utmoſt joy on his deliverance.

Upon the acceſſion of queen Elizabeth, Mr. Gilpin's friends at court thought it a good opportunity to uſe their intereſt in his favour. He was accordingly recommended to the queen, and nominated by her majeſty to the biſhopric of Carliſle; but Gilpin, who knew nothing of what was going forwards in his favour, could not by any means be perſuaded to accept it. In 1561 he had an offer made him of the provoſtſhip of Queen's college, Oxford; but this likewiſe he declined, and contented himſelf with his living of Houghton, where he beſtowed an unwearied application to his paſtoral duties. He was not ſatisfied with giving his advice in public, but inſtructed frequently in private, and encouraged his pariſhioners to come to him for the ſolution of their doubts and difficulties. Towards thoſe whom he thought well-diſpoſed, his manner was moſt engaging; and even his reproofs were urged with ſuch gentleneſs, that they rarely gave offence, and always appeared to be the effects of friendſhip. He well knew, however, that it was an eaſier taſk to prevent vice, than to correct it; to form the young to virtue, than to reform the bad habits of the old. He therefore employed much of his time in endeavouring to improve the minds of the younger part of his pariſh; ſuffering none to grow up in an ignorance of their duty, but preſſing it, as the wiſeſt part, to mix religion with their labour, and amidſt the cares of this life to have a conſtant eye upon the next. He was alſo very aſſiduous in preventing law-ſuits among his pariſhioners. His hall was often thronged with people who came to him to ſettle their differences.

differences. He had alſo a juſt concern for all under affliction, and was a much readier viſitant at the houſe of mourning than at the houſe of feaſting: and his large fund of reading and experience always furniſhed ſomething that was conſolatory. Hence he was called the good angel, by all in diſtreſs. His hoſpitable manner of living was the admiration of the whole country. Strangers and travellers found a cheerful reception at his board. All were welcome that came; and even their beaſts had ſo much care taken of them, that it was humourouſly ſaid, "If a horſe was turned looſe in any part of the country, it would make its way to the rector of Houghton." Every Sunday, from Michaelmas until Eaſter, was a ſort of public day with him; during which ſeaſon he expected to ſee all his pariſhioners and their families. He was alſo glad of the company of men of worth and letters, who uſed much to frequent his houſe. When lord Burleigh, then lord-treaſurer, was ſent by queen Elizabeth to tranſact ſome affairs in Scotland, he could not reſiſt the deſire which he felt on return to ſee a man, whoſe free diſcourſe from the pulpit to king Edward's court had early recommended him to his notice, and whoſe name he found every where mentioned with the higheſt veneration. He had not time to give notice of his intended viſit; but the economy of ſo plentiful a houſe as Mr. Gilpin's was not eaſily diſconcerted. He received his noble gueſt with ſo much true politeneſs, and treated him and his whole retinue in ſo affluent and generous a manner, that the treaſurer would often afterwards ſay, "he could hardly have expected more at Lambeth." While lord Burleigh ſtaid at Houghton, he had an opportunity of ſeeing true ſimplicity of manners, and every ſocial virtue, regulated by exact prudence. At length, with reluctance, he took his leave, embracing the worthy paſtor with all the warmth of affection. When he had mounted a hill about a mile from Houghton, which commands the vale, he turned his horſe to take one more view of the place, and having kept his eye fixed upon it for ſome time, his reverie broke out into this exclamation: "There is the enjoyment of life, indeed! Who can blame that man for not accepting a biſhopric! What does he want to make him greater, or happier, or more uſeful to mankind!"

But Mr. Gilpin's miniſterial labours were not confined to his own pariſh. With concern he obſerved ſeveral of the pariſhes around him ſunk in ſuperſtition and ignorance, owing to the ſhameful neglect of the paſtoral care in their clergy. Theſe bad conſequences induced Mr. Gilpin to ſupply, as far as he could, what was wanting in others. For this purpoſe he uſed every year regularly to viſit the moſt neglected pariſhes in Northumberland, Yorkſhire, Cheſhire, Weſtmoreland, and Cumberland; and that his own pariſh in the mean time might not ſuffer, he was at the expence of a conſtant aſſiſtant. As Mr. Gilpin had all the warmth of an enthuſiaſt, though under the direction of a calm judgment, he never wanted an audience even in the wildeſt parts; where he rouſed many to a ſenſe of religion who had contracted the moſt inveterate habits of inattention to every thing of a ſerious nature. Wherever he came, he would viſit all the gaols and places of confinement, and by his labours and affectionate manner of behaviour, reformed many abandoned perſons in thoſe places. Upon the borders of Northumberland there is a tract of country called Reads-dale and Tine-dale, of all barbarous places in the north at that time the moſt barbarous. Before the act of union it was called the *debateable land*, and was peopled by a kind of deſperate banditti, rendered fierce and ſavage by conſtant alarms. They lived by theft; uſed to plunder on both ſides of the barrier; and what they plundered on one, they expoſed to ſale on the other; by that means eſcaping juſtice. In this lawleſs country, where no man would even travel that could help it, Mr. Gilpin never failed to ſpend ſome part of every year. He had ſet places for preaching, which were as regularly crowded as the aſſize towns of a circuit. If he came to a place where there was a church, he made uſe of it; if not, of barns, or any other large building; where multitudes were ſure to attend him, ſome for his inſtructions, and others for his charity. The hazards and fatigues attending this employment were exceſſive; but theſe Mr. Gilpin cheerfully underwent, eſteeming himſelf abundantly compenſated by the advantages which he hoped would accrue from them to his uninſtructed fellow-creatures. The diſintereſted pains which he thus took among theſe illiterate people, and the good offices which he was always ready to do them, drew from them the ſincereſt expreſſions of gratitude.

On proper occaſions, likewiſe, Mr. Gilpin afforded evidence that he wanted neither reſolution nor ſpirit to reprove the vices of the great, and to maintain his own independence and dignity. One day he received a meſſage from Dr. Barnes, biſhop of Durham, appointing him to preach a viſitation ſermon on the following Sunday. As he was then preparing for a fixed journey into Reads-dale and Tine-dale, he ſent to acquaint the biſhop with the neceſſity of his keeping that appointment, and to intreat that his lordſhip would at that time excuſe him. His ſervant informed him that the biſhop had received his meſſage, but returned no anſwer. Concluding him therefore to be ſatisfied, he ſet out on his journey; but to his great ſurpriſe, when he came home, found himſelf ſuſpended: ſome perſon, out of enmity to him, having engaged the biſhop to take that haſty ſtep. A few days afterwards he received an order to meet the biſhop at Cheſter, a town in the dioceſe of Durham, where the biſhops of that ſee formerly reſided. Here many of the clergy were aſſembled, and Mr. Gilpin was ordered by the biſhop to preach that day before them. Mr. Gilpin went up, and determined to embrace that opportunity of ſpeaking ſome home truths to his dioceſan. The eccleſiaſtical court of Durham was at that time managed in the moſt ſcandalous manner. The biſhop was a well-meaning but weak man, and entirely governed by a relation who abuſed his authority. Private information of the evils and irregularities occaſioned by his miſconduct had often been conveyed to the biſhop, but without any ſucceſs. Mr. Gilpin was therefore reſolved to make his diſcourſe the medium of a public application to the biſhop for redreſs. Accordingly, he honeſtly and plainly expoſed the enormities which were committed in his dioceſe; and in a perſonal addreſs to his lordſhip boldly informed him, that for the guilt of them he would be reſponſible, if, after being fully appriſed of what was amiſs, he did not bring about an entire reformation. The freedom of Mr. Gilpin's language alarmed his friends, who as he went out of church reproved him, for giving to the biſhop that advantage over him which he had long ſought after; but Mr. Gilpin aſſured them that if his diſcourſe ſhould do the good which he intended by it, he was regardleſs what the conſequence might be to himſelf. Afterwards he waited upon the biſhop, to pay his compliments to him before he went home, when the prelate ſaid, "Sir, I propoſe to wait upon you home myſelf." This he accordingly did; and as ſoon as Mr. Gilpin had taken him into a parlour, the biſhop turned ſuddenly round, and graſped him eagerly by the hand, ſaying, "Father Gilpin, I know you are fitter to be the biſhop of Durham, than I am to be parſon of this church of yours. I aſk forgiveneſs for paſt injuries. I know you have enemies; but, while I live biſhop of Durham, none of them ſhall cauſe you any farther trouble."

We have noticed Mr. Gilpin's uncommonly generous and hoſpitable manner of living, and extenſive benevolence, to which the income ariſing from his rectory, though conſiderable, muſt have been inadequate with-

out great frugality. But he was ſtill unſatisfied with the ſervices he had rendered to his fellow-creatures; and upon queen Elizabeth's recommending the eſtabliſhment of free ſchools, to the ſurpriſe of his friends, he undertook to build and endow a grammar-ſchool: a deſign which his exact economy enabled him to accompliſh. This ſchool was no ſooner opened than it began to flouriſh; and there was ſo great a reſort of young people to it, that in a little time the town was not able to accommodate them. Mr. Gilpin, therefore, fitted up a part of his houſe for that purpoſe, where he boarded twenty or thirty children, beſtowing clothing and maintenance on the greater part of them, whoſe parents were in poor circumſtances. To inſure their good inſtruction he procured able maſters from Oxford, and himſelf conſtantly inſpected their proficiency, taking notice of and encouraging the moſt diligent and forward. He likewiſe ſent ſeveral of them to the univerſities, where he maintained them at his own expence, and endeavoured to render an academical education as uſeful to them as poſſible. For this purpoſe he held a conſtant correſpondence with their tutors, and made the youths themſelves frequently write to him and give him an account of their ſtudies; and he alſo made journeys to the univerſities, generally once every other year, to examine into their behaviour, and to give them the benefit of his perſonal advice. In the latter part of his life, Mr. Gilpin went through his duty with great difficulty. His health was much impaired, and his conſtitution broken, by the great fatigues which he had undergone during ſo many years. He died in 1583, in the ſixty-ſixth year of his age. Such was the life of Bernard Gilpin, who, for his exemplary piety, laborious virtue, and unbounded benevolence, deſerves to have his name tranſmitted to poſterity in letters of gold. To the particulars already mentioned concerning him we may add, that his imagination, memory, and judgment, were lively, retentive, and ſolid. By his unwearied application he had amaſſed a great ſtock of knowledge, and was ignorant of no part of learning at that time in eſteem. In languages, hiſtory, and divinity, he particularly excelled, and was no mean poet, though he expended little time in the purſuit of any ſtudies foreign to his profeſſion. He had a very extraordinary ſkill in the art of managing a fortune. He conſidered himſelf barely as a ſteward for other people; and took care, therefore, that his own deſires never exceeded what calm reaſon could juſtify. Extravagance with him was another word for injuſtice; and in his own manner of living he was very temperate, and rather abſtemious. And whatever his other virtues were, their luſtre was greatly increaſed by his ſincerity and humility, which his religion led him to practiſe in the moſt unaffected and amiable manner. But the moſt diſtinguiſhing parts of his character were, his conſcientious diſcharge of the miniſterial office, his extenſive benevolence, and his exalted piety, which, taken in connection with the uniform tenor of his virtuous and exemplary life, deſervedly gained him among his contemporaries the title of the "Northern Apoſtle."

GIL'SON, a townſhip of the American States, in Cheſhire county, New Hampſhire, ſituated on the eaſt ſide of Aſhuelot river, and joins Keene on the ſouth.

GILT, *ſ.* Golden ſhow; gold laid on the ſurface of any matter. *Now obſolete.*—When thou waſt in thy *gilt*, and thy perfume, they mockt thee for too much curioſity: in thy rags thou know'ſt none, but art deſpiſed for the contrary. *Shakeſpeare.*—Gold money.—Though guilt condemns, 'tis *gilt* muſt make us glad. *Middleton's Mad World.*

Have for the *gilt* of France (O guilt indeed!)
Confirm'd conſpiracy with fearful France. *Shakeſpeare.*

GILT, [the participle of GILD, which ſee].—Where the *gilt* chariot never mark'd its way. *Pope.*

GILT'HEAD, *ſ.* A fiſh; for which ſee SPARUS.—He blended together the livers of *giltheads*, the brains of pheaſants and peacocks, tongues of phenicopters, and the melts of lampreys. *Hakewill.*

GIM, *adj.* Neat; ſpruce; well dreſſed. *An old word.*

GI'MAR, a town of the iſland of Cuba: ſix miles eaſt of Havannah.

GIM'BALS, *ſ.* A contrivance by means of which barometers, veſſels of oil, the mariner's compaſs, &c. may be ſuſpended ſo as to arrange their upper parts horizontally. The nature of this contrivance will be at once underſtood, by ſhewing its application to a mariner's compaſs. It conſiſts of a hoop or ring ſupported upon two pins diametrically oppoſite each other, and iſſuing from the external ſurface of the ring in ſuch a direction, that both lie in the ſame diametrical line. When the hoop is ſuſpended on theſe pins, it is at liberty to turn freely about the diameter, of which they conſtitute the prolongation, the notches or holes of ſupport are diſpoſed horizontally. The compaſs-box itſelf is placed in a ſimilar ring with two projecting pivots; and theſe pivots are inſerted in holes made in the former ring, at equal diſtances from each of its pivots. If, therefore, the whole be left at liberty, the compaſs-box may vibrate upon the diametrical line of the outer ring, as well as upon a line formed by its own pivots, at right angles to that diametral line. The conſequence of this arrangement is, that the centre of gravity of the compaſs-box will diſpoſe itſelf immediately beneath the interſection of both lines on which it is at liberty to move: that is to ſay, if the weight of the box and its component parts be properly diſpoſed, the compaſs will aſſume a poſition in which the upper ſurface ſhall be horizontal.

GIM'BORN, a citadel of Germany, in the circle of Weſtphalia, which gives name to a lordſhip, united with Neuſtadt; erected in the year 1631, with a ſeat and voice in the circle of Weſtphalia: eight miles ſouth-ſouth-eaſt of Wipperfurt.

GIM'CRACK, *ſ.* [Suppoſed by Skinner to be ludicrouſly formed from *gin*, derived from *engine*.] A ſlight or trivial mechaniſm.—What's the meaning of all theſe trangrams and *gimcracks?* jumping over my maſter's hedges, and running your lines croſs his grounds? *Arbuthnot.*

For though theſe *gimcracks* were away,
However more reduc'd and plain,
The watch would ſtill a watch remain. *Prior.*

GI'MESCH, a town and caſtle of Hungary: ten miles weſt of Bukans.

GIMIGLIA'NO, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra: ten miles eaſt of Nicaſtro.

GIM'LET, *ſ.* [*gibelet*, *guimbelet*, Fr.] A borer with a ſcrew at its point.—The *gimlet* hath a worm at the end of its bit. *Moxon.*

GIM'MAL, *ſ.* [Suppoſed by Skinner and Ainſworth to be derived from *gimellus*, Lat. and to be uſed only of ſomething conſiſting of correſpondent parts, or double. It ſeems rather to be gradually corrupted from *geometry*, or *geometrical*. Any thing done by occult means is vulgarly ſaid to be done by geometry. It may probably be a corruption of GIMBAL, which ſee.] Some little quaint devices or pieces of machinery. *Hanmer.*

I think by ſome odd *gimmals* or device
Their arms are ſet like clocks, ſtill to ſtrike on,
Elſe they could not hold out ſo as they do. *Shakeſpeare.*

GIM'MAL, *adj.* [from the *ſ.*] Conſiſting of links.—A *gimmal* ring with one link hanging. *Brewer's Lingua.*

In their pale dull mouths the *gimmal* bit
Lies foul with chew'd graſs, ſtill and motionleſs. *Shakeſp.*

GIM'MER, *ſ.* Movement; machinery.—The holding together of the parts of matter has ſo confounded me,

me, that I have been prone to conclude with myſelf, that the *gimmers* of the world hold together not ſo much by geometry as ſome natural magic. *Moore.*

GIMO'NE, a river of France, which runs into the Garonne, near Riviere-Verdun.

GIMO'NT, a town of France, in the department of the Gers, and chief place of a canton, in the diſtrict of Auch: four leagues eaſt of Auch, and ſeven ſouth-ſouth-eaſt of Lectoure. Lat. 43. 37. N. lon. 18. 33. E. Ferro.

GIMP, *ſ.* [See GIM. *Gimp*, in old Engliſh, is neat, ſpruce.] A kind of ſilk twiſt or lace.

GIMP-WORK, *ſ.* The work which is formed of gimp; the act of making gimp. *Scott.*

GIM'ZO, a city of Paleſtine, ſituated moſt probably in the tribe of Judah; taken by the Philiſtines in the reign of Ahaz king of Judah. 2 *Chron.* xxviii. 18.

GIN, *ſ.* [from *engine.*] A trap; a ſnare.—Be it by *gins*, by ſnares, by ſubtilty. *Shakeſpeare.*

He made a planetary *gin*,
Which rats would run their own heads in.—
Keep from flaying ſcourge thy ſkin,
And ancle free from iron *gin*. *Hudibras.*

Any thing moved with ſcrews, as an engine of torture.—Typhæus' joints were ſtretched on a *gin*. *Spencer.*—A pump worked by rotatory ſails.—The delfs would be ſo flown with waters, it being impoſſible to make any adits or ſoughs to drain them, that no *gins* or machines would ſuffice to lay and keep them dry. *Ray.*

[In mechanics.] A machine for raiſing great weights, uſually conſtructed of three long legs, diſpoſed in a triangular poſition.

[Contracted from GENEVA, which ſee.] The ſpirit drawn by diſtillation from juniper berries:

This calls the church to deprecate our ſin,
And hurls the thunder of our laws on *gin*. *Pope.*

To GIN, *v. n.* [uſed in poetry for] To begin.—*Ginning* in the middle. *Shakeſpeare's Prol. to Troilus & Creſſida.*

GIN, a town of China, of the third rank, in the province of Pe-tcheli: ten miles ſouth-eaſt of Chun-te.

GIN'-DRINKING, *adj.* Addicted to drinking gin.—The common ſoldier can delight himſelf with his *gin-drinking* trull. *Spenſer's Crito.*

GIN-HO'A, a town of China, of the third rank, in the province of Quan-tong: twenty-two miles north of Chao-tcheou.

GIN-HO'AI, a town of China, of the third rank, in the province of Se-tchuen: thirty-two miles ſouth of Tche-li-leou.

GIN-KIA'-CANTZE, a town of Chineſe Tartary. Lat. 41. 45. N. lon. 141. 15. E. Ferro.

GIN-KIEOU', a town of China, of the third rank, in the province of Pe-tcheli: ſeventeen miles north of Ho-kien.

GIN-PIN, a town of China, of the third rank, in the province of Chan-tong: ſeventeen miles north-eaſt of Tong-tchang.

GINAI'RI, a town of Africa, in the kingdom of Kumbo.

GINASER'VIS, a town of France, in the department of the Var, and chief place of a canton, in the diſtrict of Barjols: three leagues north-weſt of Barjols.

GIN'DANES, a people of Lybia, who fed on the leaves of the lotus. *Herodotus.*

GIN'DES, in ancient geography, a river of Albania, flowing into the Cyrus. There was another of the ſame name in Meſopotamia.

GINER'CA, a town of the iſland of Corſica, ſituated in a ſmall bay to which it gives name: thirteen miles ſouth of Calvi.

GINES'TAS, a town of France, in the department of the Aude, and chief place of a canton, in the diſtrict of Narbonne: two leagues and a half north-weſt of Narbonne, and three eaſt of Azille.

GIN'GEE, a town and fortreſs of Hindooſtan, in the Carnatic, once the capital of a kingdom of the ſame name, ſituated on a mountain, and defended by three caſtles: thirty-four miles north-weſt of Pondicherry, and ſeventy ſouth-weſt of Madras. Lat. 12. 16. N. lon. 79. 36. E. Greenwich.

GIN'GER, a ſmall iſland in the Weſt Indies: ten miles ſouth-ſouth-weſt of Virgin Gorda.

GIN'GER, *ſ.* [*zinziber*, Lat. *gingero*, Ital.] A plant of great value; for the cultivation of which ſee the article AMOMUM, vol. i. p. 480. The root of *ginger* is of a hot, acrid, and pungent, taſte, though aromatic, and of a very agreeable ſmell. The Indians eat the young ſhoots of the leaves, and the roots likewiſe.

GIN'GERBREAD, *ſ.* A kind of farinaceous ſweetmeat made of dough, like that of bread or biſcuit, ſweetened with treacle, and flavoured with ginger and ſome other aromatic ſeeds. It is ſometimes gilt.—An' I had but one penny in the world, thou ſhould'ſt have it to buy *gingerbread*. *Shakeſpeare.*

Her currants there and gooſeberries were ſpread,
With the inticing gold of *gingerbread*. *King's Cook.*

GIN'GERLY, *adv.* [Derivation unknown.] Cautiouſly; nicely.—What is't that you took up ſo *gingerly*? *Shakeſpeare.*

GIN'GERNESS, *ſ.* Niceneſs; tenderneſs.

GIN'GERWINE, *ſ.* A kind of made wine impregnated with ginger.

GINGIDI'UM, *ſ.* in botany. See ARTEDIA, DAUCUS, and TORDYLIUM.

GINGI'RO, a kingdom of Africa, ſituated to the ſouth-weſt of Abyſſinia. Lat. 5. N. lon. 30. E. Greenwich.

GINGI'VÆ, *ſ.* In anatomy, the gums; the ſpongy fleſh that ſurrounds the ſockets of the teeth.

GIN'GIVAL, *adj.* [*gingiva*, Lat.] Belonging to the gums.—Whilſt the Italians ſtrive to cut a thread in their pronunciation between D and T, ſo to ſweeten it, they make the occluſe appulſe, eſpecially the *gingival*, ſofter than we do, giving a little of perviouſneſs. *Holder on Speech.*

To GIN'GLE, *v. n.* To utter a ſharp clattering noiſe; to utter a ſharp noiſe in quick ſucceſſion:

Once, we confeſs, beneath the patriot's cloak,
From the crack'd bag the dropping guinea ſpoke,
And *gingling* down the backſtairs, told the crew,
Old Cato is as great a rogue as you. *Pope.*

To make an affected ſound in periods or cadence, as in low or mongrel verſes.

To GIN'GLE, *v. a.* To ſhake, ſo that a ſharp ſhrill clattering noiſe ſhould be made:

Her infant grandame's whiſtle next it grew,
The bells ſhe *gingled*, and the whiſtle blew. *Pope.*

GIN'GLE, *ſ.* A ſhrill reſounding noiſe. Affectation in the ſound of periods.

GIN'GLYMOID, *adj.* [γιγλυμος, a hinge, and εἶδος, Gr. form.] Reſembling a ginglymus; approaching to a ginglymus.—The malleus lies along, fixed to the tympanum, and on the other end is joined to the incus by a double or *ginglymoid* joint. *Halder.*

GIN'GLYMUS, *ſ.* In anatomy, a mutual indenting of two bones into each other's cavity, in the manner of a hinge, of which the elbow is an inſtance. *Wiſeman.*

GINGST, a town of Germany, in the circle of Upper Saxony, in Pomerania: eight miles north-weſt of Bergen.

GIN'HEIM, a town of Germany, in the circle of the Upper Rhine, and county of Hanau-Munzenberg: three miles weſt-north-weſt of Frankfort on the Maine, and eleven weſt of Hanau.

GINK'GO, *ſ.* in botany, the MAIDENHAIR TREE.—This tree grows to a prodigious ſize, with a trunk fre-

quently as thick as the largeſt oak; the branches are alternate and ſpreading. Leaves alternate, petioled, wedge-ſhaped, rounded on the upper edge, where they are ſlightly gaſhed or notched unequally, with a large ſinus in the middle, dividing them into two lobes: they come out in bundles at the knots or tubercles of the branches, are ſmooth, and finely ſtriated by numerous parallel forked veins, but they have neither rib nor nerve, and are not much unlike the leaves of maiden-hair; they are from an inch and half to three inches in width; and the petioles are about two inches long, ſlightly channelled, pubeſcent at the baſe above, with the edges of the leaf running down the top. Of the fructification we yet know very little with certainty. The flowers are male and female ſeparate, probably on different trees. The male flowers were produced in 1795, in the royal botanic garden at Kew, *but in a ſtate not ſufficiently perfect to determine the characters abſolutely.* They come out in April, before the leaves, and from the ſame bud with them, towards the ends of the branches; on aments or catkins, as Kæmpfer deſcribes them, pendant and longiſh, abounding in pollen. The female flowers are probably ſolitary or few in number in the axils of the leaves, Kæmpfer having aſſigned this ſituation to the fruits, which he ſays grow on a thick fleſhy peduncle an inch in length, and having figured them ſingle: he deſcribes them as round or oblong, of the appearance and ſize of a Damaſcene plum or damſon, with a warted ſurface becoming yellow as the fruit ripens, and a fleſhy, juicy, white, pulp, adhering very cloſely to the nut, which reſembles that of the piſtachia, but is almoſt double the ſize, and more of the form of an apricot-ſtone; the ſhell is woody, thin, brittle, and whitiſh, and the kernel is white, rather firm, ſweet, with a mixture of auſterity, or bitterneſs, when raw, but is agreeable when roaſted gently on the coals, before the ſkin is taken off. In this ſtate it is ſuppoſed to help digeſtion. Native of Japan and China. Cultivated in 1758 by Mr. James Gordon, who firſt ſent the tree to Linnæus.

GIN'LIA, a town of Italy, in the kingdom of Naples, and province of Abruzzo Ultra: twelve miles and a half north-eaſt of Teramo.

GINNA'NI (Francis), count, an eminent naturaliſt and agriculturiſt, born at Ravenna in 1716. He received a literary education in his father's houſe, and at the age of fourteen was placed at Parma as page to the duke Antony Farneſe. He there continued to purſue his ſtudies; and upon his return he particularly attended to natural hiſtory, under the direction of his uncle, count Joſeph Ginnani. He devoted himſelf to a retired and ſtudious life, collected a large and valuable muſeum, invented agricultural inſtruments and other pieces of mechaniſm, and greatly intereſted himſelf in the inſtitution of the Society of Ravenna. His writings obtained him admiſſion into the learned ſocieties of Perugia, Bern, Paris, and London; and he maintained a correſpondence with many of the moſt eminent natural philoſophers of the age. He died in 1766, at the age of forty. The principal work of the count Ginnani is entitled *Delle Malattie del Grano in Erba, Trattato ſtorico fiſico:* A phyſical Treatiſe of the Diſeaſes of growing Corn, 1759, 4to. This work is of great compaſs and erudition, treating of all the different kinds of diſeaſe affecting green corn, with their cauſes and remedies. Of his other writings the moſt conſiderable is An Account of the Natural Productions in the Ginnani Muſeum at Ravenna, 1762, 4to. with plates. He has given a Deſcription of ſome Indigenous Plants and their Inſects, in the Journal of Bern, tom. i. and A Diſſertation on the Scirpus of Ravenna, in the Ravenna Acts. He left in manuſcript a Natural and Civil Hiſtory of the Pine Foreſts of Ravenna.

GINNA'NIA, *ſ.* [ſo named by Scopoli in honour of *Giuſeppe Ginnani*, of Ravenna, uncle to the above.] In botany, a genus of the claſs enneandria, order monogynia, natural order of lomentaceæ, (leguminoſæ, *Juſſ.*) The generic characters are—Calyx: perianthium double; outer one leafed, bifid, acute; inner one-leafed, cup-ſhaped, four or five-cleft; ſegments oval, concave, obtuſe, ſpreading, one larger than the reſt. Corolla: petals three, oblong, obtuſe, fringed, ſpreading, inſerted into the larger ſegment of the calyx at the baſe. Stamina: filaments nine, filiform, flexuoſe, longer than the corolla, inſerted into the mouth of the calyx; antheræ parallelopiped, verſatile. Piſtillum: germ oblong, compreſſed, at the bottom of the calyx affixed to a pedicel, with a membranaceous wing at the top; ſtyle filiform, flexuoſe, the length of the ſtamens; ſtigma obtuſe. Pericarpium: legume long, ſtraight, one-celled, two-valved, pedicelled. Seeds: very many, oval, flatted, ſmooth.—*Eſſential Character.* Calyx double, both one-leafed; petals three, fringed, ſpreading; germ pedicelled, with a membranaceous wing at the top.

Ginnania Guianenſis, the Paloue Guianenſis of *Aublet*, is a ſhrub growing to the height of fifteen feet, beginning to be branched at one or two feet from the ground. Leaves alternate, entire, ſmooth, ovate-oblong, acuminate, ſubſeſſile; the largeſt ſix inches long, and two and a half wide. Flowers terminating, three or four together, on a ſhort peduncle, on which are four or five ſoft green ſcales, or bractes. Native of the foreſts of Guiana; flowering in February, and fruiting in May.

GIN'NET, *ſ.* [γιννος, Gr.] A nag; a mule; a degenerated breed. Hence, according to ſome, the Spaniſh *gennet* is improperly written for *ginnet*.

GINO'RA, *ſ.* [ſo named by Jacquin in honour of the marquis *Carlo Ginori*, who had a botanic garden near Florence.] In botany, a genus of the claſs dodecandria, order monogynia, natural order of ſalicariæ, *Juſſ.* The generic characters are—Calyx: perianthium one-leafed; tube bell-ſhaped; border ſix-cleft; ſegments lanceolate, ſpreading, coloured, permanent. Corolla: petals ſix, roundiſh, ſpreading, longer than the calyx, with long claws inſerted into the neck of the calyx. Stamina: filaments twelve, ſubulate, patulous, as long as the calyx, and inſerted into it; antheræ kidney-ſhaped. Piſtillum: germ roundiſh, flatted; ſtyle ſubulate, the ſame length with the corolla, permanent; ſtigma obtuſe. Pericarpium: capſule flatted and roundiſh, ſhining, coloured, ſomewhat four-grooved, four-valved, one-celled, gaping at the tip. Seeds: very many, minute; receptacle roundiſh, large.—*Eſſential Character.* Calyx ſix-cleft; petals ſix; capſule one-celled, four-valved, coloured, containing many ſeeds.

Ginora Americana, a ſingle ſpecies. It is an elegant ſhrub, with the appearance of myrtle. Leaves oppoſite. It grows upright, to the height of three or four feet, and divides into ſmooth branches, round, except that they are compreſſed at the origin of the twigs and leaves, all woody. Leaves lanceolate, acute, quite entire, ſmooth, ſpreading, an inch and half long, on very ſhort petioles. Peduncles ſlender, ſpreading, ſolitary, an inch in length. Flowers handſome, almoſt an inch in diameter, without any ſcent; calyx red; corolla blue; capſule dark-red, outwardly reſembling a berry. Native of Cuba, by river ſides, and called there *roſa del rio*, or river roſe.

GIN'SENG, *ſ.* the celebrated medicinal plant of the Chineſe; for an account of which ſee the article PANAX.

GINT'ZELLSTORFF, a town of Germany, in the archduchy of Auſtria: five miles north-north-weſt of Ebenfurth.

GINT'ZERSDORFF, a town of Germany, in the archduchy of Auſtria: ſix miles north-north-eaſt of Ziſterſdorff.

GI'O, a cape of Scotland, on the north coaſt of the iſland of Shapinſha.

GIOBAR', a town of Aſiatic Turkey, in the province of Diarbek: ten miles north-weſt of Tecrit.

GIOCON'DO (Fra Giovanni), an eminent antiquarian and architect, a native of Verona, where he was firſt a teacher of the Greek and Latin languages, in which he

he had the honour of inſtructing the celebrated Julius Cæſar Scaliger. He was well verſed in ſcholaſtic theology and in the mathematical ſciences; and was one of thoſe who contributed to the revival of claſſical learning by the collection of ancient monuments and manuſcripts. He preſented to Lorenzo de Medici a collection of ancient inſcriptions which he had made with great labour, and which is ſpoken of in the higheſt terms by Angelo Poliziano. This was compiled in Rome before the year 1492, in which Lorenzo died. Giocondo was ſome time at the court of the emperor Maximilian. He alſo viſited France, where he was employed to build two bridges over the Seine, called thoſe of Our Lady, and the Little Bridge, both ſaid to have been of admirable beauty. He had the title of architect-royal in France, as appears from the honourable mention made of him by the learned Budæus. His employment as an artiſt did not prevent him from continuing to ſerve the cauſe of letters. An edition of Pliny's Epiſtles, printed in Bologna in 1498, and another by Aldus in 1508, contained his collations with an ancient manuſcript at Paris. He alſo was one of the firſt who gave a correct edition of Vitruvius, illuſtrated with figures, publiſhed at Venice in 1511, with a dedication to pope Julius II. He alſo aſſiſted in editing *Frontinis de Aquæductis*; *Scriptores de Re Ruſtica*; Aurelius Victor; and Cæſar's Commentaries; and was the firſt who gave a deſign of Cæſar's bridge over the Rhine. On his return to Italy, he wrote, in 1506, four diſſertations addreſſed to the magiſtracy of Venice, concerning the waters of that city, which are preſerved in its archives. When the Rialto was burnt, in 1513, he gave a deſign for rebuilding it more beautiful than before; but it was rejected for a leſs coſtly deſign of another architect. Reſentment on this account cauſed him to quit Venice for Rome, where, on the death of Bramante, he was joined with Raphael and San Gallo in ſuperintending the erection of St. Peter's. His laſt known work was the rebuilding of the ſtone bridge of Verona, which took place about 1521. He probably did not long ſurvive, ſince he calls himſelf an old man, in a dedication to Juliano de Medici, in 1513.

GIO'GI, a town of Tranſilvania, ſituated near the Maros: fourteen miles ſouth-weſt of Millenbach.

GIO'IA, a town of Italy, in the kingdom of Naples, and province of Bari: fourteen miles ſouth-ſouth-weſt of Converſano.

GIO'IA, a town of Italy, in the kingdom of Naples, and province of Abruzzo Ultra: ſeven miles ſouth-eaſt of Celano.

GIO'JA (Flavio), an ingenious Italian mathematician, to whom is generally attributed the invention of the compaſs. He was born at Paſitano, near Amalfi, in the kingdom of Naples, about the year 1300. He is ſaid to have firſt diſcovered the directive power of the magnet, and to have applied it to the purpoſes of navigation under the form of a compaſs, though in a rude and imperfect ſtate. And to ſhew this inſtrument to have been the invention of a ſubject of the king of Naples, who at that time was a junior branch of the royal family of France, he marked the north point with a fleur-de-lys, by which all nations ſtill diſtinguiſh it. As a memorial of this diſcovery, the territory of Principato, in which Gioja was born, bears a compaſs for its arms. Some authors, it is true, have claimed this invention for the French; and others for the Engliſh. Others again maintain, that the Chineſe had diſcovered this inſtrument long before their intercourſe with Europeans; and that the ſecret was brought to Italy by Marco Paulo, in 1260; but the greater number of competent enquirers have concurred in attributing this invaluable diſcovery to Gioja.

GIOI'SA, a town of Italy, in the kingdom of Naples, and province of Calabria Ultra: ſeven miles ſouth of Nicotera.

GIOLI'TO DE FERRA'RI, the name of a celebrated family of Italian printers. The firſt of theſe, JOHN, a native of Trino in Montferrat, after having for ſome time exerciſed his art in his own country, removed to Venice, about 1530, where he acquired great reputation in conjunction with his ſon GABRIEL. The latter is the moſt diſtinguiſhed of the family: he employed ſeveral learned men in the correction of his editions, which, however, are more valued for the beauty of the type and paper, and the excellence of the workmanſhip, than for their accuracy. They are ſtill much ſought after by the curious in typography, and are remarkable proofs of the perfection of the art at ſo early a period after its firſt invention. Gabriel was recogniſed as noble (in conſequence of his deſcent from the Ferrari of Placenzia) by the emperor Charles V. He lived at Venice in great eſteem, and died in 1581. His two ſons, John and Giampaolo, ſucceeded him in his office.

GIORDA'NI (Vital), an Italian mathematician, born at Bitonto, in the kingdom of Naples, in 1633. Spending the early part of his life in a diſſolute manner, he committed manſlaughter, and, flying from his country, entered as a ſoldier on-board the galleys which pope Innocent X. ſent to cruiſe againſt the Turks in the Levant. He was preſent in ſeveral engagements, and by his conduct recommended himſelf to the notice of the admiral, who, perceiving in him abilities above his condition, beſtowed on him the office of purſer. After his return to Rome, in 1659, he determined to devote himſelf to mathematical purſuits; and having obtained the poſt of keeper of the caſtle of St. Angelo, which afforded him leiſure for following the bias of his mind, he ſoon made conſiderable proficiency, and acquired the character of an able geometrician. He now met with ſome friendly patrons, who encouraged him to quit the military life, and aſſiſted him in obtaining the farther knowledge neceſſary to qualify him for the office of a mathematical tutor. In this capacity he became ſo diſtinguiſhed, that Chriſtina queen of Sweden, during her reſidence at Rome, choſe him for her mathematician; and Louis XIV. appointed him to teach the mathematics in the academy of painting and ſculpture, which that monarch eſtabliſhed in that city in 1666. In 1672 pope Clement X. made him engineer to the caſtle of St. Angelo; and in 1685 he was nominated to the mathematical profeſſorſhip in the College of Wiſdom. In 1691 he was elected a member of the academy of the Arcadians. He died in 1711, in his ſeventy-eighth year. His principal works are, 1. *Euclide Reſtituto*, 1686, folio. 2. *De componendis Gravium Momentis*, 1685, folio. 3. *Fundamentum Doctrinæ Motus Gravium*, 1686, of which an enlarged edition afterwards appeared; and, 4. *Ad Hyacinthum Chriſtophorum Epiſtola*, 1705, folio.

GIORDA'NO (Luca), an eminent painter, born at Naples in 1632. So early as the age of ſeven, he produced ſome extraordinary efforts of his own genius; and at eight, he painted in freſco two children for a church, which his father had undertaken, but found himſelf embarraſſed in the execution. It is ſaid, that his father, who had brought with him a painter to the place, found one of theſe children painted; and aſking Luca who had done it, was ſo much ſurpriſed at being told that it was himſelf, that he would not credit it, till the boy took up the bruſh and painted the other. The viceroy of Naples, who was informed of this wonder, placed Luca with Ribera as his pupil, and his progreſs was aſtoniſhing. After working ſome years under this maſter, he departed for Rome, in order to improve himſelf from the excellent models in that capital. Though he copied all the maſters, he was principally taken with Titian and Paul Veroneſe, the latter of whom he chiefly propoſed as his model, uniting with his grandeur of ſtyle the harmonious colouring of Pietro da Cortona. He worked with extreme rapidity, and had a wonderful talent of imitating from memory the ſtyle of other maſters. His original works diſplay great fertility of imagination, and a ſurpriſing

a ſurpriſing freedom of hand. In 1679 he was ſent for to Florence, to paint the cupola of the chapel Corſini. The grand-duke alſo employed him in the decoration of his palaces, and treated him with great regard. In 1690 he received an invitation from the king of Spain, Charles II. to paint at the Eſcurial. Scarcely any artiſt has been honoured with more tokens of royal favour than Giordano received from this ſovereign; and the great works upon which he was employed kept him many years in Spain. He returned by Genoa, Florence, and Rome, in which laſt capital pope Clement XI. gave him a diſtinguiſhed reception. At Naples he appeared again with all the added fame of his paſt performances, and his ſchool was frequented from all parts. He lived in a ſplendid manner, kept an open table, and diſplayed his generoſity in painting gratuitouſly for the churches. He died in 1705, at the age of ſeventy-three, and left great wealth to his family. The works of Luca Giordano are extremely numerous, and are to be met with in many churches and palaces in Italy and Spain, as well as in the galleries of collectors. One of the fineſt is the grand altar-piece in the church of the Aſcenſion at Naples, repreſenting the battle of the angels. Several of his moſt valuable deſigns are engraved, and ſome are etched by his own hand.

GIORGIA'NI, the ſurname of the celebrated doctor ALSEID ALSCHERIF ABOU HASSAN, born in 740 of the Hegira, and died at Shiraz in the hegirian year 816, anſwering to 1413 of the Chriſtian era. He was the diſciple of Mobarekſchah, and of Alaeddin Mohammed Ben Atthâr al Bokhari. He was the author of the *Taârifât*, which contains an ample explanation of all the terms uſed in philoſophy and theology; of A Commentary on Euclid, as publiſhed by the famous Naſſireddin; and A Commentary on the *Adab al Aigi*, an eſteemed moral treatiſe, written by Adhadeddin Ben Ahmed.

The ſurname of GIORGIANI is alſo applied to another mathematician, called ABOULVASA, who was the author of A Commentary upon Euclid; and to a grammarian named ABOBECR BEN ABDALCAHAR, author of the *Aovamel*, or a treatiſe on the particles which enter into the conſtruction of the Arabic language; and a treatiſe on rhetoric, under the title of *Aſrar Abelagat*.

GIORGIEV', a town of Wallachia, on the north ſide of the Danube. In June, 1771, a battle was fought near this town between the Ruſſians and Turks, in which the latter were defeated, with the loſs of 5000 killed. The Ruſſians took 180 pieces of cannon; and all the artillery and baggage for 30,000 men. It is forty miles ſouth-weſt from Bucchareſt, and 235 north-weſt from Conſtantinople.

GIORGIO'NE, an eminent painter, whoſe true name was GIORGIO BARBARELLI, born in 1478 at Caſtel Franco, in the Treviſan. He was brought up at Venice, where his earlieſt paſſion was muſic, and he became a very ſkilful performer on the lute. Applying next to deſign, he entered the ſchool of John Bellini, and ſoon ſurpaſſed his maſter. His improvement was greatly owing to his ſtudy of the works of Lionardo de Vinci, from which he acquired the management of lights and ſhades. By frequent experiments he made himſelf the greateſt colouriſt of the time, ſo that Titian, who had been his fellow-pupil, worked under him to obtain the mellowneſs of his art. Giorgione, it is ſaid, diſcovered his purpoſe, and immediately diſmiſſed him. At Venice he introduced the faſhion of painting the fronts of houſes in freſco, and decorated many in that ſtyle with mythological ſubjects. His taſte in deſign approached that of the Roman ſchool, aiming more at roundneſs in his figures than correctneſs of outline. His pencil was light and free, his expreſſion ſtrong and elevated, his imagination rich, and his colouring inimitable. He painted ſome portraits of admirable ſpirit, and landſcapes of extraordinary beauty. While purſuing his art with great application, he was carried off by the plague at Venice in 1511, at the early age of thirty-three. His works are found in various parts of Italy: a Bearing of the Croſs at Venice is regarded with a kind of veneration. His eaſel pictures are few, and highly valued. Several of his deſigns have been engraved.

GIOR'NICO, a town of Swiſſerland, in the canton of Uri. In 1478, fifteen thouſand Milanois were defeated near this town by ſix hundred Swiſs; who, in conſequence of the victory, obtained an honourable and advantageous peace of the duke of Milan: thirteen miles north of Bellinzona.

GIOS'TAH, a town of Africa, in the country of Mozambique, at the bottom of a bay not far from Sofala.

GIOT'TO, the ſecond of thoſe celebrated painters who diſtinguiſhed themſelves by the revival of the art in Italy, born in 1276, in the diſtrict of Veſpignano near Florence, where his father, Bondone, was a ſimple peaſant. The natural talent of Giotto for deſign diſcovered itſelf by his drawing figures upon the ground while tending ſheep. The painter Cimabue chancing to ſee him thus employed, took him home to Florence, and inſtructed him in his art. Giotto ſet himſelf with great diligence to his favourite purſuit, and by the force of his genius greatly outſtript his maſter. He freed himſelf from the dry Gothic manner then in uſe, and gave expreſſion and vivacity to his figures. His reputation ſpread throughout Italy, many cities of which he adorned with his works, where they are ſtill exiſting. He not only painted in freſco, but in colours; and was particularly excellent in moſaic, for ſome pieces of which he received extraordinary prices. His moſaic of the Death of the Virgin at Florence was highly admired by Michael Angelo; and that of the Ship of St. Peter, placed over the grand entrance of that church in Rome, has received the encomiums of ſeveral writers. Giotto was a man of general knowledge, fond of poetry, and pleaſant in converſation. Boccacio and Sacchetti often introduce him in their novels, and record his witty repartees. He died, much eſteemed, in 1336.

GIOVA'IN, a town of Perſia, in the province of Farſiſtan: ten miles north of Schiras.

GIOVA'IN, a town of Perſia, in the province of Kerman: fifty-ſeven miles ſouth-eaſt of Sirgian.

GIOVA'IN, a town of Perſia, in the province of Segeſtan: fifty-five miles weſt-north-weſt of Zareng.

GIOVAR', a town of Perſia, in the province of Farſiſtan: fifty-five miles ſouth-ſouth-weſt of Schiras.

GIOVELLI'NO, a town of the iſland of Corſica: twenty-five miles eaſt of Corte.

GIOVENAZ'ZO, a town of Italy, in the kingdom of Naples, and province of Bari, ſituated near the ſea; containing four churches and four convents, and defended by a caſtle: eleven miles eaſt-ſouth-eaſt of Trani.

GIO'VIO (Paul), in Latin, *Jovius*, a celebrated Italian hiſtorian, born of an ancient family at Como, in 1483. He was brought up to letters, and ſtudied in Padua, Pavia, and Milan. He took his degree in phyſic at Pavia, and engaged in the practice of the profeſſion at Como and Milan. About the year 1512 he went to Rome, where for ſome time he continued to act as a phyſician. But his principal ambition was to rank among thoſe eminent literary characters whom the munificence of Leo X. had aſſembled about his court; and he had long paid particular attention to the forming of a Latin ſtyle, and acquiring a knowledge of claſſical antiquities. His peculiar ſtudy was that of hiſtory, and he was firſt made known to pope Leo by a ſpecimen of hiſtorical compoſition, which that pontiff declared to come next in elegance to the writings of Livy. He was rewarded with a penſion, and would probably have obtained higher advancement, had Leo lived longer. Adrian took from him the penſion of his predeceſſor, but conferred upon him a canonicate in his own country, upon condition, it is ſaid, that he ſhould make honourable mention of him. This, in fact, Giovio has

done in his Life of that pontiff; though in another work he ſpeaks of him with contempt. Clement VII. treated him with more liberality, aſſigning him apartments in his palace, together with the abbacy of St. Antony in Como. At the diſaſtrous ſack of Rome in 1527, he loſt not only a quantity of wrought ſilver, but the manuſcript of his Hiſtory, of which ſome books were never recovered. As a recompence, he was raiſed in the enſuing year to the biſhopric of Nocera. Through the favour of the emperors Charles V. Francis I. and other ſovereigns and perſons of diſtinction, he acquired conſiderable opulence. He built a very elegant villa on the margin of the lake of Como, in a delightful ſituation, in which was a muſeum, rich in curioſities, eſpecially the portraits of eminent men. There he paſſed much of his time in learned leiſure; but it was not till 1549 that he finally quitted Rome. In the next year he went to pay a viſit to the grand-duke Coſmo at Florence, where he died in December 1552. His remains were interred in the cathedral of St. Lorenzo, under a marble monument, with an inſcription in a high ſtyle of eulogy.

As an hiſtorian and biographer, Giovio has been more praiſed for the elegance of his ſtyle, and the variety and livelineſs of his narrative, than for his veracity and impartiality. He is charged with having ſet his pen to ſale, and having diſtributed applauſe and cenſure according to the dictates of private intereſt. His own confidential letters avow in ſome meaſure the principle of, at leaſt, colouring actions and characters according to favour; and he was accuſtomed to ſay that he had two pens, one of gold, the other of iron. Yet he frequently atteſts his impartiality, and, as a proof of it, mentions that he was accuſed equally by the French and the Imperialiſts as being devoted to the oppoſite party. Perhaps, in the general narration he may be worthy of credit, though his repreſentation of particulars may often be falſe and diſtorted. As he wrote concerning the perſons and tranſactions of his own times, though he had more temptations to infidelity, yet he had more checks. His great work is a Hiſtory, in forty-five books, commencing from the war of Naples under Charles VIII. and coming down to 1547; but of this, ſix books are wanting, from the fifth to the eleventh, and ſix more, from the nineteenth to the twenty-fourth. The firſt edition was printed at Florence in 1550. He wrote alſo the Lives of twelve Viſconti lords of Milan; the eulogies of men celebrated in arms and letters; deſcriptions of Great Britain, of Muſcovy, and of the lake of Como; and commentaries on Turkiſh affairs. All theſe works are in Latin, which he wrote with great fluency. In the ſame language he wrote a treatiſe, *De Piſcibus Romanis*. In Italian he has left a number of Letters; and *Ragionamento ſopra i Motti & Diſegni d'Arme e d'Amore*.

Benedetto Giovio, elder brother of the preceding, who paſſed a retired life at Como, was a man of letters, and left ſeveral works in manuſcript, of which the Hiſtory of his native place was printed at Venice in 1629.

Paulo Giovio the Younger, alſo biſhop of Nocera, who was preſent at the council of Trent, and diſtinguiſhed himſelf in Latin poetry, was grand-nephew to the firſt Paul.

To GIP, *v. a.* To take out the entrails of herrings.

GIP'PING, a river of England, in the county of Suffolk, which joins the Orwell, and falls with it into the Stour.

GIP'SOUS, or Gypsous, *adj.* Made of plaſter. See Gypsum.

GIP'SY, *ſ.* [Corrupted from *Egyptian*; for when they firſt appeared in Europe, they declared, and perhaps truly, that they were driven from their own country by the cruelty of their enemies. They are now more or leſs mingled with all nations.] The name is now applied to any vagabond who pretends to foretell futurity, commonly by palmiſtry or phyſiognomy:

I, near yon ſtile, three fallow *gipſies* met;
Upon my hand they caſt a poring look,
Bid me beware, and thrice their heads they ſhook. *Gay.*

A reproachful name for a dark complexion.—Laura, to her lady, was but a kitchen wench; Dido a dowdy; Cleopatra a *gipſy*; Helen and Hero hildings and harlots. *Shakeſpeare.*—A name of ſlight reproach to a woman.—The widow play'd the *gipſy*, and ſo did her confidant too, in pretending to believe her. *L'Eſtrange.*

A ſlave I am to Clara's eyes:
The *gipſy* knows her power, and flies. *Prior.*

The wandering Egyptians, or ſtrolling gipſies, are ſaid to have made their firſt appearance in Germany about the beginning of the ſixteenth century. Hiſtorians inform us, that when ſultan Selim conquered Egypt in 1517, a large body of the natives refuſed to ſubmit to the Turkiſh yoke, and revolted under Zinganeus; whence the Turks call them to this day *Zinganees*; but being at length ſurrounded and baniſhed, they agreed to diſperſe in ſmall parties all over the world, where their ſuppoſed ſkill in the knowledge of futurity gave them an univerſal reception among ignorant and ſuperſtitious perſons. In the courſe of a few years they gained ſuch a number of proſelytes, who imitated their language and complexion, and betook themſelves to the ſame arts of chiromancy, that they became troubleſome, and even formidable, to moſt of the ſtates of Europe. Hence they were expelled from France by an edict, in 1560, and from Spain in 1591. And the government of England took the alarm much earlier: for in 1530 they are deſcribed by 22 Hen. VIII. c. 10. as "an outlandiſh people calling themſelves Egyptians, uſing no craft nor feat of merchandiſe, who have come into this realm, and gone from ſhire to ſhire, and place to place, in great companies, and uſed great, ſubtle, and crafty, means to deceive the people; bearing them in hand, that they by palmiſtry could tell men's and women's fortunes; and ſo many times by craft and ſubtilty have deceived the people of their money, and alſo have committed many heinous felonies and robberies. Wherefore they are directed to avoid the realm, and not to return under pain of impriſonment, and forfeiture of their goods and chattels; and upon their trials for any felony which they may have committed, they ſhall not be entitled to a jury *de medietate linguæ*." And afterwards it is enacted, by ſtatutes 1ſt and 2d Ph. & Mary, c. 4. and 5th Eliz. c. 20. that if any ſuch perſons ſhall be imported into the kingdom, the importer ſhall forfeit forty pounds. And if the Egyptians themſelves remain one month in the kingdom, or if any perſon being fourteen years old, whether natural-born ſubject or ſtranger, which hath been ſeen or found in the fellowſhip of ſuch Egyptians, or which hath diſguiſed him or herſelf like them, ſhall remain in the ſame one month at one or ſeveral times, it is felony without benefit of clergy. And ſir Matthew Hale informs us, that at one Suffolk aſſizes, no leſs than thirteen perſons were executed upon theſe ſtatutes a few years before the reſtoration. But, to the honour of our national humanity, there are no inſtances more modern than this of carrying theſe laws into practice; and the ſanguinary act was itſelf repealed by 23 Geo. III. c. 54.

It is incredible to think how this regular ſwarm of banditti has ſpread itſelf over the face of the earth. They wander about in Aſia, in the interior parts of Africa, and, like locuſts, have over-run moſt of the European nations. In the reigns of Henry VIII. and queen Elizabeth, as we have ſeen, they were ſet up as a mark of general perſecution in England; yet their numbers did not appear for a long time to be much diminiſhed. Spain is ſuppoſed to contain forty thouſand of theſe vagrants. They became leſs numerous in France in conſequence of the ſtrictneſs of the police. In Italy they abound, eſpecially in the ſtates of the church, on

account of the prevalence of ſuperſtition, which entices them to deceive the ignorant. They are ſcattered, though not in great numbers, through Germany, Denmark, Sweden, and Ruſſia; but their chief population is in the ſouth-eaſt parts of Europe, which ſeem to be the general rendezvous of the gipſy nation. At a moderate computation, Europe contains more than ſeven hundred thouſand of theſe vagabonds. For near four centuries they have wandered through the world; and in every region, and among every people, whether barbarous or civilized, they have continued equally unchanged by the lapſe of time, the variation of climate, and the force of example. Their ſingular phyſiognomy and particular manners are the ſame in every country. Their ſwarthy complexion derives no darker ſhade from the burning ſun of Africa, nor any fairer tincture from the temperate climates of Europe; they contract no additional lazineſs in Spain, nor acquire any new induſtry in England; in Turkey they behold the moſque and the creſcent with equal indifference as they do the reformed and the catholic church in Europe. In the neighbourhood of civilized life they continue barbarous; and, beholding around them cities and ſettled inhabitants, they live in tents or holes in the earth, and wander from place to place as fugitives and vagabonds.

Niebühr, in his Travels through Arabia, met with hordes of theſe ſtrolling gipſies in the warm diſtrict of Yemen; and M. Sauer, in like manner, found them eſtabliſhed in the frozen regions of Siberia. His account of them, publiſhed in 1802, ſhews the gipſy character to be the ſame in northern Ruſſia, as with us in England. He deſcribes them as follows: "I was ſurpriſed at the appearance of detached families of gipſies throughout the government of Tobolſk; and upon enquiry I learned, that ſeveral roving companies of theſe people had ſtrolled into the city of Tobolſk. The governor thought of eſtabliſhing a colony of them; but they were too cunning for the ſimple Siberian peaſant; which induced him to ſeparate each family. He placed them on the footing of the peaſants, and allotted a portion of land for cultivation, with a view of making them uſeful to ſociety. They, however, reject houſes even in this ſevere climate, and dwell in open tents or ſheds; nor can they be brought to any regular courſe of induſtry; but they watch every traveller, and pretend to explain the myſteries of futurity, by palmiſtry or phyſiognomy. The peaſant dreads their power; and, from motives of fear, contributes to their ſupport, leſt they ſhould ſpoil his cattle and horſes. It is ſaid, that they are very ſkilful farriers and cow-leeches."

In Hungary and Tranſylvania, their ſummer habitations are tents; their winter ones, holes ten or twelve feet deep in the earth. They are fond of plate, particularly ſilver cups, which they bury under the earth for ſecurity. The principal occupations which they pretend to follow are, ſmith's work, or tinker's, or wooden ware, and horſe-dealing; they are alſo executioners of criminals, flayers of dead beaſts, and waſhers of gold. The women deal in old clothes, proſtitution, wanton dances, and fortune-telling. Notwithſtanding theſe occupations, this people are indolent beggars and thieves. They bring up their children to their own profeſſions, and appear very fond of them. They have few diſorders, except the meaſles and ſmall-pox, and weakneſſes in their eyes, occaſioned by the ſmoke; and live to an advanced age, with a ſtrong attachment to life. Their phyſic is ſaffron in their ſoups, with bleeding.

In their food theſe people are by no means choice: it is all one to them, whether it be carrion of a ſheep, hog, cow, or other beaſt, horſe-fleſh only excepted. When any one cenſures their taſte, they anſwer, "The fleſh of a beaſt which God kills muſt be better than that of one killed by the hand of man." They therefore take every opportunity of getting ſuch dainties. That they take carrion from a layſtall, as is affirmed of the gipſies in Hungary, is by no means certain, any more than that they eat horſe-fleſh. But if a beaſt out of an herd dies, and they find it before it becomes rotten or putrefied; or, if a farmer gives them notice of a cow dead, they proceed, without heſitation, to take poſſeſſion of the booty. Their favourite object is animals that have been deſtroyed by fire; therefore, whenever a conflagration has happened, either in town or country, the next day the gipſies, from every neighbouring quarter, aſſemble and draw the ſuffocated half-conſumed beaſts out of the aſhes. Men, women, and children, in troops, are extremely buſy, joyfully collecting the fleſh, upon which they gluttonize in their huts as long as this delicious fare laſts.

The gipſies have, at leaſt in Tranſylvania, a ſort of regular government, rather nominal than real or effective. They have their leaders or chiefs, whom they diſtinguiſh by the Sclavonian title, *waywode*. To this dignity every perſon is eligible who is of a family deſcended from a former waywode; but the preference is generally given to thoſe who have the moſt wealth, who are of a large ſtature, and not paſt the meridian of life. Of religion they have no ſenſe; though, with their uſual cunning and hypocriſy, they profeſs the eſtabliſhed faith of every country in which they live. They alſo ſpeak the languages of the reſpective countries, yet have a dialect of their own; from whence derived, authors differ. The only ſcience which they have attained is muſic. Their poetry is indecent rhyme.

Their general character is thus given by Grellman, in his German Treatiſe on Gipſies: "They are lively, uncommonly loquacious and chattering; fickle in the extreme, conſequently inconſtant in their purſuits; faithleſs to every body, even their own caſt; void of the leaſt emotion of gratitude, frequently rewarding benefits with the moſt inſidious malice. Fear makes them ſlaviſhly compliant when under ſubjection; but having nothing to apprehend, like other timorous people, they are cruel. Deſire of revenge often cauſes them to take the moſt deſperate reſolutions. To ſuch a degree of violence is their fury ſometimes excited, that a mother has been known, in the exceſs of paſſion, to take her ſmall infant by the feet, and therewith ſtrike the object of her anger, when no other inſtrument has readily preſented itſelf. They are ſo addicted to drinking, as to ſacrifice what is moſt neceſſary to them, that they may feaſt their palates with ardent ſpirits. Nothing can exceed the unreſtrained depravity of manners exiſting among them. Unchecked by any idea of ſhame, they give way to every libidinous deſire. The mother endeavours, by the moſt ſcandalous arts, to train up her daughter for an offering to ſenſuality; and this is ſcarcely grown up, before ſhe becomes the ſeducer of others. Lazineſs is ſo prevalent among them, that were they to ſubſiſt by their own labour only, they would hardly have bread for two of the ſeven days in the week. This indolence increaſes their propenſity to ſtealing and cheating, the common attendants on idleneſs. They ſeek to avail themſelves of every opportunity to ſatisfy their lawleſs deſires. Their univerſal bad character therefore for fickleneſs, infidelity, ingratitude, revenge, malice, rage, depravity, lazineſs, knavery, thieviſhneſs, and cunning, though not deficient in capacity and cleverneſs, render theſe people of no uſe in ſociety, except as ſoldiers to form marauding parties. Attempts have in vain been made for cultivating and civilizing them. This appears from a very intelligent Hungarian lady's experience on the ſubject, communicated in a letter as follows: 'There are a great number of them on my eſtates, but I have permitted two families in particular to eſtabliſh themſelves at the place of my own reſidence, under the expreſs condition that no others ſhall come here and join them. I took all poſſible pains to make them reaſonable creatures. I ſet the elder ones to work; the younger ones to tend the cattle.

cattle. I obſerved that they were more fond of horſes than any thing elſe; for which reaſon I placed a gipſy under each groom. I had their children clothed, that none of them might be running about naked, according to their uſual practice. It appeared, however, that cuſtom was become nature with them. The old ones worked diligently ſo long as any body ſtood over them; the moment their back was turned they all got together in a circle, their legs acroſs, facing the ſun, and chattered. Thus they cannot poſſibly earn more, indeed hardly ſo much, as would find them bread. Even in winter they cannot bear a hat on their head, nor ſhoes on their feet. The boys will run like wild things after carrion, let it ſtink never ſo much; and where a mortality happens among the cattle, there theſe wretched beings are to be found in the greateſt numbers.' The origin of this people, as we have ſeen, has been generally ſuppoſed to be Egyptian; and that belief is as old as their exiſtence in Europe. Thomaſius, Salmon, and ſignior Griſelini, have endeavoured to prove the fact by ſatisfactory evidence. This theory, however, ſeems without foundation. The Egyptian deſcent of theſe people is not only deſtitute of proofs, but the moſt poſitive evidence is found to contradict it. Their language differs entirely from the Coptic; and their cuſtoms are very different from thoſe of the Egyptians. They are indeed to be found in Egypt; but they wander about there as ſtrangers, and form a diſtinct people as in other countries."

The Egyptian deſcent of the gipſies being thus rejected by Grellman, he next endeavours to ſhew that they came from Hindooſtan. The chief baſis of his theory, however, is no other than that very dubious one, a ſimilarity of language. He adds a long vocabulary of the gipſy and the Hindoo languages; in which, it muſt be confeſſed, many words are the ſame; but many are different. The cauſe of their emigration from their country, he conjectures, not without probability, to be the war of Timur Bec, or Tamerlane, in India. In the years 1408 and 1409, this conqueror ravaged India; and the progreſs of his arms was attended with devaſtation and cruelty. All who made reſiſtance were deſtroyed; thoſe who fell into the enemy's hands were made ſlaves; of thoſe very ſlaves one hundred thouſand were put to death. As on this occaſion an univerſal panic took place, what could be more natural than that a great number of terrified inhabitants ſhould endeavour to ſave themſelves by flight? He next endeavours to trace the route by which the gipſies came from Hindooſtan to Europe: but here he juſtly acknowledges that all is mere ſurmiſe; and that there ſtill hangs a cloud over the origin of this extraordinary race of people.

GI'RAFFE, *ſ.* the Cameleopardalus. See CERVUS, vol. iv. p. 51.

GIRA'GLIA, a ſmall iſland near the north coaſt of the iſland of Corſica: twenty-three miles north of Baſtia, and one and a half from Cape Corſo.

GI'RALD (Barry), or *Giraldus Cambrenſis*. See BARRY, vol. ii. p. 761.

GIRAL'DI (Cinzio Giambattiſta), an Italian poet, born at Ferrara in 1504. He ſtudied the languages under Calcagnini, and medicine under Manardi, in which faculty he graduated. He was for twelve years profeſſor of philoſophy and phyſic at Ferrara, where duke Hercules made him his ſecretary. He was continued for ſome time in the ſame employ by duke Alphonſo; but a difference ariſing between him and Giambattiſta Pigna reſpecting a publication, cauſed him to quit Ferrara. In 1564 he accepted an invitation from the duke of Savoy to take the chair of eloquence in the univerſity of Mondovi. He was honourably diſmiſſed in 1568, and removed to a ſimilar ſituation at Pavia. Finally, he returned to Ferrara, where he died in 1573. Cinthio Giraldi diſtinguiſhed himſelf as a writer in various branches of literature. He wrote nine Italian tragedies, which were received with great applauſe. The moſt eſteemed among them was, *L'Orbecche*, firſt repreſented before duke Hercules in 1541, and ſtill accounted one of the beſt dramatic productions of that age. His paſtoral drama, entitled *Egle*, was written earlier than the *Sacrifizio* of Beccari, uſually reckoned the firſt compoſition of the kind. His poem of twenty-ſix cantos, entitled *Ercole*, printed in 1557, has fallen into oblivion. The work by which he is moſt known is his *Ecatommithi*, or Hundred Novels, 2 vols. 8vo. 1565. It has been tranſlated into different languages, and furniſhed fables for dramatic and other compoſitions. He wrote in Latin, Poems; the Hiſtory of Andrew Doria; and a Commentary on the Princes of Eſte and Ferrara, taken from the Epitome of Lilius Gyraldus.

GIRAL'DI (Giglio Gregorio; in Latin, *Lilius Giraldus*), one of the moſt learned men of his time, born at Ferrara in 1489. He ſtudied the languages and law at his native place under the inconveniences of poverty; and, after finiſhing his education, went to Naples, where he contracted a friendſhip with Pontano, Sannazaro, and the other elegant ſcholars then flouriſhing in that city. He next viſited Mirandola, Carpi, and Milan, in which laſt place he improved himſelf in Greek under Demetrius Chalcondylas. At Modena, the counteſs Rangone choſe him for preceptor to her ſon Hercules, afterwards cardinal. He accompanied that lady to Rome at the beginning of the pontificate of Leo X. and had apartments in the Vatican. He remained in Rome during the two ſucceeding pontificates, and was thought to be in the way of high promotion; yet he obtained nothing more than the office of apoſtolical prothonotary. At the ſack of Rome in 1527 he loſt all his property, and even his books. To this calamity was added that of the death of his patron, cardinal Rangone; ſo that he left the capital in great diſtreſs, and went firſt to Bologna, and then to Mirandola. In this city he was received with great kindneſs by Gianfranceſco Pico, but ill fortune ſtill purſued him. This patron was murdered in 1533, and Giraldi with great difficulty eſcaped to Ferrara with his life. From the extreme poverty to which he was reduced, he was relieved by the favour of the ducheſs Renata, and that of ſeveral of the nobility, ſo that in his latter years he was able to lay up a ſum of ten thouſand crowns. His health, however, was extremely impaired, and he finiſhed his days in 1552. He bequeathed moſt of his property to duke Hercules, though he had ſeveral poor relations; and his books to Cinthio Giraldi, who appears to have been his kinſman. The great extent of his reading is particularly ſhewn by his work, entitled, *Syntagma de Diis Gentium*, in ſeventeen diſſertations. It is the firſt treatiſe in which mythology is diſcuſſed in a truly learned manner, and there is ſcarcely any ancient author, Greek or Latin, which he does not quote. Belonging to the ſame argument are his Treatiſe on the Muſes; on the Ships of the Ancients and their Modes of Burial; on the Life of Hercules; his Explications of the Pythagorical Symbols and other ancient Enigmas; his Treatiſe of Years and Months, with the Greek and Latin Calendars; and his Thirty Dialogues on Subjects of Erudition. His other great work is, A Hiſtory of the Greek and Latin Poets; and of the Poets of his own Time; the latter of which is an exact account of the ſtate of poetry during the firſt fifty years of the ſixteenth century. He was himſelf an elegant Latin poet, and ſome of his compoſitions are joined to the Leyden edition of his works in 1696, 2 vols. folio. It was probably a ſenſe of his own misfortunes that induced him to write two ſmall pieces againſt ingratitude, and a work which became famous, entitled, *Progymnaſmata adverſus Litteras & Litteratos*: this attack upon letters, indeed, he aſſerted to be only a ſport of the imagination. He tranſlated from the Greek a work of Simon of Antioch, *De Cibariorum Facultate*.

GI'RAN, a town of Africa, in the country of Algiers: forty-five miles ſouth-eaſt of Ouran.

GI'RANCOURT, a town of France, in the department of the Voſges, and chief place of a canton, in the diſtrict of Epinal: one league and three quarters weſt of Epinal, and three and a half ſouth-eaſt of Mirecourt.

GIR'ANDOLE, *ſ.* [French.] A kind of branched candleſtick.

GIRAPIE'TRA, a town of the iſland of Candia: ſixteen miles ſouth-weſt of Settia.

GI'RAR, a ſtrong fortreſs of Hindooſtan, in the country of Malwa: forty miles ſouth-eaſt of Shanderee, and thirty-two eaſt-north-eaſt of Kimlaſſa.

GI'RARD (Gabriel), diſtinguiſhed for his writings on the French language, and as being almoner to the ducheſs of Berry, and king's interpreter for the Sclavonian and Ruſſian languages. He was admitted into the French academy in 1744, and died in 1748, at the age of ſeventy. His principal work was *Synonymes François*; the purpoſe of which was to ſhew that the French words uſually accounted ſynonymous, have, almoſt all, ſhades of difference, which, in correct ſpeech, ſhould prevent them from being uſed indifferently. This poſition he illuſtrates by ſhort ſentences, in which the words are introduced, and which are generally uſeful maxims or delicate ſentiments, choſen with much taſte and a very nice diſcrimination. No work of the grammatical kind was ever more pleaſing to read; and Voltaire ſays of it, "that it will ſubſiſt as long as the language, and will even ſerve to make it ſubſiſt." A new edition of it, much augmented, was publiſhed by M. Beauzée, in 1769, 2 vols. 12mo. The abbé Girard alſo wrote a French grammar, entitled *Principes de la Langue Françoiſe*, 2 vols. 12mo. 1747, which has conſiderable merit.

GI'RARD DE VILLETHIER'RI (John), a French prieſt, born at Paris, where he died in 1709, at the age of ſixty-eight years. He is highly praiſed for his piety and his virtues, and for being the author of a great number of practical and devotional treatiſes. His works have been frequently printed, and, according to Dupin, taken collectively, form a body of practical morality adapted to all conditions; founded on the Scriptures, the canons, the councils, and the fathers.

GIRARDON' (Francis), an eminent French ſculptor, born in 1630, the ſon of a founder at Troyes in Champagne. After acquiring taſte and practice in his native city, he went to Paris, and improved himſelf under the ſculptor Anguier. The reputation he acquired by his performances cauſed him to be ſent by the king with a liberal penſion to Rome. On his return he was admitted into the academy of painting in 1657, and obtained the patronage of Le Brun, which he returned by an unlimited deference. He wrought much from the deſigns of that painter; and was, doubtleſs, not ill-pleaſed when the diſcouragement of Le Brun cauſed the celebrated ſculptor Puget to quit Paris and return to Marſeilles. Girardon is reckoned to have had more correctneſs than invention; and he modelled with more facility than he worked in marble, for his chiſel is thought to have generally left an impreſſion of heavineſs. His works are, however, conſidered as maſterpieces in the art. Among the principal are four of the figures compoſing the group of the baths of Apollo, and the rape of Proſerpine; both in the gardens of Verſailles: the equeſtrian ſtatue of Louis XIV. the largeſt that had been caſt at a ſingle font: and the mauſoleum of cardinal Richelieu, in the church of the Sorbonne. He made a preſent to his native place of a grand medallion of white marble repreſenting Louis XIV. He cultivated the friendſhip of the fine writers of the age, ſeveral of whom have perpetuated his name. He roſe through the various dignities in the academy to that of chancellor, to which he was nominated in 1695. After having adorned the capital and other parts of the kingdom with a number of works, and riſen to the head of his profeſſion, he died in 1715, at the age of eighty-five, and was buried in the ſplendid tomb which he had erected for his wife at Troyes.

GIRASO'LE, *ſ.* [*giraſol*, Fr.] The opal ſtone, or that which is called *cat's eye*. The word is ſometimes applied to ſemi-tranſparent milk-white porcelain.

GIRCH, a river of North Wales, which runs into the ſea, near Pullhely, in Caernarvonſhire.

GIRCHS'BECK, a town of Germany, in the duchy of Holſtein: eleven miles ſouth-ſouth-weſt of Segeberg, and ſix weſt-ſouth-weſt of Oldeſlohe.

To GIRD, *v. a.* pret. *girded*, or *girt*; [ȝyrðan, Sax.] To bind round.—They ſprinkled earth upon their heads, and *girded* their loins with ſackcloth. 2 *Mac.* x. 3.—To put on ſo as to ſurround or bind.—Cords of the bigneſs of packthread were faſtened to bandages, which the workmen had *girt* round my neck. *Swift.*—To faſten by binding.—He *girt* his warlike harneſs about him. 1 *Mac.* ii. 25.

Let us riſe at once, *gird* on our ſwords,
And, at the head of our remaining troops,
Attack the foe. *Addiſon.*

To inveſt:

Stoop then, and ſet your knee againſt my foot;
And in reguerdon of that duty done,
I *gird* thee with the valiant ſword of York. *Shakeſpeare.*

To dreſs; to habit; to clothe.—I *girded* thee about with fine linen, and I covered thee with ſilk. *Ezek.* xvi. 10.

Tyſiphone there keeps the ward,
Girt in her ſanguine gown, by night and day,
Obſervant of the ſouls that paſs the downward way.
Dryden.

To cover round as a garment:

Theſe, with what ſkill they had, together ſew'd,
To *gird* their waiſt: vain covering, if to hide
Their guilt, and dreaded ſhame! *Milton.*

To furniſh; to equip:

So to the coaſt of Jordan he directs
His eaſy ſteps, *girded* with ſnaky wiles. *Milton.*

To incloſe; to incircle:

That Nyſeian iſle,
Girt with the river Triton, where old Cham
Hid Amalthea, and her florid ſon,
Young Bacchus, from his ſtepdame Rhea's eye. *Milton.*

To reproach; to gibe.—Being mov'd, he will not ſpare to *gird* the god. *Shakeſpeare.*

To GIRD, *v. n.* [by tranſpoſition from *gride* or *cut.*] To break a ſcornful jeſt; to gibe; to ſneer.—Men of all ſorts take a pride to *gird* at me. *Shakeſpeare.*

This wondred error growth
At which our critics *gird.* *Drayton.*

GIRD, *ſ.* A twitch; a pang: it may come from the ſenſation cauſed by a bandage or girdle drawn hard ſuddenly. This word is now ſeldom uſed, unleſs the former etymology be admitted.—Conſcience by this means is freed from many fearful *girds* and twinges which the atheiſt feels. *Tillotſon.*

Sweet king! the biſhop hath a kindly *gird:*
For ſhame, my lord of Wincheſter, relent. *Shakeſpeare.*

GIRDER, *ſ.* in architecture; the largeſt beam or piece of timber ſupporting a floor. Their ends are uſually faſtened into the ſummers, or breaſt-ſummers; and the joiſts are framed in at one end to the girders. By the ſtatute for rebuilding London, no girder is to lie leſs than ten inches into the wall, and their ends to be always laid in loam, &c. The ſhorter bearings a girder has, and the oftener it is ſupported by the internal or partition walls, ſo much the ſtronger will be the building in proportion as the tie is greater.

Theſe

Theſe mighty *girders* which the fabric bind,
Theſe ribs robuſt and vaſt in order join'd. *Blackmore.*

GIR'DER, *ſ.* [from *gird*, v.] A ſatiriſt.—We great *girders*, call it a ſhort ſaying of ſharp wit, with a bitter ſenſe in a ſweet word. *Lilly's Alexan. and Campaſpe.*

GIR'DLE, *ſ.* [ȝyɲbe, Sax.] Any thing drawn round the waiſt, and tied or buckled:

A cap of flowers, and a *girdle*,
Embroider'd all with leaves of myrtle. *Shakeſpeare.*

On him his mantle, *girdle*, ſword, and bow,
On him his heart and ſoul, he did beſtow. *Cowley.*

Encloſure; circumference:

Suppoſe within the *girdle* of theſe walls
Are now confin'd two mighty monarchies. *Shakeſpeare.*

The zodiac.—Great breezes in great circles, ſuch as are under the *girdle* of the world, do refrigerate. *Bacon.*

It was anciently the cuſtom for bankrupts and inſolvent debtors to put off and ſurrender their girdle in open court. The reaſon was, that our anceſtors uſed to carry all their neceſſary utenſils tied to the girdle; whence the girdle became a ſymbol of the eſtate. Hiſtory relates, that the widow of Philip I. duke of Burgundy, renounced her right of ſucceſſion, by putting off her girdle upon the duke's tomb. It was a cuſtom among the Greeks and Romans for the huſband to untie his bride's girdle. Homer, lib. xi. of his Odyſſey, calls the girdle παρθενιην ζωνην, "maid's or virgin's girdle." The poets attribute to Venus a particular kind of girdle called *ceſtus*, to which they annexed a faculty of inſpiring the paſſion of love.

To GIR'DLE, *v. a.* To gird; to bind as with a girdle:

Lay the gentle babes, *girdling* one another
Within their innocent alabaſter arms. *Shakeſpeare.*

To incloſe; to ſhut in; to environ:

Let me look back upon thee, O thou wall,
That *girdleſt* in thoſe wolves! *Shakeſpeare.*

GIR'DLE-BELT, *ſ.* The belt that incircles the waiſt:

Nor did his eyes leſs longingly behold
The *girdle-belt*, with nails of burniſh'd gold. *Dryden.*

GIR'DLE-NESS, a cape of Scotland, on the eaſt coaſt: two miles eaſt of Aberdeen.

GIR'DLE-STEAD, *ſ.* That part of the body where the girdle was worn.—Divide yourſelf into two halfs, juſt by the *girdle-ſtead*. *Eaſtward Hoe.*

GIR'DLER, *ſ.* A maker of girdles.

GIR'DLERS' COMPANY, a reſpectable company of the city of London, incorporated Auguſt 6, 1448. They are a maſter, three wardens, twenty-four aſſiſtants, eighty-four livery-men, &c. Their armorial enſigns are per feſs azure, and or a pale counter-changed, each piece of the firſt, charged with a gridiron of the ſecond. The creſt is the demy effigy of St. Lawrence, holding in his right hand a gridiron, in the left a book, the firſt of the colour, the latter of the metal aforeſaid. The motto, "Give thanks to God." Their hall is in Baſinghall-ſtreet.

GIRE, *ſ.* [*gyrus*, Lat.] A circle deſcribed by any thing in motion. See GYRE.

GIREL'LA, *ſ.* [from the Lat. *gyro*, to turn round.] A vane; a weathercock.

GIRET', a town of Perſia, in the province of Mezanderan; thirty miles ſouth of Ferabat.

GIR'GASHITES, or GERGESE'NES, an ancient people of the land of Canaan, whoſe habitation was beyond the ſea of Tiberias, where we find ſome footſteps of their name in the city of *Gergeſa*, upon the lake of Tiberias. The Jewiſh doctors record, that when Joſhua firſt came into the land of Canaan, the Girgaſhites took a reſolution rather to forſake their country than ſubmit to the Hebrews, and accordingly retired into Africa. Nevertheleſs, a good number of them ſtaid behind, ſince Joſhua, xxiv. 11, informs us that he ſubdued the Girgaſhites, and they whom he overcame were on this ſide the Jordan.

GIR'GE, or DJERGEH, a town of Upper Egypt, the capital of the Said, and reſidence of a bey, ſituated on the left bank of the Nile, in a moſt fertile diſtrict, abounding in all kinds of proviſions. It is about a league in circumference, and contains ſeveral moſques, bazars, and ſquares, but no marble buildings or remains of ancient edifices: 215 miles ſouth of Cairo, and 160 north of Syene. Lat. 26. 30. N. lon. 49. 8. E. Ferro.

GIRGEN'TI, or AGRIGENTI, a city of the iſland of Sicily, near the ſouth coaſt of the Valley of Mazara, founded near the ruins of the ancient Agrigentum; the ſee of a biſhop: ſituated on the river St. Blaiſe, about three miles from the ſea: forty-ſeven miles ſouth of Palermo. This ſee is the richeſt in Sicily. Among the curioſities belonging to the cathedral is an Etruſcan vaſe of rare ſize and preſervation. The monaſtery of San Nicolo ſtands on a little eminence in the centre of the old city, admirably ſituated. The range of hills towards the ſouth-eaſt ſinks gradually, ſo as to admit a noble view of ſea and of plain, terminated on each ſide by luxuriant groves of fruit-trees. Above appear the remains of ancient grandeur, wonderfully contraſted with the humble ſtraw cottages built at their feet. In the garden of this convent is a ſquare building with pilaſters, which is ſuppoſed to have been part of the palace of the Roman prætor. See AGRIGENTUM, vol. i. p. 207. Lat. 37. 28. N. lon. 31. 18. E. Ferro.

GIR'IA, a town of the iſland of Cephalonia: ſixteen miles weſt of Cephalonia.

GIR'KIN, *ſ.* A ſmall kind of cucumber.

GIRL, *ſ.* [Concerning the etymology of this word there is much queſtion: Meric Caſaubon derives it from χορη, of the ſame ſignification; Minſhew from *garrula*, Latin, a prattler, or *girella*, Italian, a weathercock; Junius thinks that it comes from *herlodes*, Welſh, from which, ſays he, *harlot* is very eaſily deduced. Skinner imagines that the Saxons, who uſed ceopl, for a man, might likewiſe have ceopla for a woman, though no ſuch word is now found. Dr. Hickes derives it moſt probably from the Iſlandic *karlinna*, a woman.] A young woman, or female child.—In thoſe unfledg'd days was my wife a *girl*. *Shakeſpeare.*

Tragedy ſhould bluſh as much to ſtoop
To the low mimic follies of a farce,
As a grave matron would to dance with *girls*. *Roſcommon.*

A boy, like thee, would make a kingly line;
But oh! a *girl*, like her, muſt be divine! *Dryden.*

GIRL'ISH, *adj.* Suiting a girl; youthful.—In her *girliſh* age ſhe kept ſheep on the moor. *Carew.*

GIRL'ISHNESS, *ſ.* The ſtate or quality of being girliſh.

GIRL'ISHLY, *adv.* In a girliſh manner.

GIRN, *ſ.* [a tranſpoſition of letters for] Grin.—This is at leaſt a *girn* of fortune, if not a fair ſmile. *Davenant's Wits.*

To GIRN, *v. n.* A corruption of *grin*. It is applied in Scotland to a crabbed, captious, or peeviſh, perſon.

GIROMA'GNY, a town of France, in the department of the Upper Rhine, and chief place of a canton, in the diſtrict of Béfort: two leagues north-weſt of Béfort, and nine and a half ſouth-weſt of Colmar.

GI'RON, a town of Africa, on the Ivory Coaſt.

GI'RON, *ſ.* In heraldry; a kind of triangle.

GI'RON DE LOYASA (Garcias), a learned Spaniſh prelate, born at Talavera, and purſued his ſtudies in the univerſity of Alcala. When he had completed his philoſophical and theological courſes, he applied to the ſtudy of hiſtory, and of the councils, with which he became intimately converſant. Afterwards he retired to Toledo, of which he had obtained a canonry, and where his uncle Lopez de Carvajal reſigned to him the archdeaconry

archdeaconry of Guadalajar, which is one of the dignities belonging to the church of that city. In 1585, Philip II. king of Spain, ſent for him to court, where he made him his almoner, and maſter of the royal chapel; ſoon after which he confided to his care the education of his ſon Philip, infant of Spain. When, in 1596, cardinal Albert of Auſtria went to aſſume the government of the Low-countries, he appointed Giron his vicar-general over his archbiſhopric of Toledo; and upon the ſubſequent marriage of the cardinal, the king preferred his almoner to that valuable ſee. He had but a ſhort enjoyment, however, of his new dignity; for he died in 1599, within five or ſix months after his advancement. He was the author of a valuable collection of Spaniſh Councils, publiſhed in 1594, in folio, under the title of *Collectio Conciliorum Hiſpaniæ, cum Notis & Emendationibus*.

GIRON'DE, a department of France, bounded on the north-eaſt by the department of the Lower Charente, on the eaſt by the departments of the Dordogne and Lot and Garonne, on the ſouth by the department of the Landes, and on the weſt by the ſea. It takes its name from the river Gironde. Bourdeaux is the capital.

GIRON'DE, a town of France, in the department of the Gironde, and chief place of a canton, in the diſtrict of La Reolle: one league and a half weſt of La Reolle, and three north of Bazas.

GIRON'DE, a river of France, formed by the union of the Garonne and Dordogne, four leagues north from Bourdeaux, which runs into the Atlantic after a courſe about nine leagues north-north-weſt.

GIRONEL'LA, a town of Spain, in the province of Catalonia: ſeven miles eaſt-north-eaſt of Solſano.

GIRONNE', *adj.* Having the field divided into girons.

GIRO'ST, a town of Perſia, in the province of Kerman: 125 miles ſouth of Sirgian.

GIROU'ST (James), a French Jeſuit, born at Beaufort in Anjou, in 1624. He entered on his noviciate in 1641, and, after paſſing through the uſual academic courſes, made pulpit-eloquence the principal ſubject of his attention. In this line he roſe to high reputation in his native province, and afterwards in the capital. When he was at the height of his popularity, he was incapacitated for further public ſervices by a paralytic attack; but, as he retained his faculties, he was for ſome years much reſorted to as a learned and judicious adviſer on difficult points on caſuiſtry. He died in 1689, at ſixty-five years of age. After his death, father Bretonneau publiſhed a collection of his Sermons, in 1704, in five vols. 12mo.

GIRR'OCK, *ſ.* [*acus major.*] A kind of fiſh.

GIRT, *part. paſſ.* [from *To gird.*]

To GIRT, *v. a.* To gird; to encompaſs; to encircle. *Not proper:*

In the dread ocean, undulating wide
Beneath the radiant line that *girts* the globe. *Thomſon.*

GIRT, *ſ.* A band by which the ſaddle or burthen is fixed upon the horſe:

Here lies old Hobſon, death hath broke his *girt*;
And here, alas! hath laid him in the dirt. *Milton.*

A circular bandage.—The moſt common way of bandage is by that of the *girt*, which *girt* hath a bolſter in the middle, and the ends are tacked firmly together. *Wiſeman.*—[In timber-meaſuring.] The circumference of a tree. Some uſe this word for the quarter or fourth part of the circumference only, on account of the great uſe that is made of it; for the ſquare of this fourth part is uſed as equal to the area of the ſection of the tree; which ſquare therefore multiplied by the length of the tree, is accounted the ſolid content. This content however is always about one-fourth part *leſs* than the true quantity; being nearly equal to what this will be after the tree is hewed ſquare in the uſual way: ſo that it ſeems intended to make an allowance for the ſquaring of the tree.

GIRT-LINE, *ſ.* A ſea term; a rope paſſing through a block on the head of the lower maſt to hoiſt up the rigging.—[With carpenters.] A line on the common ſliding rule, employed in the caſting up the contents of trees by means of their girt.

GIRTH, *ſ.* A band by which the ſaddle is fixed upon the horſe:

Or the ſaddle turn'd round, or the *girths* brake;
For low on the ground, woe for his ſake,
The law is found. *Ben Jonſon.*

The compaſs meaſured by the girdle, or encloſing bandage.—He's a luſty jolly fellow that lives well, at leaſt three yards in the *girth*. *Addiſon.*

To GIRTH, *v. a.* To bind with a girth.

GIRTH-WEB, *ſ.* The web of which girths are made.

GIR'TYS, an Indian town in the north-weſt territory of the United States, near the head of the navigable water or landing on St. Mary's river, where the Indians entered into the treaty of Greenville with the United States.

GIRU', a town of Perſia, in the province of Mezanderan: fifty miles eaſt of Mezanderan.

GIR'VAN, a town of Scotland, in the county of Ayr, ſituated at the mouth of the river Girvan: the principal trades carried on are tanning of leather and making of ſhoes: fourteen miles ſouth-ſouth-weſt of Ayr, and twenty-ſeven north-north-weſt of Wigton.

GIR'VAN, a river of Scotland, which riſes in the north-eaſt part of the county of Ayr, and runs into the ſea, a little below Girvan town.

GIR'VII, [from ȝyꝛ, Sax. a fen.] The ancient inhabitants of Lincolnſhire, and ſome neighbouring counties; the inhabitants of the fen country.

GI'SARM, *ſ.* An ancient military weapon, ſuppoſed to be a pike with two points.

GIS'BERT (John), a learned French Jeſuit, born at Cahors, in 1639. During ſeven years he preſided over the claſſical and rhetorical forms at Tours; and afterwards taught philoſophy for four years, and theology during an equal period, in that city. His next appointment was to the theological chair in the univerſity of Toulouſe, which he filled for eighteen years with eminent ſucceſs and reputation. After he was releaſed from the duties of his profeſſorſhip, he was appointed principal of the Jeſuits college at Toulouſe; and in 1703 was choſen provincial of the order in Languedoc. He died at Toulouſe in 1710, in the ſeventy-firſt year of his age. His principal works were, 1. *In Summam Sancti Thomæ Quæſtiones Juris & Facti theologicæ in Collegio Toloſano Societatis Jeſu propugnatæ*, 1670, folio. 2. *Diſſertationes Academicæ Selectæ, &c.* 1688, 8vo. 3. *Scientia Religionis Univerſa, ſive Chriſtiana Theologia, Hiſtoriæ Eccleſiaſticæ nova Methodo ſociata, Queſtiones Juris & Facti complectens*, 1689, in 2 vols. 8vo. 4. *Antiprobabiliſmus, ſive Tractatus Theologicus fidelem totius Probabiliſmi Staterem continens, in quo ex Rationibus divinis accuratè examinatur ſive Veritas ſeu Falſitas cujuſcunque Probabiliſmi in Materia morali*, 1703, 4to. a work which Dupin has analyſed and recommended as a performance of great merit.

GIS'BERT (Blaiſe), a French Jeſuit, and, like the preceding, a native of Cahors, born in 1567, and entered into the order in 1672. For ſome years he filled the poſts of claſſical and rhetorical tutor; but afterwards was ſelected for the ſervice of the pulpit, in which he is ſaid to have been much admired. The laſt years of his life he ſpent in the college belonging to the ſociety at Montpellier, where he died in 1731. He was the author of The Art of Educating a Prince, 1687, 4to. reprinted in the following year in 2 vols. 12mo. under the title of The Art of forming the Mind and Heart of a Prince: and Philoſophy for a Prince; or, a true Idea of the Modern and of the Ancient Philoſophy, 1689, 8vo. But the work which does him moſt honour, is his Chriſtian Eloquence, in Theory and Practice, 1714, 4to. which was republiſhed in 1728 at Amſterdam, in 12mo. with

with notes, by the celebrated James L'Enfant, who awards it a high ſhare of praiſe. The author left behind him in manuſcript a work which, if well executed, muſt be gratifying to curioſity: it is entitled A critical Hiſtory of the Art of Preaching among the French, from the early Years of the Reign of Francis I. to the Reign of Louis XV.

GIS'BOROUGH, a market-town in the North Riding of Yorkſhire, in Cleveland, in the turnpike road from Whitby to Durham, 224 miles from London, and four from the mouth of the Tees, where is a bay and harbour for ſhips. It had an abbey, founded in 1119; and its church, by the ruins, ſeems to have been equal to the largeſt cathedral in England. The ſoil, beſides its fertility in paſture, has iron ore, and mines of alum, which were firſt diſcovered in the reign of James I. and have been ſince very much improved. Sir Paul Pindar, who firſt farmed them, paid a rent to the king of 12,500l. The market is on Fridays. Fairs April 26 and 27, Whitſun-Tueſday, Auguſt 26 and 27, September 19 and 20, and Monday after November 11.—Ounſberry-Topping, is a lofty verdant mountain, adjoining to Giſborough, which has a moſt delightful proſpect, and is regarded by the ſailors as a ſea-mark. From a rock near the top of it there iſſues a ſpring, recommended for diſorders of the eyes.

GIS'BURN, a ſmall town in Craven, in the Weſt Riding of the county of York; eleven miles from Skipton, eight from Clithero, twenty-five from Preſton, and 220 from London. A very good turnpike-road through a moſt beautiful country from Skipton to Clithero paſſes through this town, and is the direct road from York, Harrowgate, &c. to the central parts of Lancaſhire. Here is no manufactory, and but little trade of any kind, the country around this pariſh, and indeed almoſt all Craven, conſiſting chiefly of large rich paſtures and meadows, from which an almoſt incredible ſupply of fat cattle, ſheep, &c. is ſent every fortnight to the trading towns in Lancaſhire. Here are five fairs annually, viz. on Eaſter Monday, and the two ſucceeding Mondays fortnight, for lean cattle; on September the 18th for fat cattle; and 19th of September for pedlary wares.

GIS'CO, ſon of Hamilco the Carthaginian general, baniſhed from his country by the influence of his enemies. He was afterwards recalled, and empowered by the Carthaginians to puniſh, in what manner he pleaſed, thoſe who had occaſioned his baniſhment. He was ſatisfied to ſee them proſtrate on the ground, and to place his foot on their neck, ſhewing that independence and forgiveneſs are two of the moſt brilliant virtues of a great mind. He was made a general ſoon after, in Sicily, againſt the Corinthians, about 309 years before the Chriſtian era; and by his ſucceſs and intrepidity he obliged the enemies of his country to ſue for peace.

To GISE, *v. a.* To graze by taking in the cattle of other people.

GISE'KIA, *ſ.* [ſo named by Linnæus in honour of *Paulus Dietericus Giſeke*, profeſſor of phyſics at Hamburgh.] In botany, a genus of the claſs pentandria, order pentagynia, natural order of ſucculentæ, (portulaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-leaved; leaflets ovate, concave, blunt, ſcarioſe at the edge, permanent. Corolla: none. Stamina: filaments five, ſubulate, ovate at the baſe, ſhort; antheræ roundiſh. Piſtillum: germ ſuperior, roundiſh, retuſe, five-parted; ſtyles ſhort, bowed back; ſtigmas blunt. Pericarpium: capſules five, roundiſh, ſomewhat flatted, ſcabrous, blunt, approximating. Seeds: ſolitary, ovate, ſmooth.—*Eſſential Character.* Calyx five-leaved; corolla none; capſules five, approximating, roundiſh, one-ſeeded.

Giſekia pharnacioides, or trailing Giſekia, a ſolitary ſpecies. Stalks herbaceous, decumbent, ſmooth, round, ſcored with a line on the upper ſide, a foot long, with remote joints. Branches of the baſe alternate. The herb reſembles that of Illecebrum ficoideum. Leaves oppoſite, petioled, elliptic-lanceolate, quite entire, blunt, ſmooth and even, ſpreading. Flowers green on the outſide, white within, hanging down, except on the day of flowering; moſt of them axillary, on one-flowered peduncles: capſules or ſeeds black. It is an annual plant, native of the Eaſt Indies; flowering here in June.

GI'SEMENT, *ſ.* The cattle which are taken in to graze at a certain price; the money received for grazing cattle.

GI'SETAKER, *ſ.* The perſon who ſo takes cattle to graze.

GIS'GI, a town of Tranſilvania, ſituated near the Maros: fourteen miles ſouth-weſt of Millenbach.

GISHU'BEL, a town of Bohemia, in the circle of Konigingratz: twenty miles eaſt-north-eaſt of Konigingratz.

GI'SING, a town and caſtle of Hungary: fourteen miles ſouth-weſt of Steinam Anger.

GIS'LAVY, a town of Sweden, in the province of Smaland: twenty miles ſouth-weſt of Johnkioping.

GI'SLE, *ſ.* Among the Engliſh Saxons, ſignifies a pledge: thus, *Fredgiſle* is a pledge of peace; *Giſlebert* an illuſtrious pledge, like the Greek *Homerus*. *Gibſ. Camden.*

GI'SON, *ſ.* in Jewiſh antiquities, a low wall for incloſing any thing conſecrated, as the temple, the altar of burnt ſacrifices, &c.

GISO'RS, a town of France, and ſeat of a tribunal, in the department of the Eure: nine leagues north-eaſt of Evreux, and nine eaſt of Rouen. Lat. 49. 17. N. lon. 19. 22. E. Ferro.

GIST, *ſ.* A gueſt; a ſtranger.

GIST OF ACTION, in law, is the cauſe for which the action lieth; the ground and foundation thereof, without which it is not maintainable. 5 *Mod.* 305.

GIS'TAIN, a town of Spain, in Arragon, ſituated on a brook in the Pyrenees, on the confines of France: five leagues north of Ainſa.

GIS'TITZ, a town of Bohemia, in the circle of Boleſlau: four miles north of Nimburn.

GISU'ND, a town of Norway, in the dioceſe of Drontheim: forty-four miles north-weſt of Drontheim.

GITE, *ſ.* [old French.] A robe:

When Phœbus roſe, he left his golden weed,
And donn'd a *gite* in deepeſt purple dy'd. *Fairfax.*

GITH, *ſ.* [*nigella.*] The herb called Guinea pepper.

GITHA'GO, *ſ.* in botany. See AGROSTEMMA.

GI'TI, a town of Aſia, in the country of Thibet: 234 miles north-north-eaſt of Delhi. Lat. 32. 10. N. lon. 79. 36. E. Greenwich.

GIT'SCHIN, a town of Bohemia, in the circle of Konigingratz. This town was taken and ſacked by the Bohemians in the year 1442; and ſuffered greatly during the long war of the Swedes in Germany: twenty-two miles north-weſt of Konigingratz, and forty-four north-eaſt of Prague.

GIT'TAH-HE'PHER, a city of Paleſtine, belonging to the tribe of Zebulon; ſituated on the eaſtern boundary of that province. It is probably the ſame with Gath-hepher. *Joſh.* xix. 13.

GIT'TAIM, a city of Paleſtine, belonging to the tribe of Benjamin. 2 *Sam.* iv. 3. *Neh.* xi. 33.

GIT'TERN, *ſ.* A kind of harp. *Phillips.*

GIT'TITE, [from *Gath.*] A native of Gath; an inhabitant of Gath.

GIT'TITH, *ſ.* A Hebrew term frequently occurring in the Pſalms, and generally tranſlated *wine-preſſes*. The conjectures of interpreters are various concerning this word. Some think it ſignifies a ſort of muſical inſtrument; others, that the pſalms with this title were ſung after the vintage; and others, that the hymns of this kind were invented in the city of Gath. Calmet is of opinion, that it was given to the claſs of young women of Gath to be ſung by them. *Pſal.* viii. 1. lxxxi. 1. lxxxiv. 1. Dr. Hammond thinks that the pſalms with this

this title were all fet to the fame tune, and made on Goliah the Gittite.

GI'VA, a town of Aſiatic Turkey, in the province of Natolia; thirty-two miles ſouth-eaſt of Miletſ.

GIVANIROTON'DO, a town of Italy, in the kingdom of Naples, and province of Capitanata: nine miles weſt of Monte St. Angelo.

To GIVE, *v. a.* preter. *gave*; part. paſſ. *given*: [ȝiꝑen, Sax.] To beſtow; to confer without any price or reward; not to ſell.—I had a maſter that *gave* me all I could aſk, but thought fit to take one thing from me again. *Temple.*

Conſtant at church and change; his gains were ſure,
His *givings* rare, ſave farthings to the poor. *Pope.*

While tradeſmen ſtarve, theſe Philomels are gay;
For gen'rous lords had rather *give* than pay. *Young.*

To tranſmit from himſelf to another by hand, ſpeech, or writing; to deliver.—The woman whom thou gaveſt to be with me, ſhe *gave* me of the tree, and I did eat. *Gen.* iii. 12.—They were eating and drinking, marrying and *giving* in marriage. *Matt.* xxiv. 38.—We ſhall *give* an account of theſe phenomena. *Burnet.*—To put into one's poſſeſſion; to conſign; to impart; to communicate.—*Give* us of your oil, for our lamps are gone out. *Matt.* xxv.—Nature *gives* us many children and friends, to take them away; but takes none away to *give* them us again. *Temple.*—To pay as a price or reward, or in exchange.—All that a man hath will he *give* for his life. *Job*, ii. 4.

If you did know to whom I *gave* the ring,
If you did know for whom I *gave* the ring,
And would conceive for what I *gave* the ring,
You would abate the ſtrength of your diſpleaſure.
Shakeſpeare.

To yield; not to withhold.—Philip, king of Macedon, gave ſentence againſt a priſoner when he was drowſy, and ſeemed to *give* ſmall attention. The priſoner, after ſentence was pronounced, ſaid, I appeal: the king, ſomewhat ſtirred, ſaid, To whom do you appeal? The priſoner anſwered, From Philip, when he *gave* no ear, to Philip, when he ſhall *give* ear. *Bacon.*—To quit; to yield as due.—*Give* place, thou ſtranger, to an honourable man. *Eccleſ.*—To confer; to impart.—I will bleſs her, and *give* thee a ſon alſo of her. *Gen.* xvii.—To expoſe; to yield without retention:

All clad in ſkins of beaſts the jav'lin bear;
Give to the wanton winds their flowing hair. *Dryden.*

To grant; to allow.—'Tis *given* me once again to behold my friend. *Rowe.*—To yield; not to deny:

I *gave* his wife propoſal way;
Nay, urg'd him to go on: the ſhallow fraud
Will ruin him. *Rowe.*

To afford; to ſupply.—*Give* us alſo ſacrifices and burnt-offerings, that we may ſacrifice unto the Lord. *Ex.* x. 25.—To empower; to commiſſion:

Prepare
The due libation and the ſolemn pray'r;
Then *give* thy friend to ſhed the ſacred wine. *Pope.*

To enable.—God himſelf requireth the lifting up of pure hands in prayers; and hath *given* the world to underſtand, that the wicked, although they cry, ſhall not be heard. *Hooker.*

So ſome weak ſhoot, which elſe would poorly riſe,
Jove's tree adopts, and lifts into the ſkies;
Through the new pupil ſoft'ring juices flow,
Thruſt forth the gems, and *give* the flow'rs to blow. *Tickel.*

To pay.—The applauſe and approbation I *give* to both your ſpeeches. *Shakeſpeare.*—To utter; to vent; to pronounce.—Let the firſt honeſt diſcoverer *give* the word about, that Wood's halfpence have been offered, and caution the poor people not to receive them. *Swift.*—So you muſt be the firſt that *gives* this ſentence, and he that ſuffers. *Shakeſpeare.*—To exhibit; to ſhew.—This inſtance *gives* the impoſſibility of an eternal exiſtence in any thing eſſentially alterable or corruptible. *Hale.*—To exhibit as the product of a calculation.—The number of men being divided by the number of ſhips, *gives* four hundred and twenty-four men a-piece. *Arbuthnot.*—To do any act of which the conſequence reaches others.—As we deſire to *give* no offence ourſelves, ſo neither ſhall we take any at the difference of judgment in others. *Burnet.*—To exhibit; to ſend forth as odours from any body.—In oranges the ripping of the rind *giveth* out their ſmell. *Bacon.*—To addict; to apply.—He that *giveth* his mind to the law of the Moſt High, will ſeek out the wiſdom of all the ancients. *Eccleſ.* xxxix. 1.

The duke is virtuous, mild, and too well *given*,
To dream on evil. *Shakeſpeare.*

Fear him not, Cæſar, he's not dangerous:
He is a noble Roman, and well *given*. *Shakeſpeare.*

To reſign; to yield up.—Finding ourſelves in the midſt of the greateſt wilderneſs of waters, without victual, we *gave* ourſelves for loſt men, and prepared for death. *Bacon.*

Who ſay, I care not, thoſe I *give* for loſt;
And to inſtruct them will not quit the coſt. *Herbert.*

To conclude; to ſuppoſe:

Whence came you here, O friend, and whither bound?
All *gave* you loſt on far Cyclopean ground. *Garth.*

To GIVE *away*. To alienate from one's ſelf; to make over to another; to transfer.—Whatſoever we employ in charitable uſes, during our lives, is *given away* from ourſelves: what we bequeath at our death, is given from others only, as our neareſt relations. *Atterbury.*

If you ſhall marry,
You *give away* this hand, and that is mine;
You *give away* heav'n's vows, and thoſe are mine;
You *give away* myſelf, which is known mine. *Shakeſpeare.*

To GIVE *back*. To return; to reſtore.—Their vices perhaps *give back* all thoſe advantages which their victories procured. *Atterbury.*

To GIVE *forth*. To publiſh; to tell.—Soon after it was *given forth*, and believed by many, that the king was dead. *Hayward.*

To GIVE *the hand*. To yield pre-eminence, as being ſubordinate or inferior.—Leſſons being free from ſome inconveniences, whereunto ſermons are more ſubject, they may in this reſpect no leſs take than in others they muſt *give the hand*, which betokeneth pre-eminence. *Hooker.*

To GIVE *over*. To leave; to quit; to ceaſe.—Let novelty therefore in this *give over* endleſs contradictions, and let ancient cuſtoms prevail. *Hooker.*

Never *give* her *o'er*;
For ſcorn at firſt makes after love the more. *Shakeſpeare.*

To addict; to attach to.—When the Babylonians had *given* themſelves *over* to all manner of vice, it was time for the Lord, who had ſet up that empire, to pull it down. *Grew.*—To conclude loſt.—Since it is lawful to practiſe upon them that are forſaken and *given over*, I will adventure to preſcribe to you. *Suckling.*

Yet this falſe comfort never *gives* him *o'er*,
That, whilſt he creeps, his vig'rous thoughts can ſoar.
Pope.

To abandon.—The duty of uniformity throughout all churches, in all manner of indifferent ceremonies, will be very hard, and therefore beſt to *give* it *o'er*. *Hooker.*

Sleep hath forſook, and *giv'n* me *o'er*
To death's benumbing opium as my only cure. *Milton.*

To GIVE *out*. To proclaim; to publiſh; to utter.—

The

The night was distinguished by the orders which he *gave out* to his army, that they should forbear all insulting of their enemies. *Addison.*

It is *given out*, that, sleeping in my orchard,
A serpent stung me. So the whole ear of Denmark
Is by a forged process of my death,
Rankly abused. *Shakespeare.*

To show in false appearance:

His *givings out* were of an infinite distance
From his true meant design. *Shakespeare.*

To GIVE *up.* To resign; to quit; to yield.—Let us *give* ourselves wholly *up* to Christ in heart and desire. *Taylor.*—*Give* yourselves *up* to some hours of leisure. *Watts.*

Learn to be honest men, *give up* your leaders,
And pardon shall descend on all the rest. *Addison.*

Have the physicians *giv'n up* all their hopes?
Cannot they add a few days to a monarch? *Rowe.*

To abandon.—If any be *given up* to believe lies, some must be first *given up* to tell them. *Stillingfleet.*—Persons, who, through misfortunes, chuse not to dress, should not, however, *give up* neatness. *Clarissa.*—To deliver.—And Joab *gave up* the sum of the number of the people to the king. 2 *Sam.* xxiv. 9.

To GIVE *way.* To yield; not to resist; to make room for.—Private respects, with him, *gave way* to the common good. *Carew.*

Scarce had he spoken when the cloud *gave way*;
The mists flew upwards, and dissolv'd in day. *Dryden.*

The word *give* is often used with great laxity. The general idea is that of transmitting from one to another.

To GIVE, *v. n.* To rush; to fall on; to give the assault. A phrase merely French, and scarcely worthy of adoption:

Your orders come too late, the fight's begun;
The enemy *gives on* with fury led. *Dryden.*

To relent; to grow moist; to melt or soften; to thaw.—Some things are harder when they come from the fire, and afterwards *give* again, and grow soft; as the crust of bread, bisket, sweetmeats, and salt. *Bacon.*

Only a sweet and virtuous soul,
Like seasoned timber, never *gives*;
But though the whole world turn to coal,
Then chiefly lives. *Herbert.*

To move. *A French phrase:*

Up and down he traverses his ground,
Then nimbly shifts a thrust, then lends a wound;
Now back he *gives*, then rushes on amain. *Daniel.*

To GIVE *in.* To go back; to give way. *Not in use.*—The charge was given with so well-governed fury, that the left corner of the Scots battalion was enforced to *give in.* *Hayward.*

To GIVE *into.* To adopt; to embrace.—This consideration may induce a translator to *give into* those general phrases, which have attained a veneration in our language from being used in the Old Testament. *Pope.*—The whole body of the people are *giving in* with all their might *to* those very practices that are working their destruction. *Swift.*

To GIVE *off.* To cease; to forbear.—The punishment would be kept from being too much, if we *gave off* as soon as we perceived that it reaches the mind. *Locke.*

To GIVE *over.* To cease; to act no more.—Demetrius, king of Macedon, had a petition offered him divers times by an old woman, and still answered he had no leisure; whereupon the woman said aloud, Why then *give over* to be king. *Bacon.*

So Satan, whom repulse upon repulse
Met ever, and to shameful silence brought,
Yet *gives* not *o'er*, though desperate of success. *Milton.*

To GIVE *out.* To publish: to proclaim.—Simon bewitched the people of Samaria, *giving out* that himself was some great one. *Acts*, viii. 9.—To cease; to yield:

We are the earth; and they
Like moles within us, heave and cast about:
And 'till they foot and clutch their prey;
They never cool, much less *give out.* *Herbert.*

GIV'EN, (*Datum,*) a term used in mathematics, to signify something that is supposed to be known: thus, if a magnitude be known, or if we can find another equal to it, it is said to be *given* in magnitude. Or when the position of any thing is known, it is said to be *given* in position. And when the diameter of a circle is known, the circle is *given* in magnitude. Or the circle is *given* in position, when its *centre* is given in position. When the kind or species of a figure is known, or remains the same, it is *given* in specie, &c. Euclid wrote a book of *Data*, or concerning things GIVEN, in 95 propositions, usually accompanying his Elements, in the best editions, and which Pappus reckons as one of the best specimens of the analytical works of the ancients.

GIV'ER, *f.* One that gives; donor; bestower; distributor; granter:

I have not liv'd since first I heard the news,
The gift the guilty *giver* doth accuse. *Dryden.*

Both gifts destructive to the *givers* prove;
Alike both lovers fall by those they love. *Pope.*

GIVES, *f.* Fetters or shackles for the feet.

GIV'ET, a town of France, in the department of the Ardennes, and chief place of a canton, in the district of Rocroy. It anciently consisted of two small villages, in the county of Namur, on each side of the Meuse, near Charlemont, afterwards erected into two towns, one next to Charlemont, called *Givet St. Hilaire*, the other on the opposite side of the river, called *Givet Notre Dame.* The fortifications are the work of Vauban: eight leagues north of Mezieres, and five north-east of Rocroy. Lat. 50. 7. N. lon. 22. 27. E. Ferro.

GIU'LA, a town of Hungary, situated on the river Keres; taken by the Turks in 1566, and retaken, in the year 1695, by the emperor, to whom it was confirmed by the peace of Carlowitz: fifty-two miles north-north-west of Temeswar, and eighty-eight north of Belgrade.

GIULE'NEI, an island in the Caspian Sea: 130 miles south of Astrachan. Lat. 44. 15. N. lon. 65. 35. E. Ferro.

GIU'LIA NO'VA, a town of Italy, in the kingdom of Naples, and province of Abruzzo Ultra, on the coast of the Adriatic: twelve miles east-north-east of Teramo.

GIVON'NE, a town of France, in the department of the Ardennes, and chief place of a canton, in the district of Sedan: one league north-east of Sedan.

GIVO'RS, a town of France, in the department of the Rhône and Loire, and chief place of a canton, in the district of Campagne-de-Lyon: four leagues south of Lyons.

GIV'RY, a town of France, in the department of the Saône and Loire, and chief place of a canton, in the district of Châlons: one league and a half west of Châlons-sur-Saône, and two and a half south of Chagny. Lat. 46. 47. N. lon. 22. 25. E. Ferro.

GIUS'MARK, a town of Asiatic Turkey, in the province of Curdistan: eighty miles south-south-east of Betlis.

GIUST, *f.* [*giostra*, Ital.] A tilting with spears:

Full jolly knight he seem'd, and faire did sitt,
As one for knightly *giusts* and fierce encounters fitt. *Sp.*

To GIUST, *v. n.* To tilt with spears.—So foorth they went, and both together *giusted.* *Spenser.*

GIUSTENDIL', a town of European Turkey, in the province of Bulgaria; the see of a Greek archbishop: eighty miles west-north-west of Sophia.

GIUSTENDIL', a town of European Turkey, in the province of Bulgaria: twenty-four miles south of Sophia.

GIUSTINIA'NI (Auguſtin), a learned eccleſiaſtic and hiſtorian, born of a noble family at Genoa, in 1470. He entered into the order of preachers at Pavia in 1488, on which occaſion he changed his baptiſmal name of Peter for Auguſtin. In 1514 he was made biſhop of Nebbio in Corſica. He was editor in 1516 of the Pſalter in four languages, the Hebrew, Greek, Arabic, and Chaldee, with three Latin interpretations and gloſſes; which was the firſt of the Polyglott editions of the books of Scripture. The reputation he acquired by this work cauſed him to be invited to Paris by Francis I. who gave him a penſion, and appointed him to the firſt profeſſorſhip of oriental languages in that univerſity, which office he held five years. He collected a choice library, rich in Oriental, Greek, and Latin, manuſcripts, which he afterwards preſented to the republic of Genoa. After leaving France, he went to his dioceſe, and employed himſelf for ſome years in paſtoral cares, improving its revenue, building an epiſcopal palace, and performing all the duties of a good paſtor. On paſſing the ſea to his biſhopric in 1536, he was loſt with the ſhip. He reviſed and edited the treatiſe of Porchetti, entitled *Victoria adverſus impios Judæos*. After his death were publiſhed his Annals of the Republic of Genoa, from the foundation of the city to the year 1528.

GIUSTINIA'NI (Bernard), a Venetian nobleman, born in 1408. He was educated under the moſt learned perſons of his time, and obtained great reputation for his eloquence. The republic employed him on ſeveral honourable occaſions. In 1451 he was appointed to receive the emperor Frederic III. on his paſſing through the Venetian territory. He afterwards was ſent on embaſſies to Ferdinand king of Naples, to ſeveral of the popes, and to Louis XI. of France, who honoured him with knighthood. In 1467 he was made commandant of Padua, and in the progreſs of civic honours he was made counſellor, ſavio-grande, and procurator of St. Mark. He died in 1489. He was the author of a number of Orations upon public occaſions; the Life of his uncle Lorenzo Giuſtiniani; three pieces on the Life, the Tranſlation, and the Appearance, of St. Mark; a verſion of the Book of Iſocrates to Nicocles; ſome Latin Letters of his father Leonardo; and the Ancient Hiſtory of Venice, in fifteen books, from its foundation to the year 809, written in Latin. This has been ſeveral times printed, and has been tranſlated into Italian by Lodov. Domenichi: it is accounted a valuable performance, the authorities of which are derived from the beſt ſources, rejecting the fables adopted by ſome other writers.

GI'ZEH, a town of Egypt, ſituated on the weſtern bank of the Nile, nearly oppoſite the city of Cairo, and is erected on part of the ſcite of the ancient and memorable city of Memphis, near the pyramids. See the article EGYPT, vol. vi. p. 362.

GIZIGINSKA'IA, a gulf on the north-weſt extremity of the Peninſkoi Sea, extending about fifty miles in length, and ſixteen in breadth. Lat. 67. to 68. N. lon. 178. E. Ferro.

GIZ'ZARD, *ſ.* [*goſier*, Fr. *gigeria*, Lat.] The ſtrong muſculous ſtomach of a fowl.—In birds there is no maſtication in the mouth: but it is immediately ſwallowed into the crop, where it is moiſtened by ſome proper juice, and thence transferred into the *gizzard*, or muſculous ſtomach. *Ray*.

They neſtle near the throne,
By their high crops and corny *gizzards* known. *Dryden*.

It is proverbially uſed for apprehenſion, or conception of mind: as, he *frets his gizzard*, he haraſſes his imagination.

GLABEL'LA, *ſ.* [from *glaber*, Lat. ſmooth, becauſe it is without hair.] The ſpace between the eye-brows; the ſmoothneſs and clearneſs of which conſtitute great beauty in females.

GLA'BER (Rodolph), a benedictine monk of Cluni, who flouriſhed in the eleventh century. He was converſant with the learning of that dark period, and has perpetuated his name by a Chronicle or Hiſtory of France, written in Latin. It conſiſts of five books, of which the firſt relates to the events of the monarchy previous to the election of Hugh Capet, and the four ſubſequent ones to thoſe following it, to the year 1046. This work is valuable for the information it contains relative to thoſe remote ages. It has been printed in the hiſtorical collections of Pithou and Duchеſne. Glaber alſo wrote a Life of William abbot of St. Benignus at Dijon.

GLA'BRITY, *ſ.* [from *glaber*, Lat.] Smoothneſs; baldneſs.

GLA'CIAL, *adj.* [*glacial*, Fr. *glacialis*, Lat.] Icy; made of ice; frozen.

To GLA'CIATE, *v. n.* [*glacies*, Lat. *glacer*, Fr.] To turn into ice.

GLACIA'TION, *ſ.* The act of turning into ice; ice formed.—Ice is plain upon the ſurface of water, but round in hail, which is alſo a *glaciation*, and figured in its guttulous deſcent from the air. *Brown*.

GLACI'ER, *ſ.* [from *glacies*, Lat. ice, or *glacière*, Fr. an ice-houſe.] A rock or mountain covered with ice. Hence the term *glaciers* has been applied by modern philoſophers to thoſe immenſe ridges and pinnacles of ice which majeſtically crown and everlaſtingly diſtinguiſh the Swiſs and Tyrolean alps of Europe, the Andes or Cordeleras of America, the frozen coaſt of Spitzbergen, and the Thibet mountains of Aſia. The glaciers of Swiſſerland may be divided into two claſſes, one occuping the deep valleys ſituated in the boſom of the Alps, and diſtinguiſhed by the name of *Ice-valleys*; the others are thoſe which clothe the ledges and ſides of the mountains. Theſe two kinds have been diſtinguiſhed by our philoſophic countryman Mr. Coxe, into the *upper* and *lower* glaciers. The lower glaciers are by far the moſt conſiderable; ſome of them extending many leagues in length. They do not communicate with each other, as has been ſuppoſed, few of them being parallel to the central chain; but, ſtretching moſtly in a tranſverſe direction, are bordered at the higher extremity by inacceſſible rocks, and at the lower extending into the cultivated valleys. The thickneſs of the ice varies in different parts. In the glacier des Bois, which extends more than fifteen miles in length, and upwards of three in breadth, M. Sauſſure found it generally from eighty to one hundred feet; but he was credibly informed that in ſome places it was not leſs than ſix hundred feet, and even more. Theſe vaſt maſſes of ice uſually reſt on an inclined plane; where, being puſhed forward by their own weight, and but weakly ſupported by the rugged rocks beneath them, they are interſected by large crevices, and have an appearance of walls, pyramids, &c. according to the poſition of the eye in viewing them. The glacier des Bois is thus deſcribed by Mr. Coxe:—"Having advanced about a quarter of a mile, we were ſuddenly alarmed by the noiſe of a vaſt fragment of icy rock which had detached itſelf from one of the higheſt needles, and bounded from one precipice to another with great rapidity till it reached the plain below, where it was almoſt reduced to duſt. Nature now ſeemed clad in all her terrors. Before us was a valley of ice twenty miles in extent, bounded by a circular glacier of pure unbroken ſnow, named *Takul*, which leads to the foot of Mont Blanc, and is ſurrounded by large conical rocks, terminating in ſharp points like the towers of an ancient fortification; to the right roſe a range of magnificent peaks, their intervals filled with glaciers; and far above the reſt, the magnificent ſummit of Mont Blanc, his higheſt point obſcured with clouds. He appeared of ſuch immenſe magnitude, that, at his preſence, the circumjacent mountains, however gigantic, ſeemed to ſhrink before him, and *hide their diminiſhed heads*."

The upper glaciers may be ſubdivided into thoſe which cover the ſummits, and thoſe which extend along the

ſides, of the Alps. Thoſe on the very ſummit, however, though they have the appearance of ice, are not ſo in reality, but conſiſt entirely of ſnow hardened by the extreme cold. M. Sauſſure found that which covered the top of Mont Blanc to be penetrable, though with difficulty, by a ſtick; but below this hard cruſt was a ſnow like ſalt, without coherence. The ſides are covered with a mixture of ice and ſnow; by reaſon of the ſuperior power of the ſummer ſun to diſſolve the ſnow, which afterwards congeals into impenetrable ice.

Several conjectures have been made concerning the formation of theſe extraordinary bodies of ice. Mr. Coxe agrees with M. Gruner in opinion, that they are produced by the continual diſſolution of the ſnow in ſummer, and its congelation by the ſucceeding froſts. Hence, on the ſummits of the mountains where the ſun has very little power, the glacier is ſoft, and contains but little ice: as we deſcend the mountains, the conſiſtence becomes firmer, becauſe there is a conſiderable mixture of ſnow-water, the congelation of which augments the hardneſs; and in the valleys, the glacier is hardeſt of all, becauſe the portion of water is there much ſuperior to that of the ſnow; and from its rugged and ſhelving ſurface, has the exact appearance of a ſtormy ſea ſuddenly ſeized by a froſt.

The mountains which ſurround this valley or ſea of ice, are, 1ſt, Mount Charmos on the right; 2d, Mount Mallet in the back ground; 3d, Periades; 4th, the Great Jorra, of an extraordinary height; 5th, l'Aiguille du Moine; 6th, that of Dru; but the Montanverd, or green mountain, is the moſt curious, being half covered with ice and ſnow, and, in intermediate ſpaces, with rich paſtures, where cattle feed. This ſea of ice is ſuppoſed to extend about twelve leagues. A more curious, and at the ſame time a more terrific, ſcene than this cannot be conceived, at once preſenting the image of the frozen ocean and the verdure of the temperate zone. It is poſſible to deſcend from the Montanverd on the ſea of ice, and even to croſs it, but the dangers are immenſe, on account of the large crevices which it is neceſſary to ſtep over, that are more than an hundred feet deep. It is matter of much ſurpriſe, on coming to this part, to find the waves of ice, which at ſome diſtance appear inconſiderable, to be more than eighty or an hundred feet in height.

From this majeſtic ſcene we are taken by a ſteep and narrow path, through a foreſt of firs and larches, which employs about an hour to deſcend, in order to return to a place where there is a wooden bridge to croſs the Arveron; when another moſt aſtoniſhing object preſents itſelf, an entire mountain of ice, formed by the fall of a glacier, ſeen from the Montanverd, which deſcends into the valley. High mountains of granite ſurround theſe glaciers, and form, by their irregular ſtrata, ſuperb caſcades, mixing their waters with the Arveron, which iſſues from a moſt beautiful arched grotto above an hundred feet high, compoſed entirely of ice. The wonderful effects of maſſes of ice contraſted with the impending woods and rich paſtures that crown this grand and uncommon ſcene, added to the frightful noiſe ſo frequently heard of enormous bodies of it breaking off from the mountain and daſhing themſelves to pieces in the Arveron, "cannot but create," ſays M. Beaumont, "an admiration and ſurpriſe more readily felt than expreſſed, and highly deſerving the attention of the ſpeculative traveller."

Theſe vaſt reſervoirs of ice and ſnow, beſides ſupplying the Arveron, give birth to many other important rivers, whoſe ſources deeply intereſt curioſity. As an example, the account which Bourrit gives of that of the Rhone, is particularly worthy of notice. "At length we perceived through the trees a mountain of ice as ſplendid as the ſun, and flaſhing a ſimilar light on the environs. This firſt aſpect of the glacier of the Rhone inſpired us with great expectation. A moment afterwards this enormous maſs of ice having diſappeared behind thick pines, it ſoon after met our ſight between two vaſt blocks of rock, which formed a kind of portico. Surprized at the magnificence of this ſpectacle, and at its admirable contraſts, we beheld it with rapture. At length we reached this beautiful portico, beyond which we were to diſcover all the glacier. We arrived: at this ſight one would ſuppoſe one's ſelf in another world, ſo much is the imagination impreſſed with the nature and immenſity of the objects in view. To form an idea of this ſuperb ſpectacle, figure in your mind a ſcaffolding of tranſparent ice, filling a ſpace of two miles, riſing to the clouds, and darting flaſhes of light like the ſun. Nor were the ſeveral parts leſs magnificent and ſurpriſing. One might ſee as it were the ſtreets and buildings of a city, erected in the form of an amphitheatre, and embelliſhed with pieces of water, caſcades, and torrents. The effects were as prodigious as the immenſity and the height; the moſt beautiful azure, the moſt reſplendent white; the regular appearance of a thouſand pyramids of ice, more eaſy to be imagined than deſcribed. Such is the aſpect of the glacier of the Rhone, reared by nature on a plan which ſhe alone can execute: we admire the majeſtic courſe of a river, without ſuſpecting that what gives it birth, and maintains its waters, may be ſtill more majeſtic and magnificent."

An intereſting queſtion has ariſen concerning theſe glaciers of Swiſſerland, Whether they are to be conſidered as in a ſtate of increaſe, or diminution? Mr. Coxe is of opinion that they occaſionally increaſe and decreaſe; in proof of which he adduces the following obſervation: "The borders of the glacier of Montanverd are moſtly ſkirted with trees quite to the vaſt arch of ice under which the Arveron riſes with conſiderable force. Thoſe trees which ſtand at a little diſtance from the arch are about eighty feet high, and are undoubtedly of a very great age. Between theſe and the glacier the trees are of a later growth; as is evident from their texture and inferior ſize. Others, ſtill ſmaller, have been overturned and enveloped in the ice: there ſeems to be a kind of regular gradation in the age of theſe ſeveral trees, from the largeſt which are ſtanding, to the ſmalleſt that lie proſtrate."—Hence Mr. Coxe concludes, that the glacier once extended as far as the row of ſmall firs; but that, upon its gradual diſſolution, a number of trees ſhot up on the ſpot it had occupied; ſince which time the ice has again advanced, and overturned the laſt grown trees before they had attained to any conſiderable height. This he thinks alſo confirmed by the following fact: "Large ſtones of granite are uſually found at a ſmall diſtance from the extremities of the glacier. Theſe ſtones have certainly fallen from the mountains upon the ice; have been carried on in its progreſs; and have tumbled into the plain upon the diſſolution or ſinking of the ice which ſupported them. Theſe ſtones, which the natives call *moraine*, form a kind of border towards the foot of the valley of ice, and have been puſhed forward by the glacier in its advances: they extend even to the place occupied by the larger pines." In oppoſition to thoſe who maintain that there is a conſtant accumulation of ice and ſnow in the alpine regions, he alſo offers the following remarks. 1. Between the years 1776 and 1785, the glacier of Grindelevald had diminiſhed to ſuch a degree, that the ſpot which its extremity occupied in the former year, was at leaſt four hundred paces from that occupied by it in the latter. 2. In the year 1785 the Murailles de Glace, which in 1776 he had deſcribed as forming the border of the glacier of Boſſon, no longer exiſted; and young trees had ſhot up in the parts which were then covered by the glacier of Montanverd.

In the Tyrol or Rhætian Alps, now called the Brenner, the glaciers are known by the general name of *ferner*, and in the ſouth by that of *vedretta*. They receive, moreover, their particular name from the valley in which they are formed, or from the mountain (*glacière*)

to

to which they belong. Such are the Hochvernag-ferner, the Gerſlar-ferner, the Schalfthaler-ferner, &c. It is ſuppoſed, by the inhabitants of the country, that theſe glaciers, however great in number or enormous in ſize, are not of an older date than the third century. The people here ſeem to be of the ſame opinion with the Swiſs reſpecting their periodical mutations; and it is aſſerted that they increaſe and diminiſh alternately in the courſe of ſeven years. This is certain, that they are ſubject to more violent changes than in Swiſſerland; and that their augmentation is more ſenſible; the ſpace which the Gurgler-ferner now occupies, between the Schwartzberg and the Rübel-berg, was a paſture on which ſhepherds not long ago tended their flocks.

It is in the gorge of the Œtz, and in its environs, that we meet with the moſt remarkable conglomeration of glaciers; and they are there ſo greatly multiplied, that to this part of the Rhætian chain the name of *groſſe-ferner*, or great glacier, is given. Some of them here undergo great alterations on the leaſt change of temperature; at one time occupying the entire gorge, and at another even leſs than half of it. The mountain called *Neuſberg*, which terminates the Roſen-thal, has two glaciers of this kind, the Hochjock-ferner, and the Guſlar-ferner. The kind of arch compoſed of ice, from which a ſtream of water iſſues at the foot of every glacier, increaſes conſiderably during ſummer, and ſome of them become real bridges, which extend from one mountain to another, and on which travellers paſs without danger, excepting when it rains. Sometimes alſo, the ſurface of the glacier cracks perpendicularly, preſenting a multitude of pyramids, the leaſt ſolid of which breaks off and rolls with a great noiſe to the bottom of the gorge. Theſe fragments, united by a new congelation, there increaſe, and form a dyke to the ſtream which their diſſolution had increaſed. After this manner, the glacier of Roſen-thal, called Roſnerſée, was formed in 1771. A ſtream iſſuing from Hochjock-ferner fell into the gorge of Roſen; ſome blocks of ice were detached in the month of Auguſt, and ſo filled up the gorge as to make a dam acroſs it: this ſtream became a lake, and ſoon afterward a glacier, which now covers twelve thouſand metres of excellent paſturage.

The inhabitants of theſe mountains remark that, when ſuch avalanches, or blocks of ice, deſcend from a ſingle glacier, there is leſs reaſon to fear for the diſtricts ſituated below it: but that, if two glaciers diſcharge themſelves into the ſame bottom, a bank is very ſoon formed, and the new accretion of ice forces men and cattle to ſeek elſewhere for ſubſiſtence. Such accidents occurred ſeveral times during the laſt age in the gorge of Gurgler. In general, we may obſerve that all the glaciers of recent formation obtain their increaſe from the month of October to that of June, a period at which they begin to thaw; then they form a multitude of caſcades, preſenting all that variety which is admired in the Swiſs ſcenery. Streams ruſhing from beneath vaults of ice, and ſwelled by tributary water-falls, ſometimes become torrents which mark their courſe with devaſtation. When the ſoutherly winds prevail for many ſucceſſive days, the univerſal thaw ſeems to menace the valleys with a new deluge, mixed with ſand, rocks, and ice.

The icebergs, or glaciers, in the north-eaſt of Spitzbergen, preſent a ſingular appearance, being high cliffs of an emerald colour, impendent over the ſea, with cataracts of melted ſnow, and a back ground of black conic hills ſtreaked with white. The ſea itſelf contains mountains of ice, formed by aggregation; a large field forcing a ſmaller out of the water till it lodges upon the ſuperior ſurface, and the height is afterwards increaſed by the ſnow till it ſometimes riſes to 1500 feet. The ſnow in theſe high latitudes often falls as hard, and minute, as ſifted ſand.

In Aſia, Mr. Daniell has deſcribed the glaciers, which he ſays make a moſt majeſtic appearance even at the diſtance of a hundred and fifty miles, preſenting a moſt auguſt diſplay of the ſublime and beautiful. The ice riſes often into lofty ſpires on the grandeſt of ſcales; their brilliancy under the bright rays of the meridian ſun greatly ſurpaſſes all powers of deſcription; and, towards the evening, the light ſides become moſt ſuperbly tinted with a beautiful roſeate colour. If ſuch immenſe fabrics of accumulated ice preſent themſelves to our view as reſulting from the rarity of the higher region of the air in theſe milder climates, what imagination can picture to the mind's eye the boundleſs extent and magnificent grandeur of the lofty ranges of thoſe glaciers, which, amidſt the awful roar of the profound abyſs in the Frozen Ocean, muſt preſent an eternal barrier to the foot of man in the countries which ſurround the poles!

GLA'CIES MARI'Æ, *ſ.* A name given to the clear tranſparent gypſum, or vitriolated lime. It is ſeldom uſed.

GLA'CIOUS, *adj.* [*glacio*, Lat.] Icy; reſembling ice.—Although exhaled and placed in cold conſervatories, it will cryſtalize and ſhoot into *glacious* bodies. *Brown.*

GLA'CIS, *ſ.* [French.] In fortification, a ſloping bank, reaching from the parapet of the counterſcarp to the level ſide of the outwork. See the article FORTIFICATION, vol. vii. p. 591.—In architecture, an eaſy imperceptible ſlope; the cymatium of a cornice. *Aſh.*

GLAD, *adj.* [ȝlæd, Sax. *glad*, Daniſh.] Cheerful; gay; in a ſtate of hilarity.—They bleſſed the king, and went unto their tents joyful and *glad* of heart. 1 *Kings*, viii. 66.—Wearing a gay appearance; ſertile; bright; ſhowy.—The wilderneſs and the ſolitary place ſhall be *glad* for them, and the deſert ſhall rejoice and bloſſom as the roſe. *Iſaiah*, xxxv.

Then firſt ador'd
With their bright luminaries, that ſet and roſe,
Glad Ev'ning and *glad* Morn crown'd the fourth day.
Milton.

Pleaſed; elevated with joy. It has generally *of*, ſometimes *at* or *with*, before the cauſe of gladneſs: perhaps *of* is moſt proper, when the cauſe of joy is ſomething gained or poſſeſſed: and *at* or *with*, when it is ſome accident befallen himſelf or another.—He that is *glad at* calamities ſhall not be unpuniſhed. *Proverbs.*—If he be my enemy, let him triumph; if he be my friend, he will be *glad of* my repentance. *Dryden.*

The gaping wound guſh'd out a crimſon flood;
The Trojan, *glad with* ſight of hoſtile blood,
His fauchion drew. *Dryden.*

Pleaſing; exhilarating:

Her converſation
More *glad* to me than to a miſer money is. *Sidney.*

Expreſſing gladneſs:

Hark! a *glad* voice the lonely deſert cheers:
Prepare the way, a God, a God appears! *Pope.*

It is uſed in a familiar ſenſe, approaching to ludicrouſneſs.—I would be *glad* to learn from thoſe who pronounce that the human ſoul always thinks, how they know it. *Locke.*

To GLAD, *v. a.* To make glad; to cheer; to exhilarate.—Each drinks the juice that *glads* the heart of man. *Pope.*

It *glads* me
To ſee ſo many virtues thus united,
To reſtore juſtice and dethrone oppreſſion. *Otway.*

GLAD'BECK, or GLADBACH, a town of Germany, in the circle of Weſtphalia, and duchy of Juliers: ſixteen miles north of Juliers. Lat. 51. 14. N. lon. 23. 50. E. Ferro.

To GLAD'DEN, *v. a.* To cheer; to delight; to make glad; to exhilarate:

Oh,

Oh, he was all made up of love and charms!
Delight of every eye! When he appear'd,
A ſecret pleaſure *gladden'd* all that ſaw him. *Addiſon.*

GLAD'DER, *ſ.* One that makes glad; one that gladdens; one that exhilarates:

Thou *gladder* of the mount of Cytheron,
Have pity, goddeſs. *Dryden.*

GLADE, *ſ.* [from ϛlopan, to be hot, or to ſhine; whence the Daniſh *glod*, and the obſolete Engliſh *gleed*, a red-hot coal.] A lawn, or opening in a wood. It is taken for an avenue through a wood, whether open or ſhaded, and has therefore epithets of oppoſite meaning:

O might I here
In ſolitude live ſavage, in ſome *glade*
Obſcur'd, where higheſt woods, impenetrable
To ſtar or ſun-light, ſpread their umbrage broad. *Milton.*

For noonday's heat are cloſer arbours made,
And for freſh ev'ning air the op'ner *glade*. *Dryden.*

There interſpers'd in lawns and opening *glades*,
Thin trees ariſe that ſhun each other's ſhades. *Pope.*

GLA'DEN, or GLADER, *ſ.* [from *gladius*, Lat. a ſword.] Swordgraſs: a general name of plants that riſe with a broad blade like ſedge. *Junius.*

GLA'DENBACH, a town of Germany, in the circle of the Upper Rhine, and principality of Upper Heſſe: twelve miles north of Gieſſen, and eight weſt of Marburg.

GLAD'FUL, *adj.* Full of gladneſs:

There leave we them in pleaſure and repaſt,
Spending their joyous dayes and *gladful* nights. *Spenſer.*

GLAD'FULNESS, *ſ.* Joy; gladneſs. *Obſolete.*

And there him reſts in riotous ſuffiſance
Of all his *gladfulneſs*, and kingly joyance. *Spenſer.*

GLADIA'TOR, *ſ.* [Lat. from *gladius*, a ſword; *gladiateur*, Fr.] A ſword-player; a prize-fighter. Among the Romans, the ſavage and ſanguinary combats of gladiators were for ages tolerated in the amphitheatre, for the entertainment of all ranks of the people. They were uſually ſlaves or condemned criminals, who fought by compulſion; though ſometimes freemen made profeſſion of theſe combats, like our prize-fighters, for a livelihood. The Romans are ſaid to have borrowed this cruel diverſion from the Aſiatics; and that there was policy in the practice, the frequent combats of gladiators tending to accuſtom the people to deſpiſe dangers and death.

The origin of gladiators ſeems to be as follows. From the earlieſt times with which we have any acquaintance in profane hiſtory, it had been the cuſtom to ſacrifice captives, or priſoners of war, to the manes of the great men who had died in the engagement: thus Achilles, in the Iliad, lib. xxiii. ſacrifices twelve young Trojans to the manes of Patroclus; and in Virgil, lib. xi. ver. 81, Æneas ſends captives to Evander, to be ſacrificed at the funeral of his ſon Pallas. In the courſe of time they came alſo to ſacrifice ſlaves at the funerals of all perſons of condition: this was even eſteemed a neceſſary part of the ceremony; but as it would have appeared barbarous to have maſſacred them like beaſts, they were appointed to fight with each other, that the life of one might be ſaved by killing his adverſary. This ſeemed ſomewhat leſs inhuman, becauſe there was a poſſibility of avoiding death, by an exertion of ſkill and courage. This occaſioned the profeſſion of a gladiator to become an art: hence aroſe maſters of the art, and men learned ſcientifically to fight and exerciſe it. Theſe maſters bought ſlaves on purpoſe to be trained to this cruel trade, whom they afterwards ſold to ſuch as had occaſion to preſent the people with ſuch horrid ſpectacles. The exhibitions were at firſt performed near the ſepulchre of the deceaſed, or about the funeral pile; but were afterwards removed to the circus and amphitheatres, and became ordinary amuſements.

In the year of Rome 488, the ſanguinary combats between gladiators were firſt exhibited in the circus, by M. and D. Brutus, to honour the funeral of their father. The people of Campania indulged in the combats of gladiators more early, and even during their banquets. This frantic love of cruelty rapidly increaſed. In the year of Rome 536, the ſons of M. Æmilius Lepidus, intending to honour their father's memory, had games performed which continued three days, and in which twenty-two pair of gladiators combated. Thirty-three years afterward, ſeventy gladiators fought. It became cuſtomary for every general, before he undertook any expedition, to preſent this prelude of murder to the people. Cæſar maintained ſome thouſands of gladiators, at his own expence; and, when ædile, exhibited games in which three hundred and twenty pair entered the field of battle. Even Trajan, the greateſt and moſt benevolent of the emperors, indulged in this cruel practice. He gave games during a hundred and twenty days ſucceſſively, in which there were ten thouſand gladiators. To ſuch an height of extravagance was this practice carried, that Auguſtus made a law by which private individuals, who thought proper to preſent the people with ſuch ſpectacles, ſhould be limited not to expend above half their ſubſtance.

The people expreſſed their joy, when a gladiator received his death-wound, with wild ſhouts: crying, *Habet! Hoc habet!* Some of the combatants engaged each other with ſimilar weapons; as ſwords, poniards, &c. Such were often called *Samnites*, not becauſe they really were Samnites, but becauſe the Romans, full of ignoble antipathy againſt a people who had reſiſted their arms for a hundred years, delighted in beholding the murder of a Samnite. Thus we ſee that cruelty, once indulged, is not eaſily ſatiated. It requires variety of murder, and its horrible neceſſities make it inventive. Gladiators, who held an elaſtic net in their right hand, and a three-pronged weapon in the left, endeavoured to caſt the net over the head of their opponent; and then to pierce him with their prongs. If the attempt failed, the antagoniſt purſued the aſſailant to death. Hence the latter was called the *ſecutor*, purſuer; and the former *retiarius*, the net-bearer. The net-bearers combated alſo with armed Gauls, who were called *mirmillones*. The latter bore the figure of a fiſh on a helmet. Theſe mirmillones endeavoured to eſcape the net-bearer, by ducking the head, and at the ſame moment to give a blow in the foot that ſhould diſable his enemy, ſo that he might afterward deſtroy him with his ſword. It was uſual for the net-bearer, as he followed the mirmillon, to exclaim, *Non te peto, piſcem peto: Quid me fugis, Galle?* "I do not aim at thee, but at thy fiſh: Why doſt thou fly me, Gaul?"

It was the pride of the vanquiſhed gladiator, when he was doomed to die, and had received the laſt mortal wound, to fall honourably. Even when beat to the ground, and with juſt ſtrength ſufficient to ſupport himſelf on his arm, he does not abandon himſelf to grief and dejection, but is ſolicitous to maintain that firmneſs of aſpect which gladiators valued themſelves on preſerving in this ſeaſon of diſtreſs, and that invincible contempt of death which it was the principal object of theſe maſters of defence to inculcate. At this inſtant, notwithſtanding his exhauſted ſtrength, and that he has but one moment to live, he is viewed with the moſt attentive admiration; and the glory of the ſcene is to ſee him expire and fall without a groan; and without a ſymptom or expreſſion that could betray the ſmalleſt deſire of life!

If a gladiator expreſſed a ſenſe of pain, after being wounded, or aſked for his life, the people, enraged, would frequently exclaim, *Occide! ure! verbera!* "Kill! burn!

burn! whip him!" and they had even the cruelty to apply burning irons to the half-expiring victims, that they might induce them to exert their ſmall remains of power.—Sometimes the people pardoned ſuch gladiators as excelled in agility, or courage. The raiſing of the hand, with the thumb lowered, was a token that they ſhould live. The hand ſhut, with the thumb raiſed, was the ſign of death. It was uſual for the people to cry, *Recipe ferrum!* "Receive the ſword!" As ſoon as a combatant was dead, ſlaves, whoſe office it was, entered, drove a hook into his body, and dragged him away through the Porta Libitina, or gate of death, to bury him.—Thus did the moſt renowned people in the world degrade themſelves below the condition of ſavage cannibals, by the inhuman ſacrifices which polluted the amphitheatre of Rome; nor is it ſufficient that the admirers of theſe ſanguinary combats inſinuate, that the martial ſpirit of the people was preſerved by this ſchool of fortitude, which accuſtomed the Romans to the ſight of blood, and to the contempt of death; ſince this vain and idle aſſertion has been nobly and honourably confuted by the valour of ancient Greece, and of modern Europe.

Some of the gladiators were priſoners of war; and ſome were foundlings, whoſe education deſtined them to this trade. The inſtructor of theſe combatants was called *laniſta*. The ſchool in which they were trained was a large building, in which thoſe who were ſet apart to murder, or to be murdered, were exerciſed. They were not at liberty to go where they pleaſed, when not exerciſing; but were each ſhut up in a different cell. In the latter times of the republic, theſe gladiators were often made ſubſervient to the ambition of the powerful; and were let looſe, among the people, like ſo many wild beaſts.

When the people granted a gladiator his life, it was frequently only for the day: he muſt again attend the games on the morrow; and, perhaps, during their whole continuance, though they ſhould be but juſt begun. Whoever had vanquiſhed ſeveral opponents one after the other, received a ſword of wood, *rudis*; which was encircled with palm; and he was from that time releaſed from the *arena* of the gladiators. He then hung up his ſword, his ſhield, and his helmet, in the temple of Hercules. Horace has a beautiful alluſion to this cuſtom, when Mæcenas wiſhes again to induce him to write:

Prima dicte mihi, ſumma dicende Camæna,
Spectatum ſatis, et donatum jam rude quæris,
Mæcenas, iterum antiquo me includere ludo.
Non eadem eſt ætas, non mens. Vejanius, armis
Herculis ad poſtem fixis, latet abditus agro,
Ne populum extremâ toties exoret arenâ. *Lib.* i. *ep.* i. 1–6.

Free gladiators, who hired themſelves, were paid a great price; and the *rudiarii*, who had become free, a much greater: this epithet was beſtowed on thoſe who had received the wooden ſword. In the times of the emperors, the Roman citizens, knights, and ſenators, often degraded themſelves by combating with hired gladiators and ſlaves. The emperor Commodus preſented himſelf as a gladiator, and, according to Dion Caſſius, received for each day out of the gladiator's treaſury, εκ των μονομαχικων χρηματων, about fifty thouſand rix-dollars. He was alſo remarkably fond of combating with wild beaſts.

In the time of Domitian, female gladiators roſe up; and the Romans were at laſt ſo addicted to this ſanguinary game, that, like their predeceſſors the people of Campania, they had them at their feaſts. Certain combatants fought in chariots, and were called *eſſediarii*. Others fought on horſeback, with deep helmets; ſo that they could not ſee each other; and thus ran the courſe, with their ſpears, blindfold. When once a people are accuſtomed to the ſight of blood, the luſt of indulging ſuch horrible ſpectacles increaſes to the moſt outrageous phrenſy, as was fatally experienced in the late revolution in France. Political conſiderations ſhould have taught the free Romans that a ſavage nation is incapable of liberty. And how ſavage muſt that nation be, whoſe very matrons, and veſtals, were accuſtomed to ſuch ſpectacles!

The ſubjected Greeks were late in adopting theſe practices. When, in the time of the emperor Marcus Aurelius, it was propoſed to the Athenians to introduce them, in imitation of the Corinthian gladiators, the philoſopher Demonax exclaimed, with noble indignation, Oh, men of Athens, riſe, before you indulge in battles like theſe, riſe, and demoliſh the altars which your fathers have erected to Mercy.

Conſtantine, the firſt Chriſtian emperor, though not able entirely to ſuppreſs this horrid practice, forbad it; being excited ſo to do by Lactantius. Under the emperor Honorius, when Prudentius, a Chriſtian poet, had endeavoured to obtain the abolition of theſe ſpectacles, Telemachos, a hermit of the eaſt, appeared in the amphitheatre. As ſoon as the combat had begun, he deſcended, with a dignified ſimplicity, inflamed by the ſpirit of benevolence and holy zeal, into the arena, and anxiouſly endeavoured to prevent the combatants from murdering each other. The ſpectators, enraged, roſe and ſtoned him to death. Perhaps there may be ſome who will feel inclined to ridicule the ſimplicity of this dignified man, though, had it been the act of a heathen philoſopher, they would have admired and cited it as exemplary. Telemachos, however, was the laſt ſacrifice to this accurſed cuſtom. Honorius was moved, forbad the games of the gladiators, and from that period they were entirely aboliſhed.

There are two very celebrated remains of ſculpture which are ſuppoſed to be ſtatues of gladiators; the one ſtyled the *Borgheſe Gladiator*, from being erected at the Villa Borgheſe; the other, which is the moſt celebrious, and moſt highly finiſhed, is the *Dying Gladiator*, which for ages ornamented the palace of Chighi. With reſpect to the former ſtatue, M. Gibelin aſſerts, that this fine antique does not repreſent a gladiator; which indeed has been long admitted, and various conjectures have been hazarded on the ſubject. The idea of this writer is, that it is the ſtatue of a σφαιριστης, or what we call a tennis-player; and he ſupports this opinion with a great abundance of learning: adducing inſtances of ſtatues being erected in Greece to the maſters of this art. M. Mongez, on the contrary, ſuppoſes that the ſtatue at the Villa Borgheſe, repreſents either a Grecian hero, or a divinity. After having ſucceſsfully combated the opinion of Leſſing, and others, who have endeavoured to attribute this figure to Chabrias, the Athenian general, M. Mongez declines any farther controverſy, but leaves it for the conſideration of other antiquarians. The ſtatue named the *Dying Gladiator*, now removed to Paris amongſt other of the Italian ſpoils, he alſo imagines to have been wrongly named. The ſubſtance which ſurrounds the neck, and which preceding antiquaries had ſuppoſed to be a cord, he decides to be a collar worked in that form. Winckelman conceived that this was the ſtatue of a Greek herald: but M. Mongez proves, from the facial line, and the arrangement of the hair, that it repreſents a barbarian. He adds a curious obſervation, that *mouſtaches*, or whiſkers, are found on the ſtatues of barbarians only, and that this word is almoſt entirely Greek, (μυσταξ.) He hints that a dying Gaul may probably be deſigned by this figure, but he advances no abſolute conjecture.

GLADIA'TORS WAR, called alſo the *ſervile war*, was a war which the Romans ſuſtained about the year of their city 680. Spartacus, Crinus, and Oenomaus, having eſcaped, with other gladiators to the number of ſeventy-four, out of the place where they had been kept at Capua, gathered together a body of ſlaves, put

themſelves at their head, rendered themſelves maſters of all Campania, and gained ſeveral victories over the Roman prætors. At length they were defeated by Craſſus, at the extremity of Italy; having, in vain, attempted to paſs over into Sicily.

GLADIATO'RIAN, *adj.* Of gladiators.—The *gladiatorian* and other ſanguinary ſports, which we allow our people, diſcover ſufficiently our national taſte. *Shafteſbury.*

GLA'DIATURE, *ſ.* [*gladiatura*, Lat.] The feat of fighting with ſwords.

GLADI'OLUS, *ſ.* [*gladius*, Lat. a ſword; from the form of the leaves.] CORN-FLAG; in botany, a genus of the claſs triandria, order monogynia, natural order enſatæ, (irides, *Juſſ.* liliaceæ, *Hall, Boerh. Adanſon*; bulboſæ, *Ray.*) The generic characters are—Calyx: a ſpathe, two-valved, inferior, ſhorter than the corolla; valves oblong, permanent; the outer one larger, incloſing the inner. Corolla: one-petalled, ſuperior; tube cylindric, bent; border ſomewhat bell-ſhaped, ſix-parted; ſegments oblong, from erect-patulous, the uppermoſt and loweſt lateral either without or within. Stamina: filaments three, inſerted into the orifice of the tube, filiform, ſhorter than the corolla; antheræ ovate, incumbent. Piſtillum: germ inferior, triangular; ſtyle filiform; ſtigmas three, rolled back and ſpreading, blunt, villoſe. Pericarpium: capſule ovate, three-cornered, blunt, three-celled, three-valved. Seeds: very many, ſmooth: Gærtner obſerves that antholyza may very well be placed in this genus.—*Eſſential Character.* Corolla, ſix-parted, irregular, unequal; ſtigmas, three.

Species. 1. Gladiolus communis, or common corn-flag: leaves ſword-ſhaped; flowers diſtant. Root round, compreſſed, yellowiſh, covered with a brown furrowed ſkin; hence ſpring two ſword-ſhaped leaves, embracing each other at the baſe, and between them riſes the flower-ſtalk, growing near two feet high, having one or two narrow leaves embracing it like a ſheath, and terminated by five or ſix purple flowers, one above another at ſome diſtance, ranged on the ſame ſide of the ſtalk; the ſpathe covers the flower-bud before it expands, but ſplits open lengthwiſe when it opens, and ſhrivels up to a dry ſkin, remaining about the ſeed-veſſel till the ſeeds are ripe; ſeeds imbricate, as far as eight in one cell. It was cultivated by Gerarde in his garden in 1596, and it was even then very common. He gives the names not only of corn-flag, but *corn-ſedge*, and *corn-gladin*. Johnſon adds that of *ſword-flag*.

Miller makes three ſpecies of this: 1. The common ſort, deſcribed above; *G. flor uno verſu diſpoſitis* of C. Bauhin, with the flowers diſpoſed on one ſide the ſtalk, varying with white and fleſh-coloured flowers: this Gerarde calls *Italian corn flag*. 2. The Italian (G. Italicus,) *utrinque floridus* of C. Bauhin, with flowers on each ſide the ſtalk; of which he ſays there is alſo a variety with white flowers: this Gerarde and Parkinſon figure under the name of *French corn-flag*. 3. The great corn-flag of Byzantium (G. Byzantinus), which has larger roots, but of the ſame form; the leaves alſo are much broader and larger, with deeper channels; the flower-ſtalks riſe higher; the flowers are much larger, of a deeper red colour, and the ſheaths are longer. It makes a fine appearance when in flower, and is worthy of a place in every good garden; the rather, becauſe the roots do not increaſe ſo faſt as to be troubleſome. Parkinſon, beſides the French, Italian, and Byzantine, corn-flags, has three varieties; the bluſh, white, and ſmall purple. He obſerves that Gerarde miſtook the French for the Italian: and that John Tradeſcant aſſured him, that he ſaw many acres of ground in Barbary ſpread over with them.

2. Gladiolus imbricatus, or netted corn-flag: leaves ſword-ſhaped; flowers imbricate. Flowers ſmall, all directed one way, and imbricate. Native of Ruſſia.

3. Gladiolus alatus, or winged corn-flag: leaves ſword-ſhaped; the ſide petals very broad. Stem a ſpan high, thickiſh, flexuoſe between the flowers. Native of the Cape of Good Hope.

4. Gladiolus tubiflorus, or long-tubed corn-flag: leaves linear-lanceolate, villoſe, ſomewhat plaited, longer than the ſcape; tube very long; ſpathes hirſute. Leaves a ſpan long and more; ſtem round, villoſe, a finger's length. Native of the Cape of Good Hope, where it was found by Thunberg and Maſſon. It flowers in June; and was introduced in 1774.

5. Gladiolus plicatus, or hairy corn-flag: leaves oblong-lanceolate, villoſe, plaited; tube longer than the ſpathes. Leaves plaited at the nerves; flowers two or three, violet fading to white. Cultivated in 1757, by Mr. Miller, who raiſed it from ſeeds which were ſent him from the Cape of Good Hope.

6. Gladiolus ſtrictus, or upright corn-flag: leaves linear-lanceolate, villoſe, plaited; tube equal to the ſpathe. This varies with a deep blue corolla, the tube and the baſe of the ſegments a very dark purple; and with a pale purple corolla, the tube blue. It was found at the Cape by Mr. Francis Maſſon, and introduced in 1774. It flowers in June.

7. Gladiolus triſtis, or ſquare-ſtalked corn-flag: leaves linear-croſs-ſhaped; corollas bell-ſhaped. From the root come out two or three narrow leaves, a foot and half long, having a longitudinal furrow in the middle, and ending in acute points; they are of a deep green, and ſtand erect; between theſe ariſes a ſlender taper ſtalk, about the ſame length as the leaves, having one or two ſhort acute-pointed leaves on the lower part, embracing the ſtalk at their baſe. It flowers at the end of May, and the ſeeds ripen about ſix weeks after. Linnæus gave the name of *triſtis* to this ſpecies, from the gloomy colour of its flowers. They are very frequently of a pale yellow or ſulphur-colour, ſhaded in particular parts with very fine pencilings, eſpecially on the under ſide; but they vary much with different ſhades of white and green, yellow, fleſh-coloured, blue, purple, and violet. Thunberg has diſtinguiſhed ſixteen of theſe varieties. It is commonly ſaid to produce only two flowers on a ſtem, but there are frequently more: they generally give forth a moſt agreeable fragrance in their expanſion. The leaves very characteriſtically diſtinguiſh this ſpecies: they are alternately ſheathing, linear, acute, ſtriated, ſmooth, quite entire, two or three in number, the upper ones gradually ſhorter; the loweſt is thickiſh, ſcored with a deep groove within the edge, the reſt reſemble the ſpathes, and are convoluted, but they are longer. Native of the Cape of Good Hope, and cultivated in 1745, by Mr. Miller.

8. Gladiolus carinatus, or ſpotted-ſtalked corn-flag: leaves linear, keeled on both ſides, ſmooth; tube of the corolla ſhorter than the ſpathes and the borders; ſtigmas undivided, folded together. Stalk a foot and half high, and round; leaves longer than the ſtalk; flowers ſweet. Native of the Cape; flowers in April and May.

9. Gladiolus blandus, or bluſh-coloured corn-flag: leaves linear-lanceolate, nerved, ſmooth; flowers in ſpikes; the upper ſegment reflex; ſtigmas ſlightly two-lobed. Native of the Cape of Good Hope; and flowers in June.

10. Gladiolus undulatus, or waved corn-flag: leaves ſword-ſhaped; petals nearly equal, lanceolate, waved. This is of the ſame ſtature with the common ſort; ſtalk a foot and half in height; leaves ſtreaked; flowers alternate, in a double row. This ſpecies is intermediate between this genus and Ixia. Native of the Cape. See N° 14.

11. Gladiolus recurvus, or recurved corn-flag: leaves ſword-ſhaped; petals nearly equal, lanceolate, bowed back. This differs from the foregoing, in the petals not being waved, and being leſs acuminate; the tube of the corolla, not filiform, lax or pendulous; in other reſpects

reſpects very like it. Stalk ſlender; has more leaves upon it than G. triſtis; the flowers are ranged on one ſide the ſtalk towards the top, and ſtand pretty far aſunder; they have an agreeable odour; appear at the end of May, and the ſeeds ripen in July. It was raiſed in the Chelſea garden, from ſeeds which came from the Cape of Good Hope, and flowered there before the year 1760.

12. Gladiolus ſpicatus, or ſpiky corn-flag: leaves linear; ſtem extremely ſimple; flowers in ſpikes. Flowers diſtich, imbricate, blue, about twelve pairs in a ſpike of an inch in length. It differs from the next ſpecies in having larger flowers, on a ſhorter ſpike, but broader and ovate; and a ſimple ſcape.

13. Gladiolus alopecuroides, or fox-tail corn-flag: leaves linear; ſpike diſtich; imbricate. The ſpike covered as in plantain, with very numerous ſmall flowers, but in a double row: it varies with the ſcape ſimple and branched, with corollas white and blue. This, and N° 12. are natives of the Cape.

14. Gladiolus anguſtus, or narrow-leaved corn-flag: leaves linear, ſmooth; flowers in ſpikes, diſtant; the upper ſegment of the corolla ſtraight; ſtigmas ſpatulate, undivided. The ſame, according to Thunberg, with N° 10.

15. Gladiolus flavus, or yellow corn-flag: leaves lanceolate-ſword-ſhaped, flat; the throat of the upper lip of the corolla has three laminas, ſhaped like the nail, and placed perpendicularly; bractes acuminate. This differs from the next ſpecies in having the bractes acuminate, the whole corolla intenſely yellow, and the leaves a little broader. It was found near the Cape, by Mr. William Paterſon; and was introduced in 1780 by the counteſs of Strathmore. It flowers in February and March.

16. Gladiolus ſecuriger, or copper-coloured corn-flag: leaves linear-ſword-ſhaped, flat; the throat of the upper lip has three laminas, ſhaped like the nail, and placed perpendicularly; bractes obtuſe. Leaves ſmooth, more than a ſpan in length; ſtalk roundiſh, a little ſhorter than the leaves, ſometimes branched. Native of the Cape, and flowers in May.

17. Gladiolus ramoſus, or branched corn-flag: ſtem branched; leaves linear. 18. Gladiolus capitatus, or crowned corn-flag: ſtem branched; heads peduncled; root tuberous. A very large plant, with blue flowers. Theſe two are natives of the Cape. See MORÆA.

19. Gladiolus criſpus, or curled corn-flag: leaves lanceolate, crenate, waved; flowers directed the ſame way; ſpikes two; tube filiform, long. Wholly different from Ixia criſpa, in having lanceolate leaves, even on the ſtem; the tube of the corolla eight times as long as the glumes, and the petals lanceolate: whereas that has linear leaves, and a leafleſs ſtalk; the tube of the corolla hardly longer than the glume, and the petals obovate. This alſo is two feet high, and that only about four inches. Found at the Cape by Sparrmann.

20. Gladiolus junceus, or ſlender corn-flag: leaves broad-lanceolate; culm branched; flowers directed the ſame way; ſtyle ſix-parted. Stem a hand only in height, filiform, ſmooth, with one or two patulous branchlets. Found at the Cape by Thunberg.

21. Gladiolus anceps, or double corn-flag: leaves ſword-ſhaped, waved; ſtem branched, ancipital, divaricate. 22. Gladiolus gramineus, or graſſy corn-flag: petals lanceolate, briſtle-ſhaped, acuminate. 23. Gladiolus marginatus, or margined corn-flag: leaves cartilaginous-margined, ſmooth, many-nerved; ſpike lengthened; flowers alternate, nodding. 24. Gladiolus montanus, or mountain corn-flag: leaves ſword-ſhaped, nerved, ſmooth; flowers in ſpikes; corolla ringent. This, with the three foregoing, was found at the Cape by Sparrmann.

25. Gladiolus falcatus, or falcate corn-flag: ſtem ſimple; leaves ſickle-ſhaped; flowers alternate; ſtyle trifid. 26. Gladiolus flexuoſus, or flexible corn-flag: leaves linear; ſtem ſimple, flexuoſe; flowers in ſpikes, ringent; tube long. 27. Gladiolus longiflorus, or long-flowered corn-flag: ſtem round; tube of the corolla very long; ſpathes and leaves linear, ſmooth. 28. Gladiolus ſpathaceus, or flat corn-flag: ſtem branched; flowers in imbricate ſpikes; ſpathes membranaceous, awned; leaves plaited. 29. Gladiolus ſetifolius, or briſtly corn-flag: ſtem branched; corolla ringent; the loweſt leaf filiform-ſetaceous. Theſe were all found at the Cape of Good Hope by Thunberg.

30. Gladiolus cardinalis, or ſuperb corn-flag: leaves ſword-ſhaped, many-nerved; flowers directed the ſame way, many on a ſtem; corolla upright, with a bell-ſhaped border. Flowers fine ſcarlet, with large white ſomewhat rhomboidal ſpots on ſeveral of the lowermoſt diviſions of the corolla: ſtrong plants will throw up a ſtem three or four feet high, dividing at the top into ſeveral branches. It flowers with us in July and Auguſt; and is moſt probably a native of the Cape. Introduced from Holland a few years ſince, by Mr. Græffer, gardener to Ferdinand IV. king of Naples. It firſt flowered with Meſſrs. Lewis and Mackie, nurſery-men at Kingſland; and in 1790 at Meſſrs. Grimwood's and Co. at Kenſington. *Curtis's Magazine*, Pl. 135.

Propagation and Culture. The firſt requires no care; for when it is once planted in a garden, it will multiply too faſt, ſo as to become a diſagreeable weed. The Byzantine corn-flag has now, therefore, generally taken its place. This is propagated by offsets which are ſent off from the roots in the ſame manner as tulips. The roots may be taken out of the ground the end of July, when their ſtalks decay, and may be kept out of the ground till the end of September, or the beginning of October, at which time they ſhould be planted in the borders of the flower-garden, where they will thrive in any ſituation, and being intermixed with other flowers of the ſame growth, they will add to the variety. The Cape ſorts may be increaſed by offsets, which ſhould be planted in a warm border of kitchen-garden earth; and where there is a conveniency of covering ſuch border with glaſſes in the winter, if theſe roots are planted in the full ground, and protected from froſt, there will be a greater probability of their flowering than in any method of culture. They may be raiſed alſo from ſeeds, which are frequently perfected in England; theſe ſhould be ſown at the end of Auguſt, in pots filled with light earth, and placed in a ſhady ſituation till the middle of September; then the pots ſhould be removed where they may have the ſun great part of the day, and in October they muſt be placed under a hot-bed frame, where they may be protected from froſt and great rains, but enjoy the free air in mild weather. In the ſpring the young plants will appear, when they will require a little water once in eight or ten days, but it ſhould be given them ſparingly, for too much wet will rot theſe tender bulbs. In May, when the danger of froſt is over, the pots ſhould be removed to a ſheltered ſituation, where they have the morning ſun till noon; and, if the ſeaſon proves dry, they muſt be now and then refreſhed with water. Towards the latter end of June, the leaves will decay; then the roots ſhould be taken up, mixed with ſand, and kept in a dry room till the end of Auguſt, when they ſhould be planted again; and, as the roots are ſmall, four or five may be planted in each halfpenny pot, filled with light earth; theſe ſhould be placed where they may have only the forenoon ſun till the middle of September, when they ſhould have a warmer ſituation; and in October they muſt be placed under a hot-bed frame as before, and treated in the ſame way during the winter ſeaſon; and in the ſpring they muſt be placed in the open air till their leaves decay, when they may be again taken out of

of the ground, and treated in the ſame manner as before; but as the roots will have grown to a larger ſize when they are planted again, they ſhould each have a ſeparate halfpenny pot, becauſe now they will be large enough to flower, and may be treated as the old roots. See ANTHOLYZA, BUTOMUS, DRACÆNA, FERRARIA, IRIS, LOBELIA, PONTEDERIA, and XYRIS.

GLAD'KA, a fort of Ruſſia, in the government of Caucaſus, on the Malva: thirty-ſix miles weſt of Kizliar.

GLAD'LY, *adv.* Joyfully; with gaiety; with merriment; with triumph; with exultation:

For his particular, I'll receive him *gladly*;
But not one follower. *Shakeſpeare.*

GLAD'NESS, *ſ.* Cheerfulneſs; joy; exultation:

By ſuch degrees the ſpreading *gladneſs* grew
In every heart, which fear had froze before:
The ſtanding ſtreets with ſo much joy they view,
That with leſs grief the periſh'd they deplore. *Dryden.*

GLAD'SOME, *adj.* Pleaſed; gay; delighted:

The higheſt angels to and fro deſcend,
From higheſt heaven, in *gladſome* company. *Spenſer.*

Cauſing joy; having an appearance of gaiety:

Each morn they wak'd me with a ſprightly lay;
Of opening heav'n they ſung, and *gladſome* day. *Prior.*

GLAD'SOMELY, *adv.* With gaiety and delight.

GLAD'SOMENESS, *ſ.* Gaiety; ſhowyneſs; delight.

GLAIRE, *ſ.* [ȝlæȝ, Sax. amber; *glar*, Dan. glaſs; *glaire*, Fr. *glarea*, Lat.] The white of an egg.—Take the *glaire* of eggs, and ſtrain it as ſhort as water. *Peachem.*—A kind of halbert.

To GLAIRE, *v. a.* [*glarier*, Fr.] To ſmear with the white of an egg; the mode by which bookbinders give a gloſs to the covers of books.

GLAIVE, *ſ.* [French.] A weapon like a halbert.

GLAM'FORD BRIGGS, commonly called *Brigg*, a market town in the county of Lincoln, one hundred and fifty miles from London, ſituated on the river Ancholme, in the centre of the level of that name, the drainage of which was accompliſhed at a very conſiderable expence, and is ſupported by a tax on the land, and tonnage on the navigation of the river. This river is navigable from Biſhopſbridge, about ten miles ſouth of Brigg, to Ferraby Sluice, nine miles north of Brigg, where it opens into the Humber. Above and below the town the river divides into two branches, one of which runs through the town, the other a quarter of a mile weſtward of it, and has a ſmall but commodious bridge over each branch. This town forms a part of the four adjoining pariſhes of Wrawby, Bigby, Broughton, and Scawby; and has a conſiderable manufactory of ſkins, with a good trade in corn, coals, and timber. Here is a plentiful market on Thurſdays, and a fair yearly on the 5th of Auguſt. This town has alſo a large and commodious free-ſchool, with a good endowment for a maſter and uſher, both of whom are uſually in orders.

GLAMOR'GANSHIRE, a county of South Wales, bounded on the north by Brecknockſhire, on the eaſt by Monmouthſhire, on the ſouth by the Briſtol Channel, and on the weſt by Caermarthenſhire; about forty-eight miles from eaſt to weſt, and twenty-ſeven from north to ſouth. The greateſt part of the ſea coaſt forms a ſemicircular ſweep, the weſtern extremity being formed into a narrow beak between the open channel on the one hand, and an arm running round to the Caermarthenſhire coaſt on the other. Juſtin, a petty prince of this country, in the reign of William Rufus, revolting from his ſovereign, Rhys, and finding himſelf not a match for his power, by a raſhneſs, which he repented of when too late, invited over to his aſſiſtance from England, by means of one Ivo, a nobleman, to whom he had married his daughter, Robert Fitz Haimon, a Norman, ſon of Haimon Dentatus, earl of Corbul, who preſently raiſing troops, and aſſociating with him twelve knights, firſt engaged and ſlew Rhys, and then, allured by the fertility of the country, of which he had before enſured to himſelf the poſſeſſion in proſpect, turned his arms againſt Juſtin himſelf, for not keeping his word with Ivo, ſoon diſpoſſeſſed him of the patrimony of his anceſtors, and divided the country between his own followers. On the north and north-eaſt ſides it is very mountainous, the ſoil of the hills extremely varied. In ſome parts they are abſolute rocks, in others full of coal and iron. The ſurface over theſe mines produces plenty of fine wool. What corn grows in the county is principally between the ſouth ſide of the mountains and the ſea, in a ſpacious vale, or plain, open to the latter. The roads over the mountains are exceſſively ſteep, ſtony, ſtrewed, as well as the heaths on each ſide of them, with ſtones of various ſizes, detached from the rocks by the winter rains. The air on the north ſide is ſharp, occaſioned by the long continuance of the ſnow on the hills; but on the ſouth ſide mild and temperate, improved by the ſea breezes. Such is the profuſion of coal and limeſtone in this county, that lime is the general manure of it, and there is ſcarcely a cottage that is not white-waſhed regularly once a year. The plenty of coal, and the conveniency of exportation, have brought a large copper work to Swanſea. Glamorganſhire contains one epiſcopal town, Llandaff, and ſeveral others, as Cardiff, Caerphilly, Neath, Brigend, Swanſey, Llantriſant, Marthyr-Tydvil, and Cowbridge. The principal rivers are the Tave, the Neath, the Taw, the Oſmore, and the Rumney. Glamorganſhire is divided into ten hundreds and one hundred and eighteen pariſhes, which contain about fifty-eight thouſand inhabitants. Two members are returned to the Britiſh parliament, viz. one for the county, and one for the town of Cardiff.

GLAN, a river of Germany, in the circle of the Upper Rhine, which runs into the Nahe, three miles eaſt of Sobernheim, in the county of Sponheim.

GLAN, a river of Germany, in the duchy of Carinthia, which riſes near Koſtnberg, and joins the Gurck four miles eaſt of Clagenfurt.

GLANCE, *ſ.* [*glantz*, Germ. glitter.] A ſudden ſhoot of light or ſplendour:

His off'ring ſoon propitious fire from heav'n
Conſum'd with nimble *glance*, and grateful ſteam:
The other's not; for his was not ſincere. *Milton.*

A ſtroke or dart of the beam of ſight.—The aſpects which procure love are not gazings, but ſudden *glances* and dartings of the eye. *Bacon.*

Boldly ſhe look'd like one of high degree:
Yet never ſeem'd to caſt a *glance* on me;
At which I inly joy'd, for truth to ſay,
I felt an unknown awe, and ſome diſmay. *Harte.*

A ſnatch of ſight; a quick view.—The ample mind takes a ſurvey of ſeveral objects with one *glance*. *Watts.*

To GLANCE, *v. n.* To ſhoot a ſudden ray of ſplendour:

When through the gloom the *glancing* lightnings fly,
Heavy the rattling thunders roll on high. *Rowe.*

To fly off in an oblique direction:

He has a little gall'd me, I confeſs;
But as the jeſt did *glance* away from me,
'Tis ten to one it maim'd you two outright. *Shakeſpeare.*

To ſtrike in an oblique direction:

Through Paris' ſhield the forceful weapon went,
His corſlet pierces, and his garment rends,
And *glancing* downwards near his flank deſcends. *Pope.*

To view with a quick caſt of the eye; to play the eye:

Mighty dulneſs crown'd,
Shall take through Grub-ſtreet her triumphant round;
And her Parnaſſus *glancing* o'er at once,
Behold a hundred ſons, and each a dunce. *Pope.*

To cenſure by oblique hints.—He had written verſes wherein he *glanced* at a certain reverend doctor, famous for dulneſs. *Swift.*

To GLANCE, *v. a.* To move nimbly; to ſhoot obliquely:

Glancing an eye of pity on his loſſes,
Enough to preſs a royal merchant down. *Shakeſpeare.*

GLAN'CINGLY, *adv.* In an oblique broken manner; tranſiently.—Sir Richard Hawkins hath done ſomething in this kind, but brokenly and *glancingly*, intending chiefly a diſcourſe of his own voyage. *Hakewill.*

GLAND, *ſ.* [*glans*, Lat. *gland*, Fr.] All the *glands* of a human body are reduced to two ſorts, viz. conglobate and conglomerate. A conglobate *gland* is a little ſmooth body, wrapt up in a fine ſkin, by which it is ſeparated from all the other parts, only admitting an artery and nerve to paſs in, and giving way to a vein and excretory canal to come out: of this ſort are the *glands* in the brain, the labial *glands*, and teſtes. A conglomerate *gland* is compoſed of many little conglobate *glands*, all tied together, and wrapt up in the common tunicle or membrane. *Quincy.*—See the article ANATOMY, vol. i. p. 527.

The *glands*, which o'er the body ſpread,
Fine complicated clues of nervous thread,
Involv'd and twiſted with th' arterial duct,
The rapid motion of the blood obſtruct. *Blackmore.*

GLAN'DAGE, *ſ.* Maſtage; the ſeaſon of turning hogs into the woods; the feeding hogs with maſt.

GLAN'DERS, *ſ.* A fatal diſeaſe in horſes. See the article FARRIERY, vol. vii. p. 252.

GLANDE'VES, a town of France, in the department of the Lower Alps; formerly flouriſhing, and the ſee of a biſhop; but the overflowing of the Var compelled a great part of the inhabitants to leave the town, and to remove to Entrevaux, which was not far from it; and it is now almoſt abandoned.

GLAND'FORD BRIDGE. See GLAMFORD BRIGGS.

GLANDIF'EROUS, *adj.* [*glans* and *fero*, Lat.] Bearing maſt; bearing acorns or fruit like acorns.—The beech is of two ſorts, and numbered amongſt the *glandiferous* trees. *Mortimer.*

GLAN'DIUM, *ſ.* [from *glans*, a nut.] A ſmall carnous tumour like a nut.

GLAN'DORE, a town and harbour of Ireland, in the county of Cork: three miles weſt of Roſs Bay.

GLAN'DORP (John), a learned philologiſt, born at Munſter. He ſtudied under Melanchthon at Wittemberg, and diſtinguiſhed himſelf by his claſſical and critical knowledge. He was made rector of the college at Hanover, which poſt, upon ſome quarrel, he quitted in 1555, and retiring to Goſlar, was followed by moſt of his ſcholars. He had the direction of the ſchool of that town till 1560, when he removed to Marpurg, and occupied the profeſſors' chair of hiſtory in that univerſity. He died there in 1564. His works are: 1. *Sylva Carminum Elegiacorum.* 2. *Deſcriptio Gentis Antoniæ.* 3. *Familiæ Juliæ Gentis.* 4. *Diſticha Sacra & Moralia.* 4. *Annotat. in Jul. Cæſaris Commentar.* 6. *Annotat. in Ciceronis Epiſt. familiar.* 7. *Onomaſticon Hiſtoriæ Romanæ.*

GLAN'DORP (Matthew-Louis), an eminent German phyſician and ſurgeon, born at Cologne in 1595. He ſtudied at Bremen; and then viſiting Italy, he heard the lectures of Aquapendente, Spigelius, and Sanctorius, at Padua, and took the degree of doctor in that univerſity. On his return he ſettled at Bremen, where he was appointed firſt phyſician to the archbiſhop, and afterwards to the city. He was living in 1633, but the time of his death is not known. His works are: 1. *Speculum Chirurgorum*, 1619, chiefly relating to the cure of wounds. 2. *Methodus Medendæ Paronychiæ*, 1623. 3. *De Polypo Narium*, 1628. 4. *Gazophylacium Polypluſium Fonticulorum & Setaceorum*, 1633. All theſe were printed together in London in 1729, 4to.

GLAN'DULE, *ſ.* [*glandula*, Lat. *glandule*, Fr.] A ſmall gland ſerving to the ſecretion of humours.—Nature hath provided ſeveral *glandules* to ſeparate this juice from the blood, and no leſs than four pair of channels to convey it into the mouth, which are called *ductus ſalivales. Ray.*

GLANDULOS'ITY, *ſ.* A collection of glands.—In the upper parts of worms are found certain white and oval *glandulo ſities. Brown.*

GLAN'DULOUS, *adj.* [*glandulo ſus*, Lat. *glanduleux*, Fr. from *glandule.*] Pertaining to the glands; ſubſiſting in the glands; having the nature of glands.—The beaver's bags are no teſticles, or parts official unto generation, but *glandulous* ſubſtances, that hold the nature of emunctories. *Brown.*

GLANDU'LOUSNESS, *ſ.* Glanduloſity; a collection of glands. *Scott.*

GLANE, a river of France, which runs into the Dordogne, near Argental, in the department of the Correze.

GLAN'MEN, or GLOMME. See GLOMME.

GLANS, *ſ.* [perhaps from אלון *halon*, Heb. an oak.] An acorn; a cheſnut. Alſo the tip or nut of the penis is ſo named, from its likeneſs to an acorn.

GLANSHAMMAR', a town of Sweden, in the province of Nericia: ſeven miles north-eaſt of Orebro.

GLAN'VILL (Joſeph), an eminent Engliſh divine, and various writer, born at Plymouth in 1636. His early education he received in his native town, whence he was ſent to Exeter college, Oxford, in 1652. In this ſeminary he took his degree of bachelor of arts in 1655; and in the following year he removed to Lincoln college, where he took his degree of maſter of arts in 1658; and was about the ſame time appointed chaplain to Francis Rous, eſq. provoſt of Eton college, who was one of the perſons deſigned by Oliver Cromwell to compoſe his new houſe of lords. But this patron dying, Mr. Glanvill returned to Lincoln college, where he ſpent his time till the reſtoration of Charles II. in literary and philoſophical ſtudies. About this time the new philoſophy, founded upon reaſon and experiment, was beginning to triumph over the tyranny which under the name and authority of Ariſtotle had been ſo long exerciſed in the ſchools. To the principles of this philoſophy Mr. Glanvill was a convert; and when he had juſt entered the twenty-fifth year of his age, he wrote a treatiſe in defence of them, which was publiſhed in 1661, under the title of, The Vanity of Dogmatiſm or Confidence in Opinions, manifeſted in a Diſcourſe of the Shortneſs and Uncertainty of our Knowledge, and its Cauſes, with ſome Reflections on Peripateticiſm, and an Apology for Philoſophy, 12mo. As the meetings which gave riſe to the royal ſociety of London were then frequently held, and encouraged by the moſt learned men of the times, this treatiſe proved the means of introducing the author to their knowledge and acquaintance. Mr. Glanvill now entered into orders, and was preſented to the rectory of Wimbiſh, in the county of Eſſex; and in 1662 was inducted into the vicarage of Frome-Selwood in Somerſetſhire. In the ſame year he publiſhed, but without his name, an ingenious diſcourſe on the fundamental doctrine of the ancient eaſtern philoſophers, which he endeavoured to prove not contradictory to, or incompatible with, revealed religion. It was entitled, *Lux Orientalis*; or, An Enquiry into the Opinion of the Eaſtern Sages concerning the Pre-exiſtence of Souls; being a Key to unlock the grand Myſteries of Providence, in relation to Man's Sin and Miſery; 12mo. Upon the eſtabliſhment of the royal ſociety, Mr. Glanvill was encouraged to reſume his labours in defence

defence of the new method of philoſophiſing; and, making his former treatiſe the ground-work of his plan, he omitted the exceptionable parts, introduced new matter, and rendered the whole more methodical and better digeſted. His treatiſe was publiſhed in 1665, under the title of *Scepſis Scientifica*; or, Confeſſed Ignorance the Way to Science; in an Eſſay on the Vanity of Dogmatiſing and Confident Opinion, 4to. To this he added a defence of his former book againſt Mr. White, a boaſted champion of the church of Rome, and of the Ariſtotelian philoſophy; together with a well-written and learned diſcourſe concerning Ariſtotle, in the form of a letter to a friend. This work was dedicated to the royal ſociety, which was the means of admitting him among its members, about the time when the *Scepſis* made its appearance.

The credit Mr. Glanvill had acquired by his various writings, encouraged him, in 1666, to deliver his ſentiments upon the ſubject of witchcraft, the poſſibility and exiſtence of which he endeavoured to defend. His treatiſe was originally entitled, Some Philoſophical Conſiderations touching the Being of Witches and Witchcraft, 4to. but it underwent frequent alterations in ſubſequent editions. This performance, which in the preſent age will be conſidered as reflecting little credit on the author's judgment, engaged him in a controverſy which laſted as long as his life, and was conducted with great warmth and acrimony. Soon after the firſt appearance of this work, he was preſented to the rectory of the abbey church at Bath, in which city from that time he fixed his reſidence. His next work was an entertaining and inſtructive account of modern improvements, entitled, *Plus Ultra*; or, The Progreſs and Advancement of Knowledge ſince the Days of Ariſtotle, 1668, 4to. Mr. Glanvill's reputation was now ſo firmly eſtabliſhed, that he was frequently called upon to preach on public occaſions; and among others at a viſitation of the dioceſe, where he delivered a diſcourſe which met with general approbation, and was repeatedly printed. It was entitled ΔΟΓΟΥ ΘΡΗΣΚΕΙΑ: or, A ſeaſonable Recommendation of Reaſon in the Affairs of Religion, againſt Infidelity, Scepticiſm, and Fanaticiſm of all Sorts, 1760, 4to. The ſucceſs which this diſcourſe met with encouraged him to attempt removing the prejudices of ſome learned and good men againſt the new methods propoſed for the advancement of uſeful knowledge, by explaining the correſpondence between religion and the new philoſophy. This he did in a piece entitled, *Philoſophia pia*; or, A Diſcourſe of the religious Temper and Tendency of the experimental Philoſophy which is profeſſed by the Royal Society, 1671, 8vo. While he was entitling himſelf to the particular acknowledgments of the members of that body, by defending the uſeful tendency of their purſuits, he alſo contributed to their collection of inſtructive and entertaining papers, ſome obſervations on the mines in the Mendip hills, and on the natural hiſtory and ſprings of Bath, which were well received, and inſerted in the Philoſophical Tranſactions. In 1672 Mr. Glanvill exchanged his rectory of Frome for that of Streat, in the ſame county, with the chapel of Walton annexed; and about the ſame time was made chaplain in ordinary to Charles II. His next publication was a volume of Eſſays on ſeveral important Subjects in Philoſophy and Religion, 1676, 4to. conſiſting of the principal of his former pieces already noticed, reviſed and improved, together with a treatiſe, called, Antifanatic Theology and free Philoſophy; which is a kind of ſupplement to the philoſophical romance of the celebrated lord Bacon. In 1678 he publiſhed An Eſſay concerning Preaching, written for the Direction of a young Divine, 12mo. His laſt work was entitled, The zealous and impartial Proteſtant, 1680, 4to. The printing of this performance was ſcarcely finiſhed before Mr. Glanvill was attacked by a fever, which proved fatal to him when only about the age of forty-four. Soon after his death, Dr. Anthony Horneck publiſhed ſeveral of his ſermons, and other pieces, with the title of, Some Diſcourſes, Sermons, and Remains, &c. 1681, 4to. with an account of the author's life.

To GLARE, *v. n.* [*glaren*, Dut.] To ſhine ſo as to dazzle the eyes.—After great light, if you come ſuddenly into the dark, or, contrariwiſe, out of the dark into a *glaring* light, the eye is dazzled for a time, and the ſight confuſed. *Bacon.*

Alas, thy dazzled eye
Beholds this man in a falſe *glaring* light,
Which conqueſt and ſucceſs have thrown upon him.
Addiſon.

To look with fierce piercing eyes.—Look, how pale he *glares! Shakeſpeare.*

Now friends no more, nor walking hand in hand;
But when they met they made a ſurly ſtand,
And *glar'd*, like angry lions, as they paſs'd,
And wiſh'd that ev'ry look might be their laſt. *Dryden.*

To ſhine oſtentatiouſly, or with too much laboured luſtre.—The moſt *glaring* paſſages are none of the fineſt, or moſt correct. *Felton on the Claſſics.*

To GLARE, *v. a.* To ſhoot ſuch ſplendour as the eye cannot bear:

One ſpirit in them rul'd, and every eye
Glar'd lightning, and ſhot forth pernicious fire
Among th' accurſt, that wither'd all their ſtrength. *Milt.*

GLARE, *ſ.* Overpowering luſtre; ſplendour, ſuch as dazzles the eye.—I have grieved to ſee a perſon of quality gliding by me in her chair at two o'clock in the morning, and looking like a ſpectre amidſt a *glare* of flambeaux. *Addiſon.*—A fierce piercing look:

About them round
A lion now he ſtalks with fiery *glare.* *Milton.*

GLAREO'LA, *ſ.* [from *glarea*, Lat. gravel; becauſe it inhabits the gravelly ſhores.] In ornithology, the PRATINCOLE; a genus of birds belonging to the order of grallæ; the characters of which are theſe: bill ſtrong, ſhort, ſtraight, hooked at the tip; noſtrils at the baſe of the bill, linear, oblique; feet four-toed; the toes long, ſlender, connected to each other at the baſe by a membrane; tail forked, with twelve quills. There are only three ſpecies at preſent known; and three varieties: viz.

1. Glareola Auſtriaca, the Auſtrian pratincole: ſize of a blackbird; length nine inches and a quarter; bill ten lines and a half long, curved at the tip; the baſe of it red, the reſt black; upper parts of the bird greyiſh-brown; chin and throat white, ſurrounded with a black line, which begins at the hinder angle of the eye, and bounds the whole of the white parts all round; the under parts are rufous grey, growing paler towards the vent; the upper tail-coverts are alſo of this colour; quills duſky; tail much forked, and tipped with grey on the inner web; the outer web of the exterior feather white the whole of its length; the legs and cere above the knees are blood-red. This ſpecies inhabits Germany, particularly the borders of the Rhine, near Straſburgh, and lives on worms and aquatic inſects. It is alſo ſeen at times in ſome parts of France, but is in the greateſt plenty in the deſerts towards the Caſpian Sea, frequenting the dry ſandy plains in great flocks. It is common alſo throughout the whole deſert of the independent Tartars, as far as the rivers Kamyſchloſska and Irtiſh, but not farther into Siberia, the plains adapted to it being there at an end; and in general it is not obſerved beyond fifty-three degrees to the northward.

The collared pratincole is only a variety of the preceding. Bill duſky; plumage on the upper parts grey brown; on each ſide of the head a white ſpot near the eyes;

eyes; ſpace between the two ſpots, black; throat and fore part of the neck white, ſurrounded by a brown line like a collar; breaſt and under parts whitiſh; quills duſky; tail forked; legs blackiſh. It makes its neſt on the ſandy ſhores of rivers; and is always found in the neighbourhood of ſtreams. It inhabits Germany, and is ſaid to lay ſeven eggs. It is a reſtleſs noiſy bird.

A ſecond variety of this ſpecies is called the Maldivian pratincole; nine inches in length. Bill black; irides red brown; head and upper parts of the body umber-colour; wing-coverts red brown; throat white ſurrounded with a black band; quills and tail black; rump, belly, and vent, white. Native of the Maldivia Iſles.

There is a third variety of this ſpecies, with the head deep brown; neck, back, and wing-coverts, rufous grey; quills brown; under wing-coverts red brown; upper tail-coverts white; breaſt and belly pale brown; thighs and vent white; bill and legs black; irides red brown. Found about Madras, and other parts of the Coromandel coaſt in Hindooſtan.

2. Glareola Senegalenſis, the Senegal pratincole: length nine inches and a half; bill eleven lines long, and brown; general colour of the plumage brown; tail forked as in the others; legs brown. This is an African ſpecies, and inhabits Senegal.

3. Glareola nævia, the ſpotted pratincole: this is about the ſize of a thruſh. Bill black; head, neck, breaſt, and upper part of the belly, ſpotted with brown and white; upper parts of the body brown, but the ſpots leſs diſtinct; belly, ſides, and vent, rufous white, ſpotted with black; quills black; ſecond quills black and aſh-colour; tail whitiſh tipped with black; legs and cere above the knees of this laſt colour. It inhabits the gravelly ſhores of Germany.

GLAREO'SE, *adj.* [from *glare.*] Glareous; viſcous. *Scott.*

GLA'REOUS, *adj.* [*glaireux*, Fr. *glareoſus*, Lat. from *glaire.*] Conſiſting of viſcous tranſparent matter, like the white of an egg.

GLA'RING, *adj.* Applied to any thing notorious: as, a *glaring* crime.

GLA'RIS, or GLARUS, a canton of Swiſſerland, and eighth in the order of the league, ſurrounded with lofty mountains on all ſides except towards the north; theſe mountains, covered with eternal ſnow, are called *glaciers*. In the lower parts fruit trees flouriſh very well; the inhabitants cultivate but little grain: their principal riches ariſing from their meadows and paſtures. Theſe paſtures in the Alps are of a ſuperior quality; medicinal plants are abundant, ſo as even to become an object of commerce. The Alps of Glaris afford a large field not only for the botaniſt, but for natural hiſtory in general, in a prodigious variety of uncommon plants, divers metals and minerals, cryſtals, medicinal ſprings, petrifactions, large ſlate, which forms a conſiderable article of exportation, &c. It is ſuppoſed that ten thouſand head of cattle and four thouſand ſheep may be fed during the ſummer ſeaſon on the mountains of this canton. In the main, however, theſe different productions of the Alps cannot compenſate for the inconveniences ariſing from a cold and mountainous country. The great extent occupied by rocks, precipices, inacceſſible foreſts, barren heaths, and perpetual ſnow, leſſen the enjoyment of man, culture, and population; frequent inundations are cauſed by ſudden thaws or rain, always more abundant in mountainous countries; to theſe may be added the falls of ſnow, of earth and rocks from the mountains, ſtorms and tempeſts. Glaris formerly belonged to the abbey of Seckingen, in Swabia. Towards the end of the thirteenth century, it became, as a fief, ſubject to the emperor Rodolphus I. of the houſe of Auſtria. In 1351, being oppreſſed by the houſe of Auſtria, the people of Glaris entered into an alliance with the cantons of Schweitz, Lucerne, Zurich, Underwalden, and Uri; by whoſe aſſiſtance they became free, and enjoyed their liberties unmoleſted till 1388, when the Auſtrians made an irruption into the canton, with a force ſufficient, as they ſuppoſed, totally to ſubdue it; pillaging the country, and maſſacreing the inhabitants. It was then that 350 troops of Glaris, aſſiſted by thirty Switzers, reſiſted the whole ſtrength of the Auſtrian army; the former were poſted advantageouſly upon the mountains, and the latter, to the number of 15,000, at a village called Næfels. In this ſituation the Auſtrians began the attack; but were ſoon compelled to retreat with great precipitation, by a ſhower of ſtones poured upon them from the heights: in this moment of confuſion, the inhabitants ruſhed down upon the enemy with ſuch redoubled fury, that they broke their ranks; and after an immenſe ſlaughter, forced the remainder to retire from the canton. In 1523, the reformed religion was introduced into this country, but the religious war between the cantons, in 1531, prevented its becoming univerſal. The government is purely democratic; every perſon who is ſixteen years of age has a vote in the landſgemeind, or general aſſembly, which, except on extraordinary occaſions, is only held yearly, in the month of May. This general aſſembly has a right to make new laws, levy contributions, make alliances, and treat of war or peace. The executive power is entruſted to a landrath, or council, compoſed of forty-eight proteſtant members and fifteen Roman catholics. The chief of the republic is called *landamman*, who is alternately choſen from the two religions, only with this difference, that when a proteſtant, his office continues three years, and when a catholic, only two. Every man from the age of ſixteen to ſixty is obliged to regiſter himſelf in the national militia. The contribution of this canton for the army of the confederacy is four hundred men. The whole population amounts to more than ſixteen thouſand ſouls.

GLA'RIS, a town of Swiſſerland, and capital of the above-mentioned canton, ſituated upon the Linth; large and populous. The town-houſe is a handſome ſtructure. The hoſpital and the church ſerve both for proteſtants and Roman catholics. It is the ſeat of juſtice, and the aſſemblies of the people were long held here in the open air, according to the cuſtom of the ancient Gauls and Germans: thirty-two miles eaſt of Lucerne. Lat. 26. 58. N. lon. 26. 40. E. Ferro.

GLA'SENDORF, a town of Bohemia, in the circle of Konigingratz: ſix miles north-north-weſt of Trautenau.

GLA'SENDORF, a town of Sileſia, in the principality of Neiſſe: ten miles and a half ſouth-weſt of Patſchkau.

GLAS'GOW, a large and populous city of Scotland, in the county of Lanerk, ſituated on the banks of the Clyde, which, by an act of parliament, and at a conſiderable expence, has been within theſe laſt forty years made navigable for veſſels drawing ſeven feet ſix inches water. It was formerly the ſee of a biſhop, ſaid to have been founded in the ſixth century, and erected into an archbiſhopric in the fifteenth. The cathedral eſcaped the ill-directed zeal of the reformers, and ſtill remains a venerable monument of Gothic architecture. In 1172, Glaſgow was erected into a royal borough; and in 1611, the city received a charter from James VI. and, in 1636, another from Charles I. with conſiderable power and privileges, which charters were confirmed by acts of parliament in 1661 and 1690. The principal trade of Glaſgow formerly was the curing and exporting of ſalmon and herrings, the principal market for which was France, from whence they imported wines, brandy, and ſalt. But it is from the year 1707, in which the union between Scotland and England took place, that we are to date the proſperity of Glaſgow. By the union, the American trade was laid open to the inhabitants: and ſo ſenſible were they of their advantageous

J. Pass sc

The Austrian Pratincole, Cinereous Wattle Bird, and the choice Gnaphalium.

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tageous ſituation, that they began inſtantly to proſecute that commerce; an aſſiduous application to which, greatly contributed to raiſe the city to the pitch of affluence and ſplendour which it now enjoys. The city was now greatly enlarged: and as the community were ſenſible of the inconvenience that attended the want of a ſufficiency of water in the river for carrying on their commerce, they reſolved to have a port of their own nigher the mouth of the river. The magiſtrates and town-council of Glaſgow, therefore, purchaſed ſome lands on the ſouth ſide of the river Clyde for this purpoſe; and ſo expeditious were they in making their harbour, and rearing their town, that in 1710 a bailiff was appointed for the government of Port Glaſgow. It is now a very conſiderable pariſh, ſituated twenty-one miles nigher the mouth of the Clyde than Glaſgow.

The moſt ancient part of the city ſtands on a riſing ground. The foundation of the cathedral is one hundred and four feet higher than the bed of the river; and the deſcent from the high ground reaches to about one hundred yards below the college. The reſt of the city is built chiefly upon a plain, bounded ſouthward by the Clyde, and northward by a gentle ridge of hills lying in a parallel direction with that river. Theſe grounds till lately conſiſted of gardens and fields; but are now covered with buildings, in conſequence of the increaſing wealth and population of the city. The ſtreets are clean and well paved; and ſeveral of them interſecting one another at right angles, produce a very agreeable effect. The four principal ſtreets, croſſing each other in that manner, divide the city nearly into four equal parts; and the different views of them from the croſs, or centre of interſection, have an air of great magnificence. The houſes, conſiſting of four and five floors in height, are built of hewn ſtone, generally in an exceeding good taſte, and many of them elegant.

The cathedral, or high church, is a magnificent building, and its elevated ſituation is greatly to its advantage. The great tower is founded upon four large maſſive pillars, each of them about thirty feet in circumference. The tower itſelf is twenty-five feet and a half ſquare, ſurrounded by a baluſtrade, within which riſes an octangular ſpire terminated by a fane. The tower upon the weſt end is upon the ſame level, but appears not to have been finiſhed, though it is covered with lead: in this tower is a very large bell, eleven feet four inches in diameter. The principal entry was originally from the weſt; the gate eleven feet broad at the baſe, and ſeventeen feet in height. The weſt end of the choir is now appropriated for a place of divine worſhip; and is divided from the remaining part by a ſtone partition, which is incloſed by another ſtone wall parting it from the nave. It is impoſſible to form an adequate idea of the awful ſolemnity of the principal aiſle, occaſioned by the loftineſs of the roof, and the range of pillars by which the whole is ſupported. The whole length of the cathedral within the walls is two hundred and eighty-four feet, its breadth ſixty-five; the height of the choir, from the floor to the canopy, ninety feet; the height of the nave, eighty-five feet; the height of the middle tower, two hundred and twenty feet. This fabric was begun by John Achaius in 1123, and conſecrated in 1136; and continued by ſucceeding biſhops, till finiſhed in the manner in which it ſtands at preſent.

St. Andrew's church was begun by the community in 1739, and finiſhed in 1756. It is the fineſt piece of modern architecture in the city; and is built after the model of St. Martin's in the Fields, London, whoſe architect was the famous Gibbs. The length of the church is one hundred and four feet, and its breadth ſixty-ſix. It has a noble arched roof, well ornamented with figures in ſtucco, and ſuſtained by ſtone columns of the Corinthian order. Correſpondent to the model, it has a place for the altar on the eaſt, in which is a very ancient Venetian window; but the altar-place being ſeated, makes this end appear to no great advantage. The fronts of the galleries and the pulpit are done in mahogany in a very elegant manner. The ſpire by no means correſponds with the reſt of the building; and, inſtead of being an ornament, rather diſgraces this beautiful fabric. Its height is one hundred and ſeventy feet.

The college of the univerſity extends along the eaſt ſide of the high ſtreet, and is upwards of three hundred and thirty feet long. The gate at the entrance is decorated with ruſtics, and the building conſiſts of two principal courts or ſquares. The firſt is eighty-eight feet long and forty-four broad. The weſt ſide is elevated upon ſtone pillars, on which are placed pilaſters ſupporting the Doric entablature, and ornamented with arches forming a piazza. Above theſe is the public hall; the aſcent to which is by a double flight of ſteps incloſed by a handſome ſtone baluſtrade. The ſpire ſtands on the eaſt ſide, is one hundred and thirty-five feet high, and has a very good clock. Under this is the gateway into the inner and largeſt court, which is one hundred and three feet long and ſeventy-nine broad. Over the entry, in a niche, is a ſtatue of Mr. Zacharias Boyd, who was a great benefactor to the univerſity. On the ſouth ſide of the botanic garden ſtands the library; a very neat edifice, well conſtructed for the purpoſe intended, and containing a very valuable collection of books. Underneath are preſerved in caſes all the Roman inſcriptions found on Graham's Dike, together with altars and other antiquities collected from different parts of Scotland. Adjoining, there is an obſervatory, well furniſhed with aſtronomical inſtruments. The college alſo poſſeſſes, by bequeſt, the late Dr. Hunter's famous anatomical preparations, library, and muſeum: and in the department of natural philoſophy, it is furniſhed with an apparatus which is univerſally acknowledged to be the moſt extenſive and uſeful in Great Britain, and which owed its perfection to the liberality and unremitting labour of Mr. profeſſor Anderſon.

The tolbooth, or town-houſe, is a magnificent and extremely elegant building. The front is adorned with a range of Ionic pilaſters; and is elevated on ſtrong ruſticated pillars with arches, forming a piazza for merchants and others to ſhelter themſelves from the weather when engaged in buſineſs. One of the apartments was the aſſembly-hall; a neat room, forty-ſeven feet long, and twenty-four in breadth and height, finiſhed in a good taſte, though ſmall. The town-hall is a ſpacious and lofty apartment, finiſhed in a very grand manner; the ceiling is divided into different compartments well ornamented. Oppoſite to the front of this building is the exchange-walk, which is well paved with free-ſtone, and incloſed from the ſtreet by ſtone pillars. In the middle of this area is an equeſtrian ſtatue of William III. placed upon a lofty pedeſtal, and ſurrounded with an iron rail. In 1781, the exchange under the piazzas was greatly enlarged, by taking down the lower part of the town-hall and aſſembly-room; and at the ſame time, by a tontine ſcheme entered into by the inhabitants, a moſt elegant coffee-room was added, with a ſuite of buildings adjoining for the purpoſes of a tavern and hotel, aſſembly-room, and offices for notaries and underwriters. The aſſembly-room, however, being found too ſmall, a ſubſcription of above five thouſand pounds was raiſed by a ſimilar plan of a tontine for building a new one.

The guild-hall, or merchants' houſe, is ſituated upon the ſouth ſide of Bridgegate-ſtreet; and is in length eighty-two feet, in breadth thirty-one. The great hall, which is the whole length and breadth of the building, is ſo capacious, that it is better adapted for the reception of great and numerous aſſemblies than any other in the city. This houſe is adorned with a very elegant ſpire two hundred feet high.

The infirmary or hoſpital is a very neat building,

conſiſting of two wings and a large front; the length one hundred and fifty-ſix feet, the breadth of the centre thirty feet, and the depth of the wings ſixty-eight feet. Behind the building is a range of wards one hundred and twenty-ſeven feet long by twenty-five feet broad, the aſcent to which is by a flight of ſteps. The lower part of this building is appointed for the reception of lunatics. The area between the buildings is large, which, with the agreeable open ſituation of the hoſpital on the river, muſt conduce to the health of the patients.

The grammar ſchool is ſituated on the north-weſt of the town, and was built in 1787. It is a very handſome building, containing a large hall, and ſix airy commodious teaching rooms. In this ſchool there are four claſſes, the courſe being four years: each claſs is carried on the whole four years by the ſame maſter; ſo that, there being no rector, each maſter is head of the ſchool one year in rotation. It is under the direction of a committee of the town council; who, aſſiſted by the profeſſors, clergy, and other perſons of learning, frequently viſit it during the ſeſſion; and at an annual examination, prizes of books are diſtributed to the ſcholars according to their reſpective merits. The preſent number of ſcholars is above three hundred.

The New Bridge is an elegant ſtructure. It is thirty-two feet wide; with a commodious foot-way for paſſengers, five feet broad on each ſide, raiſed above the road made for carriages, and paved with freeſtone. This bridge is about five hundred feet in length; and conſiſts of ſeven arches, the faces of which are wrought in ruſtic, with a ſtrong block cornice above. The arches ſpring but a little way above low-water mark; which, though it renders the bridge ſtronger than if they ſprung from taller piers, yet diminiſhes its beauty. Between every arch there is a ſmall circular one; theſe break the force of the water when the river riſes to a flood, and add to the ſtrength of the whole. This bridge was begun in 1768, and finiſhed in 1772.

The moſt remarkable public charities in Glaſgow are as follow: Muirhead's or St. Nicholas Hoſpital; originally appointed to ſubſiſt twelve old men and a chaplain: but its revenues have, from ſome unknown cauſes, been loſt; ſo that no more of them now remains than the ſum of 128l. per annum, Scots money, or 10l. 13s. 4d. ſterling.

Hutcheſon's Hoſpital, founded and endowed in 1639 by George Hutcheſon, and Thomas Hutcheſon his brother, who was bred a preacher, for the maintenance of old men and orphans. The funds of this hoſpital were increaſed by James Blair, merchant in Glaſgow in 1710, and by ſubſequent donations. The income is now above 1400l. which is diſtributed in penſions to old people, and in educating about fifty children. The Merchants' Houſe; a charity which diſtributes in penſions about 800l. yearly.

Wilſon's Charity, for the education of boys; founded by George Wilſon, who in 1778 left 3000l. for that purpoſe. This fund is now conſiderably increaſed, and gives education and clothing to forty-eight boys, who each continues four years, ſo that twelve are admitted annually. Beſides theſe, there are many public ſchools for the education of children; as well as many inſtitutions of private ſocieties for the purpoſe of relieving the indigent and inſtructing youth, ſuch as Graham's Society, Buchanan's Society, the Highland Society, &c. Theſe laſt put annually twenty boys apprentices to trades, and during the three preceding years give them clothing and education.

The univerſity of Glaſgow owes its origin to biſhop Turnbull. From the time of its eſtabliſhment in 1450 to the reformation in 1560, the college was chiefly frequented by thoſe who were intended for the church; its members were all eccleſiaſtics, and its principal ſupport was derived from the church. The reformation brought the univerſity to the verge of deſtruction; maſters, ſtudents, and ſervants, all forſook it. The magiſtrates were ſo ſenſible of the loſs which the community had ſuſtained by this deſertion, that they endeavoured to reſtore it in 1572, by beſtowing upon it conſiderable funds, and preſcribing regulations for its management. Theſe, however, proved inſufficient; for which reaſon James VI. erected it anew, by a charter called the *Nova Erectio*, in 1577, and beſtowed upon it the teinds of the pariſh of Govan. The perſons who were to compoſe the new univerſity were, a principal, three profeſſors of philoſophy, and four ſtudents burſars. Since that time the funds of the univerſity have been conſiderably increaſed by the bounty of kings and the donations of private perſons. The profeſſors have therefore alſo been increaſed; ſo that at preſent the univerſity of Glaſgow conſiſts of a chancellor, rector, dean of faculty, principal, and fourteen profeſſors (ſix of them in the gift of the crown), together with burſars, &c. The archbiſhop of Glaſgow was formerly chancellor of the univerſity *ex officio*; at preſent, the chancellor is choſen by the rector, dean of faculty, principal, and maſters. The number of ſtudents who annually attend this college appears to be upwards of 500.

Since the ſtagnation of the American trade, already noticed, the merchants of Glaſgow have turned their attention more to manufactures, which have of late, eſpecially that of cottons and muſlins, increaſed in a very rapid degree. The manufacturing houſes, the influx of people for carrying on the manufactures, the means and encouragement which theſe afford to population, and the wealth thence derived by individuals as well as accruing to the community, have all tended greatly to increaſe the extent of the city and the elegance of the buildings. Beſides various improvements in the old ſtreets, ſeveral handſome new ones as well as new ſquares have been added; particularly George's ſquare, which is large, airy, and beautiful.

The government of the city of Glaſgow is veſted in a provoſt and three bailiffs, a dean of guild, deacon-conveener, and a treaſurer, with a common council of thirteen merchants and twelve mechanics. The provoſt and two of the bailiffs, muſt be elected from the merchant rank, and the other bailiff from the trade rank, *i. e.* the mechanics. The provoſt is, from courteſy and cuſtom, ſtyled *lord provoſt*. He is properly lord of the police of the city, preſident of the community, and is *ex officio* a juſtice of the peace for both the borough and county.

The revenue of the town ariſes from a duty upon all grain and meal brought into the city (which tax is denominated *the ladles*); from the rents of lands and houſes the property of the community; from an impoſt of two pennies Scots upon every Scots pint of ale or beer brewed, inbrought, or ſold, within the city; from certain dues payable out of the markets; from the rents of the ſeats in churches; from the dues of cranage at the quay, at the weigh-houſe, &c. As to the tonnage on the river, the pontage of the bridge, and ſtatute-work; theſe, making no part of the city revenue, are kept diſtinct, under the management of commiſſioners appointed by act of parliament.

About the time of the union, the number of inhabitants in Glaſgow was calculated at about fourteen thouſand. In 1765, when a new diviſion of the pariſhes took place, they were eſtimated at twenty-eight thouſand. In 1785, when an accurate ſurvey was made, the number was about thirty-ſix thouſand; beſides the ſuburbs, containing the Calton, Gorbals, and Anderſton, reckoned about one thouſand. Since that time many new ſtreets have been erected, and the city has become conſiderably more populous, but no cenſus has been made; though it is believed that the number of inhabitants cannot at preſent be computed at leſs than fifty thouſand.—Upon the whole, the city of Glaſgow, from the beauty of its ſituation, the general neatneſs of its appearance,

the magnificence of its public buildings, the celebrity of its univerſity, and the high and deſerved fame which it has acquired by its commerce and manufactures, is become an emporium of conſiderable importance; a nurſery for the arts of great utility and intereſt; and a ſeat of learning which has done honour to moſt branches of literature. Glaſgow is ſituated thirty-eight miles weſt of Edinburgh, and forty-three ſouth-weſt of Perth. Lat. 55. 53. N. lon. 4. 15. W. Greenwich.

GLAS'GOW, a county of the American States, in Newburn diſtrict, North Carolina. It is bounded north by Edgcomb, ſouth by Lenoir, eaſt by Pitt, and weſt by Wayne.

GLAS'HUTTEN, or GLASITTEN, a town of Hungary; celebrated for its hot baths, and near it are ſome rich gold mines: ſeven miles from Schemnitz.

GLAS'LOUGH, a town of Ireland, in the county of Monaghan: five miles north-north-eaſt of Monaghan.

GLASS, *ſ.* [glæſ, Sax. *glas*, Dut. as Pezon imagines from *glâs*, Brit. green. In Erſe it is called *klânn*, and this primarily ſignifies clean or clear, ſo denominated from its tranſparency.] An artificial ſubſtance made by fuſing fixed ſalts and flint or ſand together.—The word *glaſs* cometh from the Belgic and High Dutch: *glaſs*, from the verb *glanſen*, which ſignifies amongſt them to ſhine; or perhaps from *glacies* in the Latin, which is ice, whoſe colour it reſembles. *Peacham.—Glaſs* is thought ſo compact and firm a body, that it is indeſtructible by art or nature; and is alſo of ſo cloſe a texture, that the ſubtleſt chemical ſpirits cannot pervade it. *Boyle.*

Show'rs of grenadoes rain, by ſudden burſt
Diſploding murd'rous bowels, fragments of ſteel
And ſtones, and *glaſs*, and nitrous grain aduſt. *Philips.*

A glaſs veſſel of any kind:

I'll ſee no more;
And yet the eighth appears, who bears a *glaſs*
Which ſhews me many more. *Shakeſpeare.*

A looking-glaſs; a mirror:

He ſpreads his ſubtile nets from ſight,
With tinkling *glaſſes*, to betray
The larks that in the meſhes light. *Dryden.*

An hour-glaſs; a glaſs uſed in meaſuring time by the flux of ſand:

Were my wife's liver
Infected as her life, ſhe would not live
The running of one *glaſs*. *Shakeſpeare.*

The deſtined time of man's life:

No more his royal ſelf did live, no more his noble ſonne,
The golden Meleager now, their *glaſſes* all were run.
Chapman.

A cup of glaſs uſed to drink in:

When thy heart
Dilates with fervent joys, and eager ſoul
Prompts to purſue the ſparkling *glaſs*, be ſure
'Tis time to ſhun it. *Philips.*

The quantity of wine uſually contained in a glaſs; a draught.—While a man thinks one *glaſs* more will not make him drunk, that one *glaſs* hath diſabled him from well diſcerning his preſent condition. *Taylor.*—The firſt *glaſs* may paſs for health, the ſecond for good-humour, the third for our friends; but the fourth is for our enemies. *Temple.*—A perſpective glaſs:

The moon whoſe orb
Through optic *glaſs* the Tuſcan artiſt views. *Milton.*

When, or by whom, the art of making glaſs was firſt found out, is uncertain. Neri, an ingenious writer on the manufacture of glaſs, traces the antiquity of this art as far back as the time of Job: but Dr. Merret endeavours to prove that it is as ancient as either pottery or the making of bricks; becauſe a kiln of bricks cannot be burnt, nor a batch of pottery made, but ſome of the bricks and the ware will be ſuperficially turned to glaſs; ſo that it muſt have been known at the building of Babel, and as long before as the making of bricks was in uſe. It muſt have been known conſequently amongſt the Egyptians, when the Iſraelites were employed by them in making bricks. The Egyptians indeed boaſt, that this art was taught them by the great Hermes. Ariſtophanes, Ariſtotle, Alexander Aphrodiſæus, Lucretius, and John the Divine, put us out of all doubt that glaſs was uſed in their days.

It appears, that before the conqueſt of Britain by the Romans, glaſs-houſes had been erected in this iſland, as well as in Gaul, Spain, and Italy. Hence, in many parts of the country are to be found amulets of glaſs, having a narrow perforation and thick rim, denominated by the remaining Britons *gleincu naidreedh*, or *glaſs adders*, which were probably in former times uſed as amulets by the druids. According to venerable Bede, artificers ſkilled in making glaſs for windows, were brought into England in the year 674, by abbot Benedict, who were employed in glazing the church and monaſtery of Weremouth. According to others, they were firſt brought over by Wilfrid biſhop of Worceſter. Till this time the art of making ſuch glaſs was unknown in Britain; though glaſs windows did not begin to be common before the year 1180: and even then they were uncommon in private houſes, and conſidered as a kind of luxury, or as marks of great magnificence. Italy had them firſt, France next, from whence they came to England. Yet Venice, for many years, excelled all Europe in the ſuperiority of its glaſs; and, in the thirteenth century, the Venetians were the only people that had the ſecret of making cryſtal looking-glaſſes. Their great glaſs-works were at Muran, or Murano, a village near the city, which furniſhed all Europe with the fineſt and largeſt glaſſes.

The manufacture of glaſs was firſt begun in England in 1557: the finer ſort was made in the place called Crutched-friars, in London; the fine flint glaſs, but inferior to that of Venice, was firſt made in the Savoy-houſe, in the Strand, London. This manufacture appears to have been much improved in 1635, when it was carried on with ſea-coal inſtead of wood, and a monopoly was granted to ſir Robert Manſell, who was allowed to import the fine Venetian flint glaſſes for drinking, the art of making which was not brought to perfection in England before the reign of William III. But the firſt glaſs plates for looking-glaſſes and coach-windows were made by us in 1673, at Lambeth, through the encouragement of the duke of Buckingham; who, in 1670, introduced the manufacture of fine flint glaſs into England, by means of Venetian artiſts, with amazing ſucceſs. And an extenſive manufactory of this elegant branch of commerce was alſo eſtabliſhed in Lancaſhire, about the year 1773, through the ſpirited exertions of a very reſpectable body of proprietors, who were incorporated by an act of parliament. From this period we are to date the great improvement which has taken place in the beauty and tranſparency of the pure cryſtal glaſs in England, which is inferior to none in the univerſe.

Moſt of the glaſſes made for common uſe, conſiſt of an earthy ſubſtance, called the *baſis*; and a ſaline or metallic ſubſtance, called the *flux*. The baſis is uſually ſiliceous earth, the ſalt an alkali, and the metal lead. But various admixtures of earth and metallic calces are uſed in the actual practice of the art. None of the acids, except the phoſphoric, are ſufficiently fixed to withſtand the heat required to form the vitreous combination with an earth; and this ſalt has not yet been afforded cheap enough to be uſed, except in ſmall aſſays by the blow-pipe. The fluxes in glaſs-making are uſeful, not only becauſe more fuſible than the earthy matter, to which they communicate the ſame property, but likewiſe as ſolvents which combine with it in the dry way, and

in

in ſome inſtances produce a compound poſſeſſing greater fuſibility than belonged to any of the ingredients.

The earthy ſubſtances made uſe of in the compoſition of glaſs are, quartzoſe, ſand, flint, gypſeous ſpar, chalk, and the like, either ſingly, or in various proportions; except, however, that the ſiliceous earth is never to be diſpenſed with. The ſaline additions conſiſt either of barilla or ſoda, common pot-aſh, or wood-aſhes, and amount to about one-third part of the whole. Theſe ſubſtances are purified and pounded with greater or leſs care, according to the purity or excellence of the glaſs intended to be produced. If the materials were put into a veſſel and expoſed to fuſion, they would froth and ſwell much, partly on account of the eſcape of moiſture and other volatile matter, and partly by reaſon of ſome elaſtic fluid which appears to be extricated at the time of the combination of the baſis and the flux: various impurities of an inflammable nature would likewiſe remain unconſumed in the body of the glaſs, and injure its colour. To prevent theſe inconveniences, the compoſition is kept for the ſpace of four and twenty hours in a furnace of a particular conſtruction, at a degree of heat not ſufficient to produce complete fuſion, and with acceſs of air. It is repeatedly ſtirred during this calcination, and becomes at length converted into an imperfect glaſs called *frit*. This is put into the melting-pots, and fuſed by the ſtrong heat of a reverberatory furnace. The fuſed glaſs has then the property of adhering to an iron rod or tube, by which means it is taken out, either to aſcertain its ſtate of perfection, or to blow it into ſuch utenſils as may be required. The unvitrifiable ſalts, or ſuch as do not enter into combination with the earth, ſwim at the top of the veſſel, forming the ſubſtance called *ſandiver*, or glaſs gall, which is ſcummed off.

The proceſs of the glaſs-blower is ſimply this: The fuſed glaſs is taken out by dipping an iron tube into the pot; and the quantity firſt dipped out is ſuffered to cool a little, and ſerves as the receptacle for more glaſs to be taken up at a ſecond dip, and ſo on, until the quantity for blowing is ſufficient. The lump of glaſs may be ſoftened at pleaſure, by holding it before the mouth of the furnace. The workman renders it hollow, and of a round or ſpherical form, by blowing through the tube. This ſphere may be converted into a cone, a cylinder, or any other ſolid, whoſe tranſverſe ſection is a circle, by rolling it on a flat plate of iron. It may be ſtretched or lengthened by ſwinging the tube in the air, or giving it a vibratory motion like that of a pendulum. The workmen evince great dexterity in heating the glaſs in the various ſtages of the manipulation. They do this in ſuch parts as they are deſirous of extending; and on other occaſions they cool certain parts of their work, by fanning the air againſt it. The glaſs, in the ignited ſtate it poſſeſſes after it comes out of the pots, is ſo tough and flexible, that it may be cut with ſhears, bended with pincers, preſſed into moulds, and wrought in a variety of methods dependent on theſe properties, of which the artiſts very dexterouſly avail themſelves. Thus are all kinds of glaſs veſſels and figures made; but flat or plate glaſs is produced by running the ignited vitreous metal into tabular moulds.

As far as obſervation has hitherto directed us, it appears to be a general rule, that the hardneſs, brittleneſs, elaſticity, and other mechanical properties, of congealed bodies, are greatly affected by the degree of rapidity with which they cool, or aſſume the ſolid ſtate. This, which no doubt is referrible to the property of cryſtallization, and its various modifications, is remarkably ſeen in ſteel and other metals, and obtains in glaſs. When a drop of fuſed glaſs is ſuffered to fall into water, it is found to poſſeſs the remarkable property of flying into minute pieces, the inſtant a ſmall part of the tail is broken off. This, which is commonly diſtinguiſhed by the name of *Prince Rupert's drop*, is ſimilar to the philoſophical phial, which is a ſmall veſſel of thick glaſs ſuddenly cooled by expoſure to the air. It poſſeſſes the remarkable property of flying in pieces when the ſmalleſt piece of flint or angular pebble is let fall into it. Many explanations have been offered to account for theſe and other ſimilar phenomena, by referring to a ſuppoſed mechaniſm or arrangement of the particles, or ſudden confinement of the caloric, or matter of heat. The immediate cauſe, however, appears to be derived from the fact, that the dimenſions of bodies ſuddenly cooled, remain larger than if the refrigeration had been more gradual. Thus the ſpecific gravity of ſteel hardened by ſudden cooling in water is leſs, and its dimenſions conſequently greater, than that of the ſame ſteel gradually cooled. Hence it is probable that an effect of the ſame nature obtains in glaſs; ſo that the dimenſions of the external and ſuddenly-cooled ſurface remain larger than are ſuited to the accurate envelopement of the interior part, which is more ſlowly cooled. In moſt of the metals, the degree of flexibility they poſſeſs muſt be ſufficient to remedy this inaccuracy as it takes place; but in glaſs, which, though very elaſtic and flexible, is likewiſe exceſſively brittle, the adaptation of the parts, urged different ways by their diſpoſition to retain their reſpective dimenſions, and likewiſe to remain in contact by virtue of the coheſive attraction, can be maintained only by an elaſtic yielding of the whole, as far as may be, which will therefore remain in a ſtate of tenſion. It is not, therefore, to be wondered at, that a ſolution of continuity of any part of the ſurface ſhould deſtroy this equilibrium of elaſticity; and that the ſudden action of all the parts at once, of ſo brittle a material, ſhould deſtroy the continuity of the whole, inſtead of producing an equilibrium of any other kind.

Though the facts relating to this diſpoſition of glaſs too ſuddenly cooled are numerous and intereſting to the philoſopher, yet they conſtitute a ſerious evil with reſpect to the uſes of this excellent material. The remedy of the glaſs-maker conſiſts in annealing the ſeveral articles, which is done by placing them in a furnace over the furnace of fuſion. The glaſſes are firſt put into the hotteſt part of this furnace, and gradually removed to the cooler parts at regular intervals of time. By this means the glaſs cools very ſlowly throughout, and is in conſequence free from the flaws and defects of glaſs which has been too haſtily cooled. See the article ANNEALING, vol. i. p. 733.

It is difficult to ſpeak with exact preciſion concerning the materials, proportion, and management neceſſary to make the different kinds of glaſs, ſuch as the green glaſs for bottles, the common green and crown glaſs for windows, the white glaſs for mirrors, the white flint glaſs for decanters and jars, and the cryſtal glaſs uſed for the finer cut glaſs, not to mention the denſe white glaſs made expreſsly for optical inſtruments. All theſe are made of a better quality at ſome manufactories than at others; and it is probable that this ſuperiority of produce is rendered ſecret by the natural diſpoſition for gain, which prevails among all men whoſe pecuniary ſucceſs depends on their monopolizing the effects of their own ſkill. The green glaſs is made from inferior materials; the baſis conſiſting of a ferruginous ſtone or ſand, and the alkali ſuch as can be the moſt cheaply obtained. The colour principally depends on the iron; and the glaſs is harder, more durable, and leſs deſtructible by acids remaining in it for a long time, the leſs the quantity of alkali, and conſequently the greater the heat. Chaptal, in his Elements of Chemiſtry, mentions the ſucceſsful eſtabliſhment of a manufactory of opaque bottles of exceſſive ſtrength and lightneſs, compoſed chiefly of baſaltes; but he relates that the eſtabliſhment failed, chiefly on account of the quality of the baſaltes, which did not conſtantly prove the ſame, but, becoming in the latter ſtages of the undertaking more calcareous, produced an article of a periſhable nature, and ſubject to flaws. All the white glaſſes owe their clearneſs to the purity

purity of the materials. The fineſt ſiliceous ſand is fuſed with purified alkali. The calces of lead act as a powerful flux, and are much uſed in compoſitions of this nature. They give denſity, ſoftneſs, tranſparency, and a diſpoſition to take a brilliant poliſh.

The calces of lead have been found extremely valuable in forming the pure white glaſs for optical inſtruments. By this means the aberration of the refracting teleſcope has been corrected, and the coloured or priſmatic rays deſtroyed. The doctrine is this: Suppoſe a convex lens formed of ſuch glaſs as afforded very little colorific diſperſion of the rays, and a convex lens of ſuch glaſs as afforded much of this effect; it will follow, that when theſe two lenſes poſſeſs ſuch a figure as that the concave ſhall deſtroy the priſmatic colours produced by the convex, the exceſs of mean refraction muſt be in the latter; and conſequently, that the compound glaſs will act like a convex lens, and produce a real colourleſs focal image. The problem of conſtructing teleſcopes which ſhall be truly achromatic, depends therefore on the perfection to which the glaſs can be brought. The general facts reſpecting glaſs for this uſe are, that lead, and probably other metallic calces, increaſe the diſperſive power of lenſes more than alkalis, and theſe laſt more than earthy fluxes; and that an addition of alkali to glaſs containing lead, ſerves greatly to diminiſh the mean refraction, without much affecting the diſperſive power occaſioned by the metal. Hence it might ſeem eaſy to compoſe ſuch glaſs as the theorems of the optician demand; but the practice is by no means ſo ready. Regular refraction demands that the medium ſhould poſſeſs an uniform denſity throughout, or, in other words, that the parts of the glaſs ſhould be well combined together. This however is ſeldom the caſe, eſpecially in the denſe metallic glaſs. It is found, that the great fuſibility of the glaſs of lead cauſes it to flow, and occupy the interſtices between the particles of the ſand before theſe are melted. So that ſome very bright and apparently homogeneous glaſſes exhibit an infinity of ſmall focal images of a candle, when examined by a magnifier, which are produced by rounded particles of ſand remaining in every part of the ſubſtance. Another fault, ſtill more common, conſiſts in veins of a different denſity from the reſt, partly ariſing from imperfect fuſion, and partly from the denſity of the glaſs in the pots being greater the lower its poſition.

Various have been the attempts to remedy theſe defects, particularly ſince the board of longitude has offered a conſiderable premium for this object. We do not, however, poſſeſs any ample detail of theſe unſucceſsful experiments. It is generally underſtood, that it is in vain to endeavour to make this glaſs in ſmall furnaces, becauſe the heat in them is continually varying, and is either too low for the requiſite fluidity, or ſo high as to extricate bubbles of elaſtic matter; whereas a ſteady heat is required for the purpoſe. Macquer and others have attempted to correct the evil by repeated fuſions and pulverization of the glaſs, and by expoſing it to long-continued fires; but without complete ſucceſs. It is ſaid, that one of the practices in the Engliſh glaſs-houſes conſiſts in lading the melted matter from one pot to another in the furnace. But this, on account of the heavy duty of exciſe, and the manner in which it is levied, cannot be done to any advantageous extent. If the glaſs be ſuffered to cool in the pots after a perfect fuſion, its parts take a ſymmetrical arrangement, of the nature of cryſtallization, by which the light is acted upon in a manner independent of its figure, which is thought to be a great impediment to its optical uſe. Mr. Kier, who has had much experience in this curious inveſtigation, is diſpoſed to recommend the trial of component parts different from any which have yet been admitted into the compoſitions for common glaſs. It has been affirmed, that Mr. Dollond conſtructed his excellent three-foot glaſſes (which at preſent bear ſo high a price) with one ſingle pot of glaſs made at the glaſs-houſe near Wellcloſe-ſquare, London; and that none of the ſame quality has ſince been produced. But the proprietor of that glaſs-houſe aſſerts, that the original receipts and practice are ſtill followed in making the optical glaſs: ſo that much ſeems to depend on the accidental circumſtances in the preciſe quantity and quality of the materials, or in the effect or refinement of the matters during the fuſion; or perhaps in all theſe circumſtances combined. See Mr. Dollond's experiments under the article ABERRATION, vol. i. p. 17.

M. Reaumur was the firſt who made any direct experiments upon the converſion of glaſs into porcelain, which takes place by the evaporation or abſorption of its alkali, during the continuance of a degree of heat leſs than is ſufficient to melt it. Saline glaſſes are the beſt for this purpoſe; and the leſs ſalt they contain, the more readily they are converted. Inſtances of this effect may be obſerved among the rubbiſh of brick-kilns, where pieces of green bottles are not unfrequently ſubjected by accident to the requiſite heat; but the manual proceſs is as follows: A veſſel of green glaſs is to be filled up to the top with a mixture of white ſand and gypſum, and then ſet in a large crucible upon a quantity of the ſame mixture, with which the glaſs veſſels muſt alſo be ſurrounded and covered over, and the whole preſſed down cloſe and hard. The crucible is then to be covered with a lid, the junctures well luted, and put into a potter's kiln, where it muſt remain during the whole time that the pottery is baking; after which, the glaſs veſſel will be found transformed into a milk-white porcelain. The glaſs, on fracture, appears fibrous, as if it were compoſed merely of ſilken threads laid by the ſide of each other: it has then alſo quite loſt the ſmooth and ſhining appearance of glaſs, is very hard, and emits ſparks of fire when ſtruck with ſteel, though not ſo briſkly as real porcelain. Lewis obſerved, that the above-mentioned materials have not excluſively this effect upon glaſs; but that powdered charcoal, ſoot, tobacco-pipe clay, and bone-aſhes, produce the ſame change. It is remarkable, that the ſurrounding ſand becomes in ſome meaſure agglutinated by this proceſs, which, if continued for a ſufficient length of time, entirely deſtroys the texture of the glaſs, and renders it pulverulent.

The pots uſed in the glaſs-trade for melting the glaſs, are of two kinds: thoſe for the fine white glaſs are made of tobacco-pipe clay, which is firſt well waſhed, then calcined, and afterwards ground to a fine powder in a mill; which being mixed with water, is trod with the bare feet till it is of a fit conſiſtence to mould with the hands into the proper ſhape of the veſſels. Thoſe for the green-glaſs work are made of an inferior ſort of clay, and ſufficiently large to hold three or four hundred weight of metal.

A very conſiderable improvement in the conſtruction of the glaſs furnace, has been recently introduced by Mr. John Donaldſon of Briſtol, glaſs-manufacturer, and for which he obtained his majeſty's letters patent, dated March 5, 1802.—This improvement he deſcribes to be as follows: "After the body of the furnace itſelf is conſtructed in the uſual form and dimenſions, I proceed to incloſe the ſame within another building, adapted to prevent the external air from having any acceſs to the fire, except through the aſh-pit and grate. And I make the ſaid laſt-mentioned building of ſuch a figure and height that the rarefied air which hath paſſed through the fire, and iſſued forth from the apertures or flues of the furnace into the ſaid ſurrounding building, ſhall occupy the interior ſpace thereof, and produce the ſame effect upon the draught of air by which the fire is urged and maintained, as is produced by the heated air in any other elevated chimney, (the ſcientific cauſes of which are well known, and need not be here explained.) And

in order that the workmen may have eaſy acceſs to the working-flues, and that the heat may be moderated for working, I form certain openings in the ſaid building, which are to be cloſed by iron doors, or otherwiſe, whenever extreme heat is required, but which are opened by taking the ſame down at the time of working, and thereby permit the external air to enter between the furnace and the ſurrounding edifice, ſo as to reduce the draught to the ordinary ſtandard or force. The figure and dimenſions of the ſaid ſurrounding edifice or building are ſuſceptible of conſiderable variation, according to the circumſtances of the work itſelf, and the judgement of the operator; who muſt be ſuppoſed to poſſeſs ſufficient ſkill to perform a work of this kind in a proper manner; but in general I adviſe a conical figure, of conſiderable elevation, for the external building, having its orifice or chimney at the top, and its baſe of ſuch a diameter, as that its internal face may be leſs than one foot diſtant from the neareſt projecting part of the curvature of the furnace, with ſide-apertures, to be cloſed as aforeſaid, oppoſite the working-flues; for the ſafe and perfect conſtruction of which, the ſkill and precautions uſually employed in works of this nature will be fully ſufficient, without further inſtruction."

Of COLOURED GLASS.

It is probable that there was no great interval between the diſcovery of the art of making glaſs, and that of giving it different colours. When the ſubſtance of which it is formed contains, by accident, any metallic particles, the glaſs aſſumes ſome tint; and this happens oftener than is wiſhed; nay, a conſiderable degree of care and foreſight is neceſſary to produce glaſs perfectly colourleſs. From the different colours, therefore, which glaſs acquired of itſelf, it was eaſy to conceive the idea of giving it the tinge of ſome precious ſtone, which is nothing more than a glaſs formed by nature. This art, in ancient times, was undoubtedly carried to a very great extent. Proofs of this may be found in Pliny, who, among others, mentions artificial hyacinths, ſapphires, and that black glaſs which approached very near to the obſidian ſtone, and which in more than one place he calls *gemmæ vitreæ*. See the article GEM, p. 293, of this volume.

The glaſs-houſes at Alexandria were celebrated among the ancients for the ſkill and ingenuity of the workmen employed in them. From theſe the Romans, who did not acquire a knowledge of that art till a late period, procured for a long time all their glaſs ware. From the learned author of *Recherches ſur les Egyptiens et les Chinois*, it appears that coloured glaſs was made even in thoſe early ages. The emperor Adrian received as a preſent from an Egyptian prieſt, ſeveral glaſs cups which ſparkled with colours of every kind, and which, as coſtly wares, he ordered to be uſed only on grand feſtivals. Strabo tells us, that a glaſs-maker in Alexandria informed him that an earth was found in Egypt, without which the valuable coloured glaſs could not be made.

What materials the ancients uſed for colouring glaſs, has not been communicated to us by any of their writers. It is, however, certain that metallic calces only can be employed for that purpoſe, becauſe theſe pigments readily withſtand the heat of the furnace; and it is highly probable that ferruginous earth, if not the ſole, was at leaſt the principal, ſubſtance by which not only all ſhades of red, violet, and yellow, but even a blue colour, could be communicated, as profeſſor Gmelin has ſhewn. Reſpecting the red, there is the leſs doubt, as, at preſent, ſometimes an artificial, and ſometimes a natural, iron ochre, is often employed for that purpoſe. For common works this is ſufficient; but when pure clear glaſs, coloured ſtrongly throughout with a beautiful lively red, free from flaws and in ſomewhat large pieces, is required, iron is not fit, becauſe its colour, by the continued heat neceſſary for making glaſs, either diſappears, or becomes dirty and opaque. In the ſeventeenth century, ſome artiſts in Germany firſt fell upon the method of employing gold, inſtead of iron, and of thereby making artificial rubies, which, when they were well ſet, could deceive the eye of a connoiſſeur, unleſs he tried them with a diamond, or a file. The uſual method was to diſſolve the gold in aqua regia, and to precipitate it by a ſolution of tin, when it aſſumed the form of a purple-coloured powder. This ſubſtance, which muſt be mixed with the beſt flint, is called the precipitate or gold calx of Caſſius, gold-purple, or mineral purple.

In the year 1606, when Libavius publiſhed his Alchemy, the art of making ruby glaſs appears to have been unknown. He indeed quotes an old receipt for making rubies; and conjectures, that becauſe the real ſtones of the ſame name are found in the neighbourhood of gold mines, they may have acquired their colour from that metal; and that, by means of art, glaſs might be coloured by a ſolution of gold. The later chemiſts, however, and particularly Achard, found no traces of gold, but of iron, in that precious ſtone. The idea which Libavius conceived from a falſe deduction, has nevertheleſs been confirmed by experience. Neri, who lived almoſt at the ſame time as Libavius, was better acquainted with the gold-purple, though his receipt is very defective. According to his directions, the gold ſolution muſt be evaporated, and the remains ſuffered to continue over the fire until they become of a purple colour. One may readily believe that this colour will be produced; but glaſs will ſcarcely be coloured equally through by this powder; and, what is worſe, ſome of the gold particles will be apt to ſhew themſelves in it.

No artiſt, in the ſeventeenth century, underſtood better the uſe and preparation of gold-purple than John Kunkel, who, after being ennobled by Charles XI. king of Sweden, aſſumed the name of Lewenſtiern. He himſelf tells us, that he made artificial rubies in great abundance, and ſold them, by weight, at a high price. He ſays, he made for the elector of Cologne a cup of ruby glaſs, weighing not leſs than twenty-four pounds, which was a full inch in thickneſs, and of an equal beautiful colour throughout. He employed himſelf moſt on this art after he engaged in the ſervice of Frederic-William elector of Brandenburg, in 1679. At that time he was inſpector of the glaſs-houſes at Potſdam; and, in order that the art of making coloured glaſs might be brought to perfection, the elector expended a very large ſum. A cup with a cover, of this manufacture, is ſtill preſerved as a curioſity at Berlin.

Painting on glaſs and in enamel, and the preparation of coloured materials for moſaic work, may, in certain reſpects, be conſidered as branches of the art of colouring glaſs; and in all theſe a beautiful red is the moſt difficult, the deareſt, and the ſcarceſt. When one carefully examines the old maſter-pieces of ſtained glaſs, one finds either that the panes have on one ſide a tranſparent red varniſh burnt into them, or that the pieces which are ſtained through and through, are thinner than thoſe coloured in the other manner. It is, therefore, extremely probable, that the old artiſts, as they did not know how to give to thick pieces a beautiful tranſparent red colour, employed only iron, or manganeſe, which pigment, as already obſerved, eaſily becomes in a ſtrong heat blackiſh and muddy. Enamel painters, however, were for a long time obliged to be contented with it. A red colour in moſaic work is attended with leſs difficulty, becauſe no tranſparency, nay rather opacity, is required. At Rome thoſe pieces are valued moſt, which have the beautiful ſhining red colour of the fineſt ſealing-wax. We are told that ſuch pieces were made only out of a kind of copper droſs; and at preſent there are ſeveral artiſts in that city who prepare theſe materials, but they are not able to give them the rich and reſplendent colours of the ancients.

When coloured glaſs is to be blown, or run into ſquares, from

from the melting-pot, certain colouring ingredients are to be mixed with the materials of the white glaſs in fuſion, which forms the baſis; and this baſis muſt be cleanſed or purified, and rendered hard or ductile, in proportion as the coloured glaſs is required for cheap and common purpoſes, or for choice and coſtly wares, or the imitation of pellucid gems. In the firſt caſe, the cheapeſt colouring matters are employed, as iron or manganeſe, with which the glaſs beads and roſaries, ſo much in uſe in Roman-catholic countries, are chiefly coloured. But when rich and brilliant colours are to be produced, not only the choiceſt and moſt durable pigments are to be choſen, but the baſis or melted glaſs muſt likewiſe be pure, and adapted to the reception of the colours which is intended to be given. For this purpoſe the two following compoſitions are recommended. 1. Take twelve pounds of the fineſt white ſiliceous ſand, waſh and cleanſe it thoroughly; then add ſeven pounds of pot-aſh, one pound of ſaltpetre, and half a pound of borax: levigate, and mix them well together; and when committed to the melting-pot, a fine hard white glaſs baſis will be formed. 2. Take twelve pounds of the ſame white ſiliceous ſand equally cleanſed, ſeven pounds of pot-aſh purified with ſaltpetre, one pound of nitre, half a pound of borax, and four ounces of white arſenic: levigate, mix, and melt, as before, and a pure white glaſs baſis will be formed, conſiderably ſofter or more ductile than the firſt.

The preſent methods of imparting colours to glaſs, are as follow:

Black.—To give a deep and fine black to glaſs, take of cryſtalline and pulverine frit, of each twenty pounds; of calx of lead and tin four pounds; ſet all together in a pot in the furnace, well heated; when the glaſs is formed and pure, take ſteel well calcined and powdered, ſcales of iron that fly off from the ſmith's anvil, of each an equal quantity; levigate and mix them well; then put ſix ounces of this powder to either of the above-deſcribed baſes while in fuſion; mix, and let them boil ſtrongly together; then let it ſtand in fuſion twelve hours to purify, and after this work it. It will be a moſt elegant velvet black.

Blue.—A full blue may be given by adding ſix drams of zaffer, and two drams of manganeſe, to ten pounds of either of the compoſitions deſcribed above. For a very pure blue, half an ounce of calcined copper may be uſed inſtead of the manganeſe, and the proportion of zaffer diminiſhed to one half. Glaſs reſembling ſapphire may be made with ten pounds of the pure white glaſs in fuſion, three drams of zaffer, and one dram of the *calx caſſii*, or precipitation of gold by tin. Or a ſapphire-coloured glaſs may be made by mixing with the glaſs in fuſion one-eighth of its weight of ſmalt. A beautiful blue may alſo be produced from the calx of regulus of cobalt.

Garnet Red.—Take equal quantities of cryſtal and rochetta frit for the fuſed glaſs; and to every hundred-weight of this mixture add a pound of manganeſe and an ounce of prepared zaffer: theſe are to be powdered ſeparately, then mixed and added by degrees to the frit while in the furnace. Great care muſt be taken to mix the manganeſe and zaffer very perfectly; and when the matter has ſtood twenty-four hours in fuſion, it may be worked. Glaſs of this colour may alſo be made by adding one pound of glaſs of antimony, one dram of manganeſe, and the ſame quantity of the precipitate of gold by tin, to two pounds of either of the compoſitions or baſes above deſcribed.

Gold Yellow.—This colour may be produced by taking ten pounds of the compoſitions for hard glaſs, and for every pound of ſuch baſis adding two ounces of calcined borax, ten ounces of red tartar of the deepeſt colour, two ounces of magneſia, and two drams of charcoal. Precipitates of ſilver baked on glaſs will alſo ſtain it yellow, and likewiſe give a yellow colour on being mixed and melted with fifty times their weight of the vitreous compoſition: the precipitate from aquafortis by fixed alkali ſeems to anſwer beſt. Yellow glaſs may likewiſe be obtained with Pruſſian blue, or with antimony and lead. Equal parts of the glaſs of antimony, of flint calcined and levigated, and of minium, produce a glaſs of a bright yellow; and with two parts of glaſs of antimony, two of minium, and three of powdered flint, the colour approaches more to that of gold.

Green.—This colour may be imparted to glaſs by adding three ounces of copper precipitated from aquafortis, and two drams of precipitated iron to nine pounds of either of the compoſitions above recommended. To give an emerald-green, take five pounds of cryſtalline metal that has been paſſed ſeveral times through water, and the ſame quantity of the common white metal of polverine, four pounds of polverine frit, and three pounds of red lead; mix the red lead well with the frit, and put all into a pot in the furnace. In a few hours the maſs will be purified: then caſt the whole into water, and ſeparate the lead; return the metal into the pot, and let it ſtand a day longer in fuſion; then put in the powder of the reſiduum of the vitriol of copper, and a little crocus martis; and there will be produced a moſt lively green, little inferior to that of the oriental emerald. For a ſea-green, the fineſt cryſtalline glaſs only muſt be uſed, and no manganeſe muſt be added at firſt to the metal. The cryſtal frit muſt be melted alone; and the ſalt, which ſwims like oil on its top, muſt be ſcummed off very carefully. Then to a pot of twenty pounds of this metal add ſix ounces of calcined braſs, and a fourth part of the quantity of powdered zaffer: this powder muſt be well mixed, and put into the glaſs at three times; it will make the metal ſwell at firſt, but all muſt be thoroughly mixed in the pot. After it has ſtood in fuſion three hours, take out a little for a proof: if it be too pale, add more of the powder. Twenty-four hours after the mixing the powder, the whole will be ready to work.

Purple.—This colour may be produced by adding to ten pounds of pure white cryſtal glaſs, as a baſis, ſix drams of zaffer, and one dram of gold precipitated by tin; or to the ſame baſe, one ounce of manganeſe and half an ounce of zaffer. The colour of amethyſt may alſo be imitated in this way.

Ruby Red.—Calcine in earthen veſſels gold diſſolved in nitro-muriatic acid; the menſtruum being evaporated by diſtillation, more aqua-regia muſt be added, and the abſtraction repeated five or ſix times, till it becomes a red powder. This operation will require many days in a hot furnace. When the powder is of a proper colour, take it out, and melt the fineſt cryſtal glaſs, and purify it by often caſting it into water; then add, by ſmall quantities, enough of this red powder to give it the true colour of the ruby, with an elegant and perfect tranſparence.

Of PAINTING on GLASS.

The ancient manner of painting on glaſs was very ſimple: it conſiſted in the mere arrangement of pieces of glaſs of different colours in ſome ſort of ſymmetry, and conſtituted what is now called *moſaic work*. In proceſs of time, however, they came to attempt more regular deſigns, and alſo to repreſent figures heightened with all their ſhades: yet they proceeded no farther than the contours of the figures in black with water-colours, and hatching the draperies after the ſame manner on glaſſes of the colour of the object they deſigned to paint. For the carnation, they uſed glaſs of a bright red colour; and upon this they drew the principal lineaments, or outline, with black. At length, the taſte for this ſort of painting improving conſiderably, and the art being found applicable to the adorning of churches, halls, &c. they found out means of incorporating the colours moſt beautifully in the glaſs itſelf, by heating them in the fire to a proper degree; having firſt laid on the colours.

A French painter at Marſeilles is ſaid to have given the firſt notion of this improvement, upon going to Rome under the pontificate of Julius II. but Albert Durer and Lucas of Leyden were the firſt that carried it to much perfection.

This art, however, has frequently met with much interruption, and has been nearly loſt; of which Mr. Walpole gives us the following account, in his Anecdotes of Painting in England.—"The firſt interruption given to it, (he ſays,) was by the reformation, which baniſhed the art out of churches; yet it was in ſome meaſure kept up in the eſcutcheons of the nobility and gentry in the windows of their great halls. Towards the end of queen Elizabeth's reign it was omitted even there; yet the practice did not entirely ceaſe. The chapel of Our Lady at Warwick was ornamented anew by Robert Dudley earl of Leiceſter, and his counteſs, and the cipher of the glaſs-painter's name yet remains, with the date 1574: and in ſome of the chapels at Oxford the art again appears, dating itſelf in 1622, by the hand of no contemptible maſter.

"I could ſupply even this gap of forty-eight years by many dates on Flemiſh glaſs: but nobody ever ſuppoſed that the ſecret was loſt ſo early as the reign of James I. and that it has not periſhed ſince will be evident from the following ſeries, reaching to the preſent hour: viz. The portraits in the windows of the library at All Souls, Oxford. In the chapel at Queen's-college there are twelve windows dated 1518. P. C. a cipher on the painted glaſs in the chapel at Warwick, 1574. The windows at Wadham-college, the drawing good, and colours fine, by Bernard Van Linge, 1622. In the chapel at Lincoln's-inn, a window, with the name Bernard, 1623. This was probably the preceding Van Linge. In the church of St. Leonard, Shoreditch, two windows by Baptiſta Sutton, 1634. The windows in the chapel at Univerſity-college, Hen. Giles *pinxit*, 1687. At Chriſt-church, Iſaac Oliver, aged 84, 1700. Window in Merton-chapel, William Price, 1700. Windows at Queen's, New-college, and Maudlin, by William Price, the ſon, whoſe colours are fine, whoſe drawing is good, and whoſe taſte in ornaments and moſaic is far ſuperior to any of his predeceſſors; is equal to the antique, to the good Italian maſters, and only ſurpaſſed by his own ſingular modeſty.

"It may not be unwelcome to the curious reader to ſee ſome anecdotes of the revival of taſte for painted glaſs in England. Price, as we have ſaid, was the only painter in that ſtyle for many years in England. Afterwards one Rowell, a plumber at Reading, did ſome things, particularly for the late Henry earl of Pembroke; but Rowell's colours ſoon vaniſhed. At laſt he found out a very durable and beautiful red; but he died in a year or two, and the ſecret went with him. A man at Birmingham began the ſame art in 1757, and fitted up a window for lord Lyttelton, in the church of Hagely, but ſoon broke. A little after him, one Peckitt at York began the ſame buſineſs, and made good proficiency. A few admirers of that art collected ſome diſperſed panes from ancient buildings, particularly the late lord Cobham, who erected a Gothic temple at Stowe, and filled it with arms of the old nobility, &c. About the year 1753, one Aſciotti, an Italian, who had married a Flemiſh woman, brought a parcel of painted glaſs from Flanders, and ſold it for a few guineas to Mr. Bateman, of Old Windſor. Upon that I ſent Aſciotti again to Flanders, who brought me 450 pieces, for which, including the expence of his journey, I paid him thirty-ſix guineas. His wife made more journeys for the ſame purpoſe; and ſold her cargoes to Palmer, a glazier, in St. Martin's-lane, who immediately raiſed the price to one, two, or five, guineas, for a ſingle piece, and fitted up entire windows with them, and with moſaics of plain glaſs of different colours. In 1761, Paterſon, an auctioneer, at Eſſex-houſe in the Strand, exhibited the two firſt auctions of painted glaſs, imported in like manner from Flanders. All this manufacture conſiſted in rounds of ſcripture-ſtories, ſtained in black and yellow, or in ſmall figures of black and white; birds and flowers in colours, and Flemiſh coats of arms."

The colours uſed for painting or ſtaining glaſs, are very different from thoſe uſed in painting either in water or oil colours.—For black, take ſcales of iron, one ounce; ſcales of copper, one ounce; jet, half an ounce: reduce them to powder, and mix them. For blue, take powder of blue, one pound; ſal nitre, half a pound; mix them and grind them well together. For carnation, take red chalk, eight ounces; iron ſcales, and litharge of ſilver, of each two ounces; gum arabic, half an ounce; diſſolve in water, and grind all together; then put it in a glaſs, and let it ſtand to ſettle fourteen days. For green, take red lead, one pound; ſcales of copper, one pound; and flint, five pounds: divide them into three parts, and add to them as much ſal nitre; put them into a crucible, and melt them with a ſtrong fire; when the maſs is cold, powder it, and grind it on a porphyry. For gold colour, take ſilver, an ounce; antimony, half an ounce; melt them in a crucible; then pound the maſs to powder, and grind it on a copper plate; add to it yellow ochre, or brick-duſt calcined again, fifteen ounces; and grind well together with water. For purple, take minium, one pound; brown ſtone, one pound; white flint, five pounds: divide them into three parts, and add to them as much ſal nitre as one of the parts; calcine, melt, and grind, as before. For red, take jet, four ounces; litharge of ſilver, two ounces; red chalk, one ounce: powder them fine, and mix them. For white, take jet, two parts; white flint ground very fine, one part; mix them. For yellow, take Spaniſh brown, ten parts; leaf-ſilver, one part; antimony, half a part; put all into a crucible, and calcine them for uſe.

The grand effect produced by windows of ſtained glaſs in many of the old cathedral churches, and the additional ſplendour derived to the colours through the medium of the glaſs, naturally led to the invention of what is termed *Back-painting* on glaſs. This invention, however, is far from producing the noble effect which the art of painting on glaſs is ſuſceptible of producing, and which, if once brought to complete perfection, might become the means of preſerving portraits, and all delicate ſubjects, ſecure from that decay of colour and of canvas, which has long begun to obliterate the fineſt paintings of the greateſt artiſts whom the world has ever produced.

Might not ſomething of this kind be humbly attempted in the following way? Suppoſe, after the outline of a likeneſs be drawn, that blocks were cut from it after the ſame manner as for calicoes, or paper-hangings, only with ſuperior nicety, and in greater number, for the purpoſe of multiplying and better blending the tints. From theſe blocks, and with theſe colours, let the figure be printed on paper; and, to prevent inaccuracy in bringing the ſeparate parts, cut on the different blocks, to unite into a complete whole, let the paper be placed under a frame ſecured in an immoveable poſition. The blocks being accurately ſquared, all exactly of the ſame dimenſions, and each nicely fitting the frame, cannot, in paſſing through it to deliver their ſeveral impreſſions, make the ſmalleſt deviation from their intended places, but muſt produce an exact picture, at leaſt on the paper.

To transfer that impreſſion to glaſs, is perhaps an object of difficulty. Were it not for ſome ſmaller ſtrokes which muſt neceſſarily be in wood, the entire impreſſion might in the outſet be made on the glaſs itſelf, without any intervention of paper; ſince experience has proved to the calico-printers, that the great maſſes of colour cannot be ſucceſsfully delivered from wood; wherefore they are obliged, in thoſe parts of their patterns, to uſe bits of ſmooth worn-out beaver-hat, which might very well be preſſed on the glaſs-plate. However, from what we

we every day ſee effected in the caſe of prints affixed to glaſs without any of the paper remaining, and alſo of copper-plate embelliſhments upon porcelain and queen's ware, we doubt not that the picture, while freſh, may, by well-managed preſſure, be transferred from the paper to an even plate of ground glaſs coated with a proper gluten, which ſhall not materially offuſcate its tranſparency: and experiment muſt determine whether the paper may afterward be gently drawn or peeled off, or muſt be burned away or deſtroyed by a corroſive liquid, if any ſuch can be found which will not injure the colours.

Suppoſe, then, the operation of removing the paper be ſatisfactorily performed; proceed we now to ſecure the indelibility of the picture. Let a ſquare plate of caſt-iron, an inch or two in thickneſs, and as level and ſmooth as poſſible, be furniſhed on every ſide with a metal ledge riſing an inch or more in height, which ought to be in two ſeparate pieces, the one permanently faſtened to the plate, the other capable of being removed at pleaſure, for the purpoſe of laying in and taking out the glaſs without violence. Within that ledge let the glaſs be fitted, cloſely touching it on every ſide, and lying with the painted ſurface uppermoſt. Upon this lay another plate of glaſs, fitted in the ſame manner. Let, now, the metal frame, with the incloſed glaſſes, be expoſed to the action of fire until the glaſs plates, without being melted to abſolute fluidity, ſhall nevertheleſs become ſufficiently ſoft to coaleſce into one body under a ſtrong preſſure. The body which conveys the preſſure, and lies in immediate contact with the glaſs, muſt equally fit and completely fill the entire ſpace between the ledges, that there be no room for the ſoft glaſs to ſpread in any direction, ſo as to diſtort any of the lines of the picture.

Thoſe who have witneſſed the proceſs purſued in ſoftening tortoiſe-ſhell in the fire, and preſſing it into the various ſhapes of ſnuff-boxes, étuis, &c. will not conceive much difficulty in this uſe of the glaſs. It may be managed by the aid of a machine ſomewhat ſimilar to a common printing-preſs, with a ſolid metal platine, to fit and fill the frame, as above; though much better contrivances may be found among the multifarious engines now employed for the purpoſes of coining, and ſtriking the heavy dies, than any we can poſſibly ſuggeſt. In whatever manner the two glaſſes may be preſſed into union, the united body may be afterward ground and poliſhed: and, in proportion to the greater ſmoothneſs of the two compreſſing bodies, the leſs grinding and poliſhing will be afterward required.

For painting on glaſs by means of mezzotinto prints, ſee BACK-PAINTING, vol. ii. p. 603.

For the purpoſe of making factitious gems, a glaſs baſis is formed with the addition of a large quantity of lead. The method of making it is this: Put a quantity of lead into a potter's kiln, and keep it in a ſtate of fuſion with a moderate fire, till it is calcined to a grey powder; then ſpread it in the kiln, and give it a greater heat, continually ſtirring it to keep it from running into lumps; continue this proceſs till the powder becomes yellow; then take it out, and ſift it fine: this is one of the calces of lead. Take of this calx fifteen pounds, and cryſtalline frit twelve pounds; mix them well together; put them into a pot, and ſet them in the furnace for ten hours; caſt the whole, when perfectly melted, into water; ſeparate the looſe lead from it, and return the metal into the pot; and after ſtanding in fuſion twelve hours more, it will be fit to mix with any of the colouring matters adapted to the formation of factitious gems, or paſtes for counterfeit jewellery; for which ſee the article GEM, p. 294, of this volume.

An ingenious method of painting, ſpangling, and gilding, upon glaſs, has been invented by Mr. Tarrant Bloomſbury-ſquare, London; and he recommends the practice of it in the following words: "My method of painting, ſpangling, and gilding, upon glaſs, is well adapted for the ornamenting of carriages, furniture, muſical inſtruments, or any other matters, where ſuch kind of ornament ſhall be thought neceſſary. It is entirely new, and was never before practiſed by any perſon whatſoever. The painting muſt be performed on the back of the cryſtal, or glaſs, ſo as, when finiſhed, to appear on the front: the colours are prepared in oil, or varniſh, as in other ſimilar work. The parts of ornament which are to be of gold, muſt be firſt ſhadowed on the glaſs, and when quite dry, the gold-leaf is to be laid on: ſilver ornament may be done in the ſame manner. For ſpangling, with either metal, leave the parts to be ſpangled till the laſt, then ſhadow them, and, when dry, varniſh the parts with copal varniſh, and ſtrew the ſpangles on it while wet; when the ſpangles are quite dry, varniſh them two or three times over. If the ſpangling is to be white, uſe ſilver ſpangles. If yellow, uſe gold ſpangles. If blue, glaze the parts to be ſpangled with fine Pruſſian blue, ground very fine in oil, or varniſh, and lay on ſilver ſpangles. If green, glaze the parts with tranſparent green. If crimſon, uſe the beſt fine lake. If purple, uſe a mixture of Pruſſian blue and fine lake. To make the painting appear more raiſed, paint the ornaments, and leave the ground of the cryſtal, or glaſs, quite clear, and put another plate of glaſs coloured, behind the glaſs painted on."—See further the article GILDING, in this volume.

The preſent improved method of poliſhing and ſilvering plates of glaſs for looking-glaſſes or mirrors, is performed as follows: When the plates of glaſs have been caſt and annealed, they are pretty ſmooth on that ſide which lay upon the mould in which they were caſt; on the other ſide they are uſually rough and undulated: yet both ſurfaces are to be ground perfectly even. Before that operation is begun, they are examined, to ſee whether they have not ſome defects, ſuch as deep cavities, or cracks, which might hinder their being poliſhed in their original ſize. If any ſuch defects are found, they are cut off by means of a diamond, in ſuch a manner as to keep the plates as large as poſſible; for on their ſuperior ſize depends their value. When the plates have undergone the requiſite examination, the firſt operation is, to make them thinner. For this purpoſe they are placed on a very even table of ſtone or wood, and fixed in a true horizontal poſition, by means of a layer of plaſter. A workman gets upon the plate, and treads it, ſo as to force the plaſter to ſpread itſelf evenly under the glaſs. Other plates, eighteen inches or two feet ſquare, and alſo in the rough, are fixed, by means of plaſter, upon flat pieces of wood of the ſame dimenſions as the plates; taking care to place the ſmoothеſt ſide outwards, if the roughеſt ſide of the other plate is to be firſt poliſhed, and *vice verſa*. When the plaſter is dry, theſe ſmall plates are put upon the others; and, upon the flat piece of wood to which they are fixed, is laid a ſtone, for the purpoſe of increaſing the preſſure. This ſtone is let into a frame of wood, which has a kind of handle at each corner, and is made faſt to the board containing the upper plate of glaſs. Between the two glaſs plates is thrown water, mixed with ſand, or with powdered grit-ſtone, which ſhould be rendered finer as the work advances. The workman, by moving the machine about by means of the handles, grinds the plates, by rubbing them againſt each other, ſo that thoſe plates which ſerve to poliſh the others become alſo poliſhed themſelves; but, being much ſmaller in ſize than the under ones, they are ſooner ground ſmooth, and therefore require to be changed from time to time. A kind of ruler, laid on the plates, ſerves to diſcover what parts are moſt prominent, and require rubbing down.

The ſecond operation is to render the two plates even, after they have in the firſt place been made ſmooth. For this purpoſe two workmen, one at each end of the table, drive the machine from one to the other, making

it turn about, upon the plate, in all directions, until every part of their ſuperficies becomes even. When the ſecond operation is thus finiſhed, the workmen faſten upon another table a plate of glaſs, as large as that which is to be poliſhed, and which has already been ground to the ſame degree of ſmoothneſs. This plate is laid upon the other, and to the wooden table is fixed a light lapidary's wheel. Between the wooden table and the wheel, ſquare pieces of thin ſtone are gradually added, in order to increaſe the weight, as the glaſs becomes poliſhed. Two workmen, by means of this wheel, puſh the table backwards and forwards, and cauſe it to turn about in all directions, taking care that water, mixed with ſand, is often thrown between the plates. By this means the plates of glaſs at laſt acquire a perfectly even ſurface.

After this third operation, the plates are again examined, by holding them up to the light, in order to detect any flaws, air-bubbles, or cavities. If they have any cavity that can be taken away by freſh grinding, they are again returned to the table, and ground afreſh; but if the cavity is ſo deep that it cannot be removed, the plate is cut into various ſmall pieces, which ſerve to make looking-glaſſes of a ſmaller ſize.

The plate is next laid upon a woollen cloth, with its under ſurface coloured red, that the degree of tranſparency and brilliancy to be given it, might be aſcertained. It is then covered with a powder, compoſed of the reſiduum from the diſtillation of aqua fortis, mixed with vitriol of iron and common ſalt, which is nothing more than a very fine emery. When the plate is covered with the powder, the workman has a kind of bruſh made of felt or velvet, which is likewiſe covered with the powder, and with which he poliſhes the plate of glaſs in all directions, until it has received the ſmooth metallic brilliancy required; then it is fit for foliating or ſilvering.

This operation is alſo performed upon a table of ſtone, or of thick wood, perfectly ſmooth and flat, and covered with grey paper thoroughly ſmooth: the table is moveable on an axis, in order that it may be inclined, ſo as to cauſe the mercury to run into a groove made round the table. On the table is ſpread a ſheet of tin-foil, well hammered after being laminated. A very ſmall quantity of mercury is firſt poured upon the ſheet of tin-foil, and ſpread all over its ſurface, ſo as juſt to moiſten it. A larger quantity is then poured on, enough to cover the ſheet to a certain thickneſs all over. When the tin-foil is thus equally covered with mercury, the application of the plate of glaſs to it muſt not be too long delayed, becauſe, in that caſe, the mercury would diſſolve the tin-foil. As the ſurface of the mercury always becomes more or leſs calcined, a ſmall quantity of water is poured upon it; and, when the plate is to be laid on, a bruſh, and afterwards a hare's foot, is paſſed over it, which entirely removes the calcined pellicle, &c. A piece of parchment, extending ſome lines above the ſurface of the mercury, is put upon the edge of the table; and the plate, being firſt made very clean and dry, is ſlipped over the parchment. It is neceſſary that the plate ſhould be preſſed down upon the mercury, that bubbles of air may not get between it and the metal. When the plate is fixed down upon the tin-foil, the table muſt be gently inclined: a great part of the mercury then runs off, and the plate comes in contact with that part which adheres to the tin-foil. A ſhort time after, the plate is covered with a woollen cloth, and ſeveral weights are laid upon it, to increaſe its adherence to the tin-foil. When it has been in this ſituation a ſufficient time, the projecting edges of the tin-foil are cut off, and the plate is taken up finiſhed for uſe. This method of foliating or ſilvering looking-glaſſes and mirrors, is the proceſs now uſed at Ildefonſo in Spain, which is allowed to be the fineſt glaſs-manufactory in Europe. The largeſt mirrors are there made in a braſs frame, one hundred and ſixty-two inches long, ninety-three inches wide, ſix inches deep, and weighing nearly nine tons.

The art of *cutting* glaſs, by which ſo much brilliancy and magnificence is given to chandeliers, girandoles, glaſs ornaments, and table ſets, appears to have been brought into England from Germany in the laſt century.

The art of *engraving* external ornaments upon glaſs, according to profeſſor Beckmann, was practiſed by the ancient Greeks; and was probably in uſe at a much earlier date among the Egyptians, who certainly appear to have been the firſt people who found out the art of engraving on precious ſtones. *Etching* on glaſs is a modern invention, and is now brought to conſiderable perfection; for which ſee the article ENGRAVING, vol. vi. p. 813.

Much has been ſaid and written on the wonderful art of joining broken or fractured glaſs. All that is requiſite, however, is, to interpoſe between the fractured parts, a glaſs levigated like a pigment, but more ductile, or of eaſier fuſion, than the pieces to be joined; and then ſubjecting the whole to ſuch a heat as will fuſe the cementing ingredient, and make the pieces agglutinate, without being themſelves fuſed. A compoſition for cementing broken pieces of flint glaſs, may be made by fuſing ſome of the ſame kind of glaſs previouſly reduced to a powder, adding a little red lead and borax, or the borax only. In this manner C. Pajot of Charmes joined ſome broken glaſſes ſo firmly, that when preſented before the national inſtitute at Paris, they would rather break cloſe to the joining, than in the actual fracture.

The Armenian jewellers at Conſtantinople are in poſſeſſion of a cement of ſo clear and adheſive a property, that by the uſe of it they not only join broken glaſs and China, but ſet diamonds and precious ſtones with it in ſilver or gold; and it is ſo very ſtrong that when applied warm, the parts never ſeparate. It is thus made: Diſſolve five or ſix parts, as large as peaſe, in as much ſpirit of wine as will ſuffice to render it liquid; in another veſſel diſſolve as much iſinglaſs (which has been previouſly ſoaked in water till it is ſoft) in French brandy or rum, as will amount to two ounces by meaſure, and add two ſmall bits of gum galbanum or ammoniacum, which muſt be rubbed or ground till they are diſſolved; then mix the whole with a ſufficient heat; keep it in a phial ſtopt, and when it is to be uſed ſet it in hot water.

The firſt duties granted on glaſs were by ſtat. 6 & 7 Will. III. which duties were continued for ever by a ſubſequent act; but were afterwards taken off, by ſtat. 10 & 11 Will. III. c. 18. By ſtat. 19 Geo. II. c. 12, an exciſe duty is laid upon glaſs of 8d. per pound upon all crown, plate, and flint, glaſs imported; 2d. per pound on green glaſs imported, and 2s. per dozen on flaſks and bottles imported; and on all materials or metal uſed in making crown, plate, or flint, glaſs, 9s. 4d. per hogſhead; and for making common bottles, or green glaſs, 2s. 4d. per hogſhead; and higher duties by ſubſequent acts.

BURNING GLASS. See BURNING GLASS, vol. iii. p. 533.

CUPPING GLASS. See SURGERY.

HOUR or SAND GLASS. See HOUR GLASS.

MUSCOVY GLASS. See MICA.

TIN GLASS, the ſame with biſmuth. See the article CHEMISTRY, vol. iv. p. 273; and BISMUTH, vol. iii. p. 69.

WEATHER GLASS. See BAROMETER, vol. ii. p. 735.

GLASS, *adj.* Vitreous; made of glaſs:

Get thee *glaſs* eyes,
And, like a ſcurvy politician, ſeem
To ſee the things thou do'ſt not. *Shakeſpeare.*

To GLASS, *v. a.* To ſee as in a glaſs; to repreſent as in a glaſs or mirror. *Not in uſe:*

Methinks

Methinks I am partaker of thy paſſion,
And in thy caſe do *glaſs* mine own debility. *Sidney.*

To caſe in glaſs:

Methought all his ſenſes were lockt in his eye,
As jewels in cryſtal for ſome prince to buy;
Who tend'ring their own worth, from whence they were *glaſst*,
Did point out to buy them, along as you paſt. *Shakeſp.*

To cover with glaſs; to glaze.—I have obſerved little grains of ſilver to lie hid in the ſmall cavities, perhaps *glaſſed* over by a vitrifying heat, in crucibles wherein ſilver has been long kept in fuſion. *Boyle.*

GLASS'-FURNACE, *ſ.* A furnace in which glaſs is made by liquefaction.—If our dreamer pleaſes to try whether the glowing heat of a *glaſs-furnace* be barely a wandering imagination in a drowſy man's fancy, by putting his hand into it, he may perhaps be awakened into a certainty that it is ſomething more than bare imagination. *Locke.*

GLASS'-GAZING, *adj.* Finical; often contemplating himſelf in a mirror.—A whorſon, *glaſs-gazing*, finical, rogue. *Shakeſpeare.*

GLASS'-GRINDER, *ſ.* One whoſe trade is to poliſh and grind glaſs.—The *glaſs-grinders* complain of the trouble they meet with. *Boyle.*

GLASS'-HOUSE, *ſ.* A houſe where glaſs is manufactured.—I remember to have met with an old Roman moſaic, compoſed of little pieces of clay half vitrified, and prepared at the *glaſs-houſes*. *Addiſon.*

GLASS-MAN, *ſ.* One who ſells glaſs.—The profit of glaſſes conſiſts only in a ſmall preſent made by the *glaſs-man*. *Swift.*

GLASS-MET'AL, *ſ.* Glaſs in fuſion.—Let proof be made of the incorporating of copper or braſs with *glaſs-metal*. *Bacon.*

GLASS-WORK, *ſ.* Manufactory of glaſs.—The cryſtalline Venice glaſs is a mixture, in equal portions, of ſtones brought from Pavia, and the aſhes of a weed called kali, gathered in a deſert between Alexandria and Roſetta; by the Egyptians uſed firſt for fuel, and then they cruſh the aſhes into lumps like a ſtone, and ſo ſell them to the Venetians for their *glaſs-works*. *Bacon.*

GLASS'CARRICK POINT, a cape on the eaſtern coaſt of Ireland, in the county of Wexford. Lat. 52. 35. N. lon. 6. 12. W. Greenwich.

GLASSHUT'TEN, a town of Germany, in the circle of Upper Saxony, near which is a ſilver mine: three miles from Dreſden.

GLAS'SIUS (Solomon), a learned German Lutheran divine, born in 1593. His academic education he received at the univerſity of Jena, where he was admitted to the degree of doctor of divinity, and for ſome time filled the profeſſor's chair in that faculty, with diſtinguiſhed reputation. He was afterwards appointed ſuperintendant-general of the churches and ſchools in the duchy of Saxe-Gotha, and is highly praiſed for his prudence, equity, and impartiality. He died at Gotha in 1656, at ſixty-three years of age. He was the author of *Philologia Sacra*, 1623, 4to. which Moſheim pronounces an ineſtimable work. He was alſo the author of, *Onomatologia Meſſiæ Prophetica*; *Chriſtologia Moſaica & Davidica*; *Diſputationes in Auguſtanam Confeſſionem*; *Exegeſis Evangeliorum & Epiſtolarum*, &c.

GLASS'WORT, *ſ.* in botany. See SALICORNIA and CHENOPODIUM.

GLAS'SY, *adj.* Made of glaſs; vitreous.—In the valley near Mount Carmel in Judea there is a ſand, which of all others hath moſt affinity with glaſs; inſomuch as other minerals laid in it turn to a *glaſſy* ſubſtance. *Bacon.*—Reſembling glaſs, as in ſmoothneſs or luſtre, or brittleneſs.—Whoſe womb produc'd the *glaſſy* ice. *Sandys.*

Man! proud man!
Dreſt in a little brief authority,
Moſt ignorant of what he's moſt aſſur'd,
His *glaſſy* eſſence; like an angry ape,
Plays ſuch fantaſtic tricks before high heav'n,
As make the angels weep. *Shakeſpeare.*

GLAS'TENBURG, a town of United America, in the ſtate of Connecticut: ſeventeen miles weſt-north-weſt of Windham.

GLAS'TONBURY, an ancient and much celebrated town in the county of Somerſet, diſtant one hundred and twenty-ſix miles from London, twenty-ſeven from Briſtol, twenty-ſix from Bath, five from Wells, and fifteen from Bridgewater. It is in a manner encompaſſed with rivers, and was of old called the Iſle of Avalon. This town, while under the protection of its abbots, was a parliamentary borough, but it loſt that privilege at the cruel death of abbot Whiting, in 1539. It is now a town corporate by charter from queen Anne, governed by a mayor, juſtice, eight aldermen, and ſixteen burgeſſes; but ſends no members. It conſiſts of ſix ſtreets. Here are two pariſh churches; the upper a handſome fabric with a fine tower, adorned with figures in niches; one Preſbyterian meeting-houſe, and one meeting for Quakers; two almſhouſes, one for men and the other for women, with a chapel belonging to each; and a free-ſchool for thirty boys; alſo a Sunday ſchool. The market is on Wedneſdays. Its annual fairs are held on Wedneſday in Eaſter week, September 19th, October 10th, and the Monday week after St. Andrew's day.

Glaſtonbury owes its origin to its celebrated abbey, ſituated in a low marſhy country, ſuppoſed to have been built about the year 708, in the reign of king Ina, who endowed it with great privileges. About the year 873, it was ruined by the Danes; but was re-edified by king Edmund, the ninth Saxon monarch, who exempted it from all impoſitions and oppreſſions, and rendered it entirely ſubject to, and dependent on, the abbey. In this ſtate it continued till the year 1184, when both it and the abbey were conſumed by fire. It was again rebuilt by the liberality of Henry III. but on the 11th of September, 1276, it was once more deſtroyed by an earthquake, which precipitated the church of St. Michael from the Tor-hill, and greatly damaged other ſtructures in the country. Many houſes are almoſt entirely built with ſtones from the abbey. The town comprehends two pariſhes, which contain upwards of 360 houſes.

The abbey is ſaid to owe its foundation to Joſeph of Arimathea, *who planted his ſtaff*, that is, *took up his abode here*, and built an oratory in honour of the Virgin Mary. In 542, the celebrated king Arthur, after being mortally wounded, was brought and interred here. In 605, a regular ſociety was inſtituted by St. Auguſtine, who was ſent into England by pope Gregory the Great to preach the goſpel. About this time it obtained the name of *Glaſteinbyri*, by which, with ſome little variation, it has ever ſince been called. Several biſhops and kings were great benefactors; but Ina excelled all his predeceſſors in munificence; he pulled down the old monaſtery, and rebuilt it in the moſt ſumptuous and magnificent manner, to the honour of Chriſt, and the apoſtles St. Peter and St. Paul; adorning the edifice with a coſtly chapel, garniſhed and plated over with 2640 pounds weight of ſilver, and an altar with 264 pounds weight of gold. Beſides which he gave rich ornaments thereto, as chalice, cenſer, candleſticks, baſon, bucket, images, and pall for the altar, of incredible value, with precious gems for the embroidery of the celebrating robes. Succeeding monarchs were zealous in ratifying, confirming, and adding to, all the grants that had been made to this illuſtrious foundation. In ſhort, (to uſe the words of a Glaſtonbury hiſtorian,) kings and queens, not only of the Weſt Saxons, but of other kingdoms of the heptarchy, ſeveral archbiſhops and biſhops, many dukes, and the nobility of both ſexes, thought themſelves happy in encreaſing the revenues of this venerable houſe, to obtain them a place of ſepulture

pulture therein. However, during the dreadful depredations of the Danes, both the monaſtery and town of Glaſtonbury began to drop their ſplendour, and exhibit the appearance of ruin and diſtreſs. To reſtore it to its ancient dignity was the buſineſs of king Edmund, who appointed St. Dunſtan abbot over it, and permitted him to make free uſe of his regal treaſury to enable him to rebuild it. The lands which, before the Norman conqueſt, the monaſtery of Glaſtonbury poſſeſſed, by the grants of different kings and others, were immenſe in number and in value.

Richard Whiting, the laſt abbot of Glaſtonbury, was unwilling to ſurrender his abbey to king Henry VIII. or to lend an ear to any of the ſolicitations which were offered him, whereupon, by falſe pretence, they ſeized on him at his manor-houſe of Sharpham, in 1539; and without much formal proceſs as to law or equity, he was dragged on a hurdle to the Tor-hill, where, without the leaſt regard to his age, his ſanctity, or his entreaties to reviſit his convent, he was hanged; his head ſet upon the abbey gate, and his quarters ſent to Wells, Bath, Ivelcheſter, and Bridgewater. The fate of the abbot and the abbey being thus decided, the buildings and revenues of this houſe, which had flouriſhed for ſuch a length of time, became the objects of depredation. Thoſe riches which had flowed from the treaſury of monarchs, and thoſe ſtructures which had braved the ſhock of time and the inclemencies of age, ſunk together. The eſtates of the monaſtery, devolving to the crown, were either granted or ſold away. The revenues, in 1444, were valued at 1151l. 6s. 8d. and, in 1534, at 3311l. 7s. 6d. The foundation plot of ground on which the abbey and its offices were erected, compriſed no leſs than ſixty acres of ground. Of this immenſe range of buildings, ſcarcely a veſtige now is to be ſeen; and all that remains of this once magnificent pile, are ſome fragments of the church, St. Joſeph's chapel, and the abbot's kitchen. The reſt is reduced to a heap of rubbiſh, loading the ſurface of its ſcite with unſeemly ruins.

Not only the town, but the environs of Glaſtonbury, abound with religious reliques. The moſt conſpicuous is the Tor or Tower of St. Michael, ſtanding upon a very high hill, north-eaſtward from the town, on which poor Whiting met his untimely end. On this bleak and deſolate ſpot, the ſaints Phaganus and Diruvianus erected a ſmall oratory to the honour of St. Michael the archangel, which was re-edified by St. Patrick, and beautified by ſome of his ſucceſſors. The ſucceeding abbots enlarged upon the ancient plan, and here built not only a large and elegant church and monaſtery, but alſo other buildings, dwelling houſes, and offices; and obtained many grants of privileges from ſeveral of the kings. The whole of the buildings which had been erected on this hill by ſeveral abbots, at a vaſt expence, the labour being very great to convey materials up the immenſe aſcent, were totally deſtroyed by the earthquake which happened in 1271, but afterwards more ſplendidly rebuilt, and that church erected, of which the tower ſtill remains, and lifts its head into the clouds; an object of admiration to travellers, and an ornament to the ſurrounding country.—For an account of the diſcovery of king Arthur's tomb at Glaſtonbury, and a deſcription of his curious round table, with an engraving of the ſame, ſee ARTHUR, vol. ii. p. 227.

The mineral waters of this place are ſtrongly impregnated with iron, fixed air, and foſſil alkali, from whence they derive their ſalutary properties. It is found very efficacious in all ſcorbutic and ſcrophulous complaints; and is a powerful remedy for the aſthma, dropſy, leproſy, king's evil, ulcers, St. Vitus's dance, and all other nervous affections, and bilious diſorders, where ſtrengthening the ſyſtem is neceſſary.

The Glaſtonbury thorn, ſo famous in legendary lore, buds and bloſſoms in the depth of winter. The ſtory of its budding always upon Chriſtmas-day is well known; that circumſtance, however, is falſe; though, if the winter be mild, it always buds at the latter end of December, but later if the winter is ſevere. It is a ſpecies of *medlar*, for which ſee the article MESPHILUS.

GLAS'TONBURY, a townſhip of the American States, in Bennington county, Vermont.

GLAS'TONBURY, a handſome town of the American States, in Hartford county, Connecticut, ſituated on the eaſt ſide of Connecticut river, oppoſite to Weathersfield.

GLATT, a river of Germany, in the circle of Swabia, which runs into the Neckar, two miles north from Sultz, in the duchy of Wirtemberg.

GLATZ, a principality of Sileſia, lying on the borders of Bohemia, ſurrounded on all ſides by mountains. It is every where mountainous, interſected with valleys, meadows, corn-fields, woodlands, and ſmall rivers. In a good year it produces wheat ſufficient; in bad ſeaſons it is ſupplied from the neighbouring countries. It has excellent paſture grounds, which feed great numbers of cattle; wood and game are plentiful. It contains quarries of mill-ſtones, free-ſtone, and marble. Jaſper, topazes, and cornelians, are found in ſome places. Here are mines of coal, copper, and ſilver, with ſeveral mineral ſprings. Glatz has belonged to ſeveral princes: from the year 1561 to 1742 it was annexed to the crown of Bohemia. In 1742, the empreſs Maria Thereſa ceded it to Frederic II. king of Pruſſia, and his heirs for ever, with entire ſovereignty, and abſolute independence of the crown of Bohemia. The country forms only one circle, divided into ſix diſtricts. Glatz is the capital.

GLATZ, a town of Sileſia, and capital of the principality of the ſame name, ſituated on the Neiſſe, built on the ſide of a mountain, on the ſummit of which is a large and ſtrong caſtle. The town contains about four hundred houſes within the walls, and as many in four fauxbourgs. It is a place of conſiderable trade; but has been frequently pillaged and burnt, and the ſubject of inceſſant diſcords between the Poles and Bohemians, not to mention the two deſtructive fires of 1015 and 1033. In 1056, it was alſo taken and laid in aſhes by the emperor Conrad. In 1463, 1469, and 1524, it again ſuffered by fire. Its ſevereſt ſiege, however, was that which it held out, in 1622, againſt the united forces of the emperor Ferdinand II. and his allies. In 1742, the Pruſſians took it by capitulation: twenty-five miles weſt of Neiſſe, and eighty-eight eaſt of Prague. Lat. 50. 16. N. lon. 34. 25. E. Ferro.

GLATZ KO'GEL, a mountain of Germany, in the archduchy of Auſtria: twelve miles ſouth of Steyr.

GLAU'BER (John Rudolph), a celebrated chemiſt, born in Germany. After paſſing a conſiderable time in travel, he ſettled at Amſterdam about the middle of the ſeventeenth century. He wrote a number of works, moſtly infected with the unintelligible theory of the hermetic philoſophy; yet containing ſome uſeful facts in true chemiſtry, and ſome proceſſes of his own invention. His name is perpetuated by the purgative neutral ſalt, called *Glauber's*, compoſed of the vitriolic acid and foſſil fixed alkali. Of his works an abridged collection was made in German, which was tranſlated into Engliſh in 1689; but they are now moſtly conſigned to oblivion.

GLAUBER'S SALTS. See the article CHEMISTRY, vol. iv. p. 228, 231, and 246.

GLAU'CHA, or GLAUCHAU', a town of Germany, in the circle of Upper Saxony, and lordſhip of Schonburg, on the Mulda; containing about 600 houſes; the inhabitants are engaged in manufactures of ſtuffs: forty-ſix miles weſt of Dreſden, and ſix north of Zwickau Lat. 50. 45. N. lon. 30. 16. E. Ferro.

GLAU'CHE, a town of Germany, in the circle of Lower Saxony, and duchy of Magdeburg, joining to the town of Halle, but governed by its proper magiſtrates. Here are four ſchools or ſeminaries, in which

the languages, theology, mathematics, muſic, &c. are taught by 120 preceptors. It is ſometimes conſidered a fauxbourg of Halle.

GLAU'CIUM, *ſ.* in botany. See CHELIDONIUM.

GLAUCOI'DES, *ſ.* in botany. See PEPLIS.

GLAUCO'MA, *ſ.* [Gr. *glaucome*, Fr. blue-grey.] A fault in the eye, which changes the cryſtalline humour into a greyiſh or ſea-green colour, without detriment of ſight, and therein differs from what is commonly underſtood by ſuffuſion. *Quincy.*—The *glaucoma* is no other diſeaſe than the cataract. *Sharp.*

GLAUCO'PIS, *ſ.* [Latin; ſo named becauſe the bill is ſcymetar-ſhaped; and it is called *wattle-bird*, becauſe it has wattles or gills like a cock.] In ornithology, a genus of birds belonging to the order of picæ; the characters of which are as follow: bill incurvate, vaulted; the under mandible ſhorteſt, and carunculated at the baſe; noſtrils depreſſed, half covered with a ſemi-cartilaginous membrane; tongue ſub-cartilaginous, notched and ciliated at the tip; feet ambulatory.

There is only one ſpecies of this genus as yet known, which is the Glaucopis cinerea, or cinereous wattle-bird of New Zealand. It chiefly delights on the ground, and perches but ſeldom. The body, bill, and legs, are bluiſh-black, velvety on the neck and ſhoulders; like the turkey-cock, the wattles or gills have the faculty of changing from fulvous to red, or blue: irides blue, and very large; tail long, and wedge-ſhaped, conſiſting of twelve feathers. It feeds on berries, inſects, and ſmall birds; and rarely perches but in queſt of berries or inſects. It has a piping or murmuring voice; and its fleſh is nutritive and well-taſted. It is in length fifteen inches, very ſhy, and rarely found.

GLAU'COSIS, *ſ.* With phyſicians; the glaucoma, a diſeaſe of the eyes.

GLAU'COUS, *adj.* Having a whitiſh green colour.

GLAU'CUS, ſon of Hippolochus, the ſon of Bellerophon. He aſſiſted Priam in the Trojan war, and had the ſimplicity to exchange his golden ſuit of armour with Diomedes for an iron one, whence came the proverb of *Glauci et Diomedis permutatio*, to expreſs a fooliſh purchaſe. He behaved with much courage, and was killed by Ajax. *Homer.*

GLAU'CUS, in mythology, a fiſherman of Anthedon in Bœotia, ſon of Neptune and Nais, or according to others of Polybius the ſon of Mercury. As he was fiſhing, he obſerved that all the fiſhes which he laid on the graſs received freſh vigour as they touched the ground, and immediately eſcaped from him by leaping into the ſea. He attributed the cauſe of it to the graſs, and by taſting it, he found himſelf ſuddenly moved with a deſire of living in the ſea. Upon this he leaped into the water, and was made a ſea deity by Oceanus and Tethys, at the requeſt of the gods. After this transformation, he became enamoured of the nereid Scylla, whoſe ingratitude was ſeverely puniſhed by Circe. He is repreſented, like the other ſea deities, with a long beard, diſhevelled hair, and ſhaggy eyebrows, and with the tail of a fiſh. He received the gift of prophecy from Apollo, and according to ſome accounts he was the interpreter of Nereus. He aſſiſted the Argonauts in their expedition, and foretold them that Hercules, and the two ſons of Leda, would one day receive immortal honours. The fable of his metamorphoſis has been explained by ſome authors, who obſerve that he was an excellent diver, who was devoured by fiſhes as he was ſwimming in the ſea. *Ovid.*

GLAVE, *ſ.* [*glaive*, Fr. *glaif*, a hook, Welſh.] A broad ſword; a falchion:

Two hundred Greeks came next in fight well try'd,
Not ſurely arm'd in ſteel or iron ſtrong,
But each a *glave* hath pendant by his ſide. *Fairfax.*

GLAVE'A, *ſ.* [Old Latin.] A javelin or hand-dart.

To GLA'VER, *v. n.* [*glave*, Welſh, flattery; glæpan, Sax. to flatter. It is ſtill retained in Scotland.] To flatter; to wheedle.—Kingdoms have their diſtempers, intermiſſions, and paroxyſms, as well as natural bodies; and a *glavering* council is as dangerous as a wheedling prieſt, or a flattering phyſician. *L'Eſtrange.*

GLAV'ERING, *ſ.* Flattering words.

GLAUX, *ſ.* [of Pliny and Dioſcorides. Derivation uncertain: ſome deduce it from γαλα, milk.] In botany, a genus of the claſs pentandria, order monogynia, natural order calycanthemæ, (ſalicariæ, *Juſſ.*) The generic characters are—Calyx: none, unleſs the corolla be called ſo. Corolla: petal one, five-parted, bell-ſhaped, upright, permanent; ſegments obtuſe, rolled back. Stamina: filaments five, ſubulate, upright, the length of the corolla; antheræ roundiſh. Piſtillum: germ ovate; ſtyle filiform, the length of the ſtamens; ſtigma capitate. Pericarpium: capſule globular, acuminate, one-celled, five-valved. Seeds: five, roundiſh; receptacle very large, globular, hollowed for the reception of the ſeeds.—*Eſſential Character.* Calyx, one-leafed, bell-ſhaped; capſule, one-celled, five-valved, five-ſeeded.

Glaux maritima, ſea milkwort, or black ſaltwort, a ſingle ſpecies. Root perennial, creeping; ſtems trailing, jointed, branched a little; leaves ſeſſile, oval-oblong, or oval-lanceolate, ſucculent; oppoſite at the bottom, but among the flowers alternate; flowers almoſt ſeſſile, axillary, ſolitary, from about the middle of the ſtem purple, greeniſh-white, white or ſtriped. Found on the ſea-coaſt, and on ſalt marſhes at a diſtance from the ſea; even about Upſal, which is very far from the ſea. It is a pretty little plant, enlivening large tracts of the dreary ſituations where it is found. The whole plant is ſucculent, and ſalt to the taſte; cows eat it. It flowers in June, and continues the reſt of the ſummer. It is ſeldom cultivated in gardens. See ANDRACHNE, ASTRAGALUS, ISNARDIA, and PEPLIS.

GLAY'MOUS, *adj.* Muddy; clammy. *Scott. Not much uſed.*

GLAY'MOUSNESS, *ſ.* Muddineſs; clammineſs. *Sc.*

To GLAZE, *v. a.* [*To glaſs*, only accidentally varied.] To furniſh with windows of glaſs.—Let there be two delicate cabinets daintily paved, richly hanged, and *glazed* with cryſtalline glaſs. *Bacon.*—To cover with glaſs, as potters do their earthen ware; [from the French *glaiſe*, clay.] To overlay with ſomething ſhining and pellucid.—The reaſon of one man operates on that of another in all true oratory; wherein though with other ornaments he may *glaze* and brandiſh the weapons, yet is it found reaſon that carries the ſtroke home. *Grew.*

Sorrow's eye, *glazed* with brining tears,
Divides one thing entire to many objects. *Shakeſpeare.*

GLA'ZIER, *ſ.* [corrupted from *glaſier*, or *glaſſier*, of *glaſs.*] One whoſe trade is to make glaſs windows.—Into rabbets the ſeveral panes of glaſs-work are ſet, and faſtened by the *glazier*. *Moxon.*

The dext'rous *glazier* ſtrong returns the bound,
And jingling faſhes on the penthouſe ſound. *Gay.*

And then, without the aid of neighbour's art,
Perform'd the carpenter's and *glazier*'s part. *Harte.*

Glaziers, before their knowledge of the diamond to cu glaſs, uſed for that purpoſe emery, ſharp-pointed inſtruments of the hardeſt ſteel, and a red-hot iron, by which they directed the line of ſeparation, which required extraordinary care, and employed a great deal of time. *Beckmann.*

GLA'ZING, *ſ.* The act or art of putting glaſs into windows or other frames. The art of cruſting over earthen ware by a vitreous ſubſtance, the baſis of which is generally lead. The uſual compoſition for glazing earthen ware, is formed of white ſand forty pounds, of red

red lead twenty pounds, of pearl-aſhes twenty pounds, and of common ſalt twelve pounds. Theſe ingredients are ground together, and then calcined for ſome time with a moderate heat. When the mixture is cold, it is levigated; and when wanted for uſe, it is tempered with water. The proportion of theſe ingredients may be occaſionally varied. The ware, after being turned on the wheel and dried in the open air, is covered over with the above compoſition by means of a bruſh; and when ſet in the furnace the violent heat ſoon reduces it to a perfect glaſs, covering the whole internal and external ſurface of the veſſel.

As it is well known that this common glazing by lead employed for earthen ware is of a pernicious nature, H. Nieſeman, a potter at Leipſic, has propoſed the following: Take nitre, pot-aſh, and common ſalt, of each half a pound, with double that quantity of pulveriſed glaſs, and mix them well together; then take a well-baked flat earthen diſh, cover it pretty thick with well-beat clay, ſtrew over the clay as much ſand as will adhere to it, and ſuffer it to dry. Put the above ingredients, well mixed, into this diſh, and introduce it into the furnace, that they may be all fuſed together. The diſh, however, muſt be placed within another, in order that the ingredients may not be loſt in caſe the diſh ſhould happen to crack: but if it be well covered with clay carefully beſtrewed with ſand, little danger is to be apprehended. When the ingredients have been fuſed, they are to be pounded very fine in the uſual manner, and may be employed as the common glazing of lead. The colour of this glazing inclines a little to grey, but by the addition of the common calcareous ſpar it acquires a yellow colour: manganeſe gives it a brown colour; and the addition of copper aſhes a green colour. Thus any colour may be obtained by changing the pigment. To avoid, however, every thing that has the appearance of being pernicious, this mixture of copper aſhes ſhould be employed only for veſſels which are to be uſed in waſhing. If this glazing is required for any particular purpoſe to be difficult of fuſion, a little leſs litharge may be added to it; but the quantity in all caſes muſt be ſo ſmall as to leave no room for apprehending the leaſt bad conſequences. This ſubſtitute for the common glazing is ſtrongly recommended by profeſſor Leonhardi.

M. Weſtrumb, an eminent German chemiſt, after being required by the government of Hanover to deviſe a leſs pernicious glazing for earthen ware than that in common practice, produced the following: 1. Take thirty-two parts of ſand; eleven, fifteen, or twenty, parts of purified potaſh; and from three to five parts of borax. Or, 2. Take thirty-two parts of flint-glaſs; ſixteen parts of borax; and three parts of pure potaſh. Or, 3. Take one hundred and fifty parts of cryſtallized Glauber's ſalt, with eight parts of pulveriſed charcoal, previouſly roaſted, till it has acquired a grey colour; ſixteen parts of ſand; and eight parts of borax. Either of theſe will completely anſwer the purpoſe, without ſubjecting culinary veſſels to a glazing ſo extremely pernicious as that of lead.

GLA'ZOV, a town of Ruſſia, in the government of Viatka, on the Tchevtza: fifty-ſix miles eaſt-ſouth-eaſt of Viatka. Lat. 58. 5. N. lon. 69. 44. E. Ferro.

GLEAD, *ſ.* See GLEDE.

GLEAM, *ſ.* [gelioma, Sax.] Sudden ſhoot of light; luſtre; brightneſs:

We ken the enemy from far; the ſetting ſun
Plays on their ſhining arms and burniſh'd helmets,
And covers all the field with *gleams* of fire. *Addiſon.*

To GLEAM, *v. n.* To ſhine with ſudden coruſcation:

Obſervant of approaching day,
The meek-eye'd morn appears, mother of dews,
At firſt faint *gleaming* in the dappled eaſt. *Thomſon.*

To ſhine?

On each hand the guſhing waters play,
And down the rough caſcade white daſhing fall,
Or *gleam* in lengthen'd viſtas through the trees. *Thomſ.*

GLEAM'ING, *ſ.* [from the *part.*] A gleam; a ſudden ſhoot of light.—Ye *gleamings* of departed peace.

GLEA'MY, *adj.* Fluſhing; darting ſudden coruſcations of light:

In brazen arms, that caſt a *gleamy* ray,
Swift through the town the warrior bends his way. *Pope.*

To GLEAN, *v. a.* [*glaner*, Fr. as Skinner thinks, from *granum*, Lat.] To gather what the harveſtmen leave behind.—She came and *gleaned* in the field after the reapers. *Ruth*, ii.

Cheap conqueſt for his following friends remain'd;
He reap'd the field, and they but only *glean'd*. *Dryden.*

To gather any thing thinly ſcattered.—They *gleaned* of them in the highways five thouſand men. *Judges*, xx. 45.

But Argive chiefs, and Agamemnon's train,
When his refulgent arms flaſh'd through the ſhady plain,
Fled from his well-known face with wonted fear;
As when his thund'ring ſword and pointed ſpear,
Drove headlong to their ſhips, and *glean'd* the routed rear. *Dryden.*

GLEAN, *ſ.* Collection made laboriouſly by ſlow degrees:

Plains, meads, and orchards, all the day he plies;
The *gleans* of yellow thyme diſtend his thighs. *Dryden.*

GLEAN'ER, *ſ.* One who gathers after the reapers:

For ſtill the world prevail'd, and its dread laugh,
Which ſcarce the firm philoſopher can ſcorn,
Should his heart own a *gleaner* in the field. *Thomſon.*

One who gathers any thing ſlowly and laborioufly.—An ordinary coffee-houſe *gleaner* of the city is an arrant ſtateſman. *Locke.*

GLEAN'ING, *ſ.* The act of gleaning, or thing gleaned.—The orphan and widow are members of the ſame common family, and have a right to be ſupported out of the incomes of it, as the poor Jews had to gather the *gleanings* of the rich man's harveſt. *Atterbury.*

GLEANING, or LEASING, is an ancient cuſtom in England, by which the poor are allowed to enter and glean upon another's ground, after the harveſt; as was ſuppoſed, without being guilty of treſpaſs; which humane proviſion ſeems borrowed from the Moſaical law. But it is now poſitively ſettled by a ſolemn judgment of the court of common pleas, that a right to glean in the harveſt-field cannot be claimed by any perſon at common law: neither have the poor of a pariſh, legally ſettled, ſuch right. Gould, J. diſſented from this opinion, quoting the paſſages in the Moſaical law, *Levit.* xix. 9, 10; xxiii. 22; and *Deut.* xxiv. 19; and ſee 4 *Burr.* 1927, together with the recognition of the cuſtom or privilege in a private act of parliament for an incloſure in Baſingſtoke pariſh. The other judges however were of opinion, that it would be dangerous and impolitic to admit gleaning to be a right, and in fact would be prejudicial to the poor themſelves, now provided for under various poſitive ſtatutes. They alſo remarked that the cuſtom of gleaning or leaſing was various in various places, and was in many places reſtricted to particular corn, and could not therefore be ſet up as an univerſal common-law right; that it would be opening a tempting door to fraud and idleneſs, and had never been ſpecifically recognized by any judicial determination. 1 *Hen. Black. Rep.* 51–63.

GLEBA'RIÆ, *ſ.* [Latin.] Turfs, or earth fit to burn.

GLEBE, *ſ.* [*gleba*, Lat.] Turf; ſoil; ground.—Fertile of corn, the *glebe* of oil and wine. *Milton.*

Sleeping vegetables lie,
'Till the glad ſummons of a genial ray
Unbinds the *glebe*, and calls them out to day. *Garth.*

The land poſſeſſed as a part of the revenue of an eccleſiaſtical benefice.—The ordinary living or revenue of a parſonage is of three ſorts: the one in land, commonly called the *glebe*; another in tythe; the third, in offerings beſtowed by the people. *Spelman.*—A treſpaſs done on a parſon's *glebe* land, which is a freehold, cannot be tried in a ſpiritual court. *Ayliffe.*

By the law of England, if any parſon, vicar, &c. hath cauſed any of his glebe-land to be manured and ſown at his own coſts, with any corn or grain, the incumbents may deviſe all the profits and corn growing upon the ſaid glebe by will, under ſtat. 28 Hen. VIII. c. 11. And if a parſon ſows his glebe and dies, the executors ſhall have the corn ſown by the teſtator. But if the glebe be in the hands of a tenant, and the parſon dies after ſeverance of the corn, and before his rent due; it is ſaid, neither the parſon's executors, nor the ſucceſſor, can claim the rent, but the tenant may retain it, and alſo the crop, unleſs there be a ſpecial covenant for the payment to the parſon's executors proportionably, &c. *Wood's Inſt.* 163. But, query, If this caſe would not come within the equity of ſtat. 11 Geo. II. c. 19. which gives right of action to the repreſentative of tenant for life, for any portion of rent in arrear at the time of his death?

Exchange of glebe land will not bind the ſucceſſor. *Noy*, 5. Prohibition was moved for to a parſon for digging new coal-mines in his glebe, and alſo for felling trees; for it is waſte, and prohibited by the ſtatute *de non proſternend' arbores*, &c. The court held it lay not for the mines; for then no mines in glebe could ever be opened. *Lev.* 107. By the ſaid ſtat. 28 Hen. VIII. c. 11, every ſucceſſor, on a month's warning, after induction, ſhall have the manſion-houſe and the glebe belonging thereto, not ſown at the time of the predeceſſor's death. He that is inſtituted may enter into the glebe land before induction, and has right to have it againſt any ſtranger; per Coke Ch. J. *Roll. R.* 192. There is a writ grounded on the ſtat. *articuli cleri*, c. 6, where a parſon is diſtrained in his glebe lands by ſheriffs, or other officers; againſt whom attachment ſhall iſſue. *New Nat. Br.* 386, 7.

GLE'BEC, a town of United America, in the ſtate of Virginia: ten miles ſouth-eaſt of Tappahanoc.

GLEBO'SE, *adj.* Glebous. *Not much uſed.*

GLEBOS'ITY, *ſ.* [from *gleboſe.*] The ſtate or quality of being glebous. *Scott.*

GLE'BOUS, *adj.* [from *glebe.*] Turfy.

GLE'BOUSNESS, *ſ.* [from *glebous.*] The ſtate or quality of being glebous. *Scott.*

GLEBOW', a town of the duchy of Courland: eighteen miles ſouth of Mittaw.

GLEB'ULENT, *adj.* [*glebulentus*, Lat.] Cloddy; abounding with clods, &c.

GLE'BY, *adj.* Turfy: perhaps in the following paſſage, fat or fruitful:

Pernicious flatt'ry! thy malignant ſeeds
In an ill hour, and by a fatal hand
Sadly diffus'd o'er virtue's *gleby* land,
With riſing pride amidſt the corn appear,
And choke the hopes and harveſt of the year. *Prior.*

GLECHO'MA, *ſ.* [from γληχων, the name of a plant in Dioſcorides.] GROUND-IVY; in botany, a genus of the claſs didynamia, order gymnoſpermia, natural order verticillatæ, (labiatæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, tubular, cylindric, ſtreaked, very ſmall, permanent; mouth five-cleft, acuminate, unequal. Corolla: one-petalled, ringent; tube ſlender, compreſſed; upper lip erect, obtuſe, ſemibifid; lower ſpreading, larger, obtuſe, trifid; middle ſegment larger, emarginate. Stamina: filaments four, under the upper lip, of which two are ſhorter; each pair of anthers converging in form of a croſs. Piſtillum: germ four-cleft; ſtyle filiform, bending beneath the upper lip; ſtigma bifid, acute. Pericarpium: none; calyx cheriſhing the ſeeds in its boſom. Seeds: four, ovate.—*Eſſential Character.* Calyx, five-cleft; each pair of anthers converging in form of a croſs.

There is but one ſpecies of ground-ivy at preſent known; it is called Glechoma hederacea. The root is perennial, ſending out trailing four-cornered ſhoots, producing roots at the joints, and ſpreading wide; the flowering ſtalks ſpring from the joints, which are woolly; theſe are upright but weak, ſquare, hirſute with hairs turning downward, from four to ſix inches high; leaves oppoſite, wrinkled, ſomewhat hairy, on grooved petioles, as long as the leaves; they are beſet underneath with hollow dots, in which are glands ſecreting an eſſential oil, and above with little eminences, but which do not ſecrete any odoriferous oil, ſo that this ſurface being rubbed gives out no peculiar ſcent, whereas the under ſurface affords a pleaſant reviving ſmell; peduncles axillary, oppoſite, ſhort, branched, ſupporting from three to five flowers; there is a pair of floral leaves at the branching of the peduncle, and another pair under each of the lateral flowers; they are ſubulate, or ſetaceous, and very ſmall; the middle flower has none; calyx hairy, ſtreaked, with the teeth nearly equal; corolla blue, (ſometimes varying to white;) the large middle ſegment of the lower lip marked with purple ſpots of a deeper colour, and hairy at the baſe; ſtamens ſometimes in the ſpring imperfect, with filaments only half the uſual length, terminated by a reddiſh blunt point, or ſometimes by effete anthers: when perfect, the anthers, after burſting, form a croſs, or the ſhape of the letter X. It is very ſtrange that Scopoli ſhould deny this character, no leſs evident than beautiful and ſingular. We can account for it only by ſuppoſing that he muſt have examined the flowers when they were in an imperfect ſtate, which they frequently are early in the ſpring. The leaves are often deformed with red hairy tumours, which are the galls of the Cynips glechomæ. It gradually expels plants which grow near it, and thus impoveriſhes paſtures. The leaves were formerly thrown into the vat with ale to clarify it, and to give it a flavour. This was called *gill-ale*; ground-ivy being named *gill*, or *gill-creep-by-ground*, in ſome places. From this uſe of the plant, and the form of its leaves, it has alſo the names of *ale-hoof* and *tun-hoof*, &c. but it has gradually grown into diſuſe ſince the introduction of hops. Cattle ſeem rarely to touch it; according to Linnæus, ſheep eat it, horſes are not fond of it, and it is refuſed by cows, goats, and ſwine. It is ſaid to be injurious to horſes, if they eat much of it. The expreſſed juice, mixed with a little wine, and applied morning and evening, deſtroys the white ſpecks upon horſes eyes.

Ground-ivy has a peculiar ſtrong ſmell, and a bitteriſh taſte, ſomewhat aromatic. It was formerly in conſiderable credit for pectoral, detergent, aperient, diuretic, corroborant, and other, qualities; and was recommended particularly in pulmonary and nephritic complaints. In obſtinate coughs it is ſtill a favourite remedy with the common people; but it is little preſcribed by medical practitioners, and is wholly diſcarded from the materia medica of the London college. Mr. Ray gives a remarkable inſtance of its efficacy in removing a violent and inveterate head-ache by drawing the juice of the plant up the noſtrils: but Dr. Cullen will not allow it to act any otherwiſe than as an errhine. He alſo thinks the uſe of it in ale to be frivolous; and affirms, that in many caſes where he had ſeen it employed, there was no evidence either of its diuretic or pectoral effects. It is moſt uſually taken in form of an infuſion or tea; the expreſſed juice is alſo uſed with honey in coughs: a conſerve or ſyrup is alſo made with it. The diſtilled water cannot be of any avail. Some foreign phyſicians

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ſeem to have a better opinion of this herb than ours. It is ſo common under hedges, on banks, in woods, and ſometimes in dry paſtures, that it is never cultivated in gardens. It varies in ſize, as well as the degree of colour in the flower, according to its ſituation. The flowers appear in April, May, and June. Thunberg obſerved it in Japan.

A plant ſo common, and ſo much eſteemed by the multitude, has of courſe many names. To ſuch as are given above we may add thoſe of cat's-foot, hay-maids, and Robin-run-in-the-hedge. In German it is *gundelreben, gundermann, grundermann, gundelrab, gundrebe, grundrebe, gunderlunze, donnerrebe, erdepheu, erdenkranzlein, meerzourzel*; in Dutch, *aardveil, hondſdraf, onderhave*; in Daniſh, *vedbende*; in Swediſh, *jordrefvot*; in Italian, *ellera terreſtre*; in Spaniſh, *hiedra terreſtre*.

GLECO'MA, *ſ.* See GLECHOMA and STACHYS.

GLEDE, *ſ.* [ȝlıdaȝlıde, Sax.] A kind of hawk.—Ye ſhall not eat the *glede*, the kite, and the vulture. *Deut.* xiv. 13.

GLED'ITSCH (John Gottlieb), an eminent botaniſt, born in 1714 at Leipſic, where his father was a muſician. Having completed his ſtudies when profeſſor Hebenſtreet ſet out on his travels to Africa, Gleditſch undertook the care of the botanical garden, and made ſeveral botanical excurſions into the Harz and Thuringian foreſts. He afterwards repaired for improvement to Annaberg, and Berlin. Frederic-William I. recommended him to M. von Zeithen, of whoſe garden at Trebnitz he gave a deſcription, in 1736. In 1740 he obtained the degree of M. D. at Frankfort on the Oder, where he ſettled, and read lectures on botany, phyſiology, and the materia medica. In the courſe of his botanical excurſions to the Thuringian foreſt, he formed an acquaintance with Erneſt-Auguſtus, duke of Saxe Weimar, with whom he reſided ſome time; and who offered to appoint him his phyſician with a handſome ſalary; but this offer he declined, in conſequence of being invited to become a member of the revived academy of ſciences at Berlin, and to become botaniſt to the ſociety. In 1740 he was made ſecond profeſſor in the anatomical theatre, and director of the botanical garden. He was alſo invited to St. Peterſburg, with the offer of a large ſalary; but Frederic the Great retained him by adding two hundred dollars to his income. Being ordered, by royal command, to read lectures on the care and management of foreſts, he was the firſt who laid the foundation for a complete ſyſtem on this important ſubject. He died of a diſorder of the breaſt on the 5th of October, 1786, in the ſeventy-third year of his age. Gleditſch was of great ſervice to his country by the attention he paid to the economy of foreſts; and it may truly be ſaid that, in this reſpect, he was to Brandenburg what the great Linnæus was to Sweden. His works are, 1. *Diſſertatio de Methodo Botanica dubio & fallaci, Virtutum in Plantis Indice*, Francof. ad Viadr. 1742, 4to. 2. *De Fuco Subgloboſo ſeſſili & molli, in Marchia reperiundo*, Berol. 1743, 4to. 3. *Methodus Fungorum, exhibens Genera, Species, & Varietates, cum Charactere, Differentia ſpecifica, Synonimis, Solo, Loco, & Obſervationibus*, Berol. 1753, 8vo. 4. *Experientiæ circa Generationem Fungorum*, in the Tranſactions of the Royal Academy of Sciences at Berlin, 1749. 5. *Abhandlung von Vertilgung der Zugheuſchreken*; or, An Eſſay on the Means of extirpating the migratory Locuſts; Berlin, 1754, 8vo. 6. *De Locuſtis Orientalibus, quarum Agmina Itinera inſtituunt, & 1750 Marchiam Brandenb. devaſtarunt*, in the Tranſactions of the Academy of Berlin, 1752. 7. *Syſtema Plantarum in Conſideratione Situs & Nexus Staminum fundatum*, in the ſame, 1749. 8. *Vermiſchte Phyſicaliſch-botaniſch-öconomiſche Abhandlungen*; or, Miſcellaneous Phyſical, Botanical, and Economical, Eſſays; Halle, 1765, 1766, 1767, three parts, 8vo. 9. *Vermiſchte Bemerkungen, &c.* or, Miſcellaneous Obſervations in regard to Medicine, Botany, and Economy; Leipſic, 1768, 8vo. 10. *Alphabetiſches Verzeichniſs der Gewöhnlichſten Arzneygewächſe, &c.* An alphabetical Catalogue of thoſe Plants commonly uſed in Medicine; Berlin, 1769, 8vo. 11. *Pflanzen Verzeichniſs, &c.* A Catalogue of Plants, Trees, and Shrubs, cultivated in public or private Gardens, for botanical, phyſical, and economical Purpoſes; Berlin, 1773, 8vo. 12. *Syſtematiſche Einleitung, &c.* A ſyſtematic Introduction to the Art of managing Foreſts, deduced from phyſical and economical Principles; ibid. 1774, 1775, 2 vols. 13. *Betrachtung über die Beſchoffenheit des Bienenſtandes, in der Mark Brandenburg, &c.* Conſiderations on the State of Bees in the March of Brandenburg; together with a Catalogue of thoſe Plants from which Bees collect their Honey and Wax; Riga and Mietau, 1769, 8vo. 14. *Einleitung in die Wiſſenſchaft der rohen und einfachen Arzneymittel, &c.* Introduction to the Knowledge of crude and ſimple Medicines; Berlin, 1778, 1779. 15. *Phyſicaliſche-öconomiſche Betrachtung über den Heideboden, &c.* or, Economico-phyſical Conſiderations on the Heaths in the March of Brandenburg; Berlin and Leipſic, 1782, 8vo. After his death the following work, found in manuſcript, was publiſhed by Dr. Luders of Harelberg: 16. *Botanica Medica*; or, An Account of the medical Virtues of the principal Indigenous Plants; Berlin, 1788, 1789, two parts, 8vo.

GLEDIT'SIA, *ſ.* [ſo named by Linnæus in honour of *J. Gottlieb Gleditſch*, juſt mentioned.] In botany, a genus of the claſs polygamia, order dioecia, natural order lomentaceæ, (leguminoſæ, *Juſſ.*) The generic characters are—I. Male, a long, compact, cylindric, ament. Calyx: perianthium proper three-leaved, (three-cleft, *Gærtner*;) leaflets patulous, ſmall, acute. Corolla: petals three, roundiſh, ſeſſile, patulous, like the calyx; nectary turbinate, with the other parts of the fructification growing to the mouth. Stamina: filaments ſix, filiform, longer than the corolla; antheræ incumbent, oblong, compreſſed, twin.—II. Hermaphrodite in the ſame ament with the males, uſually terminating. Calyx: perianthium four-cleft, otherwiſe as in the male. Corolla: petals four, otherwiſe as in the male; nectary as in the male. Stamina: as in the male. Piſtillum, Pericarpium, and Seed: as in the female.—III. Female, a lax ament, on a diſtinct plant. Calyx: perianthium proper as in the male, but five-leaved, (five-cleft, *Gærtner*.) Corolla: petals five, long, ſharp, from upright ſpreading; nectaries two, ſhort, like filaments. Piſtillum: germ broad, flatted, longer than the corolla; ſtyle ſhort, reflex; ſtigma thick, the length of the ſtyle, along which it grows, pubeſcent at the top. Pericarpium: legume very large, broad, extremely flatted, divided by ſeveral tranſverſe partitions, and filled with pulp. Seeds: ſolitary, roundiſh, hard, ſhining.—*Eſſential Character.* Hermaphrodite: calyx, four-cleft; corolla, four-petalled; ſtamina, ſix; piſtillum, one. Male: calyx, three-leaved; corolla, three-petalled; ſtamina, ſix. Female: calyx, five leaved; corolla, five-petalled; piſtillum, one; legume.

Gleditſia triacanthos, a ſingle ſpecies, with three varieties. α. G. polyſperma, or three-thorned acacia: legumes with many ſeeds; leaflets linear-oblong. This tree is common in moſt parts of North America, where it is known by the name of *honey locuſt*; it is called by the gardeners here *three-thorned acacia*. It riſes with an erect trunk to the height of thirty or forty feet, and is armed with long ſpines, three or four inches long, which have two or three ſmaller ones coming out from the ſide, and are frequently produced in cluſters at the knots of the ſtem; leaves bipinnate, compoſed of ten pairs of leaflets, of a lucid green and ſeſſile; the flowers come out from the ſide of the young branches, and being of an herbaceous colour, make no figure; legume near a foot and half long, and two inches broad; ſeeds ſmooth, ſurrounded by a ſweet pulp. The leaves ſeldom come out till June in this country, and the flowers not till the end of July. This tree does not produce

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any flowers till it is of a large size. There was one in the bishop of London's garden at Fulham, which produced pods, in the year 1728, that came to their full size; but the seeds did not ripen. It appears from Plukenet that it was cultivated by bishop Compton in 1700.

β. G. monosperma, single-seeded or water acacia: legumes one-seeded; leaflets ovate-oblong; spines few. This has much the appearance of the other, but has fewer spines; the leaves are smaller, and the pods are oval, containing but one seed. It was discovered by Mr. Catesby in Carolina.

γ. G. horrida, or strong-spined acacia: leaflets ovate-oblong; spines very frequent, in all the varieties axillary, and commonly triple.

Propagation and Culture. These trees are propagated by seeds, which must be procured from America; those of the first are annually sent to England in plenty, by the title of *locust* or *honey locust*, to distinguish it from the false acacia, which is frequently called *locust-tree* in America; these seeds may be sown upon a bed of light earth in the spring, burying them half an inch deep; and, if the spring should prove dry, they must be frequently watered, otherwise the plants will not come up the first year, for sometimes the seeds remain two years in the ground before they come up; therefore those who are desirous to save time, should sow the seeds as soon as they arrive, and plunge the pots into a moderate hot-bed, observing to water them frequently; by this method most of the plants will come up the same season; but these should be gradually inured to bear the open air; for, if they are continued in the hot-bed, they will draw up weak. During the summer season, those plants in pots will require frequent waterings, but those in the full ground will not dry so fast, therefore need no water, unless the season should prove very dry. In autumn, those in the pots should be placed under a hot-bed frame to protect them from frost, for these young plants generally keep growing late in the summer; and, the upper part of their shoots being tender, the early frosts of the autumn often kill the ends of them, if they are not protected, and this frequently occasions great part of the shoots decaying in winter; for which reason those plants in the full ground should be covered with mats in autumn, on the first appearance of frost; for a small frost in autumn will do more mischief to these young shoots which are full of sap, than severe frost when the shoots are hardened. The following spring they may be transplanted into nursery-beds, at a foot distance from row to row, and six inches asunder in the rows; but this should not be performed till April, after the danger of hard frost is over; for as the plants do not put out their leaves till very late, there will be no hazard in removing them any time before May. If the season should prove dry, they must be watered; and if the surface of the beds is covered with moss, or mulch, to prevent the earth from drying, it will be of great service to the plants. In these beds the plants may remain two years, during which time they must be constantly kept clean from weeds; and in the winter there should be some rotten tan, or other mulch, spread over the surface of the ground to keep out the frost. If the plants thrive well, they will be fit to transplant to the places where they are to remain after two years growth, for they do not bear removing when large; the best season for transplanting these trees, is late in the spring; they thrive best in a light deep soil, for in strong shallow ground they become mossy, and never grow large; they should also have a sheltered situation, for when they are much exposed to winds, their branches are frequently broken in the summer season, when they are fully clothed with leaves.

This being an elegant tree, it should appear singly in the openings of plantations, provided it be well sheltered from cold winds; but it is not in full leaf till the month of June.

GLEE, *s.* [ȝlizȝe, Sax.] Joy; merriment; gaiety:

She marcheth home, and by her takes the knight,
Whom all the people follow with great *glee*. *Spenser.*

The poor man then was rich, and liv'd with *glee*;
Each barley-bread untaxt, and day-light free. *Harte.*

It anciently signified music played at feasts. It is now seldom used except in ludicrous writing, or with some mixture of irony and contempt.—Is Blouzelinda dead? farewell my *glee!* *Gay.*

GLEED, *s.* [from ȝlopan, Sax. to glow.] A hot glowing coal. *A provincial and obsolete word.*

GLEE'FUL, *adj.* Gay; merry; cheerful. *Not used.*

My lovely Aaron, wherefore look'st thou sad,
When every thing doth make a *gleeful* boast? *Shakesp.*

GLEEK, *s.* [ȝligȝe, Sax.] Music; or musician.—What will you give us?——No money, but the *gleek*: I will give you the minstrel. *Shakespeare.*—A scoff.—Now where's the bastard's braves and Charles his *gleeks*? *Shakespeare.*—A game at cards.—Penny *gleek* I hope's in fashion yet. *Davenant's Wits.*—[Because three knaves in the game are a *gleek*.] A triplet.—We'll celebrate a *gleek* of marriages. *Albumazar.*

To GLEEK, *v. a.* [ȝligman, in Saxon, is a mimic or a droll.] To sneer; to gibe; to droll upon.—I have seen you *gleeking* or galling at this gentleman twice or thrice. *Shakespeare.*—In Scotland it signifies to fool or spend time idly, with something of mimicry or drollery.

GLEE'MEN, *s.* [ȝlip, or ȝligman, Sax. hence ȝligȝamen, glee-games, explained in Somner's Lexicon, by merry tricks, jests, sports, and gambols.] A kind of showmen anciently much in vogue in England. The gleemen added mimicry, and other means of promoting mirth, to their profession, as well as dancing and tumbling, with slights of hand, and variety of deceptions to amuse the spectators; it was therefore necessary for them to associate themselves into companies, by which means they were enabled to diversify their performances, and render many of them more surprising through the assistance of their confederates.

To GLEEN, *v. n.* To shine with heat or polish; it may be of the same derivation with *glow* or with *gleam*:

Those who labour
The sweaty forge, who edge the crooked scythe,
Bend stubborn steel, and harden *gleening* armour,
Acknowledge Vulcan's aid. *Prior.*

GLEE'SOME, *adj.* Joyous:

That *gleesome* hunters, pleased with their sport,
With sacrifices due have thank'd me for't. *W. Browne.*

GLEET, *s.* [It is written by Skinner *glitt*, and derived from ȝliban, Sax. to run softly.] A sanious ooze; a thin ichor running from a sore.—A hard dry eschar, without either matter or *gleet*. *Wiseman.*

To GLEET, *v. n.* To drip or ooze with a thin sanious liquor. To run slowly.—Vapours raised by the sun make clouds, which hit against the mountainous places of the globe, and by this concussion are condensed, and so *gleet* down the caverns of these mountains, whose inner parts, being hollow, afford them a bason. *Cheyne.*

GLEE'TY, *adj.* Ichory; thinly sanious.—If the flesh lose its ruddiness, and the matter change to be thin and *gleety*, you may suspect it corrupting. *Wiseman.*

GLEI'BERG, or GLITZBERG, a town of Germany, in the circle of the Upper Rhine, and principality of Nassau Weilburg: two miles north of Giessen, and eight north-east of Wetzlar.

GLEI'CHEN (Frederic-William von), furnamed RUTZWORM, lord of Greifenstein, Bonnland, and Etzelbach, knight of the Brandenburgh order of the red eagle, born at Bayreuth, in 1714. He spent the earlier part of his life as an officer in the service of Bayreuth, distinguished by his attention to military discipline. He rose to the rank of lieutenant-colonel, and obtained the

favour of the marcgrave. This, however, was not able to retain him at a court, the pageantry of which he uſed to call ſplendid miſery. In the ſpring of 1756 he obtained leave to retire with a penſion, to which was afterwards added the rank of privy counſellor; and it was after this period that he began to diſtinguiſh himſelf as a philoſopher, a naturaliſt, and a writer. He removed with his family to the eſtate of Greiſenſtein, where he devoted the reſidue of his life to the ſtudy of natural hiſtory. He died on the 16th of June, 1783, after a long and a tedious illneſs. His works are, 1. *Das neueſte Auſdem Reiche der Pflanzen, &c.* The lateſt Diſcoveries in the Vegetable Kingdom; or, Obſervations on the Parts of Fructification in Plants when in Bloom, and on the Inſects found in them; together with ſome Experiments on the Germ, and an Appendix of miſcellaneous Obſervations; Nuremberg, 1764, folio, with coloured plates. 2. *Geſchichte der Gemeinen Stubenfliege, &c.* Hiſtory of the common Houſe-Fly; Nurem. 1764, with four coloured plates. 3. *Microſcopiſche Entdeckungen bey den Pflanzen, &c.* Microſcopical Obſervations on Plants, Flowers, Bloſſoms, and other remarkable Objects; Nurem. 1777, 4to. with coloured plates. 4. *Abhandlung über di Saamen-und infuſions Thierchen, &c.* Treatiſe on ſeminal Animalcula and infuſion Animals; Nurem. 1778, 4to. with coloured plates. 5. *Verſuch einer Geſchichte der Blattläuſe, &c.* An Eſſay towards a Hiſtory of the Tree-Louſe of the Elm; with four coloured plates, and a preface by profeſſor Delius; Nurem. 1770, 4to. 6. *Von Entſtehung, Bildung, Umbildung und Beſtimmung des Erdkorpers, &c.* On the Origin and Formation of the Earth; Deſſau, 1782, 8vo. 7. *Abhandlung vom Sonnen Mikroſcop, &c.* A Treatiſe on the Solar Microſcope, &c. Nurem. 1781, 4to. Von Gleichen was the author alſo of various papers publiſhed in the Tranſactions of the Friendly Searchers into Nature at Berlin, and in the Acta Acad. Elect. Mog.

GLEI'CHENBERG, a town of Germany, in the duchy of Stiria: ten miles north of Racklſburg.

GLEICHE'NIA, *ſ.* in botany, a genus of the claſs cryptogamia, order filices. The generic characters are—Fructification three or four together, oval, ſeſſile, half immerged in an hemiſpherical hollow of the ſegments of the frond, one-celled, two-valved; ſeeds numerous, roundiſh.

Species. 1. Gleichenia polypodioides: ribs of the fronds quite glabrous; capſules in threes. 2. Gleichenia circinata: ribs of the frond pubeſcent; capſules four together.

GLEI'CHENSTEIN, a town and caſtle of Germany, in the circle of the Lower Rhine, and territory of Eichsfeld: ſeven miles ſouth-eaſt of Heilligenſtadt.

GLEINCK, a town of Germany, in the archduchy of Auſtria: two miles north of Steyr.

GLEIN'STOTTEN, a town of Germany, in the duchy of Stiria: fourteen miles ſouth-eaſt of Voitſberg.

GLEISS, a town of Swiſſerland, in the Valais: twenty-ſix miles eaſt of Sion.

GLEI'WITZ, or GLIWICE, a town of Sileſia, in the principality of Oppeln: thirty-ſix miles ſouth-eaſt of Oppeln, and twenty-three ſouth of Lublenietz.

GLEMS, a river of Germany, which runs into the Enz, about two miles north from Mark Groningen, in the duchy of Wurtemberg.

GLEN, *ſ.* [*gleann*, Erſe.] A valley; a dale; a depreſſion between two hills:

From me his madding mind is ſtart,
And wooes the widow's daughter of the *glen*. *Spenſer.*

A wide open ſpace between hills, is called a *vale*. If it be of ſmaller dimenſions, we call it a *valley*. But when this ſpace is contracted to a *chaſm*, it becomes a *glen*. A glen therefore is moſt commonly the offſpring of a mountainous country; though it is ſometimes found elſewhere, with its common accompaniments of woody banks, and a rivulet at the bottom. Theſe circumſtances, it is evident, admit an infinite variety of rural ſcenes. The *glen* may be more or leſs contracted; it may form one ſingle ſweep, or its deviations may be irregular. The wood may conſiſt of full-grown trees, or of underwood, or of a mixture of both. The path, which winds through it, may run along the upper part, or the lower. Or, laſtly, the rivulet may foam among rocks, or it may murmur among pebbles, or it may form tranſparent pools, overhung with wood; or, which is often the caſe, it may be totally inviſible, and an object only of the ear. The moſt beautiful circumſtances that attend the internal parts of a glen, are the glades, or openings, which are found in it. If the whole were a thicket, like the *full-grown copſe*, little beauty would reſult. An agreeable ſhade alone, in that caſe, muſt ſatisfy our expectations. But the glen, whoſe furniture is commonly of more fortuitous growth than that of the copſe, and not ſo ſubject to periodical defalcations, exhibits generally more beautiful ſcenery. Particularly it abounds with frequent openings. The eye is carried down, from the higher grounds, to a ſweep of the river—or to a little guſhing caſcade—or to the face of a fractured rock, garniſhed with hanging wood—or perhaps to a cottage, with its ſcanty area of lawn falling to the river on one ſide, and ſheltered by a clump of oaks on the other; while the ſmoke, wreathing behind the trees, diſperſes, and loſes itſelf, as it gains the ſummit of the glen. Or ſtill more beautifully perhaps the eye breaks out, at ſome opening, into the country; enriched with all the varieties of diſtant landſcape—plains, and woods melting together—a winding river—blue mountains—or perhaps ſome bay of the ſea, with a little harbour and ſhipping.—Shanklin, in the Iſle of Wight, affords a ſtriking example of this beautiful and romantic ſcenery.

GLEN, a lake of Ireland, in the county of Donegal: twenty-two miles weſt-north-weſt of Londonderry.

GLEN AL'MOND, a vale of Scotland, in the county of Perth: eight miles north of Crieff.

GLEN A'LOT, a vale of Scotland, in the county of Sutherland: fourteen miles north of Dornoch.

GLEN ART'NEY, a vale of Scotland, in the county of Perth: four miles north-eaſt of Callender.

GLEN CAR'RELL, a vale of Scotland, in the county of Sutherland: twelve miles north of Dornoch.

GLEN DER'BY, a vale of Scotland, in the county of Perth: ten miles north of Dunkeld.

GLEN FI'CHAN, a vale of Scotland, in the weſt part of the county of Argyle.

GLEN FID'DICH, a vale of Scotland, in the county of Banff: twelve miles ſouth-eaſt of Inverary.

GLEN FINE, a vale of Scotland, in the county of Argyle, north of Loch Fine.

GLEN FIN'GLASS, a vale of Scotland, in the county of Perth.

GLEN GAR'RY, a vale of Scotland, in the county of Inverneſs, north of Loch Garry.

GLEN GRU'DY, a vale of Scotland, in the county of Roſs, north of Loch Fairniſh.

GLEN KIN'GLASS, a vale of Scotland, in the county of Argyle: twenty miles north of George's Town.

GLEN LED'NOOK, a vale of Scotland, in the county of Perth: ten miles north-weſt of Crieff.

GLEN LO'CHY, a vale of Scotland, in the county of Argyle, north-eaſt of Glenorchy.

GLEN LY'ON, a vale of Scotland, in the county of Perth.

GLEN MORIS'TON, a vale of Scotland, in the county of Inverneſs: five miles weſt of Fort Auguſtus.

GLEN MOY, a vale of Scotland, in the county of Angus, north-weſt of Brechin.

GLEN MUIK, a vale of Scotland, in the county of Roſs.

GLEN QUEICH, a vale of Scotland, in the county of Perth: ten miles north of Crieff.

GLEN RIN'NES, a vale of Scotland, in the county of Bamff: ſeven miles ſouth-eaſt of Inveravon.

GLEN UR'QUHART, a vale of Scotland, in the county of Inverneſs.

GLEN YAL'DER, a vale of Scotland, in the county of Aberdeen, between Loch Garr and the river Dee.

GLEN'A, or GLE'NE, *ſ.* [from γληνη, Gr.] The ball of the eye; the moderate hollowneſs of the ends of the bones in articulation.

GLEN'COE, a vale of Scotland, in the county of Argyle, near Loch Leven, where, in the year 1691, the inhabitants were maſſacred, contrary to the faith of a royal proclamation: ſeventeen miles north of Inverary.

GLEN'CROY, a vale of Scotland, in the county of Argyle, on the north-eaſt ſide of Loch Lough.

GLENDAL'OCH, or city of *the Seven Churches*, in Ireland, ſituated five miles north-weſt of Rothdrum, in the county of Wicklow. The name ſignifies "the vale of the two lakes." In this valley, ſurrounded by high and almoſt inacceſſible mountains, St. Kevin, about the middle of the ſixth century, founded a monaſtery, which was much reſorted to, and at length became a biſhopric and a city. St. Kevin died the 3d of June, 618, aged one hundred and twenty; and on that day annually numbers of perſons flocked to the Seven Churches, to celebrate the feſtival of that venerated ſaint. During the middle ages, the city of Glendaloch, called by Hoveden *Epiſcopatus Biſtagnienſis*, was held in great eſteem, and its epiſcopal juriſdiction extended to the walls of Dublin. About the middle of the twelfth century, cardinal Papiro united it to the ſee of Dublin; in conſequence of which the city was ſuffered to decay, and had become nearly a deſert in 1497. From the extenſive ruins it appears to have been a place of conſequence. The cathedral, the walls of which are partly ſtanding, was dedicated to St. Peter and St. Paul. South of the cathedral ſtands a ſmall church roofed with ſtone, almoſt entire; and in ſeveral parts of the valley are a number of ſtone croſſes, ſome of which are curiouſly carved, but without inſcriptions.

GLEN'EGAD HEAD, a cape of Ireland, in the county of Donegal. Lat. 55. 20. N. lon. 7. 4. W. Greenwich.

GLEN'ELY, a river of Ireland, in the county of Antrim, which runs into the ſea, three miles ſouth of Geron Point.

GLENGAR'RIFF, an harbour of Ireland, in the county of Cork, on the north-eaſt part of Bantry Bay.

GLENIC'ZA, a river of Poland, which runs into the Obra, near Koſten, in the palatinate of Poſnania.

GLENMO'RE, a vale of Scotland, in the county of Perth: twelve miles north-eaſt of Blair Athol.

GLENOI'DES, *ſ.* [from γληνη, a cavity, and ειδος, Gr. a form.] In anatomy, the two cavities in the turning joint of the neck.

GLENOR'CHY, a village and vale of Scotland, in the county of Argyle: thirteen miles north of Inverary.

GLENSHEE', a vale of Scotland, in the county of Perth: fifteen miles eaſt of Blair Athol.

GLERS, a town of Germany, in the county of Tyrol: twenty-one miles weſt of Bolzano.

GLE'SUM, *ſ.* With old writers, amber.

GLEUCI'NUM, *ſ.* [Latin.] The oil that runs off before the olives are thoroughly preſſed.

GLEW, *ſ.* [*gluten*, Lat.] See GLUE.

GLIB, *adj.* [from λειος, Gr. *Skinner.*] Smooth; ſlippery; ſo formed as to be eaſily moved.—Liquid bodies have nothing to ſuſtain their parts, nor any thing to cement them; the parts being *glib* and continually in motion, fall off from one another, which way ſoever gravity inclines them. *Burnet.*—Smooth; voluble:

I want that *glib* and oily art
To ſpeak and purpoſe not, ſince what I well intend,
I'll do't before I ſpeak. *Shakeſpeare.*

GLIB, *ſ.*—The Iriſh have from the Scythians mantles and long *glibs*; which is a thick curled buſh of hair hanging down over their eyes, and monſtrouſly diſguiſing them. *Spenſer on Ireland.*

To GLIB, *v. a.* [from the *adj.*] To caſtrate:

I'll geld them all: fourteen they ſhall not ſee,
To bring falſe generations; they are coheirs,
And I had rather *glib* myſelf, than they
Should not produce fair iſſue. *Shakeſpeare.*

GLIB'BERY, *adj.* Smooth-faced.—Milk, milk, ye *glibbery* urchin, is food for infants. *Marſton.*

Have each meal an orphan
Served to your table, or a *glibbery* heir
With all his lands melted into a mortgage. *Randolph.*

GLIB'LY, *adv.* [from *glib.*] Smoothly; volubly.—Many who would ſtartle at an oath, whoſe ſtomachs as well as conſcience recoil at an obſcenity, do yet ſlide *glibly* into a detraction. *Government of the Tongue.*

GLIB'NESS, *ſ.* [from *glib.*] Smoothneſs; ſlipperineſs.—The tongue is the moſt ready for motion of any member, and by acceſs of humours acquires a *glibneſs* too, the more to facilitate its moving. *Government of the Tongue.*

To GLIDE, *v. n.* [gliban, Sax. *glijden*, Dut.] To flow gently and ſilently.—In double ſtream the briny waters *glide*. *Dryden.*

Where ſtray the Muſes, in what lawn or grove?
In thoſe fair fields where ſacred Iſis *glides*,
Or elſe where Cam his winding vales divides. *Pope.*

To paſs on without change of ſtep:

Ye *gliding* ghoſts, permit me to relate
The myſtic wonders of your ſilent ſtate. *Dryden.*

To move ſwiftly and ſmoothly along.—All things are beheld as in a haſty motion, where the objects only *glide* before the eye, and diſappear. *Dryden.*

Shoals of fiſh, with fins and ſhining ſcales,
Glide under the green wave. *Milton.*

GLIDE, *ſ.* Lapſe; act or manner of paſſing ſmoothly:

The ſnake unlink'd itſelf,
And with indented *glides* did ſlip away. *Shakeſpeare.*

GLI'DER, *ſ.* One that glides:

The glaunce into the heart did glide;
Hey ho the *glider*;
Therewith my ſoul was ſharply gride,
Such wounds ſoon waxen wider. *Spenſer.*

GLIKE, *ſ.* [gliz, Sax. See GLEEK.] A ſneer; a ſcoff; a ſhout. *Not in uſe.*—Where's the baſtard's braves, and Charles his *glikes*. *Shakeſpeare.*

GLIK'EON, a town of European Turkey, in the province of Epire: twenty-ſix miles weſt of Atla.

GLIM'ANY, a town of Poland, in the palatinate of Lemberg: twenty miles eaſt-north-eaſt of Lemberg.

To GLIM'MER, *v. n.* [*glimmer*, Dan. to ſhine; *glimmen*, Dut. to glow.] To ſhine faintly.—The weſt yet *glimmers* with ſome ſtreaks of day. *Shakeſpeare.*

The truth appears ſo naked on my ſide,
That any purblind eye may find it out.
—And on my ſide it is ſo well apparel'd,
So clear, ſo ſhining, and ſo evident,
That it would *glimmer* through a blind man's eye.
Shakeſpeare.

To be perceived imperfectly; to appear faintly.—The Pagan prieſthood was always in the druids; and there was a perceivable *glimmering* of the Jewiſh rites in it, though much corrupted. *Swift.*

GLIM'MER, *ſ.* Faint ſplendour; weak light. A ſpecies of micaceous earth.—The leſſer maſſes that are lodged in ſparry and ſtony bodies, diſperſedly, from their ſhining and glimmering, were an inducement to the writers of foſſils to give thoſe bodies the name of mica and *glimmer*. *Woodward.*

GLIM'MERING, *ſ.* A glimmer; a faint appearance.

GLIMPSE, *f.* [*glimmen*, Dut. to glow.] A weak faint light.—Thouſands of things, which now either wholly eſcape our apprehenſions, or which our ſhort-ſighted reaſon having got ſome faint *glimpſe* of, we, in the dark, grope after. *Locke.*—A quick flaſhing light.—Light as the lightning *glimpſe* they ran. *Milton.*

My thoughtleſs youth was wing'd with vain deſires;
My manhood, long miſled by wand'ring fires,
Follow'd falſe lights; and when their *glimpſe* was gone,
My pride ſtruck out new ſpangles of her own. *Dryden.*

Tranſitory luſtre:

If I, celeſtial fire, in aught
Have ſerv'd thy will, or gratified thy thought,
One *glimpſe* of glory to my iſſue give;
Grac'd for the little time he has to live. *Dryden.*

Short fleeting enjoyment:

If while this wearied fleſh draws fleeting breath,
Not ſatisfy'd with life, afraid of death,
It haply be thy will that I ſhould know
Glimpſe of delight, or pauſe from anxious woe;
From now, from inſtant now, great fire, diſpel
The clouds that preſs my ſoul. *Prior.*

A ſhort tranſitory view:

O friends! I hear the tread of nimble feet
Haſting this way, and now by *glimpſe* diſcern
Ithuriel, and Zephon, through the ſhade. *Milton.*

The exhibition of a faint reſemblance.—No man hath a virtue that he has not a *glimpſe* of. *Shakeſpeare.*

GLIMS HOLM, one of the ſmall Orkney iſlands: one mile and a half ſouth of Pamona.

GLI'NA, a river of Croatia, which riſes near Creutz, and runs into the Lonia.

GLINNI'NO, a town of Ruſſia, in the government of Novgorod, on the Miſta: twelve miles ſouth-eaſt of Borovigi.

GLIN'LOUGH, a lake of Ireland, in the county of Leitrim: ſeven miles north-north-eaſt of Sligo.

GLINSK, a town of Ruſſia, in the government of Tchernigov: eighty-eight miles ſouth-eaſt of Tchernigov.

GLINT'ZENDORFF, a town of Germany, in the archduchy of Auſtria: five miles north-eaſt of Entzerſtorff.

GLI'NUS, *f.* [γλινος, or γλεινος, is the name of a tree in Theophraſtus.] In botany, a genus of the claſs dodecandria, order pentagynia, natural order of caryophyllei, (ficoideæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-leaved; leaflets ovate, concave, coloured within, permanent. Corolla: none; nectaries often five, flat, reſembling petals, narrow, ſhorter than the calyx, unequally bifid or trifid. Stamina: filaments about fifteen, (fifteen to twenty, *G.*) ſubulate, flat, the length of the calyx; antheræ erect, upright, compreſſed, twin. Piſtillum: germ ſuperior, five-cornered; ſtyles five, ſhort; ſtigmas ſimple; (ſtyle one, five-cleft, *Gærtner.*) Pericarpium: capſule ovate, five-celled, five-cornered, five-valved. Seeds: very many, roundiſh, in a ſingle row under the valves, tubercled, affixed at the baſe to a ſmall ſwelling membrane.—*Eſſential Character.* Calyx, five-leaved; corolla, none; nectaries, cloven briſtles; capſule, five-cornered, five-celled, five-valved, containing numerous ſeeds.

Species. 1. Glinus lotoides, or hairy glinus: ſtem hairy, leaves obovate. Root annual; capſule ovate-pyramidal, thin, puſtuled by the protuberating ſeeds; partitions inſerted in the middle of the valves; ſeeds affixed by means of very long umbilical cords to the central angle of the cells: there are about fifty in each cell, kidney-ſhaped with a beak, ſtudded with thick ſcattered dots, ſhining and ferruginous; integument double; albumen ſcarcely any; embryo ſpiral. Native of the South of Europe and the Levant.

2. Glinus dictamnoides: ſtem fruteſcent, proſtrate; leaves orbicular, tomentoſe, flat; calycine leaflets lanceolate. Stems ſcarcely the ſize of packthread, proſtrate, diffuſed, ſomewhat branched; branches alternate, both they and the ſtems tomentoſe at the top, but with hairs leſs diſtinct than in the firſt ſpecies; leaves petioled, two or four together, ſomewhat ſharp at the baſe, without veins or nerves, with ſtellate hairs ſhorter than in G. lotoides; peduncles at the joints, aggregate, ſhort. Native of the Eaſt Indies.

3. Glinus ſetiflorus: ſtem ſhrubby; leaves obovate, plaited; calycine leaflets ovate. This has the ſame habit with the two others. The whole plant is hoary with very cloſe hairs, longer than in the firſt ſpecies. Stem very much and dichotomouſly branched; branches diffuſed, jointed, a little thicker at the joints; leaves two or four at the joints, acute at the baſe, ſubretuſe; flowers axillary, ſeveral; capſule as in G. lotoides. Native of Arabia. See AIZOON.

GLI'RES, *f.* [*glis*, Lat. from γελεος, Gr. a dormouſe.] The name of the fourth order of mammalia, in the claſſification of Linnæus. See the article MAMMALIA.

GLIS, *f.* [from *gliſco*, Lat. to grow fat.] The dormouſe; ſo called becauſe it is always found fat. Alſo a thiſtle, from γλια, Gr. glue, becauſe of its property of ſticking to whatever it touches.

GLIS'CERE, *v. a.* [Latin.] To kindle; to grow light as the fire. *Scott.*

GLIS'CERE, *ſ.* The paroxyſm, the exacerbation of a fever. *Scott.*

GLISCHROCO'LOS, *ſ.* [from γλισχρος, viſcid, and χολη, Gr. the bile.] The medical epithet for bilious viſcid excrements.

GLIS'SAS, in ancient geography, a town of Bœotia, with a ſmall river in the neighbourhood. *Pauſanias.*

To GLIS'TEN, *v. n.* [*glittan*, Germ.] To ſhine; to ſparkle with light.—The ladies eyes *gliſtened* with pleaſure. *Richardſon.*

The bleating kind
Eye the bleak heaven, and next the *gliſtening* earth,
With looks of dumb deſpair. *Thomſon.*

To GLIS'TER, *v. n.* [*glittan*, Germ. *gliſteran*, Dut.] To ſhine; to be bright.—When the ſun ſhone upon the ſhields of gold and braſs, the mountains *gliſtered* therewith, and ſhined like lamps of fire. 1 *Mac.* vi. 39.

'Tis better to be lowly born
And range with humble livers in content,
Than to be perk'd up in a *gliſtering* grief. *Shakeſpeare.*

GLIS'TER, *ſ.* [properly written *clyſter*, from κλυζω.] See CLYSTER. It is written wrong even by Brown. *Johnſon.*—Choler is the natural *glyſter*, or one excretion whereby nature excludeth another; which, deſcending daily unto the bowels, extimulates thoſe parts, and excites them unto expulſion. *Brown.*

GLIT'NESS, one of the ſmaller Shetland iſlands, on the eaſt coaſt of Shetland: eleven miles north of Lerwick.

GLIT'SCHEN, a river of Swiſſerland, which runs into the lake of Thurn, near Inter Lacken, in the canton of Berne.

To GLIT'TER, *v. n.* [glitinian, Sax.] To ſhine; to exhibit luſtre; to gleam:

Before the battle joins from far
The field yet *glitters* with the pomp of war. *Dryden.*

To be ſpecious; to be ſtriking.—On the one hand ſet the moſt *glittering* temptations to diſcord, and on the other the diſmal effects of it. *Decay of Piety.*

In *glittering* ſcenes, o'er her own heart ſevere;
In crowds collected; and in courts ſincere. *Young.*

GLIT'TER, *ſ.* Luſtre; bright ſhow; ſplendour.—Flouriſh not too much upon the *glitter* of fortune, for fear there ſhould be too much alloy in it. *Collier.*

GLIT'TERAND, Shining; ſparkling. A participle uſed by Chaucer and Spenſer.

GLIT'TERING,

GLIT'TERING, *f.* The act of ſending forth a ſplendour; glitter, brightneſs.

GLIT'TERINGLY, *adv.* With ſhining luſtre.

GLIU'BIN, a town of European Turkey, in Dalmatia: eighteen miles ſouth-eaſt of Moſtar.

To GLOAR, *v. a.* [*gloeren*, Dut.] To ſquint; to look aſkew. *Skinner.*

GLOAR, *adv.* Diſagreeably; fulſomely.—She is *gloar* fat. *Scott.*

GLOAR'AND, *adj.* [the participial form in the Scotch dialect, from *gloar*.] Squinting; ſtaring.

To GLOAT, *v. n.* [written perhaps for *gloar*.] To caſt ſide glances, as a timorous lover:

Teach every grace to ſmile in your behalf,
And her deluding eyes to *gloat* for you. *Rowe.*

GLO'BARD, *f.* [from *glow*.] A glow-worm.

GLO'BATED, *adj.* [from *globe*.] Formed in the ſhape of a globe; ſpherical; ſpheroidical.

GLOB'BA, *f.* [the vernacular name by the Malayans.] In botany, a genus of the claſs diandria, order monogynia, natural order of ſcitaminæ, (cannæ, *Juſſ.*) The generic characters are—Calyx: perianthium ſuperior, one-leafed, cylindric, with a trifid mouth, permanent. Corolla: monopetalous, cylindric, with a trifid equal mouth. Stamina: filaments two, filiform, middling in length; antheræ faſtened longitudinally to the filaments. Piſtillum: germ inferior; ſtyle briſtle-ſhaped, of a middling length; ſtigma ſharp. Pericarpium: capſule roundiſh, three-celled, three-valved. Seeds: very many.—*Eſſential Character.* Calyx ſuperior, trifid; corolla equal, trifid; capſule three-celled; ſeeds very many.

Species. 1. Globba marantina, or marantina globba: ſpike terminating, erect. Stem ſimple, herbaceous. Leaves alternate, petioled, altogether like thoſe of maranta; the petioles membranaceous and ſheathing; the ſheaths truncate at the tip. Flowers remote, each involved in an ovate bracte, longer than the flower. This, and the ſecond and third ſpecies, are natives of the Eaſt Indies.

2. Globba nutans, or nodding globba: ſpike terminating, pendulous. Rumphius makes two varieties of this, the great and the ſmall. The former has a very ſtraight firm ſtem, from fourteen to eighteen feet in height, two inches in diameter at the bottom, naked for ſix feet from the root, and ſtout enough for walking canes; the upper part is ſoft, and is eaten in ſome places. Leaves three feet long, and more than two hands broad, thin, ſmooth, with many parallel tranſverſe veins, bending upwards near the edge, forming ſlight ridges on the upper, and furrows on the lower, ſurface. The trunk terminates in a jointed ſtem, three ſpans in length, with a narrow boat-ſhaped leaf at each joint, hollowed above, and of a duſky red colour. Fruit the ſize of a pigeon's egg, red. The leaves of the ſmaller ſort are more wandering, narrower, and draw more to a point at the baſe. The primary ſtem is two or three feet in length, and leafleſs, producing abundance of oblong flowers, in bunches like the hyacinth.

3. Globba uviformis, or grape globba: ſpike lateral. Stem from ſeven or eight to twelve or fourteen feet high, the thickneſs of a finger. Leaves from fourteen to ſixteen inches long, and from four to ſix fingers broad, ſmooth, and dark green above, pale green and lanuginoſe beneath. The fructification iſſues from the ſide of the ſtem, eighteen inches or two feet above the root, in a ſpathed bunch or ſpike a hand in length, containing many white flowers, which are ſucceeded by fruit reſembling grapes, but larger, white, becoming black, or of the colour of ſmoke, and ſometimes eaten.

4. Globba Japonica, or Japan globba: raceme terminating, drooping; leaves ſword-ſhaped, entire. The ſtem is ſheathed with leaves, ſimple, round, ſtreaked, ſmooth, upright, two feet high, or more. Leaves few, acuminate, ſmooth, very finely ſtreaked obliquely, a little longer than the ſheathing petioles, very thin, except the midrib, which is thick, deep green above, paler beneath, a foot long and two inches broad. Flowers many. Seeds ſurrounded by a white connecting membrane, angular, ſmooth, brown. Native of Japan; where the fruit is ripe in December and January.

GLOBE, *f.* [*globe*, Fr. *globus*, Lat.] A ſphere; a ball; a round body: a body of which every part of the ſurface is at the ſame diſtance from the centre. The terraqueous ball:

The youth, whoſe fortune the vaſt *globe* obey'd,
Finding his royal enemy betray'd,
Wept at his fall. *Stepney.*

A ſphere, in which the various regions of the earth are geographically depicted, and hence termed the *terreſtrial* globe; or in which the conſtellations of the heavens are laid down, according to their poſitions in the firmament, and thence denominated the *celeſtial* globe:

The aſtrologer who ſpells the ſtars,
Miſtakes his *globe*, and in her brighter eye
Interprets heav'n's phyſiognomy. *Cleaveland.*

[In medicine.] A ball which ſeems to aſcend from the ſtomach into the throat in hyſterical diſorders, called the *globus hyſtericus*. [In tactics.] A body of ſoldiers drawn into a circle:

A *globe* of fiery ſeraphim incloſ'd,
With bright imblazoning, and horrent arms. *Milton.*

The terreſtrial and celeſtial globes are highly neceſſary for the ſtudy of geography. The celeſtial globe ſerves to explain all the phenomena ariſing from the diurnal motion of the earth about its axis, and alſo the variation of ſeaſons ariſing from its motion about the ſun, only ſuppoſing the ſun to move in the ecliptic inſtead of the earth, which will not alter any of the appearances. To each globe there is a circular flat piece of wood, the plane of which paſſes through the centre of the globe, on which are marked the days of the month, and correſponding to them the ſigns of the ecliptic where the ſun is on thoſe days; the points of the compaſs are alſo put upon the ſame piece. This is called the *horizon*; at right angles to which there is a circular piece of braſs, on which the globe hangs, called the *brazen meridian*; it is ſupported at the loweſt point on a roller, on which it turns in its own plane, and paſſes through the horizon in two grooves cut for that purpoſe; on this circle the globe is ſupported by the extremities of its axis; and the axis paſſes through the brazen meridian, and carries an index round with it over a circular plate which is divided into hours, &c. On each globe there are two circles, one repreſenting the *ecliptic*, with the characters of the ſigns upon it, and the other the *equator*, both having their reſpective degrees correctly marked. To each of theſe circles, on the celeſtial globe, ſecondaries are drawn to every 10 or 15 degrees; but on the terreſtrial globe, they are drawn only to the equator. There is alſo a flat piece of braſs, called the *quadrant of altitude*, which is occaſionally fixed to the brazen meridian in its zenith, by a nut, and the lower end is put between the globe and the horizon, and can be turned round to any point; it is divided into degrees, &c. by which the altitudes of objects above the horizon may be found, and their azimuths determined. From one point of the brazen meridian correſponding to the equator, the degrees begin, and are continued both ways up to 90° at each pole; but for the other ſemicircle of the brazen meridian, the degrees begin at the poles, and are continued up to 90° at the equator. On the horizon, the degrees begin at the eaſt and weſt points, and are continued both ways to 90°, or to the north and ſouth points. The ecliptic and equator begin their degrees at one of their interſections, called *aries*, and they are continued round the ſame way to 360°; alſo, the former is divided into, and marked with, the twelve ſigns; and

the latter is divided from the ſame point into 24 hours. Upon the foot of the globe there is often put a compaſs, by which the brazen meridian may be ſet north and ſouth.—See figures of a pair of globes on an improved conſtruction, under the article GEOGRAPHY, p. 353, of this volume.

Euclid, at the end of his twelfth book, ſhews that ſpheres or globes are to one another in the triplicate ratio of their diameters, that is, their ſolidities are to one another as the cubes of their diameters. And Archimedes determines the real magnitudes and meaſures of the ſurfaces and ſolidities of ſpheres and their ſegments, in his treatiſe de Sphæra et Cylindro: viz. 1. That the ſuperficies of any globe is equal to 4 times a great circle of it. 2. That any ſphere is equal to $\frac{2}{3}$ of its circumſcribing cylinder, or of a cylinder of the ſame diameter and altitude. 3. That the curve ſurface of the ſegment of a globe, is equal to the circle whoſe radius is the line drawn from the vertex of the ſegment to the circumference of the baſe. 4. That the content of a ſolid ſector of the globe, is equal to a cone whoſe altitude is the radius of the globe, and its baſe equal to the curve ſuperficies or baſe of the ſector; and from hence are eaſily deduced theſe practical rules for the ſurfaces and ſolidities of globes and their ſegments; viz. 1. *For the ſurface of a globe*, multiply the ſquare of the diameter by 3·1416; or multiply the diameter by the circumference. 2. *For the ſolidity of a globe*, multiply the cube of the diameter by ·5236 (viz. $\frac{1}{6}$ of 3·1416); or multiply the ſurface by $\frac{1}{6}$ of the diameter. 3. *For the ſurface of a ſegment*, multiply the diameter of the globe by the altitude of the ſegment, and the product again by 3·1416. 4. *For the ſolidity of a ſegment*, multiply the ſquare of the diameter of the globe by the difference between 3 times that diameter and 2 times the altitude of the ſegment, and the product again by ·5236, or $\frac{1}{6}$ of 3·1416.—See the article SPHERE. And for the moſt approved methods of projecting globes and maps, ſee GEOGRAPHY, p. 359 of this volume.

Beſides the terreſtrial and celeſtial globes above deſcribed, there are others conſtructed or mounted for the following purpoſes: 1. A globe to ſhew the phenomena of the tranſit of Mercury and Venus over the Sun. 2. A globe to ſhew the phenomena of ſolar and lunar eclipſes on all places of the terreſtrial globe, called an *eclipſareon*. 3. A globe to ſhew the nature and manner of the preceſſion of the equinoxes, and thereby the difference between the ſidereal and tropical years, as alſo the apparent and direct motion of the fixed ſtars. 4. A celeſtial globe, with a teleſcope to fix on the north pole of the globe occaſionally, with a divided arc, &c. &c. An apparatus invented by Adams for obſerving any celeſtial body, and thereby, in an inſtantaneous manner, obtaining all the particulars of any phenomena preſenting themſelves in the heavens. 5. A lunar globe, or the *ſelenegraphia*, invented by Mr. John Ruſſel, R. A. forming an apparatus for exhibiting the phenomena of the moon, and the uſeful purpoſes to which it may be applied.—For a ſeries of uſeful problems on the terreſtrial and celeſtial globes, adapted to the knowledge of Geography and Aſtronomy, ſee pages 366–368 of this volume.

GLOBE-AM'ARANTH. See GOMPHRENA.
GLO'BE-ANIMAL. See ANIMALCULE.
GLO'BE-FISH. See OSTRACION.
GLO'BE-FLOWER. See TROLLIUS.
GLOBE-THIS'TLE. See ECHINOPS, vol. vi.
GLO'BED, *adj.* Round; globated.
GLOBO'SE, *adj.* [*globoſus*, Lat.] Spherical; round:

Then formed the moon
Globoſe, and ev'ry magnitude of ſtars. *Milton.*

GLOBOS'ITY, *ſ.* Sphericity; ſphericalneſs.
GLO'BOUS, *adj.* [*globoſus*, Lat.] Spherical; round.—When the accent is intended to be on the laſt ſyllable, the word ſhould be written *globoſe*, when on the firſt *globous*. *Johnſon.*—Milton has not obſerved this rule:

Wide over all the plain, and wider far
Than all this *globoſe* earth in plain outſpread. *Milton.*

Large *globous* irons fly, or dreadful hiſs,
Singeing the air. *Philips.*

GLO'BOUSNESS, *ſ.* Globoſity.
GLO'BULAR, *adj.* [*globulus*, Lat.] Having the form of a ſmall ſphere; round; ſpherical.—The figure of the atoms of all viſible fluids ſeemeth to be *globular*, there being no other figure ſo well fitted to the making of fluidity. *Grew.*

GLOBULA'RIA, *ſ.* [ſo named by Tournefort from the flowers growing many together in form of a little globe or ball.] In botany, a genus of the claſs tetrandria, order monogynia, natural order of aggregatæ, (lyſimachiæ, *Juſſ.*) The generic characters are—Calyx: common perianthium imbricate with ſcales the length of the diſk and equal; proper one-leafed, tubular, five-cleft, ſharp, permanent, (four or five-toothed, the teeth briſtle-ſhaped and acuminate, *Gærtner.*) Corolla: univerſal nearly equal; proper monopetalous, tubular at the baſe; border five-parted; upper lip very narrow, two-parted, ſhorter; lower of three larger equal ſegments. Stamina: filaments four, ſimple, the length of the corollule; antheræ diſtinct, incumbent. Piſtillum: germ ovate, ſuperior; ſtyle ſimple, the length of the ſtamens; ſtigma obtuſe. Pericarpium: none; proper calyx converging, incloſing the ſeed. Seeds: ſolitary, ovate. Receptaculum: common oblong, ſeparated by chaffs.—*Eſſential Character.* Calyx common (or none, *G.*) imbricate; proper tubular, inferior; corollets the upper lip two-parted, lower three-parted; receptacle chaffy.

Species. 1. Globularia longifolia, or long-leaved globularia: ſtem ſhrubby; all the leaves linear-lanceolate, quite entire; heads axillary. Theſe have all perennial roots. Stem ſhrubby, or herbaceous, ſimple, uſually with one head of flowers at the top; ſtem-leaves ſmall, or ſcarcely any. The leaves of all the globularias are dry black; the corollas blue. The firſt ſpecies riſes much higher than the ſecond, having a hard white wood with a large pith and a ſcabrous light brown or grey bark; the branches towards their ends very thick ſet with leaves, without any order; they are two inches long, and a third part of an inch broad in the middle; the nerves yelloviſh green. Flowers ſmall, blue, in round heads. Native of Madeira; flowers in July and Auguſt.

2. Globularia alypum, or three-tooth-leaved globularia: ſtem ſhrubby; leaves lanceolate, three-toothed, and entire; heads terminating. This has a hard woody ſtem, about two feet high, with many woody branches, beſet with leaves like thoſe of the myrtle. The flowers are produced on the tops of the branches in a ball, and are of a blue colour. Native of the ſouth of Europe: as about Montpellier, and in many parts of Narbonne and Provence; Valentia, and ſeveral other places in Spain; Nice, and the ſea-coaſt of Uneglia; alſo in Barbary. It flowers from Auguſt to November. From the violent purging quality of this ſhrub, it acquired the name of *herba terribilis*, herb terrible; but, in the abundance of purging medicines that we poſſeſs, this is ſeldom if ever uſed.

3. Globularia biſnagarica: ſtem ſhrubby; root-leaves wedge-ſhaped, retuſe; ſtem-leaves lanceolate. Stem ſhrubby. Leaves rigid, thoſe next the root-leaves rounder and cordate, but the ſtem-leaves pointed.

4. Globularia vulgaris, common globularia, or blue daiſy: ſtem herbaceous; root-leaves three-toothed; ſtem-leaves lanceolate. Stem ſlender, upright, covered with leaves, from an inch and a half to ſix inches in height, and ſometimes more, ſomewhat angular, very ſimple, ſmooth, one-flowered. Root-leaves numerous, like thoſe of the daiſy, but thicker. Scopoli obſerves, that the leaves of the former year are emarginate, with a dagger-point in the

the middle; but the freſh leaves three-toothed. He adds, that the ſtamens are ſhorter than the ſegments of the upper lip. Native of many parts of Europe; as Sweden, the ſouth of France, Germany, Swiſſerland, Auſtria, Carniola, Hungary, Savoy, Italy, and Spain. Profeſſor Martyn gathered it on Mont Saleve in flower in April 1779; but it uſually flowers in May and June. Parkinſon ſays it was (1629) very rare in our Engliſh gardens. In Gerarde's time (1597) the blue daiſy, or globe daiſy, as he calls it, was a ſtranger in England. Johnſon (Ger. emac.) gives only two figures, and adds that one might have ſerved, for they differ but in the tallneſs of their growth, and in the breadth of their leaves. He ſays nothing of their being cultivated in our gardens. It varies with a white flower; and with a leafleſs ſtalk.

5. Globularia ſpinoſa, or prickly-leaved globularia: root-leaves crenate-prickly; ſtem-leaves quite entire, mucronate. Root-leaves ſeveral, ſmall, ſtiff, notched, and at each notch a prickle; ſtem a hand in height, dark green, with oblong narrow leaves at the baſe, not notched but ending in prickles; head of flowers longer than in the foregoing, hairy. Found by Albinus on the mountains of Granada: flowers in May.

6. Globularia cordifolia, or wedge-leaved globularia: ſtem almoſt naked; leaves wedge-ſhaped, three-cuſped, the middle cuſp leaſt. Root large, woody, producing many tufts of leaves; leaves gradually widening from the baſe, emarginate, with the nerve ending in a ſhort awn or ſpinule; ſtem naked, except one little ſtrap, two inches high or little more, terminated by one head of flowers, ſmaller than in the other ſorts. Native of Swiſſerland, Auſtria, Carniola, Hungary, Piedmont, and Arragon; Ray found it at the foot of Mont Saleve in Savoy, near Geneva: it flowers in June and July.

7. Globularia nudicaulis, or naked-ſtalked globularia: ſtem naked; leaves quite entire, lanceolate. Somewhat larger than the foregoing, both in leaves and flowers; leaves firm like thoſe of the bay; ſtem naked, except a few little ſtraps or ſcales, ſix inches high; flowers uſually trifid, but ſometimes quadrifid. Native of Swiſſerland, Auſtria, Carniola, Savoy, and Piedmont; Ray obſerved it near the Grand Chartreux in Dauphiné. It flowers in July.

8. Globularia orientalis, or eaſtern globularia: ſtem almoſt naked; heads alternate, ſeſſile; leaves lanceolate-ovate, entire. Stem a foot high, herbaceous, quite ſimple; the leaves on it very ſmall, lanceolate, alternate, remote. There are from ſeven to ten heads at the top of the ſtem. Found by Tournefort in the Levant. Cultivated by Mr. Miller in 1739.

Propagation and Culture. The ſecond ſpecies may be propagated by cuttings, which ſhould be cut off in April, juſt before they begin to make new ſhoots; the cuttings ſhould be planted into pots filled with light freſh earth, and then placed into a very moderate hot-bed, obſerving to water and ſhade them until they have taken root, when they may be taken out of the bed, and inured to bear the open air by degrees. In ſummer theſe plants may be expoſed with other hardy exotic plants, and in winter they ſhould be placed under a hot-bed frame, where they may enjoy the free air in mild weather, but ſhould be ſcreened from hard froſt, which will deſtroy them if they are expoſed thereto, but in mild winters they will live in the open air. This plant never produces good ſeeds in this country. 4, 5, 6, 7, may be propagated by parting the roots after the manner of daiſies. The beſt ſeaſon for parting and tranſplanting of the plants is in September, that they may take new root before the froſty weather comes on. They ſhould be planted in a ſhady ſituation, and require a moiſt loamy ſoil, in which they will thrive much better than in a light ground and an open ſituation; but the plants ſhould not be removed oftener than every other year, if they are required to flower ſtrong. 1, 8, are ſomewhat tender, and ſhould be ſheltered from the froſt in winter, under a frame, but in ſummer ſhould be expoſed with other hardy exotic plants, and will require to be frequently watered in dry weather. This may be propagated by ſeeds, or by parting their roots, as was directed for the fourth ſort. See PROTEA and SAPONARIA.

GLOBULA'RIÆ AFFI'NIS, *ſ.* See ERIOCAULON.

GLOB'ULARNESS, *ſ.* The ſtate or quality of being globular.

GLOB'ULE, *ſ.* [*globule*, Fr. *globulus*, Lat.] A little globe; a ſmall particle of matter of a ſpherical form.—Blood conſiſts of red *globules*, ſwimming in a thin liquor called ſerum: the red *globules* are elaſtic and will break; the veſſels which admit the ſmaller *globule*, cannot admit the greater without a diſeaſe. *Arbuthnot.*

GLOB'ULOUS, *adj.* In form of a ſmall ſphere; round.—The whiteneſs of ſuch *globulous* particles proceeds from the air included in the froth. *Boyle.*

GLOCHID'ION, *ſ.* in botany. See BRADLEJA.

GLOCOV'NI, a river of Croatia, which riſes near Creutz, and runs into the Lonia.

GLODE, [old preterite of *glide.*] Glanced.—Like ſparke of fire that from the andvile *glode*. *Spenſer.*

GLOGAU', a principality of Sileſia, ſituated on each ſide of the Oder, on the borders of Poland. It produces corn and wine in plenty, the foreſts are well furniſhed with wood, and in ſome parts are mines of iron, a great number of ſheep are fed, and the wool is wrought into different manufactures. It is divided into ſix circles; Great Glogau is the capital. In 1241, it was governed by princes of its own; after that it belonged to the king of Poland, to the king of Bohemia, to the emperor, and laſt of all to the king of Pruſſia.

GLOGAU' (Great), a town of Sileſia, and capital of the principality of Glogau, built in 1110, on the ſouth ſide of the Oder, and now conſidered as a fortreſs, being taken by the Pruſſians in 1741, who ſtrengthened the fortifications. It is the ſeat of the governor, and a commandant of divers tribunals, a biſhop's court, &c. It contains two catholic churches, one of which is collegiate, three convents, a Lutheran church and ſchool, and a chapel for Calviniſts: fifty miles ſouth-ſouth-weſt of Poſen, and thirty-two north-north-eaſt of Buntzlau. Lat. 51. 39. N. lon. 33. 59. E. Ferro.

GLOGAU' O'BER, or GORNY GLOGOWICE, a town of Sileſia, in the principality of Oppeln: twenty-two miles eaſt-ſouth-eaſt of Nieſſe, and nineteen ſouth of Oppeln.

GLOG'NITZ, a town of Germany, in the archduchy of Auſtria: twenty-eight miles ſouth of Vienna, and ſixteen ſouth-weſt of Ebenfurth.

GLOGOVNIT'ZA, a town of Croatia: four miles north-north-eaſt of Creutz.

To GLOM'ERATE, *v. a.* [*glomero*, Lat.] To gather into a ball or ſphere.—A filamentous ſubſtance gathered into a ball is ſaid to be *glomerated*, but diſcontinuous particles are *conglobated*. *Johnſon.*

GLOMERA'TION, *ſ.* [*glomeratio*, Lat.] The act of forming into a ball or ſphere. A body formed into a ball.—The rainbow conſiſteth of a *glomeration* of ſmall drops, which cannot fall but from the air that is very low. *Bacon.*

GLOM'ERELLS, *ſ.* Commiſſaries appointed to determine differences between ſcholars of a ſchool or univerſity, and the townſmen of the place. In the edict of the biſhop of Ely, anno 1276, there is mention of the *maſter of the glomerells.*

GLOM'EROUS, *adj.* [*glomeroſus*, Lat.] Gathered into a ball or ſphere, as a ball of thread.

GLOM'ME, a river of Sweden, which paſſes by Tonſet, Elvedal, Konſwinger, &c. and runs into the North Sea, near Frederickſtadt.

GLON, a river of Germany, in the circle of Upper Bavaria, which runs into the Amber, near Crantzberg.

GLOOM, *ſ.* [ȝlomanȝ, Sax.] Twilight. Imperfect darkneſs; diſmalneſs; obſcurity; defect of light:

Glowing embers through the room,
Teach light to counterfeit a *gloom*. *Milton.*

Now warm in love, now with'ring in thy bloom,
Loſt in a convent's ſolitary *gloom*. *Pope.*

Cloudineſs of aſpect; heavineſs of mind; ſullenneſs:

At the bright'ning orient beam
Purge off this *gloom*. *Milton.*

To GLOOM, *v. n.* To ſhine obſcurely; as the twilight. *This ſenſe is not now in uſe.*

Scarcely had Phœbus in the *glooming* eaſt,
Yet harneſſed his fiery-footed team. *Spenſer.*

To be cloudy; to be dark. To be melancholy; to be ſullen.—A *glooming* peace this morning with it brings. *Shakeſpeare.*

GLOOM'ILY, *adv.* Obſcurely; dimly; without perfect light; diſmally. Sullenly; with cloudy aſpect; with dark intentions; not cheerfully.—See, he comes: how *gloomily* he looks! *Dryden.*—*Gloomily* retir'd the ſpider lives. *Thomſon.*

GLOOM'INESS, *ſ.* Want of light; obſcurity; imperfect light; diſmalneſs. Want of cheerfulneſs; cloudineſs of look; heavineſs of mind; melancholy.—The *gloominеſs* in which ſometimes the minds of the beſt men are involved, very often ſtands in need of ſuch little incitements to mirth and laughter as are apt to diſperſe melancholy. *Addiſon.*

GLOO'MY, *adj.* Obſcure; imperfectly illuminated; almoſt dark; diſmal for want of light.—The ſurface of the earth is clearer or *gloomier*, juſt as the ſun is bright or more overcaſt. *Pope.*

Deep in a cavern dwells the drowſy god,
Whoſe *gloomy* manſion nor the riſing ſun,
Nor ſetting, viſits, nor the lightſome noon. *Dryden.*

Dark of complexion:

That fair field
Of Enna, where Proſerpine gathering flowers,
Herſelf a fairer flow'r, by *gloomy* Dis
Was gather'd. *Milton.*

Sullen; melancholy; cloudy of look:

He on his impious foes right onward drove
Gloomy as night. *Milton.*

Heavy of heart.

GLO'RIED, *adj.* Illuſtrious; honourable; decorated with glory; dignified with honours. *Not in uſe.*

Old reſpect,
As I ſuppoſe, toward your once *glory'd* friend,
My ſon, now captivate, hither hath inform'd
Your younger feet, while mine caſt back with age
Came lagging after. *Milton.*

GLORIFICA'TION, *ſ.* [Fr. from *glorify.*] The act of giving glory.—At opening your eyes, enter upon the day with thankſgiving for the preſervation of you the laſt night, with the *glorification* of God for the works of the creation. *Taylor.*

To GLO'RIFY, *v. a.* [*glorifier*, Fr. *glorifico*, Lat.] To procure honour or praiſe to one:

Juſtice is their virtue: that alone
Makes them ſit ſure, and *glorifies* the throne. *Daniel.*

To pay honour or praiſe in worſhip.—God is *glorified* when ſuch his excellency, above all things, is with due admiration acknowledged. *Hooker.*—All nations ſhall *glorify* thy name. *Pſalms*, lxxxvi. 9.—To praiſe; to honour; to extol. To exalt to glory in heaven; to raiſe to celeſtial beatitude.—If God be glorified in him, God ſhall alſo *glorify* him in himſelf, and ſhall ſtraightway *glorify* him. *John*, xiii. 32.—Whom he juſtified, them he alſo *glorified*. *Rom.* viii. 30.—The ſoul, being immortal, will, at ſome time or other, reſume its body again in a *glorified* manner. *Ayliffe.*

GLORIO'SA, *ſ.* [from the magnificent ſplendour of its flowers.] In botany, a genus of the claſs hexandria, order monogynia, natural order ſarmentaceæ, (lilia, *Juſſ.*) The generic characters are—Calyx: none. Corolla: petals ſix, oblong-lanceolate, waved, very long, wholly reflex. Stamina: filaments ſix, ſubulate, ſhorter than the corolla, from ſtraight patulous; antheræ incumbent. Piſtillum: germ globular; ſtyle filiform, longer than the ſtamens, inclined; ſtigma triple, obtuſe. Pericarpium: capſule ſuperior, oval, three-lobed, three-celled, three-valved. Seeds: ſeveral, globular, berried, in two rows.—*Eſſential Character.* Corolla, ſix-petalled, waved, reflex; ſtyle oblique.

Species. 1. Glorioſa ſuperba, the ſuperb lily: leaves tendril-bearing. This has a long fleſhy root of a whitiſh colour, and a nauſeous bitter taſte, from the middle of which ariſes a round weak ſtem, requiring ſupport, and with that growing to the height of eight or ten feet; leaves ſmooth, about eight inches long, and one inch and a half broad at the baſe, growing narrower till within two inches of the end, which runs out in a narrow point, and ends in a tendril. See Botany Plate IV. fig. 13. Flowers at the upper part of the ſtem, from the ſide, on ſlender peduncles, hanging down, at firſt of an herbaceous colour, but changing to a beautiful flame colour. This fine plant is native of Guinea, as well as the Eaſt Indies; and was introduced here in 1690, by Mr. Bentick. It flowers in June and July, but ſeldom perfects ſeeds in this country. The ſtalks decay in autumn, the roots remain inactive all the winter, and new ſtalks come out in March. The roots and every part of the plant are poiſonous.

2. Glorioſa ſimplex, or ſimple-ſuperb lily: leaves acuminate. Leaves ſmooth, about three inches long and two broad, ending in acute points, but having no tendril; the ſtalks as yet have not grown more than two feet high, but have the appearance of climbing; the leaves have a ſtrong diſagreeable ſcent on being handled. It is ſaid to have a blue flower. The ſeeds were ſent to Mr. Miller by Monſ. Richard, gardener to the French king at Trianon, and were brought from Senegal by Monſ. Adanſon. This plant has not appeared in any of the gardens either in France or England, nor was there any ſpecimen of it in Miller's Herbarium; it is doubtful therefore what it might have been.

Propagation and Culture. As theſe plants rarely produce ſeeds in this country, they are generally propagated by their roots. Thoſe of the firſt ſort creep and multiply pretty faſt, but the ſecond has not as yet put out any offsets; but as the plants are young, we cannot as yet ſay how they may increaſe when they are of a proper age. Theſe roots may be taken out of the ground when their ſtalks are decayed, and preſerved in ſand during the winter ſeaſon, but they muſt be kept in the ſtove, or a warm room, where they can receive no injury from the cold; and in the ſpring they muſt be planted in pots filled with light earth, and plunged into the tan-bed in the ſtove; but others chuſe to let the roots continue in the ground all the winter, keeping the pots always in the tan-bed; where this is practiſed, the roots ſhould have very little water in the winter; for as they are then in an inactive ſtate, moiſture at that time frequently rots the roots. Towards the end of March, or the beginning of April, their ſtalks will appear, when there ſhould be ſome tall ſticks put down by them to ſupport them, otherwiſe they will trail over the neighbouring plants, and the firſt ſort will faſten to the plants by the tendrils. The ſtalks of this ſort will riſe ten or twelve feet high, if the roots are ſtrong, and ſome of them will produce two or three flowers; theſe make a fine appearance in the ſtove, during their continuance, which is ſeldom more than ten days or a fortnight. In ſummer, when the plants are growing, they will

will require frequently to be watered; but they muſt not have it in too large quantities, for they are very ſubject to rot with much wet at any ſeaſon. Thoſe roots which are not taken out of the pots in winter, ſhould be tranſplanted and parted the beginning of March, before they put out new fibres or ſtalks, for they muſt not be removed when they are in a growing ſtate; the pots ſhould not be too large; for unleſs they are confined, they will not put out ſtrong ſtalks; the largeſt roots may be planted in twopenny pots, but the ſmall ones will require only pots of about five or ſix inches over at the top.

GLO'RIOUS, *adj.* [*glorioſus*, Lat. *glorieux*, Fr.] Boaſtful; proud; haughty; oſtentatious.—They that are *glorious* muſt needs be factious; for all bravery ſtands upon compariſons. *Bacon.*—Noble; illuſtrious; excellent. It is frequently uſed by theological writers, to expreſs the brightneſs of triumphant ſanctity rewarded in heaven.—Let them know that thou art Lord, the only God, and *glorious* over the whole world. *Dan.*

Impartial juſtice holds her equal ſcales,
'Till ſtronger virtue does the weight incline;
If over thee thy *glorious* foe prevails,
He now defends the cauſe that once was thine. *Prior.*

GLO'RIOUSLY, *adv.* Nobly; ſplendidly; illuſtrioufly.—They inſpire with thoſe celeſtial flames which ſhine ſo *glorioufly* in their works. *Dryden.*

Great wits ſometimes may *glorioufly* offend,
And riſe to faults true critics dare not mend. *Pope.*

GLO'RY, *ſ.* [from the Latin word GLORIA.] Of this, Tully gives a juſt definition. He ſays it is "Conſentiens laus bonorum, incorrupta vox benè judicantium de excellente virtute." *Tuſc. Diſp.* "The conſentient praiſe of good men, the unbiaſſed voice of thoſe who judge well concerning ſuperior virtue." Our own divine poet has well diſcriminated real Glory and vain-Glory:

Strength from Truth divided and from Juſt,
Illaudable, nought merits but diſpraiſe
And ignominy, yet to glory aſpires
Vain-glorious, and through infamy ſeeks fame.
Milton's Par. L. vi. 381.

In a figurative ſenſe the word GLORY is applied to a luminous appearance in the ſky. Hence the elegant Tranſlator of the Iliad, improving on his Original, in that fine night-piece at the end of the Eighth Book, ſays, "A Flood of Glory burſts from all the ſkies." *Pope.*

The laborious CRUDEN has collected the various acceptations of GLORY in the Holy Scriptures. There, GLORY, is taken for worldly ſplendour and magnificence, which makes kings glorious before men. MAT. vi. 29. "Solomon IN ALL HIS GLORY," in all his luſtre, and in his richeſt ornaments, was not ſo beautiful as a lily. Thus riches, authority, ſumptuous buildings and garments which men are ready to praiſe, and which makes their poſſeſſion glorious before men, are called in Scripture GLORY. *Pſal.* xlix. 16. "WHEN THE GLORY OF THIS HOUSE IS INCREASED." By GLORY is meant the "tongue," which is that peculiar excellency, wherein chiefly, except reaſon, man ſurpaſſes all other creatures. PSAL. xvi. 9. "MY HEART IS GLAD, AND MY GLORY REJOICETH;" my tongue breaks out into holy boaſtings and praiſes. So in PSAL. c. 1. I will ſing and give praiſe even "WITH MY GLORY." The GLORY of the king of Aſſyria is his ſplendid princes, brave captains, valiant commanders, and powerful armies, which would make a gallant ſhew, and wherein he would glory, and boaſt exceedingly. ISA. viii. 7. "THE LORD BRINGETH UPON THEM THE KING OF ASSYRIA AND ALL HIS GLORY." GLORY is put for the ark of the covenant, which was a glorious type and aſſurance of God's preſence, and the great ſafe-guard and ornament of Iſrael, which they could glory in above all other nations. 1 SAM. iv. 21. The GLORY is departed from Iſrael. *Rom.* ix. 4. "To whom pertaineth the GLORY." GLORY is put for the Church, which GOD makes glorious, not only in his own eyes, but even in the eyes of the World. ISA. iv. 5. "UPON ALL THE GLORY ſhall be a defence;" upon all holy aſſemblies of ſincere Chriſtians. It is put for grace, 2 COR. iii. 18. "We are changed into the ſame image, FROM GLORY TO GLORY." The Apoſtle calls man the image and GLORY of GOD, and for this reaſon he "ought not to cover his head;" that is, ſince God would have the male ſex to be a kind of repreſentation of his glory, majeſty, and power, a man ought not, by hiding his face, wherein theſe things are moſt conſpicuous, to conceal the Glory of GOD ſhining in him. David calls God his GLORY. PSAL. iii. 3. "Thou art my GLORY;" thou art the author of that royal dignity to which I am advanced: or, thou art the matter of my glorying, thou haſt formerly given, and wilt further give me, occaſion of glorying or boaſting of thy power and favour to me. Glory is taken for the unſpeakable bleſſedneſs, joy, and felicity, of the ſaints in heaven. PSAL. lxxiii. 24. "Thou ſhalt guide me with thy counſel, and afterwards receive me to GLORY." God promiſes to be to his Church "a Wall of Fire round about, and the GLORY in the midſt;" ZECH. ii. 5, that he would protect his Church, and that his preſence and power ſhould make her glorious. It is put for the preſence of God, PSAL. lxiii. 2. When the Iſraelites forſook GOD in the Wilderneſs, "they changed their GLORY into the ſimilitude of an Ox that eateth graſs." PSAL. cvi. 20. They changed their glory; that is, their GOD, who was indeed their glory, into the golden image of an ox or calf. Joſhua ſpeaking to Achan ſays, "Give GLORY to God," JOSH. vii. 19. Confeſs the truth, and aſcribe unto God the glory of his omniſcience in knowing thy ſin, and of his juſtice in puniſhing thee according to thy deſert. When God thought fit to call his ſervant Moſes to himſelf, he directed him to go up to Mount Abarim, and die there, NUM. xxvii. 12, &c. Moſes hereupon deſired of God, that he would provide a man who ſhould be ſet over the multitude. The Lord therefore commanded him to take Joſhua the ſon of Nun, ſaying, "He is a man who is filled with the ſpirit, lay thine hand upon him, and give him a charge in the preſence of the multitude, and put ſome of thine honour [in Hebrew, of thy GLORY or SPLENDOUR] upon him." The queſtion is, what GLORY this was, that Moſes communicated to Joſhua. ONKELOS, and ſome of the RABBINS, are of opinion, that Moſes imparted to him ſome of that luſtre which appeared upon his countenance, after the converſation which he had been admitted to with GOD. Moſes, they ſay, ſhined like the ſun, and Joſhua like the moon: this was a weak and borrowed brightneſs. But it is to be underſtood of that authority and empire whereof he ſtood in need for the government of the people. Moſes laid his hands on him, and by this ceremony appointed him for his ſucceſſor in the conduct of the Iſraelites: He gave him his orders and inſtructions, that he might acquit himſelf with honour in this employment.

The GLORY OF GOD.—Moſes earneſtly begged of God to ſhew him his GLORY. EXOD. xxxiii. 18. "I beſeech thee, ſhew me thy GLORY;" that is, the higheſt manifeſtation of thy divine glory that I am capable of; or that glorious ſhape, which, together with an human voice, thou haſt now aſſumed. "The heavens declare the GLORY of GOD." PSAL. xix. 1. The viſible heavens afford matter and occaſion, in reſpect of their vaſt extent, glorious furniture, and powerful influences, to acknowledge and admire the glorious Being, infinite power, wiſdom, and goodneſs, of GOD. "The GLORY of the LORD hath filled the Houſe of the LORD;"

that is, the cloud which was an uſual token of God's glorious preſence. 1 KINGS, viii. 11. Chriſt ſays to Martha, JOHN, xi. 40, "If thou wouldeſt believe, thou ſhouldeſt ſee the GLORY of GOD;" that is, an admirable inſtance of the divine power, in raiſing thy dead brother. The miracles which our Saviour wrought, manifeſted his GLORY, or his divine power, JOHN, ii. 11. "The GLORY of the LORD ſhall be revealed," ISA. xl. 5, that is, the glorious power and goodneſs of God, ſhall be manifeſted in the deliverance of the Jews from Babylon, but more eſpecially in the redemption of all nations by our LORD JESUS CHRIST. "Whether ye eat or drink, or whatſoever ye do, do all to the GLORY of GOD;" 1 COR. x. 31. that is, let the glory and honour of God be habitually and really the chief end of all your actions.

Among military men, the love of glory gives birth to many ſplendid, and ſometimes to uſeful, actions. But, if it be not regulated by principle; if the praiſe of man be all, and the approbation of God and conſcience nothing, may it not frequently impel to actions that are highly criminal? Falſe ideas of glory have made heroes the ſcourges of the human race. Hearts that were formed for benevolence, have, by the love of glory, been hardened to the commiſſion of deeds at which humanity revolts. Murder and devaſtation have been made the inſignia of honour; and the widows' and the orphans' tears have conſtituted the pearls that form the hero's wreath!

To GLO'RY, *v. n.* [*glorior*, Lat.] To boaſt in; to be proud of.—Let them look they *glory* not in miſchief. *Shakeſpeare.*

Thou haſt ſeen Mount Atlas,
While ſtorms and tempeſts thunder on its brow,
And oceans break their billows at its feet,
It ſtands unmov'd, and *glories* in its height. *Addiſon.*

GLO'RYING, *ſ.* [from the participle.] The act of boaſting in any thing; as, Your *glorying* is not good.

GLOS LA FERRIE'RE, a town of France, in the department of the Orne, and chief place of a canton, in the diſtrict of l'Aigle: eight leagues weſt of Evreux, and two north of l'Aigle.

To GLOSE, *v. a.* To flatter; to collogue. *Hanmer.* See *To* GLOZE.

GLOSS, *ſ.* [*gloſe*, Fr. *gloſa*, It. and Sp. *gloſſe*, Germ. *gloſſa*, Lat. γλοσσομα, of γλωσσα, Gr.] A ſcholium; a comment:

If then all ſouls, both good and bad, do teach,
With gen'ral voice, that ſouls can never die;
'Tis not man's flatt'ring *gloſs*, but nature's ſpeech,
Which, like God's oracles, can never lie. *Davies.*

Superficial luſtre. In this ſenſe it ſeems to have another derivation; it has perhaps ſome affinity to *glow*.—Steel *gloſſes* are more reſplendent than plates of braſs. *Bacon.*

Weeds that the wind did toſs
The virgins wore: the youths, woven coats, that caſt
a faint dim *gloſs*. *Chapman.*

An interpretation artfully ſpecious; a ſpecious repreſentation. *This ſenſe ſeems to partake of both the former:*

Poor painters oft with ſilly poets join,
To fill the world with ſtrange but vain conceit;
One brings the ſtuff, the other ſtamps the coin,
Which breeds nought elſe but *gloſſes* of deceit. *Sidney.*

To GLOSS, *v. n.* [*gloſer*, Fr.] To comment:

Thou detain'ſt Briſeis in thy bands,
By prieſtly *gloſſing* on the god's commands. *Dryden.*

To make ſly remarks:

Her equals firſt obſerv'd her growing zeal,
And laughing *gloſs'd*, that Abra ſerv'd ſo well. *Prior.*

To GLOSS, *v. a.* To explain by comment:

In parchment then, large as the fields, he draws,
Aſſurances, big as *gloſs'd* civil laws. *Donne.*

To palliate by ſpecious expoſition or repreſentation.—Is this the paradiſe, in deſcription whereof ſo much *gloſſing* and deceiving eloquence hath been ſpent? *Hooker.*

Do I not reaſon wholly on your conduct;
You have the art to *gloſs* the fouleſt cauſe. *Philips.*

To embelliſh with ſuperficial luſtre:

The ſame ill habits, the ſame follies too,
Gloſs'd over only with a ſaint-like ſhow. *Dryden.*

GLOSSA'GRA, *ſ.* [from γλωσσα, the tongue, and αγρα, Gr. a ſeizure.] A rheumatic pain of the tongue.

GLOS'SARIST, *ſ.* The writer of a gloſſary.—Etymology is ſo clearly not a neceſſary branch of the duty of a *gloſſariſt*, that I truſt I ſhall be eaſily excuſed for not having troubled the reader with longer or more frequent digreſſions of that ſort. *Tyrwhitt.*

GLOS'SARY, *ſ.* [*gloſſarium*, Lat. *gloſſaire*, Fr.] A dictionary of obſcure or antiquated words.

GLOSSA'TOR, *ſ.* [*gloſſateur*, Fr. from *gloſs.*] A writer of gloſſes; a commentator.

GLOS'SER, *ſ.* [*gloſſarius*, Lat.] A ſcholiaſt; a commentator. A poliſher.

GLOS'SINESS, *ſ.* Smooth poliſh; ſuperficial luſtre.

GLOS'SING, *ſ.* [from the *part.*] The act of explaining by a gloſs or comment. *Dryden.*

GLOSSOCAT'OCHUS, *ſ.* [from γλωσσα, the tongue, and καταεχω, Gr. to depreſs.] An inſtrument for preſſing down the tongue. A ſpatula.

GLOSSOCE'LE, *ſ.* [from γλωσσα, the tongue, and κηλη, Gr. a tumour.] An extruſion of the tongue, with ſwelling.

GLOSSOCO'MION, *ſ.* [from γλωσσα, the tongue, and κομεω, Gr. to guard.] This word literally means a caſe for the tongue of a hautboy; and by metaphor a caſe for a fractured limb. In mechanics, a machine for raiſing great weights.

GLOSSOG'RAPHER, *ſ.* [*gloſſographe*, Fr. of *gloſſographus*, Lat. γλωσσογραφος, of γλωσσα, the tongue, and γραφω, Gr. to write.] A ſcholiaſt; a commentator.

GLOSSOG'RAPHY, *ſ.* [γλωσσα, and γραφω, Gr. to deſcribe.] The writing of commentaries.

GLOSS'OMA, *ſ.* [from γλωσσα, Gr. the tongue.] In botany, a genus of the claſs tetrandria, order monogynia, natural order rhamni, *Juſſieu.* The generic characters are—Calyx: perianthium one-leafed, turbinate, four-toothed, ſuperior, permanent. Corolla: petals four, lanceolate, acute, bowed back; nectary a rim round the baſe of the ſtyle. Stamina: filaments four, very ſhort; antheræ oblong, almoſt united into a cylinder, prolonged at the tip into a membranaceous ſtrap or ſcale, gaping on the inſide. Piſtillum: germ inferior; ſtyle filiform, the length of the ſtamens; ſtigmas four, acute. Pericarpium: drupe ſpear-ſhaped, one-celled, crowned with the calyx. Seed: ſingle, ovate, ſtreaked.—*Eſſential Character.* Calyx, turbinate, four-toothed, ſuperior; corolla, four-petalled; antheræ, almoſt united, with a membranaceous ſcale at the end; ſtigmas, four.

Gloſſoma Guianenſis, a ſingle ſpecies. It is a middle-ſized ſhrub, five or ſix feet high, the bark brown, the wood yellow, hard, and compact; branches jointed, four-cornered; leaves oppoſite, cruciate, ſix inches and a half long, and two and a half wide, entire, ſmooth, thick, elliptic, acuminate, on very ſhort petioles. Native of Guiana, and flowering in September. *Votomita* is the vernacular name.

GLOSSOPET'ALUM, *ſ.* [Gr. tongue-petalled; each petal having a ſtrap or tongue at the end.] In botany, a genus of the claſs pentandria, order pentagynia, natural order rhamni, *Juſſieu.* The generic characters are—Calyx: perianthium one-leafed, very ſmall, five-toothed, permanent. Corolla: petals five, lanceolate, ſpreading,

ſpreading, acute; at the tip of each a linear-lanceolate, truncate, ſtrap, nearly the length of the petal, and lying on it. Stamina: filaments five, very ſhort; antheræ roundiſh. Piſtillum: germ roundiſh, ſurrounded by a gland, bearing the petals and ſtamens; ſtyle none; ſtigmas five, acute. Pericarpium: berry roundiſh, five-grooved, one-celled. Seeds: five, angular.—*Eſſential Character.* Calyx, very ſmall, five-toothed; petals, five, with a ſtrap at the tip of each.

Species. 1. Gloſſopetalum glabrum, or ſmooth gloſſopetalum: leaves ſmooth. A tree, the trunk of which riſes to the height of ſixty feet and more, and is from two to three feet in diameter; the bark is ſmooth and grey; the wood white and of a looſe texture; leaves alternate, ſmooth, ſhining, firm, entire, ovate-lanceolate, ending in a long point; the midrib divides them unequally; peduncles ſolitary, axillary, two inches long, bearing many flowers in a ſpherical head; corolla yellow; berry black. Native of Guiana, flowering in November. The natives make canoes of the trunk.

2. Gloſſopetalum hirſutum, or hairy gloſſopetalum: leaves hairy. The trunk of this ſpecies is only from twenty to twenty-five feet in height; the bark is wrinkled, blackiſh marked with white; the leaves are covered with ſhort hairs on both ſides: theſe are uſed againſt inflammations in the eyes; they are bitter, as is alſo the bark. Native of Guiana and Cayenne. *Goupi* is the vernacular name.

GLOS'SY, *adj.* [from *gloſs.*] Shining; ſmoothly poliſhed:

His ſurcoat was a bearſkin on his back;
His hair hung long behind, and *gloſſy* raven black. *Dryd.*

GLOT'TIS, *ſ.* [from γλῶττα, Gr. the tongue.] In anatomy, the narrow ſlit at the upper part of the aſpera arteria, which is covered by the epiglottis when we hold our breath, and when we ſwallow. The glottis, by its dilatation and contraction, modulates the voice.

GLOU'CESTER, the metropolis of Glouceſterſhire, called by the ancient Britons *Caerglow*, the Fair City, from its fine and gently elevated ſituation; by the Romans it was named *Clevum*, or *Glevum*, to which the Saxons, according to their cuſtom, added *Ceſter*, which ſignifies a caſtle or fortification, and thus called it *Gleavceſter*, whence its preſent name. Leland ſays, that in his time it was a large place, well built with timber, and defended with ſtrong walls, except on the ſouth ſide, where it is waſhed by the Severn, over which noble river it has a good ſtone bridge. This city is allowed by all antiquarians to have been a Roman ſtation; and Camden ſays that the famous Roman way called *Ermin-ſtreet*, which begins at St. David's in Pembrokeſhire, and reaches to Wincheſter and Southampton, paſſes through Glouceſter. After the Saxon heptarchy, it continued to be a place of conſiderable note; and a little before the Norman conqueſt, Breicktric, a Saxon, was lord of Glouceſter; but, refuſing to marry Maud, who became the conſort of William the Conqueror, ſhe cauſed him to be impriſoned, and his eſtate ſeized by the crown. Afterwards it was given by Rufus to Robert Fitz Hamon, lord of Corbaille in Normandy. It has ſuffered conſiderably by fire at different periods: its abbey was burnt down in 1102, and again in 1122. It ſtands upon a hill; and from the middle of the city, where the four principal ſtreets meet, there is a deſcent every way, which keeps it not only clean and healthy, but adds to the beauty of the place. Henry VIII. made it the ſee of a biſhop, with a dean and ſix prebends. Its caſtle, which was erected in the time of William the Conqueror, is very much decayed: part of it is leaſed out by the crown; and part has been converted into a ſpacious county gaol.

King John, in the firſt year of his reign, made it a borough-town, and Henry III. erected it into a corporation. It was beſieged and taken in four days by the barons, in the reign of the laſt-mentioned king. It was, however, ſoon retaken by his ſon, who pardoned the burgeſſes upon their paying a thouſand marks. In 1272, Edward I. held a parliament here, in which ſome uſeful laws were made, now called the Statutes of Glouceſter. Richard II. held a parliament here alſo; and Richard III. in conſequence of bearing the title of duke of Glouceſter before he obtained the crown, added the two adjacent hundreds of Dudſton and King's Barton to it, gave it his ſword and cap of maintenance, and made it a county of itſelf, by the name of "the county of the city of Glouceſter;" but, after the reſtoration, the hundreds were taken away by act of parliament, and the walls of the city razed, becauſe the inhabitants had ſhut the gates, in 1643, againſt Charles I. by whom it was beſieged. The city had once eleven pariſh churches; but, ſix being demoliſhed in 1643, there only now remain five, and the cathedral. This city gives the title of duke to his royal highneſs William Henry, nephew of George III.

This large and populous city is delightfully ſituated on the banks of the Severn. It was formerly famous for its iron forges (even ſo early as the time of William the Conqueror); but thoſe have long ceaſed: its chief trade, at preſent, conſiſts in pin-making, which is carried on to a very great extent; wool-ſtapling, malting, and rope-making. The ſtreets are ſpacious, and well paved and lighted; its boundaries are about three miles in circumference.

The cathedral of Glouceſter is juſtly admired as one of the fineſt pieces of Gothic architecture in England. Aldred biſhop of Worceſter, in 1047, and afterwards archbiſhop of York, who crowned William the Conqueror, built and decorated it about the year 1060. Abbot Horton, in 1551, added the north aiſle, and a great hall in which the parliament was afterwards held, and which is now a library. In 1381, abbot Troceſter began the building of the large cloiſter; and abbot Seabrook began the ſtately tower, and appointed Robert Tull, a monk of this church, to take care of the finiſhing it, who afterwards was conſecrated biſhop of St. David's in 1450. This appears by two verſes written in the choir, over the arch of the tower:

Hoc quod digeſtum ſpecularis opuſque politum
Tulhi hæc ex onere, Seabrooke abbate jubente.

Abbot Hanley, in 1457, laid the foundation of the Virgin Mary's chapel. Abbot Parker was the laſt abbot; in whoſe time the abbey was reſigned to Henry VIII. by the prior, and not by the abbot. The abbey-church was then made a cathedral, in the year 1541, by Henry VIII. who appointed John Wakeman, abbot of Tewkeſbury, to be its firſt biſhop. Abbot Morewent, in 1419, built the frontiſpiece at the weſt end entirely from the ground. The following are the dimenſions of the cathedral as it now ſtands:—The Virgin Mary's chapel, in length ninety feet, in breadth twenty-ſeven, and in height ſixty-ſix feet. The choir is one hundred and forty-one feet in length, thirty-ſeven and a half in breadth, and in height eighty-five feet. The great window at the end of the choir is eighty-three feet high. The body of the church in length is one hundred and ſeventy-one feet nine inches, in breadth eighty-five feet, in height ſeventy-one feet. The length of the whole is four hundred and forty-four feet eight inches. Each aiſle in the large cloiſter (which contains four) is in length one hundred and forty-ſeven feet, in breadth thirteen, in height ſixteen feet and a half; and always kept locked up, unleſs in the time of divine ſervice. There is alſo a ſmaller cloiſter, which is inhabited, and contains four aiſles, and a paſſage for people to paſs through. There is a place called the Whiſpering-gallery, and very remarkable: it is a long alley from one

ſide

ſide of the choir to the other, built circular, and contains in length eighty-four feet. The voice is heard from one ſide to the other, if a perſon ſpeaks ever ſo low; as in the whiſpering gallery of St. Paul's, London. The church on the outſide is in height eighty-five feet and a half. The tower to the battlements is one hundred and ninety-eight feet high, and from the battlements to the top of the pinnacles twenty-four feet. From the bottom to the top of the tower is two hundred and eighty feet. The great bell in the tower weighs ſix thouſand pounds, and requires eight men to ring it. There is beſides a fine peal of eight bells.

Edward II. ſurnamed the Martyr, and who was murdered at Berkeley Caſtle in 1327, lies in this cathedral, in an alabaſter tomb. Out of the abundance of pious offerings to his remains, the religious built the choir; and ſo great was the number of votaries to his ſhrine, for ſome time after his death, that they could hardly find room in the town. King Oſric of Northumberland, who died about the year 600, and Robert Curthoſe duke of Normandy, eldeſt ſon to William the Conqueror, who died in 1134 at Cardiff Caſtle in Wales, were likewiſe interred here. In the chapter-houſe lies Strongbow, who conquered Ireland. The cloiſters are exquiſitely beautiful, done in the ſtyle of the chapel of King's college, Cambridge.

In the city, beſides the churches, are ſeveral meeting-houſes for the different ſects of proteſtant diſſenters. The college-ſchool is in high reputation; alſo Cript ſchool. There is likewiſe a charity-ſchool well endowed for freemen's ſons; and ſeveral private ſchools in good eſtimation. The hoſpital of St. Bartholomew, founded in the reign of queen Elizabeth, for decayed men and women, is liberally endowed, and has been recently rebuilt, in a handſome ſtyle, by the ſpirited conduct of the corporation, who generouſly gave up their cuſtomary entertainments to defray the expence, and to render the habitation of old age wholeſome and comfortable: an example highly deſerving the imitation of other corporate bodies. There are alſo two alms-houſes, under the direction of the corporation, in the vicinity of the city. The poor are provided for in a general workhouſe, incorporated by act of parliament, under the management of guardians annually choſen by the ſeveral pariſhes. Two commodious market-houſes have been lately built; as alſo an elegant theatre. In ſhort, for beauty of ſituation, ſalubrity of air, goodneſs of markets, general and internal regulations of order and cleanlineſs, Glouceſter yields to no city in the kingdom.

Here are conſiderable ruins of the abbeys of black and white friars; and of a monaſtery, founded as early as the year 710. A mile or two diſtant is Robin Hood's Hill; and contiguous to the city ſtands the county infirmary, built and ſupported by voluntary contributions.

Glouceſter has ſent repreſentatives to parliament from the twenty-third year of Edward I. and the government of the city, by charter from Charles I. is veſted in a mayor, high-ſteward, recorder, twelve aldermen, a town-clerk, two ſheriffs, common-council, treaſurer, chamberlain, ſword-bearer, and other inferior officers. According to ſir Robert Atkins's Hiſtory of Glouceſterſhire, this city was incorporated by Henry III. when he was crowned there. It was then governed by a mayor, aldermen, &c. But the inhabitants reſigning their charter, in 1672, to Charles II. he granted them another in the twenty-fourth year of his reign, by which the city and county is now governed. For the better regulating the trade of the city, there are twelve companies, whoſe maſters attend the mayor in their gowns, on all public occaſions; theſe are the mercers, in which are included the apothecaries, grocers, and chandlers; the weavers, the tanners, the butchers, the bakers, the ſmiths and hammer-men, among whom are the goldſmiths, ironmongers, coopers, and joiners; the ſhoemakers, metal-men, tailors, barbers, and glovers. The right of election is in the inhabitants and freemen. The number of voters three thouſand. Returning-officers the ſheriffs.

Glouceſter is diſtant from London one hundred and two miles, Oxford forty-ſix, Bath forty-one, Briſtol thirty-four, Hereford thirty, Worceſter twenty-ſix, and Cheltenham ten. The great roads from London to South Wales, and from the weſt to the north of England, paſs through the city. Here are plentiful markets on Wedneſdays and Saturdays; alſo four large annual fairs, on April 5, July 5, September 28 and 29, and November 28.

The navigable canal from Hereford to the river Severn, a few miles from the city of Glouceſter, is of great advantage to the two counties through which it paſſes; as well as to the trade of thoſe two opulent cities.—A vein of coal has been diſcovered near Newent, of a good quality, and of conſiderable extent. Coals are alſo found in the foreſt of Dean, and near Sudbury; but the city and a conſiderable part of the county of Glouceſter is ſupplied, by means of the Severn, with coal from the Staffordſhire and Shropſhire collieries.

At the diſtance of about half a mile from Glouceſter, are ſome remarkable ruins of a priory, ſituated in a deep ſolitary vale, encompaſſed with rocks which almoſt exclude the mid-day ſun, and was built by St. David, who there lived the life of a hermit, in the reign of Henry I. The remains of the priory are now converted into a farm-houſe and its offices, which are very extenſive. On a hill in this vicinity, are found thoſe ſtones called *aſtroites*, or ſtar-ſtones, about the ſize of a ſilver penny, as thick as a half-crown, and, when put into vinegar, they have a peculiar kind of motion. In the little iſle of Alney, near Glouceſter, the famous ſingle combat was fought between Edmund Ironſide and Canute the Dane, for the whole kingdom, in ſight of both their armies.

The GLOUCESTER MINERAL WATER is now drunk for various diſeaſes with ſingular ſucceſs; and ſince it has been analized by Dr. Hemming, its efficacy has been more generally admitted. Dr. Hemming has ſhewn by his experiments, publiſhed in 1789, that each gallon of this water contains,

Of fixed air, or acidulated gas, by meaſure,	72 ounces,
Calcareous earth combined with the ſame,	30 grains,
Aerated magneſia,	24 grains,
Aerated iron,	8 grains,
Epſom ſalt,	30 grains.

As an anſwer to objections which might be urged againſt the efficacy of the waters, on account of the ſmall proportion of iron contained in it, the author quotes the opinion of Dr. Cullen: "Mineral waters often produce cures which we in vain attempt to perform by the combinations in our ſhops, even although theſe waters contain nothing but iron. This is manifeſtly owing to the weakneſs of the doſe; in proof of which we find, that the ſtrongly impregnated waters ſeldom anſwer ſo well as thoſe weak ones we commonly reject."

GLOU'CESTER, a county of the American States, in New Jerſey, bounded north by Burlington county; ſouth by Salem, Cumberland, and Cape May counties; eaſt by the Atlantic Ocean; and weſt by Delaware river. Its length on the Delaware is about thirty miles, and on the ſea the line is about twenty-two miles. Great and Little Egg harbour rivers are both navigable for veſſels of two hundred tons about twenty miles from their mouths. The ſtreams which fall into Delaware river are navigable for ſmall veſſels, a few miles up from their mouths, and afford ſome ſhad, rock, herrings, and perch. The adjacent iſlands are Red Bank, Pett, and Old Man's Creek, Iſlands: the firſt of which is famous in the hiſtory of the American war, for the deſ-

perate defence the garriſon upon it made, to prevent the Britiſh fleet from paſſing up to Philadelphia. The ſoil of this county is a mixture of ſand and loam, and the tract bordering on the Delaware is in a high ſtate of cultivation. The chief productions are beef, pork, fiſh, hay, corn, lumber, butter, cheeſe, &c. It is divided into ten townſhips, viz. Woodbury, Waterford, Newtown, Glouceſter Townſhip, Glouceſter Town, Deptford, Greenwich, Woolwich, Egg Harbour, and Galloway. The firſt eight lie along the Delaware, and the other two on the ocean. Mulicus river divides this county from Burlington, and is navigable twenty miles for veſſels of ſixty tons. Maurice river riſes here, runs ſoutherly about forty miles through Cumberland county into Delaware bay, is navigable for veſſels of one hundred tons fifteen miles, and for ſhallops ten miles farther. It contains 13,172 inhabitants. There are found in this county quantities of bog iron ore, which is manufactured into pig and bar iron, and hollow ware. Here is alſo a glaſs manufactory. Chief town, Woodbury, nine miles ſouth of Philadelphia.

GLOU'CESTER, a county of the American States, in Virginia, remarkably fertile, and well cultivated, bounded north by Piankitank river, which ſeparates it from Middleſex; eaſt by Matthews county, and Cheſapeak Bay; north-weſt by King and Queen; ſouth and ſouth-weſt by York river, which divides it from York county. It is about fifty-five miles in length, and thirty in breadth, and contains 13,498 inhabitants. The low lands here produce excellent barley, and Indian corn, which is the ſtaple produce of the county.

GLOU'CESTER, or CAPE ANN, a townſhip of the American States, in Eſſex county, Maſſachuſetts, whoſe eaſt point forms the north ſide of the Bay of Maſſachuſetts. It contains 5317 inhabitants, and is divided into five pariſhes, and has beſides a ſociety of Univerſaliſts. It is a poſt-town, and port of entry. The harbour is very open, and acceſſible to large ſhips; and is one of the moſt conſiderable fiſhing towns in the commonwealth. At the harbour are fitted out annually from ſixty to ſeventy bankers; and from Squam and Sandy Bay, two ſmall out-ports, the bay fiſhery is carried on with great ſpirit, and to a large amount. The exports for one year, ending Sept. 30, 1794, amounted in value to 229,613 dollars. Thatcher's iſland, on which are two lights of equal height, lies cloſe to the ſouth-eaſt ſide of the townſhip, which is itſelf joined to the continent by a beach of ſand which is very rarely overflowed by the water. There is a very fine white ſand here fit for making glaſs. The harbour is defended by a battery and citadel, erected in 1795: ſixteen miles north-eaſt by eaſt of Salem, and thirty-four north-eaſt of Boſton.

GLOU'CESTER, a townſhip of the American States, and the largeſt, in Providence county, Rhode Iſland, having Connecticut on the weſt, and Maſſachuſetts on the north; and contains 4025 inhabitants.

GLOU'CESTER, a ſmall town in Glouceſter county, New Jerſey, on the eaſt ſide of Delaware river, three miles below Philadelphia. It was formerly the county town, but has now ſcarcely the appearance of a village.

GLOU'CESTER, a poſt-town of the American States, in Virginia, ſituated in the county of its own name, on a point of land on the north ſide of York River, partly oppoſite York Town, and about ſeventeen miles diſtant.

GLOU'CESTER, in the territory of the Hudſon's Bay company, is ſituated on the north ſide of Muſquacobaſton Lake, one hundred and twenty miles weſt of Oſnaburgh. Lat. 51. 24. N. lon. 86. 59. W.

GLOU'CESTER ISLAND, an iſland in the South Pacific Ocean, about two leagues long, and a mile wide, ſurrounded with rocks, againſt which the ſea beats with great violence. It is inhabited, and the men appeared armed with long pikes or poles. Lat. 19. 15. S. lon. 140. 4. W. Greenwich.

GLOU'CESTER ISLANDS, two iſlands in the South Pacific Ocean. One, lat. 20. 38. S. lon. 146. W. Greenwich. The other, lat. 20. 34. S. lon. 146. 15. W. Greenwich.

GLOU'CESTERSHIRE, an inland county of England, bounded on the north by Worceſterſhire and Warwickſhire; on the eaſt by Oxfordſhire; on the ſouth by Wiltſhire and Somerſetſhire; and on the weſt by Monmouthſhire, the Briſtol Channel, and Herefordſhire. It lies in the province of Canterbury, the dioceſe of its own name, and is included in the Oxford circuit. It contains one thouſand three hundred ſquare miles, or eight hundred and thirty-two thouſand acres, being ſixty-three miles long, forty-ſeven broad, and two hundred and ſixty miles in circumference; compriſing thirty hundreds, and two hundred and eighty pariſhes.

The county is divided into two unequal parts by the Severn, which, entering Glouceſterſhire a little above Tewkeſbury, and joined by the current of the Avon, haſtens to diffuſe fertility over the ſpacious vale through which it flows. The lower part of its weſtern boundary, remarkable for the pictureſque ſcenery of its borders, is formed by the Wye, which, reaching this county a little below Roſs in Herefordſhire, ſeparates it for the reſt of its progreſs from the county of Monmouth. Its ſouth-weſtern extremity is divided from Somerſetſhire by the Lower Avon, which, though unequal to the Warwickſhire Avon in the beauty of its ſtream, runs between more romantic banks, and forces its paſſage to the ſea, through St. Vincent's rocks, below the city of Briſtol, a conſiderable part of which lies in Glouceſterſhire, though, as a county of itſelf, it is governed by its own magiſtrates. The tides from St. George's Channel, meeting with the powerful tides from the Atlantic, enter the mouths of the Severn and its tributary ſtreams with a rapid influx; and, rolling on with a lofty head, received from our earlieſt hiſtorians the name of the *Hydra*.

Thus Glouceſterſhire ſeems naturally divided into three longitudinal ſtripes, or diſtricts, which in many reſpects differ materially from each other. The eaſtern ſtripe, which is much the wideſt, is called the *Cotſwold*. This is a long tract of elevated ground, for the moſt part bleak and bare, yet affording in many places a ſhort fine graſs for paſturage, and a moſt clear and ſalubrious air. The ſides of this long range are extremely beautiful as they ſink into the vale, extending from the hills of Stinchcomb and Nibley in the ſouth, to that of Bredon in the north. The middle ſtripe is the ſpacious and extenſive vale bordering on the Severn, whoſe fertile paſtures maintain a great abundance of fine cattle; and furniſh the kingdom with that excellent cheeſe for which the county is juſtly famous. This vale, communicating with that of Eveſham of more contracted dimenſions, has received, for no aſſignable reaſon, the ſame general title. The weſtern ſtripe, which is by much the ſhorteſt diſtrict, is wholly varied with hill and dale; and is chiefly occupied by the foreſt of Deane, once reckoned the chief ſupport of the Engliſh navy, and which it is ſaid the Spaniſh armada was expreſsly commiſſioned to deſtroy. The foreſt is now thinned of its oak by frequency of felling, and narrowed by increaſe of cultivation; but a few ſolitary deer ſtill continue to run wild in its receſſes.

The ſoil differs much in different parts. On the Cotſwold hills it is in general loamy, with ſtones; the earth ſhallow, ſeldom allowing the plough to enter more than four or five inches, beneath which is generally a kind of limeſtone. In ſome places the land is ſtiff and ſour. About Fairford and Cirenceſter the ſoil is richer and deeper. The farms in general are large; great quantities of ſheep are fed here, formerly cele-

brated for the fineneſs of their wool, and the ſmallneſs of their fleece; and hence the county became ſo celebrious for its manufactures of ſuperfine broad cloth. It is not improbable that the fine-woolled ſheep of Spain might originally have been procured from Cotſwold, ſent over by Richard I. or Edward I. This breed of ſheep has been changed for others of a larger kind, which produce a larger fleece of coarſer wool. The vale about the city of Glouceſter contains excellent meadow and paſture land. Towards Tewkeſbury the ſoil is a ſandy loam, rich and deep, chiefly employed in grazing and dairying. Mines of coal abound in Kingſwood and the neighbourhood of Briſtol, and mines of iron in the foreſt of Deane.

The rivers of Glouceſterſhire are the Severn, Wye, Coln, Chern, Stroud, eminent for dying ſcarlet, Iſis, Avon, Frome, Swiliate, Caron, Windruſh, Evendole, Leven, Lache, Iſbourne, Chilt, Badgworth, Evelm, Berkeley, and Trim. In the river Severn ſtand the iſles of Condicote, and the Alney. The moſt noted places are Kingroad and the Pill, St. Vincent's Rocks, Cotſwold Hills, four hundred and fifty yards above the Severn, Deane and Kingſwood foreſts, Mycklewood chace, and Croſs wood. Its product is coal and iron, cattle, ſheep, excellent wool, corn, timber, ſalmon, and other river fiſh. Its manufactures, beſides its excellent cheeſe, are ſtockings, muſtard balls, men's hats, leather, pins, paper, iron ware, tinned plates, braſs, ſteel, &c. But the chief trade of this county is its broad-cloth manufactory, which gives employment to many thouſands of people, and is a ſource of national wealth of the higheſt importance.—The chief iron-works in the county are at Flaxley, Lidney, Lidbrook, and Redbrook, all of which are contiguous to the foreſt of Deane. A capital ſteel and iron wire-work is carried on at Froombridge, eight miles from Glouceſter, on the Briſtol road; and at Framilode, in the ſame neighbourhood, is a tin-plate manufactory. Great quantities of cider are made in the villages on the banks of the Severn, a kind of which, called Styre cider, is almoſt peculiar to the weſtern banks of that river.

Beſides the city of Glouceſter, the principal towns are Cirenceſter, Tewkeſbury, Berkeley, Camden, Durſley, Newnham, Marſhfield, Deane, Painſwick, Tetbury, Cheltenham, Hampton or Minching-Hampton, Fairford, Sudbury, Wotton-Underedge, Lechlade, Wickware, Winchcomb, Stroud, Colford, Newent, Stow on the Wold, Morton, Northleach, Thornbury, and Stanley. There are mineral waters of well-known celebrity at Cheltenham; at Glouceſter; at Barrow and Moreden near Bodington; at Aſh-church near Tewkeſbury; at Dumbleton near Winchcomb; at Eaſington near Durſley; beſides thoſe of Briſtol Wells near Clifton. A fine ſpring alſo riſes out of a rock in the foreſt of Deane, which runs through a conſiderable part of it; and after ſupplying ſeveral mills, and three iron forges, empties itſelf into the river Severn at Weſtbury. This ſpring, near its ſource, having paſſed through a ſmall grove, falls into a ſquare baſon, made to receive it, about five feet deep, and large enough for a perſon to bathe in, with ſteps on one ſide. The baſon is called St. Anthony's well; and the water, which is extremely cold, is much celebrated in all the adjacent country, as a certain remedy for cutaneous diſorders of every kind. Ralph Bigland, eſq. late garter principal king of arms, in his Hiſtory of Glouceſterſhire lately publiſhed, ſays that "this mineral ſpring has been known to cure a cutaneous leproſy, even by a few times bathing." Eight members are returned to the Britiſh parliament, viz. for the county, Glouceſter, Cirenceſter, and Tewkeſbury, two each.

GLOVE, *ſ.* [gloꝛe, Sax. *klaffue*, Dan. to divide.] Cover of the hand.—Stat. 6 Geo. III. c. 19, reſtrains the importation and ſale of foreign gloves and mitts; and one ſection of the ſtat. 25 Geo. III. c. 55. alſo reſtrains the importation of foreign leather not completely made into gloves, but cut into ſhapes, or tranks. By this latter act a ſtamp duty was impoſed on gloves ſold, which is now repealed.

To GLOVE, *v. a.* To cover as with a glove:

A ſcaly gauntlet now, with joints of ſteel,
Muſt *glove* this hand. *Shakeſpeare.*

GLOVE-SILVER, *ſ.* Money cuſtomarily given to ſervants to buy them gloves, as an encouragement for their labours.—*Glove-money* has been alſo applied to extraordinary rewards given to officers of courts, &c. It is now given on the circuits, by the barriſters, and by juſtices of the peace, when called over in court, to the judges' crier.

GLOV'ER, *ſ.* One whoſe trade is to make or ſell gloves.—Does he not wear a great round beard, like a *glover's* paring knife? *Shakeſpeare.*

GLOV'ERS' COMPANY, one of the chartered companies of the city of London. They were incorporated a maſter, four wardens, and aſſiſtants not exceeding twenty-four; and the livery are one hundred and twenty. Their arms party per feſs ſable and argent, a pale counterchanged on every piece of the firſt, a ram ſpringant of the ſecond. Their hall is in Beech-lane.

GLOV'ER (Richard), an Engliſh poet, the ſon of a Hamburgh merchant in London, born in 1712. He received a claſſical education at Cheam; and though it was followed by no academical ſtudies, his mind became permanently imbued with a taſte for the learning of antiquity. He had alſo imbibed an attachment to ſcience, as appeared from a copy of verſes "To the Memory of Sir Iſaac Newton," written when he was only ſixteen, which had merit enough to be prefixed to the View of Sir Iſaac Newton's Philoſophy, publiſhed by Dr. Pemberton in 1728. Theſe attachments, however, did not prevent him from engaging in commercial purſuits, and he became eminent in the mercantile walk to which his father introduced him. Yet he was at the ſame time known to his intimates as a votary of elegant literature; and Green, in his poem of the Spleen, written before 1737, alludes to Glover as a youth deſtined to ſhine in the higher departments of poetry. In 1737 he married a lady with a handſome fortune; and in the ſame year he publiſhed his epic poem of Leonidas. This was a period particularly favourable to thoſe writings which were formed upon high notions of liberty. While the crown and miniſtry were obliged from peculiar circumſtances to favour popular principles of government, the oppoſition, compoſed of an union of parties, headed by Frederic prince of Wales, made uſe of the ſame principles to promote a jealouſy of exiſting power. They likewiſe endeavoured to combat the pacific policy of Walpole, by exciting a martial ſpirit in the people, and inculcating the loftieſt ideas of the national rights. Glover had already formed connections with this party; and his poem, founded upon the patriotic ſtruggles of free Greece againſt Aſiatic deſpotiſm, was admirably calculated to ſerve a generous cauſe. It therefore received the higheſt commendations from Lyttleton and other writers on that ſide, and was ſoon puſhed through ſeveral editions. Leonidas is certainly no mean performance. It abounds in noble ſentiments, and is conſiderably varied by incident and deſcription.

His poem of London, or the Progreſs of Commerce, publiſhed in 1739, is ſcarcely equal to what the ſubject might afford, being cramped by the temporary purpoſe of rouſing a ſpirit of hoſtility againſt the Spaniards. This end, together with that of throwing reproach on the miniſtry, was more effectually anſwered by his ballad of Hoſier's Ghoſt, publiſhed the ſame year, which became very popular, and is ſtill conſpicuous among the national ſongs. As Glover poſſeſſed talents not only

Neele, sculp. Strand.

GLOCESTERSHIRE.

London, Published as the Act directs, August 10th 1805 by J. Wilkes.

only for the productions of the closet, but for public life, we find him at this period entering warmly into the politics of the city. Such was the credit he gained for the extent of his information, that he was appointed by the London merchants to conduct an application to parliament, complaining of the neglect with which their trade had been treated. The speech which he pronounced at the bar of the house of commons on this subject in January, 1742, was much admired, and appeared from the press. Yet, in 1751, he was an unsuccessful candidate for the office of chamberlain of the city of London. In his retirement he wrote the tragedy of Boadicea, acted at Drury-lane in 1753. It ran its nine nights, but is ranked among those numerous performances of the kind which are better fitted for the closet than the stage. In 1761 he published Medea, a tragedy imitated from those of Euripides and Seneca; which was acted with applause. He now returned into public life, and sat as member for Weymouth in the parliament of 1761. Advancing years at length admonished him to retire; and in the bosom of domestic life, which he adorned and dignified by his virtues and accomplishments, he died in November, 1785, at the age of seventy-three. In the last edition of his Leonidas, he introduced great additions, and had extended the work from nine books to twelve; but he was not able to revive its popularity. Still attached to the theme, he composed another poem as its sequel, entitled, The Athenaid, relating in thirty books the series of wars between the Greeks and Persians, which, with poetical licence, he regards as vengeance for the death of Leonidas. This was printed in 1788, in 3 vols. 12mo. but seems totally to have failed in engaging the public notice. He wrote a sequel to his Medea; but it required such a magnificence of decoration, that it was never ventured at upon the stage.

GLOV'ER, a township of the American States, in Vermont, in Orleans county, north-east of Craftsborough.

GLOV'ERESS, *f.* A woman employed in making or selling gloves.

GLOV'ERS-STITCH, *f.* In surgery, a particular method of sewing up a wound; being the upward stitch used in making gloves.

To GLOUT, *v. n.* To pout; to look sullen. *A low word:*

Glouting with sullen spight, the fury shook
Her clotted locks, and blasted with each look. *Garth.*

To GLOW, *v. n.* [ȝlopan, Sax. *gloeyen*, Dut.] To be heated so as to shine without flame:

Not all parts like, but all alike inform'd,
With radiant light, as *glowing* iron with fire. *Milton.*

To burn with vehement heat:

How op'ning heav'ns their happy regions show,
And yawning gulphs with flaming vengeance *glow. Smith.*

To feel heat of body.—The cord slides swiftly through his *glowing* hands. *Gay.*—To exhibit a strong bright colour.—Clearer stars *glow* round the frozen pole. *Pope.*

From the mingled strength of shade and light,
A new creation rises to my sight;
Such heav'nly figures from his pencil flow,
So warm with life his blended colours *glow. Addison.*

To feel passion of mind, or activity of fancy:

Let the gay conscience of a life well spent
Calm ev'ry thought, inspirit ev'ry grace,
Glow in thy heart, and smile upon thy face. *Pope.*

To rage or burn as a passion:

A fire which every windy passion blows;
With pride it mounts, and with revenge it *glows. Dryden.*

To GLOW, *v. a.* To make hot so as to shine. *Not in use.*

On each side her
Stood pretty dimpled boys, like smiling Cupids,
With divers colour'd fans, whose wind did seem
To *glow* the delicate cheeks which they did cool.
Shakespeare.

GLOW, *f.* Shining heat. Vehemence of passion. Brightness or vividness of colour.—The red *glow* of scorn and proud disdain. *Shakespeare.*

A waving *glow* his bloomy beds display,
Blushing in bright diversities of day. *Pope.*

GLOW'-WORM, *f.* A small creeping grub with a luminous tail; for the natural history of which see the article LAMPYRIS.—A great light drowneth a smaller that it cannot be seen; as the sun that of a *glow-worm. Bacon.*

The man, who first upon the ground
A *glow-worm* spy'd, supposing he had found
A moving diamond, a breathing stone;
For life it had, and like those jewels shone:
He held it dear, 'till by the springing day
Inform'd, he threw the worthless worm away. *Waller.*

GLOXIN'IA, *f.* [so named by l'Heritier, in memory of *B. P. Gloxin*, of Colmar, author of *Observationes Botanicæ*, 1785.] In botany, a genus of the class didynamia, order angiospermia, natural order of personatæ, (campanulaceæ, *Juss.*) The generic characters are—Calyx: perianthium superior, five-leaved; leaflets equal, lanceolate, serrulate at the tip, the three upper ones nerved, the two lower bent down with the nectary, permanent. Corolla: monopetalous, irregularly campanulate; tube scarcely any; border oblique, five-cleft, segments roundish, the four upper spreading and entire, the lowest straight, concave, toothed. Stamina: filaments four, with the rudiment of a fifth, two scarcely shorter, inserted into the receptacle, fastened to the lower margin of the corolla, sickled, pubescent, converging laterally above; antheræ ovate, two-celled, peltate, united within the opening of the corolla. Pistillum: germ inferior, turbinate, striated; style filiform, the length of the stamens; stigma capitate, the length of the antheræ. Pericarpium: capsule one-celled (or half-celled); receptacles two, opposite, two-parted, fastened to the sides of the capsule by the partition. Seeds: very numerous, inserted into the receptacles.—*Essential Character.* Calyx superior, five-leaved; corolla bell-shaped, with the border oblique; filaments with the rudiment of a fifth, inserted into the receptacle.

Gloxinia maculata, or spotted gloxinia, the only species. Root perennial, thick, fleshy, divided into knots, which are scaly, somewhat like those of tooth-wort. Stems several, about a foot high, thick, succulent, purplish. Leaves oblong, thick, sessile, serrate, rough on their upper side, where they are of a dark green, but their under side is purplish. Stem terminated by a short spike of blue flowers. Native of South America, where it was discovered about Carthagena by Mr. Robert Millar, who sent the seeds to Europe. Mr. Philip Miller cultivated it in 1739.

Propagation and Culture.—This plant must be constantly preserved in the stove, and plunged into the bark-bed. During the winter season, much water will rot the roots. In the middle of March, just before it begins to shoot, the roots may be parted, and transplanted into middle-sized pots, filled with rich light earth, and plunged into the bark-bed, which should then be renewed with fresh tan. When the plants come up, they must be frequently refreshed with water in small quantities; and, as the season becomes warmer, a large share of fresh air should be admitted. They should not be placed where they are over-hung or shaded by other plants; nor should they be shifted or transplanted when they are in leaf, for that will prevent their flowering. Since this plant increases very fast by the roots, there is no necessity for using other methods to propagate it; otherwise the shoots of the young stalks will take root, if they are planted in pots

pots filled with light earth, and plunged into a hot-bed, during any of the ſummer months.

To GLOZE, *v. n.* [gleran, Sax.] To flatter; to wheedle; to inſinuate; to fawn:

So *gloz'd* the tempter, and his proem tun'd:
Into the heart of Eve his words made way. *Milton.*

Now for a *glozing* ſpeech,
Fair proteſtations, ſpecious marks of friendſhip. *Philips.*

To comment. This ſhould be *gloſs*:

Which Salique land the French unjuſtly *gloze*
To be the realm of France. *Shakeſpeare.*

GLOZE, *ſ.* Flattery; inſinuation.—Now to plain dealing; lay theſe *glozes* by. *Shakeſpeare.*—Specious ſhow; gloſs. *Not uſed.*

Precious couches full oft are ſhaked with a fever;
If then a bodily evil in a bodily *gloze* be not hidden,
Shall ſuch morning dews be an eaſe to the heat of a lover's fire? *Sidney.*

GLO'ZER, *ſ.* A flatterer.

GLUBOKAI'A, a town of Ruſſia, in the government of Kolivan: ſeventy-two miles eaſt of Semipolatnoi.

GLUCHOV', a town of Ruſſia, in the government of Novgorod Sieverſkoi: forty miles eaſt-ſouth-eaſt of Novgorod Sieverſkoi.

GLU'CINE, *ſ.* in mineralogy, a new ſpecies of earth lately diſcovered by profeſſor Vauquelin, for which ſee MINERALOGY.

GLUCK (Chriſtopher), a very eminent muſical compoſer, born in 1714, in the Upper Palatinate, on the borders of Bohemia. At an early age he learned the rudiments of muſic at Prague, and acquired a facility in playing upon various inſtruments. He then made a tour to Italy, and brought out his firſt opera at Milan. In 1745 he paid a viſit to England, where the opera-houſe, which had been ſhut on account of the rebellion, was re-opened at the beginning of 1746, with his *Caduta de' Giganti*. He produced ſeveral other pieces in this country, which he at length quitted for Germany, and fixed his principal reſidence at Vienna. He there attained a reputation which placed him nearly at the head of his profeſſion, though his ſtyle was peculiar, and did not ſuit all taſtes. Gluck aimed at ſimplifying muſic; and (ſays Dr. Burney) with unbounded invention and powers for creating capricious difficulties, and decking his melodies with meretricious ornaments, he tries all he can to keep his muſe chaſte and ſober; his three operas of *Orfeo*, *Alceſte*, and *Paride*, are proofs of this. An acquaintance which he formed at Vienna with the French poet Bailli de Roulet, for whom he ſet to muſic his opera of *Iphigenie en Aulide*, drew him to Paris in 1774, where his arrival proved a remarkable era in the muſical annals of that capital. After furniſhing the French opera with a number of compoſitions, his infirmities warned him to retire, and he ended his days at Vienna, being carried off by a fit of apoplexy in November 1787. He was a writer as well as a compoſer. His Letters on Muſic were publiſhed in the Mercure de France and the Gazette de Literature; and, together with the Dedications and Prefaces to his works, were publiſhed collectively at Paris in 1781.

GLUCK'SBURG, a town of Denmark, with a fortreſs, in the duchy of Sleſwic: three leagues eaſt of Flenſburg.

GLUCK'STADT, a ſea-port town of Germany, in the circle of Lower Saxony, and duchy of Holſtein, belonging to Denmark, ſituated on the Elbe, which at this place receives a ſmall river, called the *Rhine*. Gluckſtadt is regular and well built. The market-place looks into the main ſtreets. The adjacent country being hollow and marſhy, a ſtone cauſeway of near three quarters of a mile in length has been carried along it from Krempe. On the land ſide the town may be laid under water. There being no ſprings here, the greateſt part of the houſes have ciſterns for the receiving of rain, and thoſe which are without ſuch conveniences are obliged to uſe the harbour water, or that of the new moat. Storms and inundations being frequent in theſe parts, the inhabitants have not been negligent in making proper fences. This town is the ſeat of the king's regency, and the offices and courts connected with it. Both the garriſon and palace congregation frequent the town church. Here is alſo a free grammar-ſchool. The Calviniſts are permitted a church, the Roman-catholics a chapel, and the Jews a ſynagogue. In 1738, a commercial college was inſtituted here by Chriſtian VI. it being a place of ſome trade; and in 1750, Frederic V. eſtabliſhed an office for keeping the harbour in good condition. Adjoining to this harbour is a baſon for the reception of veſſels. Gluckſtadt was built in 1620, by permiſſion of Chriſtian IV. in a waſte called the *Wilderneſs*, who, in the patent granted to it, gave orders that it ſhould be named *Gluckſtadt*, or the Fortunate Town, conferring on it at the ſame time many cuſtoms, rights, and privileges, as enjoyed by the town of Wilſter, and ſoon after it was inveſted with the Lubec and Hamburgh rights. The palace of Gluckſburg here, which was erected by the ſame king, has been long ſince pulled down. The town has been ſeveral times beſieged, particularly in 1628, by the imperialiſts, but has never been taken. The king of Denmark attempted to oblige ſhips paſſing up the Elbe to pay toll here, but the ſtrong reſiſtance which was made to it by all the powers of Europe occaſioned it to be given up: twenty-eight miles north-weſt of Hamburgh. Lat. 53. 54. N. lon. 26. 39. E. Ferro.

GLUE, *ſ.* [*glu*, Fr. *gluten*, Lat. *glud*, Welſh.] An inſpiſſated jelly made from the parings of hides and other offals, by boiling them in water, ſtraining through a wicker baſket, ſuffering the impurities to ſubſide, and then boiling it a ſecond time. In this ſtate it is poured into flat frames or moulds; then cut into ſquare pieces when congealed, and afterwards dried in a coarſe net. It is ſaid to improve by age; and that glue is reckoned the beſt which ſwells conſiderably without melting by three or four days infuſion in cold water, and recovers its former dimenſions by drying. A very hard and permanent glue is alſo to be obtained by boiling down animal bones, of which ſeveral intereſting experiments have been made by M. Pelletier. See the article CHEMISTRY, vol. iv. p. 370.

A curious Glue for domeſtic uſes.—Take an ounce of iſinglaſs, beat it to ſhreds, and put it into a pint of brandy; when gradually diſſolved, ſtrain the ſolution through a piece of fine muſlin, and the glue will be obtained, which is to be kept in a bottle cloſely ſtopped. When uſed in the manner of common glue, it joins together the parts of wood as ſtrong or ſtronger than the wood itſelf. It is alſo remarkable that, if ſaw-duſt, or powdered wood, be made into a ball with this glue, the ball will prove ſolid and elaſtic, ſo that it may be turned, and uſed as a bowl, without breaking. Another uſe of this glue is, that of its ſerving admirably well for taking off impreſſions of medals or coins: thus, if a little of it, when melted, be poured thinly on a new guinea, ſo as to cover the whole ſurface of the piece, and ſuffered ſo to remain a day or two, till it become thoroughly dry, it will appear hard and tranſparent like a piece of Muſcovy glaſs, with the impreſſion of the guinea in intaglio on one ſide, and in relievo on the other. This glue dries into a very ſtrong, tough, and tranſparent, ſubſtance; not eaſily damaged by any thing but aqueous moiſture, which would diſſolve it. This laſt reaſon renders it unfit for any uſe where it would be much expoſed to wet or damp air. Common glue, diſſolved with linſeed oil, is of all others the beſt calculated to ſtand the weather; a ſecret perhaps little known by thoſe who would be moſt benefited by its adoption.

To GLUE, *v. a.* To join with a viſcous cement.—

Whoſo teacheth a fool is as one that *glueth* a potſherd together. *Eccleſ.* xxii. 7.—Moſt wounds, if kept clean, and from the air, the fleſh will *glue* together with its own native balm. *Derham.*—To hold together.—The parts of all homogeneal hard bodies ſtick together very ſtrongly; and for explaining how this may be, ſome tell us their bodies are *glued* together by reſt. *Newton.*—To join; to unite; to inviſcate.—Intemperance, ſenſuality, and fleſhly luſts, do debaſe men's minds, and clog their ſpirits; ſink us down into ſenſe, and *glue* us to thoſe low and inferior things. *Tillotſon.*

I hear thee, view thee, gaze o'er all thy charms,
And round thy phantom *glue* my claſping arms. *Pope.*

GLU'E-BOILER, *ſ.* One whoſe trade is to make glue.

GLU'ER, *ſ.* One who cements with glue.

GLU'EY, *adj.* Viſcous; tenacious; glutinous.—It is called balſamic mixture, becauſe it is a *gluey* ſpumous matter. *Harvey.*

GLU'ING, *ſ.* The act of uniting with glue; the juncture formed by glue.

GLU'ISH, *adj.* Clammy; viſcous, like glue. *Scott.*

GLUM, *adj.* [a low word formed by corrupting *gloom.*] Sullen; ſtubbornly grave.

GLUME, *ſ.* [*gluma*, Lat. from *glubo*, to ſkin.] Huſk or chaff. In botany, it means the calyx or corolla of corn or graſſes, formed of valves which embrace the ſeed, and which is the chaff after threſhing. See the article BOTANY, vol. iii. p. 246 and 293.

GLUM'MEN, a town of Pruſſia, in the province of Nantangen: twenty-four miles ſouth of Konigſberg.

GLU'MOUS, *adj.* [*glumoſus*, Lat. from *gluma*, chaff.] In botany, it is applied to an aggregate flower whoſe baſe is provided with a common glume or huſk. See BOTANY, vol. iii. p. 252 and 298.

GLU'RENTZ, or GLURNS, a town of Germany, in the county of Tyrol, ſituated on the river Adige, built in 1362, and ſurrounded with walls in 1530: thirty-ſix miles weſt of Brixen, and thirteen weſt of Tyrol. Lat. 46. 44. N. lon. 28. 9. E. Ferro.

To GLUT, *v. a.* [*engloutir*, Fr. *glutio*, Lat. to ſwallow; γλυζω, Gr.] To ſwallow; to devour:

'Till cramm'd, and gorg'd, nigh burſt
With ſuck'd and *glutted* offal. *Milton.*

To cloy; to fill beyond ſufficiency; to ſate; to diſguſt.—The ambaſſador, making his oration, did ſo magnify the king and queen, as was enough to *glut* the hearers. *Bacon.*

The fickle ear ſoon *glutted* with the ſound,
Condemn'd eternal changes to purſue,
Tir'd with the laſt, and eager of the new. *Pope.*

To feaſt or delight even to ſatiety.—With death's carcaſe *glut* the grave. *Milton.*

A ſylvan ſcene, which, riſing by degrees,
Leads up the eye below, nor *gluts* the ſight
With one full proſpect; but invites by many. *Dryden.*

To overfill; to load.—He attributes the ill ſucceſs of either party to their *glutting* the market, and retailing too much of a bad commodity at once. *Arbuthnot.*—To ſaturate.—The menſtruum, being already *glutted*, could not act powerfully enough to diſſolve it. *Boyle.*

GLUT, *ſ.* That which is gorged or ſwallowed:

Diſgorged foul
Their deviliſh *glut*, chain'd thunderbolts, and hail
Of iron globes. *Milton.*

Plenty even to loathing and fatiety.—Let him but ſet the one in balance againſt the other, and he ſhall find himſelf miſerable, even in the very *glut* of his delights. *L'Eſtrange.*

So death
Shall be deceiv'd his *glut*; and with us two
Be forc'd to ſatisfy his rav'nous maw. *Milton.*

More than enough; overmuch.—If you pour a *glut* of water upon a bottle, it receives little of it. *Ben Jonſon.*—Any thing that fills up a paſſage.—The water ſome ſuppoſe to paſs from the bottom of the ſea to the heads of ſprings, until they, by ſome *glut*, ſtop, arreſted in their paſſage. *Woodward.*

GLU'TA, *ſ.* In botany, a genus of the claſs pentandria, order monogynia. The generic characters are—Calyx: perianthium one-leafed, very thinly membranaceous, bell-ſhaped, obtuſe, ſhorter than the germ, deciduous. Corolla: petals five, lanceolate, longer than the calyx, ſpreading at the top, but below as far as the middle glued to the column of the germ. Stamina: filaments five, briſtle-ſhaped, of a middling length, inſerted into the tip of the column; antheræ verſatile, roundiſh. Piſtillum: germ obovate, ſitting on an oblong column; ſtyle filiform, of a middling length; ſtigma ſimple.—*Eſſential Character.* Calyx bell-ſhaped, deciduous; petals five, glued at the bottom to the column of the germ; filaments inſerted into the tip of the column; germ ſitting on an oblong column.

Gluta benghas, a ſolitary ſpecies. It is a tree, with branches leafy at the end. Leaves alternate, ſeſſile, broad-lanceolate, about a foot in length, veined, naked; on the flowering branches only a hand long, more obtuſe and crowded. Panicle terminating, peduncled, with flowers the ſize of thoſe of the cabbage. Fructification ſingular; and, if we were to ſuppoſe the petals to be ſeparated from the column, the ſituation of the ſtamens would be as in Paſſiflora. Native of Java. Compare it with Helicteres, Stercules, &c. and obſerve whether the fruit be one-celled, as in Paſſiflora, or many-celled, as in Helicteres, &c.

GLUTÆ'US, *ſ.* [from γλετος, Gr. the buttocks.] Belonging to the buttocks. The name of the muſcles whoſe office is to extend the thigh. See ANATOMY.

GLU'TEN, *ſ.* [Latin.] The glue of vegetables.—See the article CHEMISTRY, vol. iv. p. 342.

To GLU'TINATE, *v. n.* [*glutinatum*, Lat.] To glue or ſtick together.

GLUTINA'TION, *ſ.* A glueing together.

GLU'TINATIVE, *adj.* [*glutineux*, Fr. of *glutinoſus*, Lat.] That ſticks like glue; clammy.

GLUTINOS'ITY, *ſ.* Glueineſs.

GLU'TINOUS, *adj.* [*glutineux*, Fr. from *gluten*, Lat.] Gluey; viſcous; tenacious.—Nouriſhment too viſcid and *glutinous* to be ſubdued by the vital force. *Arbuthnot on Aliments.*

GLU'TINOUSNESS, *ſ.* Viſcoſity; tenacity.—There is a reſiſtance in fluids, which may ariſe from their elaſticity, *glutinouſneſs*, and the friction of their parts. *Cheyne.*

GLUT'TON, *ſ.* [*glouton*, Fr. from *glutio*, Lat. to ſwallow.] One who indulges himſelf too much in eating.—The Chineſe eat horſe-fleſh at this day, and ſome *gluttons* have cats-fleſh baked. *Bacon.*—One eager of any thing to exceſs:

The reſt bring home in ſtate the happy pair
To that laſt ſcene of bliſs, and leave them there;
All thoſe free joys inſatiably to prove,
With which rich beauty feaſts the *glutton* love. *Cowley.*

To GLUT'TONIZE, *v. n.* To play the glutton; to be luxurious.

GLUT'TONOUS, *adj.* Given to exceſſive feeding; delighted overmuch with food:

Well obſerve
The rule of not too much, by temperance taught
In what thou eat'ſt and drink'ſt; ſeeking from thence
Due nouriſhment, no *gluttonous* delight. *Milton.*

GLUT'TONOUSLY, *adv.* With the voracity of a glutton.

GLUT'TONY, *ſ.* [*gloutonie*, Fr. from *glutton.*] Exceſs of eating; luxury of the table.—*Gluttony*, a vice in a great fortune, a curſe in a ſmall. *Holiday.*

Well may they fear ſome miſerable end,
Whom *gluttony* and want at once attend. *Dryden.*

There is a morbid ſort of gluttony, called *fames canina*, "dog-like appetite," which ſometimes occurs, and renders the perſon ſeized with it an object of pity: (ſee BULIMIA, vol. iii. p. 498.)—But profeſſed gluttons may be reckoned amongſt the monſters of nature. Some people think our James I. was in the right, when a man being preſented to him that could eat a whole ſheep at one meal, he aſked "What he could then do more than another man?" and being anſwered "He could not do ſo much," ſaid, "Hang him then; for it is unfit that any ſubject ſhould live that eats ſo much as twenty men, and cannot do ſo much as one."

The emperor Clodius Albinus would devour more apples at once than a buſhel would hold. He would eat five hundred figs at his breakfaſt, one hundred peaches, ten melons, twenty pounds weight of grapes, and four hundred oyſters. "Pray God, (ſaid Lipſius,) to keep ſuch a curſe from the earth."—Our Daniſh king Hardiknute was ſo great a glutton, that an hiſtorian calls him *bocca de porco*, "ſwine's-mouth." His tables were covered four times a-day with the moſt coſtly viands, upon which he gorged: and as he lived he died; for, eating voraciouſly at a wedding-banquet at Lambeth, he fell down dead. His death was ſo welcome to his ſubjects, that they annually celebrated the day with the feſtival called *Hock-tide*.

We are told by Fuller, that Nicholas Wood, of Harriſon in Kent, ate a whole ſheep at one meal, raw; at another time, thirty dozen of pigeons. At ſir William Sidley's, in the ſame county, he ate as much victuals as would have ſufficed thirty men. At lord Wotton's manſion-houſe in Kent, he devoured at one dinner eighty-four rabbits, which, by computation, at half a rabbit a man, would have ſerved one hundred and ſixty-eight men. He ate at his breakfaſt eighteen yards of black-pudding. He devoured a hog at one ſitting; and after it, being accommodated with fruit, he ate three pecks of damoſins.—A barriſter, whoſe name was Mallet, in the reign of Charles I. ate at one time a whole ordinary provided in Weſtminſter for thirty men at twelve-pence a-piece. His fortune not being ſufficient to ſupply him with better ſort of food, he fed generally on offals, ox-livers, hearts, &c. He lived to almoſt ſixty years of age, and for the ſeven laſt years of his life ate as moderately as other men.

GLU'Y. See GLUEY.

GLY'CAS (Michael), a Greek hiſtorian, ſuppoſed to have lived in the twelfth or thirteenth century; but as there are letters in his name addreſſed to the emperor Conſtantine Paleologus, he is referred by Caſſimer Oudin to the fifteenth century. He was a native of Byzantium, but ſpent great part of his life in Sicily. It is not known what was his condition, but he appears to have been acquainted with theology, grammar, hiſtory civil and eccleſiaſtical, and the other ſciences; and the letters addreſſed to him by prelates, doctors, &c. ſhew that he ſtood high in public reputation. He is principally known by his Annals, in four parts, containing the hiſtory of the world from the creation to the birth of Chriſt, and that of the Byzantine emperors down to the death of Alexius Comnenus in 1118. Father Labbe gave an edition of the Annals of Glycas, Greek and Latin, folio, Paris, 1660, with notes; the tranſlation is by Leunclavius, but corrected by the editor. Meurſius publiſhed ſeparately the third part of the Annals, with a verſion and ſcholia, but erroneouſly attributed to Theodore Metochites. Several letters of Glycas have alſo been publiſhed in different collections.

GLY'CINE, *ſ.* [from γλυκυς, Gr. ſweet.] In botany, a genus of the claſs diadelphia, order decandria, natural order of papilionaceæ, or leguminoſæ. The generic characters are—Calyx: perianthium one-leafed, compreſſed; mouth two-lipped; upper lip emarginate, obtuſe; lower longer, trifid, acute; the middle tooth more produced. Corolla: papilionaceous; banner obcordate, the ſides bent down, the back gibbous, the tip emarginate, ſtraight, repelled, from the keel; wings oblong, towards the tip ovate, ſmall, bent downwards; keel linear, ſickle-ſhaped, bent upwards, at the tip preſſing the banner upwards, obtuſe, towards the tip broader. Stamina: filaments diadelphous, (ſimple and nine-cleft) only a little divided at the tip, rolled back; antheræ ſimple. Piſtillum: germ oblong; ſtyle cylindric, rolled back in a ſpiral; ſtigma obtuſe. Pericarpium: legume oblong. Seeds: kidney-form.—*Eſſential Character.* Calyx, two-lipped; corolla, the keel turning back the banner at the tip.

Species. 1. Glycine ſubterranea, or procumbent glycine: leaves ternate, radical; ſtalks procumbent, flexuoſe; peduncles two-flowered. Root annual; ſtalks ſeveral, a ſpan in length, very rigid, cloſe to the ground, or deſcending to it, round, hairy, unbranched; leaves alternate, upright, petioled; leaflets ſpreading, petioled, oblong, quite entire, emarginate, ſmooth, veined, flat, nearly equal; flowers upright, the ſize of thoſe in Ervum tetraſpermum, and pale yellow; legume lens-ſhaped, ſmooth, containing one round ſeed. As ſoon as it is out of flower the peduncle perforates the earth, as in Trifolium ſubterraneum and Arachis hypogæa, and the ſeeds ripen under ground. It is a native of Braſil and Surinam, whence it was brought in the year 1762 by Dahlberg, and flowered in the bark-ſtove in the botanic garden at Upſal, but did not ripen its ſeed there. It is common on the eaſtern coaſt of Africa, the ſeeds which were brought thence by Loureiro grew, bore flowers and fruit for two years in Portugal, but the third year did not produce any ſeed. In Surinam it is called *gobbe-gobbe*, and is planted there in a ſandy ſoil with the addition of a little clay. It bears abundance of fruit, which is a welcome repaſt to the inhabitants, boiled whilſt yet unripe, like peaſe.

2. Glycine monoica, or pale-flowered glycine: leaves ternate, almoſt naked; ſtalks hairy, racemes pendulous, fruit-bearing flowers apetalous. Stalk grey, with reverſed hairs; flowers like thoſe of Vicia cracca, with the banner pale violet, the wings and keel white; they have ſtamens and piſtils, but the former being effete, they bear no fruit; the lower peduncles are longer, hanging down, and one-flowered; this flower has the rudiment of a calyx and piſtil, but no corolla; it bears a legume containing one or two ſeeds. Here, therefore, the laws of fructification are the ſame as in Viola mirabilis. This alſo perfects the fruit under ground, like Lathyrus ſubterraneus. Native of North America and Japan. It flowers here in September.

3. Glycine debilis, or hairy glycine: leaves ternate; leaflets oval, hairy underneath; legumes ſubſolitary, linear, many-ſeeded; ſtyle permanent, upright. Root biennial. Native of the Eaſt Indies, where it was found by John Gerard Koenig, M.D. It flowers in June and July.

4. Glycine caribæn, or trailing glycine: leaves ternate, ſubvilloſe; leaflets rhomb-ſhaped; racemes patulous; legumes hirſute; ſtalk ſhrubby, twining. Stems aſh-coloured, the thickneſs of a quill, ſmooth; the younger branches green and herbaceous. Native of the Weſt Indies. It was cultivated before 1742, by Robert James lord Petre; and flowers in September and October.

5. Glycine triloba, or three-lobed glycine: leaves ternate; leaflets lobed; ſtalk proſtrate; peduncles two-flowered. The whole plant is proſtrate, and does not climb; root annual. The flowers are yellow, ſmall, and generally two together. Native of the Eaſt Indies. It is probably a Phaſeolus.

6. Glycine villoſa, or villoſe glycine: leaves ternate, three-lobed, villoſe; racemes axillary. Stem filiform, angular, twining, flexuoſe, tomentoſe, as is alſo the whole plant. Native of Japan.

7. Gly-

7. Glycine Javanica, or Java glycine: leaves ternate; ſtalk villoſe; petioles rough-haired; bractes lanceolate, minute. Stem twining, as in Phaſeolus, with yellow reflex hairs ſcattered over it; leaves of Phaſeolus; peduncles the length of the leaves, terminated by an ovate-oblong cloſe ſpike of nodding violet-coloured flowers, with very minute bractes between them. Native of the Eaſt Indies, and near Nagaſaki in Japan, where it is called *fajo mame*, and flowers in September and October.

8. Glycine comoſa, or bearded glycine: leaves ternate, hirſute; racemes lateral. This riſes from two to three feet high, with ſlender herbaceous ſtalks; flowers ſmall, of a fine blue colour; ſeeds with purple ſpots. Native of Virginia, in moiſt ſhady places. It flowers here in June; and is ſometimes ſucceeded by ſeeds, which ripen in Auguſt.

9. Glycine phaſeoloides, or phaſeolus glycine: leaves ternate, villoſe underneath; racemes terminating. Stem twining to a conſiderable height, and bearing many flowers towards the top. The legumes have two ſeeds, and are contracted in the middle. Native of Jamaica and Domingo.

10. Glycine tomentoſa, or downy glycine: leaves ternate, tomentoſe; racemes very ſhort, axillary; legumes two-ſeeded. Root perennial; ſtalks twining, from a foot and a half to four feet in height, three-cornered, hairy; a ſingle leaf comes out at each joint, on a foot-ſtalk; leaflets roundiſh, wrinkled, ſet with ſlender hairs, the under ſurface paler, the middle leaflet ſomewhat wider than the lateral ones. From the boſom of the leaves three or four ſmall flowers come out, on very ſhort peduncles, of a pale yellow colour; legumes the form and ſize of the lentil, brown when ripe, ſomewhat hirſute, containing two ſeeds, ſmaller than lentils, and more ſwelling, browniſh, and marked with paler ſpots. Native of Virginia, where it is called *mountain pea*. It flowers from June to September, and ripens the early flowers in autumn.

β. Dolichos pubeſcens of Linnæus's Species is probably only a variety of this, the banner not being bent back. The ſtature of this variety is that of Phaſeolus vulgaris, but the whole plant is ſofter and pubeſcent. The leaflets are almoſt naked on the upper ſurface; the middle one inclining to rhomb-ſhaped, the ſide ones gibbous without, and lanceolate within; flowers three together, ſeſſile, yelloviſh white, with a brown ſpot on the banner; legumes oblong, pubeſcent, a little bowed back.

11. Glycine reticulata, or netted-leaved glycine: leaves ternate, oblong-lanceolate, pubeſcent, the veins like network underneath; racemes axillary, ſubſeſſile; legumes oblong, compreſſed. Native of Jamaica; found there by Swartz.

12. Glycine bituminoſa, or clammy glycine: leaves ternate; flowers racemed; legumes tumid, villoſe. Native of the Cape of Good Hope; introduced in 1774, by Mr. Francis Maſſon: flowers from April to September.

13. Glycine nummularia: leaves ternate, very obtuſe; racemes with flowers in pairs; legumes ſeſſile, ſuborbiculate, compreſſed. Stem herbaceous, twining, angular, pubeſcent. Native of the Eaſt Indies.

14. Glycine labialis, or labiate glycine: twining; leaves ternate, obovate, ſomewhat hoary; flowers axillary, heaped, corolla ſomewhat two-lipped. Stalk twining, the thickneſs of a thread; ſeeds ſeven to nine, roundiſh, compreſſed, yellow. Native of the Eaſt Indies.

15. Glycine ſtriata, or ſtriated glycine: twining; leaves ternate, oblong, very ſoftly hoary; racemes axillary, the length of the leaves; legumes extremely hirſute. Stems woody, round, hirſute. It has from ſix to thirty flowers, by pairs or in threes at ſhort intervals, on their proper pedicels. Seeds ſeveral, ſhining, brown variegated. Native of South America; it flowered in the Vienna garden in 1770.

16. Glycine roſea, or roſeate glycine: twining; leaves ternate; leaflets cordate-ovate, acute, quite entire; peduncles three-flowered; legumes compreſſed, keeled, one-ſeeded. 17. Glycine lucida, or ſhining glycine: twining; leaves ternate; leaflets ovate, acuminate, quite entire; racemes terminating, glandular, pedicels in threes; legumes inflated, containing two ſeeds. Natives of the Society Iſles.

18. Glycine ſuaveolens, or ſweet-ſmelling glycine: ſhrubby, upright, hoary; leaves ternate, ovate, acute; flowers axillary, ſolitary; legumes containing two ſeeds. A ſhrub, the whole of which is hoary, clammy, and ſweet. Seeds black, ſmooth, with a callous whitiſh heart. Found by Koenig among rocks near Madras, in the Eaſt Indies.

19. Glycine apios, or tuberous-rooted glycine: leaves unequally pinnate, ovate-lanceolate, with ſeven leaflets. This has tuberous roots, from which come out in the ſpring ſlender twining ſtalks, which riſe to the height of eight or ten feet; leaves compoſed of three pairs of leaflets, terminated by an odd one. The flowers come out in ſhort ſpikes from the ſide of the ſtalks. They have little ſcent, appear in Auguſt, but do not produce ſeeds in England. The genus of this is doubtful, perhaps it may be nearer to the Aſtragali, but the corolla is different, eſpecially in the linear keel much fickle-ſhaped; colour dark purple, duſky fleſh-colour, or rather fuliginous, or a ſullen bluſh-colour. Cultivated here in 1640. Parkinſon calls it *Virginia earth-nuts*.

20. Glycine fruteſcens, or ſhrubby glycine, or Carolina kidney-bean-tree: leaves unequally pinnate; ſtalk perennial. This has woody ſtalks, which twiſt themſelves together, and alſo twine round any trees that grow near, and will riſe to the height of fifteen feet or more. The leaves are in ſhape ſomewhat like thoſe of the aſh-tree, but have a greater number of leaflets. The flowers are produced in cluſters from the axils, and are of a purple colour; they are ſucceeded by long cylindrical legumes, ſhaped like thoſe of the ſcarlet kidney-bean, containing ſeveral ſeeds, which are never perfected in England. The legume, in this and the foregoing ſpecies, two celled. It flowers from June to September. Introduced in 1724, by Mr. Mark Cateſby.

21. Glycine monophylla, or ſimple-leaved glycine: leaves ſimple, cordate; ſtalk pubeſcent, three-cornered. Stalks two feet high, branched, the thickneſs of a thread, proſtrate and decumbent, hairy. Linnæus obſerves that his plant differs in having an upright ſtalk, and narrower leaves. Native of the Cape of Good Hope. It flowers in Auguſt.

22. Glycine picta, or painted glycine: leaves ternate, lanceolate, villoſe; racemes axillary, peduncled; ſtem erect, ſhrubby. This is an upright branched ſhrub; branches angular, ſtriated, ſubtomentoſe, with purpliſh hairs. Found in Guiana by Aublet, and in the iſland of Trinidad by Von Rohr.

23. Glycine bimaculata, or two-ſpotted glycine: ſtem twining, ſmooth, and even; leaves ſimple, cordate-oblong; racemes many-flowered. This riſes up with a twining ſhrubby ſtalk to the height of ſix or eight feet and more; multiplying greatly by age, it becomes loaded with a profuſion of purple flowers growing in racemes; the richneſs of the corolla is enlivened by two green ſpots at the baſe of the banner. For the moſt part the flowers go off here without producing any ſeed-veſſels; perfect ſeeds, however, have been produced, and a plant has flowered from them in the garden of John Ord, eſq. at Walham-green. It begins to flower in February, and continues during the ſummer. In the nurſeries about town it is known by the name of G. virens, the name originally given to this plant by Dr. Solander. The characters do not appear to be peculiarly expreſſive of this genus. This is one of the firſt plants from Botany-bay that flowered in this country, and it is one of the moſt ornamental.

24. Glycine rubicunda, or red glycine: ſtem perennial,

nial, twining; leaves ternate; leaflets ſuboval, quite entire; peduncles ſubtriflorous. Stem ſhrubby, ſlender, twining, five or ſix feet high, and more, red, branched, leafy. Almoſt the whole plant is covered with hairs preſſed cloſe. It flowers from April to June. Native of New South Wales, whence it was introduced about the ſame time with the foregoing.

25. Glycine coccinea, or ſcarlet glycine: leaves ternate; leaflets roundiſh, waved. Shrubby, climbing, growing to the height of many feet, if ſupported, and producing a great number of flowers on its pendant branches. Flowers for the moſt part in pairs, of a glowing ſcarlet colour, at the baſe of the keel ſomewhat inclined to purple; the bottom of the banner is decorated with a large yellow ſpot, verging to green. It flowers from April to June. Introduced lately from New South Wales.

Propagation and Culture. Few of theſe plants have yet been cultivated in this country. The eighth and tenth are hardy enough to live in the open air in England; they may be propagated by ſeeds, or parting of the roots; the former is the beſt method where good ſeeds can be obtained: theſe may be ſown on a bed of light earth in the ſpring, and, if the ſeaſon ſhould prove dry, they muſt be frequently refreſhed with water, otherwiſe they will remain a long time in the ground before they vegetate: when the plants come up, they muſt be kept clean from weeds in the ſummer, and in the autumn, when their ſtalks are decayed, if ſome rotten tanners' bark is ſpread over the ſurface of the ground, it will protect the roots from being injured by the froſt. In the ſpring, the roots ſhould be tranſplanted to the places where they are deſigned to remain, which muſt be in a warm ſheltered ſituation, but not too much expoſed to the ſun, and in a light ſoil, where they will thrive and produce flowers annually. If theſe are propagated by parting of the roots, it ſhould be done in the ſpring, before the roots begin to ſhoot: but they ſhould not be parted oftener than every third year, for, if they be frequently removed, they will not flower ſo ſtrong. The tenth being the moſt tender of the two, the ſeeds may for greater ſecurity be ſown in a hot-bed; and ſome of the plants kept in the green-houſe, or againſt a ſouth wall, to be protected occaſionally in ſevere weather with dung put to their roots. The nineteenth is propagated by parting the roots, and each of the tubers will grow; the beſt time for this is the end of March or beginning of April, before they put out ſhoots. The roots ſhould be planted in a warm ſituation, and in hard froſt covered with tan or mulch to protect them, otherwiſe they will not live abroad in this country: where they have been planted againſt a ſouth wall they have thriven and flowered extremely well, which they ſeldom do in any other ſituation; and thoſe roots which are planted in pots rarely flower, nor do their ſtalks riſe near ſo high as thoſe which are planted in the full ground. The twentieth is to be increaſed by laying down the young branches in October, which will be rooted well by that time twelvemonth, eſpecially if they are duly watered in dry weather, and may then be tranſplanted, either in a nurſery for a year to get ſtrength, or to the place where they are to remain for good, which ſhould be in a warm light ſoil and a ſheltered ſituation, where they will endure the cold of our ordinary winters very well; and if their roots are covered with ſtraw, fern, peaſe-haulm, or any other light covering, there will be no danger of their being deſtroyed by the froſt. The reſt muſt be kept in the bark ſtove; but Mr. Curtis thinks that No. 23 and 24, may probably ſucceed in the open air, in warm ſheltered ſituations, if protected a little in inclement ſeaſons. See ABRUS, and HEDYSARUM.

GLYCYRRHI'ZA, *ſ.* [from the Greek γλυκυς, ſweet, and ριζα, a root.] LIQUORICE; in botany, a genus of the claſs diadelphia, order decandria, natural order of papilionaceæ, or leguminoſæ. The generic characters are—Calyx: perianthium one-leafed, tubular, two-lipped, permanent: upper lip three-parted; the lateral ſegment linear, the middle one broader, bifid; lower entirely ſimple, linear. Corolla: papilionaceous; banner ovate-lanceolate, ſtraight, longer; wings oblong, very like the keel, but a little larger; keel two-petalled, acute, with a claw the length of the calyx. Stamina: filaments diadelphous, (ſimple and nine-cleft,) ſtraight; antheræ ſimple, roundiſh. Piſtillum: germ ſhorter than the calyx; ſtyle ſubulate, the length of the ſtamens; ſtigma obtuſe, aſcending. Pericarpium: legume ovate or oblong, compreſſed, acute, one-celled. Seeds: very few, kidney-form.—*Eſſential Character.* Calyx two-lipped; upper lip three-parted, lower undivided; legume ovate, compreſſed.

Species. 1. Glycyrrhiza echinata, or prickly-headed liquorice: legumes prickly; leaves ſtipuled, with the terminating leaflet ſeſſile. Theſe are tall-growing, perennial, herbaceous, plants, with the ſtalks ſomewhat woody at the bottom. The ſtipules are diſtinct from the petiole. The flowers in a head or ſpike, from the axils, and at the end of the branches. The ſeed-veſſel a legume or pod, ſmooth, hairy, or prickly. The firſt ſpecies has ſtalks and leaves very like thoſe of the ſecond, but the flowers are produced in ſhorter ſpikes, and the pods are very ſhort, broad at their baſe, end in acute points, and are armed with ſharp prickles. It flowers from April to June, and in warm ſeaſons will perfect ſeeds in England. Native of Monte Gargano in Apulia, of the northern provinces in China, and of Tartary. Cultivated by Gerarde in 1596.

2. Glycyrrhiza glabra, or common liquorice: legumes ſmooth, no ſtipules, the terminating leaflet petioled. The roots run very deep into the ground, and creep to a conſiderable diſtance, eſpecially where they ſtand long unremoved. From theſe ariſe ſtrong herbaceous ſtalks, four or five feet high. Leaves compoſed of four or five pairs of ovate leaflets, terminated by an odd one: theſe and the ſtalks are clammy, and of a dark green. Flowers in axillary ſpikes, ſtanding erect, and of a pale blue colour. Pods ſhort, containing two or three ſeeds. Native of the ſouth of Europe, in France, Spain, and Italy; alſo of China. Cultivated in China, Germany, England, &c. Here particularly about Pontefract in Yorkſhire, Worksop in Nottinghamſhire, and Godalmin in Surrey; and of late years there has been much raiſed in the gardens near London. It appears from Turner's Herbal, that it was cultivated in England in 1562: and Stow informs us, that "the planting and growing of licoriſh begun about the firſt year of queen Eliſabeth," (1558.) Gerarde (1597) relates, that he had plenty in his garden; and that the poor people of the north parts of England manured it with great diligence, whereby they obtained great plenty thereof. Ray affirms, that the liquorice root of Engliſh produce is ſuperior to the foreign. The quantity now exported from Spain is ſaid to be annually not leſs than four thouſand quintals, or nearly two hundred tons, a conſiderable part of which is ſuppoſed to be purchaſed by the porter brewers in London. Liquorice root contains a great quantity of ſaccharine matter, with ſome proportion of mucilage. Lightly boiled in a little water, it gives out nearly all its ſweetneſs; the decoction, preſſed through a ſtrainer, and inſpiſſated with a gentle heat till it will no longer ſtick to the fingers, affords a better extract than that brought from abroad, and its quantity amounts to near half the weight of the root. Rectified ſpirit takes up the ſweet matter of the liquorice equally with water; and as it diſſolves much leſs of the inſipid mucilage, the ſpirituous tincture and extract are ſweeter than the watery. Liquorice is in common uſe as a pectoral or emollient in catarrhal defluctions on the breaſt, coughs, hoarſeneſſes, &c. The infuſions or extracts are commodious vehicles for other medicines.

3. Glycyrrhiza hirſuta, or hairy liquorice: legumes

hirſute, the terminating leaflet petioled. This has much the appearance of the two foregoing ſorts, but the pods are hairy and longer. Native of the Levant; whence the ſeeds were ſent to Paris by Tournefort.

4. Glycyrrhiza aſperima, or rough liquorice: legumes ſmooth; leaflets elliptic, cuſped; ſtalk hiſpid, ſcabrous. This has rather the air of an Aſtragalus. Root ſlender and very long, extremely ſweet, eſpecially in the ſpring. The flower pale violet. Diſcovered by Pallas, on ſandy hills between the Wolga and the Jaick.

Propagation and Culture. This plant delights in a light ſandy ſoil, which ſhould be three feet deep at leaſt, for the goodneſs of liquorice conſiſts in the length of the roots: the ground in which you intend to plant liquorice, ſhould be well dug and dunged the year before you plant it, that the dung may be perfectly rotted, and mixed with the earth, otherwiſe it will be apt to ſtop the roots from running down; and before you plant it, the ground ſhould be dug three ſpades deep, and laid very light; when your ground is thus well prepared, you ſhould furniſh yourſelf with freſh plants taken from the ſides or heads of the old roots, obſerving that they have a good bud or eye, otherwiſe they are ſubject to miſcarry; theſe plants ſhould be about ten inches long, and perfectly ſound.

The beſt ſeaſon for planting them is in the beginning or middle of March, which muſt be done in the following manner, viz. Firſt ſtrain a line acroſs the ground in which you would plant them, then with a long dibble made on purpoſe, put in the ſhoot, ſo that the whole plant may be ſet ſtraight into the ground, with the head about an inch under the ſurface in a ſtraight line, about a foot aſunder, or more, in the rows, and two feet diſtance row from row; and after having finiſhed the whole ſpot of ground, you may ſow a thin crop of onions, which being plants that do not root deep into the ground, nor ſpread much above, will do the liquorice no damage the firſt year; for the liquorice will not ſhoot very high the firſt ſeaſon, and the hoeing of the onions will alſo keep the ground clear from weeds; but in doing of this you muſt be careful not to cut off the top ſhoots of the liquorice plants when they appear above ground, which would greatly injure them; and alſo obſerve to cut up all the onions which grow near the heads of the liquorice; and after your onions are pulled up, you ſhould carefully hoe and clean the ground from weeds; and in October, when the ſhoots of the liquorice are decayed, you ſhould ſpread a little very rotten dung upon the ſurface of the ground, which will prevent the weeds from growing during the winter, and the rain will waſh the virtue of the dung into the ground, which will greatly improve the plants. In the beginning of March following you ſhould ſlightly dig the ground between the rows of liquorice, burying the remaining part of the dung; but in doing of this, you ſhould be very careful not to cut the roots. The ſtirring of the ground will not only preſerve it clean from weeds a long time, but alſo greatly ſtrengthen the plants.

The diſtance allowed for planting theſe plants, will, by ſome, be thought too great; but, as the largeneſs of the roots is the chief advantage to the planter, ſo the only method to obtain this is by giving them room; and beſides, this will give a greater liberty to ſtir and dreſs the ground, which is of great ſervice to liquorice; and if the plantation deſigned were to be of an extraordinary bigneſs, we ſhould adviſe the rows to be made at leaſt three feet diſtant, whereby it will be eaſy to ſtir the ground with a breaſt plough, which will greatly leſſen the expence of labour. Theſe plants ſhould remain three years from the time of planting, when they will be fit to take up for uſe, which ſhould not be done until the ſtalks are perfectly decayed; for when it is taken up too ſoon, it is ſubject to ſhrink greatly, and loſe of its weight. The ground near London, being rich, increaſes the bulk of the root very faſt; but, when it is taken up, it appears of a very dark colour, and not near ſo ſightly as that which grows upon a ſandy ſoil in an open country. See Abrus, Astragalus, and Sophora.

GLYCO'NIAN, *adj.* In ancient poetry; belonging to a verſe conſiſting of three feet, a ſpondee, a choriambus, and a pyrrhichius.

GLYM'PES, in ancient geography, a town on the borders of the Lacedæmonians and Meſſenians. *Polybius.*

GLYN, *ſ.* [Iriſh; *gleann, glyn,* plur. Erſe; *glenn,* Scottiſh.] A hollow between two mountains. See Glen.—Though he could not beat out the Iriſh, yet he did ſhut them up within thoſe two narrow corners and *glyns* under the mountain's foot. *Spenſer.*

GLYNN, a county of the American States, in the Lower diſtrict of Georgia, bounded eaſt by the ocean, north by Alatamaha river, which ſeparates it from Liberty county, and ſouth by Camden county. Chief town, Brunſwick.

GLYPH, *ſ.* [in ſculpture and architecture.] Any canal or cavity uſed as an ornament.

GLY'PHICE, *ſ.* [γλυφικη, of γλυφω, Gr. to carve or engrave.] The art of carving, cutting, or caſting, the images or reſemblances of natural things in metal.

GLYP'TIC, *adj.* [γλυπτος, Gr.] Appertaining to ſculpture.

GME'LIN (John George, M. D.), public lecturer on botany and medicine at Tubingen, member of the royal ſociety of Gottingen, and of the academy of ſciences at Stockholm, born the 12th of Auguſt, 1709, at Tubingen, where his father reſided as an apothecary. While at ſchool he applied with ſo much diligence, that when only fourteen years of age, he was able to attend the academical lectures in the place of his nativity. He took the degree of M. D. there in 1727. Some of his former teachers having about this time been invited to Peterſburgh, he reſolved to pay a viſit to that capital, where he ſoon formed an acquaintance with Blumentroſt, the director of the academy, who not only permitted him to be preſent at the meetings of the members, and to have acceſs to the muſeum, but obtained for him, in 1728, an annual penſion. He at length acquired ſo much eſteem at Peterſburgh, that being deſirous in 1729 to return to Tubingen, he was honoured with a place among the regular members of the academy, and in 1731 he was appointed profeſſor of chemiſtry and natural hiſtory. The Ruſſian government wiſhing to carry into execution a plan, formed by Peter the Great, of ſending a ſociety of learned men to explore the boundaries of Siberia, and to determine whether a paſſage to China and Japan could be opened by ſea along the coaſts of the Ruſſian empire, Gmelin, G. F. Muller, with Louis de l'Iſle de la Croyere, were ſelected for this purpoſe, and ſet out on their journey, at the expence of the government, on the 19th of Auguſt, 1733. The department of natural hiſtory was aſſigned to Gmelin, that relating to manners and cuſtoms to Muller, and the geographical part to de l'Iſle. In the month of February, 1743, Gmelin returned ſafe to Peterſburgh, after having employed nine years and a half in this long and arduous journey, which proved highly intereſting to the ſciences; and he reſumed the offices he had before filled. In 1747 he paid a viſit to his native country, and during his abſence was appointed to the profeſſorſhip vacant by the death of Bachmeiſter, which he entered upon in 1749. He was attacked in May, 1755, by a violent fever, of which he died, in the forty-fifth year of his age. Gmelin was one of the greateſt botaniſts of the eighteenth century, and has rendered himſelf celebrated by his *Flora Siberica, ſeu Hiſtoria Plantarum Siberiæ,* Petrop. 1747, 1749, two parts, large quarto, with one hundred plates: the third and fourth parts were publiſhed by S. G. Gmelin. This

work was the refult of Gmelin's travels through Siberia, and is arranged according to the method of Van Royen. In a preface, the author gives a ſhort account of the natural hiſtory of Siberia, and determines the boundaries between Europe and Aſia, which have been adopted by all the celebrated geographers ſince that time. He then gives a ſketch of his travels, which are deſcribed at length in the following work: *Reiſe durch Sibirien*, &c. Travels through Siberia between the Years 1733 and 1743; Gotting. 1751, 1752, four parts, 8vo. with plates. This journal contains a great variety of new and intereſting facts, as the author not only relates, with great modeſty, the viciſſitudes and dangers to which he and his fellow-travellers were expoſed in theſe northern countries, but deſcribes, with the utmoſt care and attention to truth, the phyſical and geographical nature of the diſtricts through which he paſſed, the character and cuſtoms of the inhabitants, the mines, curious animals, and various other things which were before unknown.

GME'LIN (Samuel Gutlieb), ſon of Philip Frederic Gmelin, born in 1743 at Tubingen, where he ſtudied, and in 1763 obtained the degree of doctor of medicine. His theſis when a candidate for this honour, *De Analepticis quibuſdam nobilioribus e Cinamomo Aniſo ſtellato & Aſſa Fœtida*, made him known as an early genius; and during his travels through France and Holland he diſtinguiſhed himſelf ſo much by his knowledge of natural hiſtory, that he was appointed to be profeſſor in the academy of ſciences at Peterſburgh. In 1767, when the empreſs of Ruſſia, in conſequence of the expected tranſit of Venus over the ſun's diſk, was deſirous of ſending learned men to explore different provinces of her extenſive empire, Gmelin and profeſſor Guldenſtadt were appointed to travel through the province of Aſtracan. Gmelin ſet out in the month of June, 1768, explored in 1769 the weſtern ſide of the Don, and ſpent the following winter at Aſtracan. In 1770 and 1771 he travelled through the Perſian provinces on the ſouth and ſouth-weſt ſide of the Caſpian Sea, and in 1772 returned to Aſtracan; after which he examined the banks of the Wolga, and in 1773 the eaſtern ſide of the Caſpian Sea, ſo dangerous to travellers. He was then recalled to Ruſſia, and had arrived within three days' journey of Kiſlar, a fortreſs on the Ruſſian borders, when he was ſeized by the chan of the Chaitaks, who treated him with great barbarity, robbed him of all his property, and detained him a priſoner for ſix months. At this time Gmelin was in a bad ſtate of health; and vexation, the effects of the climate, and improper food, brought on a ſevere indiſpoſition. To add to his misfortune, the chan intercepted the proviſions ſent to him from Kiſlar, and would not ſuffer him to receive them. As the chan required thirty thouſand roubles for his ranſom, the empreſs gave orders to reſcue him by force; but the rebellion which at that time had been excited by Pugatchef rendered this plan impoſſible. He died in confinement on the 27th of July, 1774. The ſavage prince, having now loſt all hopes of a ranſom, gave up the body that it might be buried. The death of this eminent naturaliſt was much regretted by Catharine, who made a liberal proviſion for his widow. Gmelin was a great friend to botany, as well as to natural hiſtory in general, and fell a ſacrifice to his zeal for enlarging the knowledge of theſe ſciences. His works are: 1. *Hiſtoria Fucorum*, Petrop. 1768, 4to. 2. *Reiſſen durch Ruſsland*, &c. or, Travels through Ruſſia, 1768–1774, for the Purpoſe of exploring the Three Kingdoms of Nature, in Four Parts; of which the laſt was edited after the author's death by profeſſor Pallas, in 1786. The whole was printed at Peterſburgh, in 4to. with 140 plates.

JOHN FREDERIC GMELIN, brother of the preceding, and diſtinguiſhed by the epithet of *the Younger Gmelin*, born at Tubingen in 1748. He was the author of ſeveral performances on vegetable phyſiology, and the claſſification of plants, and likewiſe publiſhed numerous works on the materia medica and chemiſtry, mineralogy, and every part of natural hiſtory. He was one of the moſt laborious and learned profeſſors of the univerſity of Gottingen. Of his numerous works, the moſt celebrious is his edition of the *Syſtema Naturæ* of Linnæus, in 7 vols. or parts, 8vo. Lipſiæ, 1791. J. Fred. Gmelin was alſo the author of a Hiſtory of Chemiſtry, forming a part of the Hiſtory of Arts and Sciences, undertaken by the profeſſors of Gottingen. The world is indebted to him for the diſcovery of ſeveral excellent dyes, extracted from vegetable and mineral ſubſtances. As a man, he poſſeſſed unimpeachable integrity; he was mild, modeſt, and laborious; a good huſband, an excellent father, and a faithful friend. He died at Gottingen in 1805.

GMELI'NA, *ſ.* [from J. G. Gmelin, noticed above.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order perſonatæ, (vitices, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, very ſmall, ſubglobular, four-toothed, permanent. Corolla: one-petalled, bell-ſhaped, patulous; the border four-cleft; the upper ſegment wider and vaulted; the lower and lateral ſegments obtuſe, ſmaller, ſpreading, rounded. Stamina: filaments four, two of which are thicker, and two bowed in and aſcending; antheræ, two thicker, parted; two ſmaller, ſimple. Piſtillum: germ roundiſh; ſtyle the length of the ſmaller ſtamens; ſtigma ſimple. Pericarpium: drupe ovate, one-celled. Seed: nut ovate, ſmooth and even, two-celled; (three-celled, with the loweſt cell barren. *Gærtner.*)—*Eſſential Character.* Calyx, ſlightly four-toothed; corolla, four-cleft, bell-ſhaped; antheræ, two-parted, two ſimple; drupe, with a two or three celled nut.

Gmelina Aſiatica, a ſingle ſpecies. It is a tree, with round, ſtiff, upright, branches; leaves oppoſite, petioled, ovate, tomentoſe underneath, having frequently a ſhorter ſharp lobe on each ſide; ſpines axillary, oppoſite, horizontal, pubeſcent at the tip, the length of the petioles; flowers from the end of the tender twigs, on peduncles; the fruit is a berried drupe, the ſize of Jujubes, black and ſmooth; the ſhell bony, thick at the top, with two ſmall lateral lobes; remarkably acuminate at the bottom. In each of the two upper cells is a ſingle ſeed, thickiſh, convex on one ſide, and flattiſh on the other; whitiſh or pale ſtraw-colour, with a ſmall umbilical caruncle below the top: there is no albumen or white, but the embryo is of the ſame form with the ſeed: the cotyledons, or ſeed-lobes, are elliptic, fleſhy, and thickiſh.

GNA'A, a town of Germany, in the duchy of Stiria: twenty-four miles ſouth-eaſt of Gratz, and eighty ſouth of Vienna.

GNA'DENHUETTEN, or GNADENHUTTEN, a ſettlement of the Moravians, or United Brethren of North America, ſituated on Muſkingum river, oppoſite to Salem, in the lands which belonged to the Mahikan Indians. In 1746 it was a pleaſant town inhabited by Chriſtian Indians, where were a chapel, miſſionary's houſe, and many Indian houſes. This, together with Schoenbrun and Salem, were reſerved by congreſs, by an ordinance, May 20, 1785, for the Chriſtian Indians formerly ſettled there. On Sept. 3, 1788, it was reſolved that the plat of each town ſhould make up four thouſand acres, and the grant was made to the United Moravians for propagating the goſpel among the heathen.—Alſo the name of a Moravian ſettlement on the ſouth-weſt bank of Lehigh river, in Pennſylvania, twenty-nine miles north-weſt of Bethlehem.

GNA'DENHUETTEN (New), a Moravian ſettlement on Huron river, which runs ſouth-eaſterly into Lake St. Clair, in the north-weſtern territory: twenty-two miles from Lake St. Clair, and twenty-eight north-weſt of Detroit.

GNAPHA'LIUM, *ſ.* [from γναφαλον, Gr. cotton or nap.]

nap.] In botany, a genus of the claſs ſyngeneſia, order polygamia ſuperflua, natural order compoſitæ diſcoideæ, (corymbiferæ, *Juſſ.*) The generic characters are—Calyx: common rounded, imbricate, with the marginal ſcales rounded, ſcarioſe, coloured. Corolla: compound; corollets hermaphrodite, tubular, with apetalous females ſometimes intermixt; hermaphrodites funnel-form, with a five-cleft reflex border. Stamina: (in the hermaphrodites,) filaments five, capillary, very ſhort; anther cylindric, tubulous. Piſtillum: germ ovate; ſtyle filiform, the length of the ſtamens; ſtigma bifid; in the females, reflex. Pericarpium: none; calyx permanent, ſhining. Seeds: ſolitary, oblong, ſmall, crowned with a capillary or feathered down. Receptaculum: naked.—*Eſſential Character.* Calyx, imbricate, with the marginal ſcales rounded, ſcarioſe, coloured; down, feathered (or ſimple); receptacle, naked.

Species. I. Shrubby, with white flowers. 1. Gnaphalium eximium, or choice gnaphalium: leaves ſeſſile, ovate, crowded, upright, tomentoſe; corymb ſeſſile. The numerous ſpecies of this genus are either underſhrubs or herbs: the leaves are placed alternately, and are for the moſt part hoary: the flowers uſually terminate the ſtem and branches in globes or corymbs: the calyx is permanent, with yellow or white ſcales. The Filagos are ſcarcely diſtinct from the Gnaphaliums, conſidered as a natural genus. The firſt ſpecies has a ſtem the thickneſs of a finger, and tomentoſe; leaves ſharpiſh, without veins, white, with nap on both ſides; flowers globular, with calyxes as large as the outer joint of a finger, conſiſting of imbricate, roundiſh, ſcarioſe, concave, obtuſe, ſmooth, purpliſh, ſcales. Native of the Cape of Good Hope.

2. Gnaphalium arboreum, or tree everlaſting: leaves ſeſſile, linear, ſmooth on the upper ſurface, rolled back along the edge; flowers in a kind of head on elongate peduncles. This is a ſhrub the height of a man, determinately branched; leaves reſembling thoſe of roſemary, crowded, ſtrict, acute, naked, underneath tomentoſe, as are alſo the branches; with ſmaller leaves alternate, remote. It flowers moſt part of the year, and was introduced in 1770, by Mr. William Malcolm. Native of the Cape.

3. Gnaphalium grandiflorum, or great-flowered everlaſting: leaves ſtem-claſping, ovate, three-nerved, lanuginous on both ſides. 4. Gnaphalium fruticans, or fruiting gnaphalium: leaves ovate, ſtem-claſping; ſtem rigid; cyme ſeſſile. 5. Gnaphalium criſpum, or criſped gnaphalium: leaves tomentoſe underneath, ſcabrous above; root-leaves petioled, oblong; ſtem-leaves embracing, waved. 6. Gnaphalium appendiculatum, or appendiculated gnaphalium; leaves ſeſſile, imbricate, lanceolate, woolly, appendicled at the tip with a ſcarioſe membrane. 7. Gnaphalium coronatum, or crowned gnaphalium: leaves ſeſſile, lanceolate; corymbs compound, ſeſſile; peduncles leafleſs; calyxes crowned. 8. Gnaphalium diſcolorum, or coloured gnaphalium: leaves ſeſſile, lanceolate; calyxes white; lower ſcales fleſh-coloured. 9. Gnaphalium muricatum, or prickly gnaphalium: leaves ſubulate, mucronate; umbel compound; calyxes cylindric, containing about three flowers. 10. Gnaphalium ericoides, or heath-leaved everlaſting: leaves ſeſſile, linear; outer calyxes rude; inner fleſh-coloured. 11. Gnaphalium teretifolium, or crowded everlaſting: leaves crowded, almoſt columnar; corymbs branched; calyxes ferruginous on the outſide.

II. Shrubby, with yellow flowers. 12. Gnaphalium mucronatum, or pointed everlaſting: leaves ſubulate, mucronate; calycine ſcales roundiſh. This, and all the foregoing ſpecies, are natives of the Cape of Good Hope.

13. Gnaphalium ſtoechas, or common ſhrubby everlaſting: leaves linear; corymb compound; branches wandlike. Stem about three feet high, with long ſlender irregular branches, the lower ones having blunt leaves, two inches and a half long, and an eighth of an inch broad at the end; thoſe on the flower-ſtalks are very narrow, and end in acute points; the whole plant is very woolly; flowers terminating in a compound corymb; calyxes at firſt ſilvery, but turning to a yellow ſulphur-colour. If they are gathered before the flowers are much opened, the heads will continue in beauty many years, if kept from air and duſt. According to Haller, all the flowers are androgynous; and have been formerly recommended as attenuants, diſcutients, and diaphoretics, but are not uſed in modern practice. Native of Germany, France, Spain, and Iſtria. By old writers it is called *gold-flower*, *God's-flower*, *goldilocks*, and *golden ſtoechas*: by Ray, *narrow-leaved goldylocks*, or *caſſidony*.

14. Gnaphalium igneſcens, or red-flowered everlaſting: leaves ſublanceolate, tomentoſe, ſeſſile; corymbs alternate, conglobate; flowers globular. Stem and leaves woolly; the former a foot high, ſending out a few ſide branches, terminated by a compound corymb, the heads of which are ſmall, of a gold colour, changing to red as they fade. Native place of growth not known. It was cultivated in 1768, by Mr. Miller.

15. Gnaphalium dentatum, or toothed everlaſting: leaves wedge-ſhaped, toothed ſeſſile; corymb ſimple. The whole plant is hoary; branches ſcarcely a ſpan long, and round; leaves blunt at the top, and three-toothed, thick, and veined; flowers at the ends of the branchlets, few, ſmall, ſhining, in oblong heads.

16. Gnaphalium ferratum, or ſerrated everlaſting: leaves ſtem-claſping, lanceolate, ſerrate, naked on the upper ſurface. This is an elegant plant, ſuffruticoſe, ſoft and ſilky, yellow, much branched, with procumbent, ſimple, pubeſcent, runners; leaves very frequent, ſoft, entire, yellow; flowers terminating, very many, in a cloſe compact head, each on ſhort pedicels.

17. Gnaphalium patulum, or ſpreading everlaſting: leaves ſtem-claſping, ſpatulate; corymbs aggregate; branches ſpreading. Branches filiform, a foot or more in length, round, white-tomentoſe, patulous, ſomewhat branched. Introduced in 1774 by Mr. Francis Maſſon. It flowers from Auguſt to January.

18. Gnaphalium petiolatum, or petiolated everlaſting: leaves ovate, quite entire, petioled; flowers crowded, terminating. Related very nearly to the foregoing, according to Linnæus, but it is not in his Herbarium.

19. Gnaphalium craſſifolium, or thick-leaved everlaſting: leaves broad-lanceolate, ſubpetioled, leathery, tomentoſe; corymb compound; ſtalk proliferous. Stem a foot high, proliferous-branched, perennial except the proliferous branch; leaves wider at the end, blunt, covered with a very thick down, ſtiffiſh, towards the flowers gradually narrower; flowers numerous; calyxes pale yellow; corollas of a deeper colour; the florets before they open appear white. Native of Majorca and Minorca. It flowers from July to September.

20. Gnaphalium maritimum, or ſea everlaſting: very much branched; leaves lanceolate, ſeſſile, ſharpiſh; inmoſt calycine ſcales gold-coloured. A ſhrub of four feet in height; the branches pubeſcent; leaves alternate, ſomewhat crowded, tomentoſe, aſh-coloured, when young very white; flowers gold-coloured. It differs from the foregoing, in having the leaves by no means narrowed at the baſe. It flowers from June to Auguſt.

21. Gnaphalium repens, or creeping everlaſting: leaves linear; ſtem creeping, ſtraight; branches upright, very ſimple. Stem creeping, rooting, perennial, perfectly ſimple, filiform, angular, four feet high; branches alternate, two inches in length, bearing both leaves and flowers; flowers yellowiſh, the ſize of hemp ſeeds.

22. Gnaphalium umbellatum, or umbellated everlaſting: leaves in bunches, ſubulate, twiſted; umbels ſimple, terminating, ſeſſile. In the herb this bears a ſtrong

ſtrong reſemblance to N° 9, but it differs in having a regular umbel, larger flowers, and the ſcales of the calyx a beautiful red, in which laſt circumſtance it reſembles a Xeranthemum.

23. Gnaphalium hiſpidum, or hiſpid everlaſting: leaves linear, ſemicylindric, grooved, hiſpid, patulous; heads terminating, ſimple. This ſpecies is eaſily known by the ſtiff briſtles on its aceroſe leaves, and by its aggregate flowers. Theſe nine ſpecies, except the 19th, are natives of the Cape of Good Hope.

III. Herbaceous, with yellow flowers. 24. Gnaphalium cylindricum, or cylindrical everlaſting: leaves ſeſſile, oblong, tomentoſe; corymbs unequal; calyxes ſmooth, cylindric, ſeſſile. Herb branched, diffuſed, a ſpan in length, tomentoſe all over; calyxes very long, imbricate, with equal, ovate, bluntiſh, ſcales. Native of the Cape.

25. Gnaphalium orientale, or eaſtern everlaſting: of which there are two kinds; the broad-leaved, and the narrow-leaved: leaves linear-lanceolate, ſeſſile; corymb compound; peduncles elongate. Stem ſeldom riſing more than three or four inches high, and putting out many heads; leaves narrow, woolly on both ſides, and coming out without order; flower-ſtems eight or ten inches high, with narrow hoary leaves all the way, terminated by a compound corymb of bright yellow flowers in large heads, coming out in May, and continuing in ſucceſſion moſt part of the ſummer. It has been long in Portugal, where in the winter ſeaſon they ornament the churches with the flowers. This is improperly called Gn. orientale, and Eaſtern everlaſting, for it is ſuppoſed to be a native of Africa. Parkinſon, who calls it *golden flowergentle*, cultivated it in 1629.

β. The ſhrubby or narrow-leaved ſort grows naturally at the Cape of Good Hope. This differs from the other in riſing with ſtalks four or five feet high, dividing into many branches, having long narrow leaves placed alternately; the corymb is looſe, with the flowers on long pedicels; whereas thoſe of the other are compact.

26. Gnaphalium arenarium, ſandy everlaſting, or broad-leaved goldilocks: leaves lanceolate, the lower ones obtuſe; corymb compound; ſtalks quite ſimple. This is an annual hoary plant, with an oblong root; ſtem upright, a foot or more in height, white with down; leaves alternate, an inch long, and three or four lines wide, half-ſtem-claſping, quite entire, white with down on both ſides, blunt and frequently recurved a little at the tip, the edges rolled back; the ſhining yellow heads of flowers are two lines in length and breadth; the calycine ſcales are ovate, blunt, and lemon-coloured, as are alſo the corollets. Native of Scania, Denmark, and Germany, in dry ſandy paſtures and hills; flowering from July to September. Alſo in Japan, where it is uſed for moxa, and as tobacco, by way-ſides and in ditches; flowering from December to April. It was formerly much recommended in dyſenteries, &c. but is now diſuſed. It is ſuppoſed to preſerve woollen clothes from the moth.

27. Gnaphalium rutilans, or ſhining-flowered everlaſting: leaves lanceolate; corymb decompound; ſtalk branched at the bottom. Stem ſlender, ſending out many lateral branches below, with very narrow leaves, hoary on their under ſide; the flowers are produced in a compound corymb at the ends of the branches; at their firſt appearance they are of a pale red, but afterwards change to a gold colour. Native of the Cape of Good Hope. It flowers from the end of June to the beginning of Auguſt.

28. Gnaphalium milleflorum, or many-flowered everlaſting: flowers corymbed, faſtigiate, reddiſh-white; calyxes ſubcylindric. Stalk a foot high, tomentoſe; corymb terminating, with above fifty flowers in it; calyxes ſmooth and even, pale, with the lower ſcales purpliſh; corollas yellow. Native of the Cape of Good Hope, where it was found by Thunberg.

29. Gnaphalium imbricatum, or imbricated everlaſting: leaves lanceolate, tomentoſe; calycine ſcales reflex; ſtalk branched. Stem aſh-coloured, tomentoſe, diffuſed, erect, ſcarcely a foot high. Native of the Cape of Good Hope.

30. Gnaphalium cymoſum, or branching everlaſting: leaves lanceolate, three-nerved, ſmooth on the upper ſurface; raceme terminating; ſtalk branched at the bottom. The flowers are entirely of a gold colour, and ſmooth, with blunt ſcales; perennial, about eighteen inches in height; ſtalks woody, cylindric; flowers very numerous, ſmall, oblong. Theſe and the leaves, when rubbed, emit an odour like that of ſouthernwood. Native of the Cape of Good Hope; and flowers from April to Auguſt.

31. Gnaphalium nudifolium, or naked-leaved everlaſting: leaves lanceolate, three-nerved, naked, with netted veins. Root-leaves lanceolate-ovate, by no means tomentoſe, ſcabrous about the edge; ſtalk ſimple, a foot high, having ſmaller leaves of a more lanceolate ſhape at the bottom, and naked at the top; flowers golden, in a compound corymb. Gærtner ſeparates this and ſome other Gnaphaliums under the name of Anaxeton, on account of the receptacle being villoſe or chaffy only towards the circumference; and the down being ſimple or capillary. Native of the Cape, and perennial.

32. Gnaphalium luteo-album, Jerſey everlaſting, or cudweed: leaves half-ſtem-claſping, ſword-ſhaped, repand, obtuſe, pubeſcent on both ſides; flowers conglomerate. This is an annual plant, and very woolly; ſtalks many, upright, a foot or eighteen inches in height. Native of the South of France, Spain, Portugal, Switſerland, Germany, the iſland of Jerſey, the ſea-coaſts of Wales, of the weſt of England, and near Bognor rocks in Suſſex; in ſandy grounds, and on dry banks and walls; alſo of New Caledonia. It flowers from July to September.

There is a variety of this with narrower leaves, not quite ſo woolly; the ſtalks riſe higher, and are more branched; the flowers grow in cloſe bunches on the top of the ſtalks, and are of a pale yellow colour.

33. Gnaphalium albeſcens, or whitiſh everlaſting: ſnowy-tomentoſe; leaves linear-lanceolate; ſtalk upright, undivided at the bottom; branches terminating, faſtigiate; flowers crowded, conical. Shrubby. Native of Jamaica.

34. Gnaphalium pedunculare, or pedunculated everlaſting: leaves ſpatulate, ſomewhat ſtem-claſping, tomentoſe underneath; calycine ſcales ſharpiſh. Stalk herbaceous, a foot and half in height, branched, diffuſed with elongated branches. Native of the Cape of Good Hope.

35. Gnaphalium odoratiſſimum, or ſweet-ſcented everlaſting: leaves decurrent, mucronate, tomentoſe on both ſides, flat. Stems about three feet high, dividing into many irregular branches, on which are oblong blunt leaves, hoary on their under ſide, but of a dark green above, decurrent; ſtems terminated by a compound corymb of flowers, cloſely joined together, of a bright gold-colour, but ſmall, and changing to a darker colour as they fade. Native of the Cape.

IV. Herbaceous, with white flowers. 36. Gnaphalium ſanguineum, or bloody gnaphalium: leaves decurrent, lanceolate, tomentoſe, flat, with a little naked point at the end. Stems about ſix inches high, with lanceolate acute leaves, woolly, terminated by a large corymb of flowers ſitting very cloſe, and of a fine red colour. Native of Egypt and Paleſtine.

37. Gnaphalium fœtidum, or ſtrong-ſcented everlaſting: leaves ſtem-claſping, quite entire, acute, tomentoſe underneath; ſtalk branched. This is an annual plant, ſending out many oblong blunt leaves near the root; ſtems a foot and half high; leaves alternate, when handled emitting a very rank odour; ſtems ter-

minated by a corymb of flowers, which have large ſilvery calyxes, that will retain their beauty ſeveral years. Native of the Cape. It varies with golden calyxes.

38. Gnaphalium undulatum, or waved everlaſting: leaves ſubdecurrent, lanceolate, waved, acute, tomentoſe underneath; ſtalk branched. Annual; ſtems about a foot high. The whole plant has a diſagreeable odour. The flowers in a terminating corymb; they are white, and appear in July. Native of the Cape of Good Hope, and alſo of North America.

39. Gnaphalium Americanum, or American everlaſting: root-leaves lingulate-lanceolate, ſnow-white beneath; ſtalk ſimple, upright, tomentoſe; flowers ſpiked and lateral, ſeſſile, crowded. Annual; ſeldom riſes above ſix or nine inches in height; flowers yellowiſh, and diſpoſed pretty thick about the top of the ſtalk, which puts on the appearance of a ſhorter ſpike. Native of Jamaica, in the coldeſt mountains of Liguanea.

40. Gnaphalium criſpum, or curled everlaſting: leaves ſtem-claſping, ſpatulate, tomentoſe; calyxes very obtuſe, plaited and waved, tomentoſe at the baſe.

41. Gnaphalium helianthemifolium, or dwarf-ciſtus leaved everlaſting: leaves ſomewhat ſtem-claſping, lanceolate; corymbs compound; calycine ſcales ſomewhat plaited.

42. Gnaphalium ſquarroſum, or ſquare everlaſting: leaves ſeſſile, tongue-ſhaped, tomentoſe; the inner calycine ſcales ſubulate, and bowed back.

43. Gnaphalium ſtellatum, or ſtarry everlaſting: leaves ſeſſile, lanceolate, villoſe; calyxes acute, fleſh-coloured on the outſide. Natives of the Cape.

44. Gnaphalium obtuſifolium, or blunt-leaved everlaſting: leaves lanceolate; ſtalk tomentoſe, panicled; flowers glomerate, conical, terminating. This is an annual plant, with woolly obtuſe leaves; ſtems ſingle, about nine inches high; flowers in ſpikes from the ſide of the ſtalks, of a dirty white-colour. Native of Virginia, Pennſylvania, and New England.

45. Gnaphalium margaritaceum, American everlaſting, or cudweed: leaves linear-lanceolate, acuminate, alternate; ſtalk branched at the top; corymbs faſtigiate. Root perennial, creeping, and ſpreading far, ſo as to become a troubleſome weed; ſtalks extremely downy, white; leaves numerous, long, ſeſſile, growing without order round the ſtem, entire at the edges, dark green, naked above, beneath covered with a thick down, and whitiſh; the flowering branches form a broad flat bunch; each branch contains numerous crowded heads, on ſhort, branched, downy, peduncles, but the middle ones ſeſſile; ſcales of the calyx bluntly ovate, white, not downy; ſeed crowned with a ſeſſile feather of few ſimple rays, as long as the calyx. Haller ſays that the flowers are all hermaphrodite, but afterwards adds, that a few females are ſometimes intermixed with them. Native of North America, where it grows in vaſt quantities in uncultivated fields, glades, hills, &c. and is called *life everlaſting*; becauſe the ſilvery heads, properly dried, will keep their beauty long without changing. It is alſo found in Kamtſchatka: and with us in England; having been obſerved near Bocking in Eſſex by Mr. Dale; and on the banks of Rymny river, for the ſpace of twelve miles, by Mr. Lhwyd. None of our old herbaliſts mention its being found wild in this iſland, but it has been long known in our gardens. It flowers from July to September. A decoction of the flowers and ſtalks is uſed in America, to foment the limbs for pains and bruiſes.

46. Gnaphalium plantagineum, or plantain-leaved everlaſting: runners procumbent; ſtalk very ſimple; root-leaves ovate, very large. Perennial; from the main ſtalk come out runners, which take root in the ground; ſtem-leaves narrower, woolly, alternate; flowers in a terminating corymb, white and ſmall, appearing in June and July. Native of North America. Linnæus obſerves, that it has altogether the air of the foregoing. He had ſeen only the female, and doubted whether it might not be a variety only of the next ſpecies.

47. Gnaphalium dioicum, mountain everlaſting, cudweed, or cat's-foot: runners procumbent; ſtalk quite ſimple; corymb ſimple; flowers divided. Root woody, brown, ſtrikes deep, throwing out a few rigid fibres; from the crown ariſe ſeveral creeping runners; ſtems erect, ſimple, from two or three to ſix or ſeven inches high, white, downy, clothed with numerous ſemi-amplexicaul linear leaves, green above, white and downy beneath; flowering heads three to eight crown the ſtem in a cloſe bunch, on ſhort peduncles; ſcales of the calyx blunt, the outer ones ſhort, green covered with down, the inner widening upwards, long, ſmooth, white, ſhining, frequently tinged with purple; the calyxes bearing female flowers are cylindrical; the ſeed ſhort, crowned by a ſeſſile down with ſimple rays, longer than the calyx. The calyxes bearing hermaphrodite flowers are globular, ſhorter, and the feather does not exceed the calyx. Haller ſuſpects that the hermaphrodite flowers are barren. It is rare that any ripe ſeed is produced, ſuch being the caſe with many plants that creep by the roots. The female heads often have imperfect ſeeds; the hermaphrodites none at all. Native of moſt parts of Europe, on open downs: with us on Newmarket heath and Gogmagog hills, Canham heath near Bury, Swaffham and Stratton heaths in Norfolk, in Cornwall, Wales, on Bernack and Wittering heaths, in the northern counties, and Scotland; flowering in May and June.

48. Gnaphalium alpinum, or alpine everlaſting: runners procumbent; ſtalk quite ſimple; head leafleſs; flowers oblong. Root perennial; ſtalk entirely ſimple, ſhorter than a finger, with three or four lanceolate leaves. Linnæus obſerved only the female flowers, and doubts whether it may not be a variety of Gn. dioicum. The colour of the flower is by no means ſhining in this; otherwiſe it has the appearance of the foregoing, the ſize, ſtalks, flowers, and runners; but the leaves are narrower, the calycine ſcales lanceolate, villoſe at the baſe, brown at the tip and edge. Native of the Lapland Alps, and of Swiſſerland.

49. Gnaphalium Indicum, or Indian everlaſting: leaves lanceolate; ſtalk very much branched, diffuſed; corymbs unequal; calyxes coloured within. Perennial; ſtalk half a foot high, tomentoſe. Native of the Eaſt Indies, and Cochinchina.

50. Gnaphalium purpureum, or purple everlaſting: leaves lanceolate, naked; ſtalk erect, quite ſimple; flowers in lateral ſeſſile ſpikes. Annual; ſtalks from a ſpan to a foot in height, ſometimes upright and unbranched, ſometimes reclining and putting out a few branches, ſlender, tomentoſe; leaves from green becoming hoary; thoſe next the root broader, and waved about the edge, quickly drying away; ſtalk-leaves narrower, till they become linear among the flowers, the heads of which are ſhort and purpliſh. It flowers in ſummer and autumn. Native of Carolina and Virginia. Cultivated in the Eltham garden before 1732.

51. Gnaphalium denudatum, or bare everlaſting: leaves ſpatulate; underneath ſnowy white, tomentoſe; ſmooth and even above. Native of the Cape of Good Hope.

V. Reſembling Filago; herbaceous. 52. Gnaphalium ſylvaticum, wood everlaſting, Engliſh or upright cudweed: ſtalk quite ſimple, upright; flowers ſcattered. This is a biennial plant. In woods one ſtem from twelve to eighteen inches high, generally grows from the root. In open ground, the root-leaves form a thick tuft, and from among them ariſe ſeveral ſhorter ſtems, ſometimes not more than three inches high, at firſt often declining, but very ſoon aſcending; root-leaves long, of a very narrow linear-lanceolate form,

green and hairy above, white and thickly downy beneath; flowers in a long ſpike, compoſed of very ſhort branches, bearing from one to five or more flowers; the lower branches ſomewhat diſtant, the upper crowded; beneath each a leaf, ſimilar to, but ſmaller than, the ſtem-leaves; flowering heads very ſmall; ſcales of the calyx bluntly oval, greeniſh at the baſe, yellowiſh-brown upwards, ſmooth with ſhining margins; exterior ſhort, interior as long as the florets; ſeeds minute, crowned with a ſeſſile feather, having ſimple rays as long as the calyx; female flowers numerous; hermaphrodites four or five. Native of moſt parts of Europe: in Britain it has been obſerved in Norwood, Surrey; on Hampſtead heath, and in the woods thereabouts; near Charlton; about Harefield; in Gamlingay park, Cambridgeſhire; in Armingdale wood near Norwich; on Naſeby field, and Thorp-Malſor, in Northamptonſhire; in rough paſtures near Fladbury in Worceſterſhire; on a ſandy heath, a mile from Shiffnall, on the road to Wolverhampton; on the banks of the canal in the pariſh of Coſely, Warwickſhire; on the great iſland in Winander-mere; and on the iſlands of Scotland. It flowers in Auguſt.

53. Gnaphalium ſpicatum, or ſpiked everlaſting: ſtems herbaceous, quite ſimple; flowers in whorls; leaves in bundles, linear, revolute. Stems ſeveral, aſcending, a finger's length, ſmooth, covered with leaves and flowers. Native of Egypt.

54. Gnaphalium verticillatum, or whorled everlaſting: ſtalk quite ſimple; flowers in whorls; leaves linear. 55. Gnaphalium oculus cati, or cat's-eye everlaſting: ſtalk proſtrate; leaves ovate; flowers glomerate, terminating, extremely villoſe. 56. Gnaphalium piloſellum, or bald everlaſting: leaves lanceolate, five-nerved, tomentoſe underneath; ſtalk naked; flowers in heads. 57. Gnaphalium declinatum, or creeping everlaſting: leaves linear-lanceolate; the calyxes with a white lanceolate ray. 58. Gnaphalium coronatum, or rayed everlaſting: leaves lanceolate; calyxes with a manifold roundiſh ray. Natives of the Cape.

59. Gnaphalium ſupinum, or dwarf everlaſting or cudweed: ſtalk ſimple, procumbent; flowers ſcattered. This reſembles Gn. ſylvaticum very much, but it is low, and the ſtalk is decumbent whilſt the plant is in flower. Perennial; root-leaves in tufts, half or three quarters of an inch long, narrow, linear-lanceolate, ſlightly hairy above, downy beneath, but greeniſh; ſtem two or three inches high, with two or three longer and narrower ſeſſile leaves; ſeeds elliptical, crowned with a ſeſſile down, having ſimple rays as long as the florets, and longer than the calyx; the florets are moſtly female, but a few in the centre of the diſk are hermaphrodites. Native of the Swiſs and Italian Alps; and the tops of the highland mountains in Scotland: found on Ben Lomond, by Dr. J. E. Smith; and five miles from Fort George, on the weſt ſide of the road to Aberdeen. It flowers in July and Auguſt.

60. Gnaphalium uliginoſum, or marſh everlaſting or cudweed: ſtalk branched, diffuſed; flowers crowded, terminating. Annual; ſtem from three or four to ſeven or eight inches and even more, upright, covered with thick white down, and much branched; branches ſpreading, lower ones often procumbent, clothed with numerous leaves, particularly towards the ſummit, and theſe thickeſt and moſt downy; leaves elliptical, tapering into a long footſtalk, ſlightly downy and greeniſh above, more ſo and whitiſh beneath: the ends of the branches are crowded with numerous heads of nearly ſeſſile flowers; ſcales of the calyx lanceolate, ſmooth, brown, ſhining; when old, blackiſh, almoſt hid in the down; feather ſeſſile, with few ſimple rays as long as the calyx. Native of the greater part of Europe, in marſhy places, eſpecially where water ſtagnates in winter. It flowers in Auguſt.

61. Gnaphalium glomeratum, or cluſter-flowered everlaſting: ſtalk diffuſed; inner ſcales of the calyxes ſubulate and naked; leaves ſomewhat ſtem-claſping. Annual; heads leafy; branches higher than the ſtalk. Native of the Cape of Good Hope.

VI. New ſpecies. 62. Gnaphalium Japonicum, or Japaneſe gnaphalium: herbaceous; upright; leaves linear-ſword-ſhaped, ſnowy-white underneath; heads terminating. Root faſcicled, with ſmall fibres, annual; ſtalks one or two, ſimple, naked at the top, white with down, a ſpan and half in height; root-leaves very many, drawn to a point below, ſharp, entire, lax, often reflex, a palm in length and half a line in breadth; ſtem-leaves ſeſſile, upright, ſhorter; flowers on the ſtalk terminating, glomerate, ſeſſile, purpliſh; the heads the ſize of a large pea. Native of Japan; flowering in Auguſt.

63. Gnaphalium trinerve, or three-nerved everlaſting: ſhrubby; leaves ſeſſile, lanceolate, three-nerved, ſilvery-white underneath; panicle corymbed, terminating, looſe. 64. Gnaphalium lanatum, or woolly gnaphalium: herbaceous, woolly; leaves linear-oblong, callous-mucronate at the tip; corymb contracted; ſtalk very ſimple. 65. Gnaphalium involucratum, or covered gnaphalium: herbaceous; leaves linear, elongate, mucronate, tomentoſe underneath; head terminating, leafy. Natives of New Zealand.

66. Gnaphalium ſinuatum, or ſinuated gnaphalium: herbaceous; branches aſſurgent; leaves ovate-lanceolate, ſinuate, toothed, hairy on both ſides. Stem four feet high, ſimple, erect; leaves large, alternate; flowers yellow, in terminating erect panicles, the marginal ſcales of the calyx being red and membranaceous. Native of Cochinchina.

Propagation and Culture. The tender ſorts, ſuch as all thoſe from the Cape, &c. 1 to 12, 15 to 24, 27 to 31, 33 to 35, 37 to 43, 51, 53 to 58, 61 to 66, Oriental everlaſting, &c. may be increaſed by ſlipping off the heads, or by cuttings, during any of the ſummer months; they ſhould be planted in a bed of light earth, or in pots in a gentle hot-bed, and covered with hand-glaſſes, or ſhaded with mats, obſerving to refreſh them frequently with water in ſmall quantities; theſe cuttings will put out roots in ſix or eight weeks, then plant them in pots filled with light earth, and place them in a ſhady ſituation till they have taken new root, when they may be removed to an open ſituation, and placed among other hardy exotics, till the middle or end of October; at which time they ſhould be placed under a common frame, where they may be protected from froſt, but in mild weather they ſhould be expoſed to the open air. N° 13, 14, 25, and 36, are ſo hardy, as in very mild winters to live abroad in warm borders near walls, with little ſhelter. The Jerſey everlaſting, N° 32, and ſome others, will come up better from ſcattered ſeeds, than when they are ſown by art; but if the ſeeds are ſown, it muſt be ſoon after they are ripe. The plants require only to be kept clean from weeds, and to be thinned where they are too cloſe. N° 45 and 46 will thrive in almoſt any ſoil and ſituation, and are eaſily propagated by their creeping roots. As to the common European ſorts, if the ſeeds are permitted to ſcatter, the plants will come up in the ſpring, with greater certainty than if they were ſown; but they are rather regarded as weeds than as garden plants. See ATHANASIA, CONYZA, FILAGO, MICROPUS, SERIPHIUM, STOEBE, and STÆHELINA.

GNAPHALOI'DES, *ſ.* See GNAPHALIUM.

GNAR, *ſ.* [*knorre*, Teut.] A hard knot in a tree.

To GNAR, or GNARL, *v. n.* [ȝnyrran, Sax. *knorren*, Dut.] To growl; to murmur; to ſnarl:

Thus is the ſhepherd beaten from thy ſide,
And wolves are *gnarling* who ſhall gnaw thee firſt. *Shakeſ.*

GNARL'ED, *adj.* [*gnar*, *nar*, or *nurr*, is in Staffordſhire

ſhire a hard knot of wood which boys drive with ſticks.] Knotty:

Merciful heav'n!
Thou rather with thy ſharp and ſulph'rous bolt
Split'ſt the unwedgable and *gnarled* oak,
Than the ſoft myrtle. *Shakeſpeare.*

To GNASH, *v. a.* [*knaſchen*, Dut. to gnaw.] To ſtrike together; to claſh:

The ſeer, who could not yet this wrath aſſwage,
Row'd his green eyes, that ſparkled with his rage,
And *gnaſh'd* his teeth. *Dryden.*

To GNASH, *v. n.* To grind or collide the teeth.—He ſhall *gnaſh* with his teeth, and melt away. *Pſ.* cxii. 10.—There ſhall be weeping and *gnaſhing* of teeth. *Matt.* viii.—To rage even to colliſion of the teeth; to fume; to growl.—They *gnaſhed* upon me with their teeth. *Pſ.* xxxv. 16.

With boiling rage Atrides burn'd,
And foam betwixt his *gnaſhing* grinders churn'd. *Dryd.*

GNAT, *ſ.* [ȝnæt, Sax.] A ſmall winged ſtinging inſect, for the natural hiſtory of which ſee the article CULEX, vol. iv. p. 461.

Her whip of cricket's bone, the laſh of film;
Her waggoner, a ſmall grey-coated *gnat*. *Shakeſpeare.*

Any thing proverbially ſmall.—Ye blind guides, which ſtrain at a *gnat* and ſwallow a camel. *Mat.* xxiii. 24.

GNAT'FLOWER, *ſ.* A flower, otherwiſe called the beeflower. See OPHRYS.

GNA'THO, *ſ.* [Latin.] A flatterer; a paraſite. *Aſh.*

GNATHONICAL, *adj.* Playing the gnatho; flattering; deceitful in words; ſoothing a perſon's humour to get by him. *Bailey.*

To GNA'THONISE, *v. n.* To play the gnatho; to flatter, &c. *Bailey.*

GNA'TIA, in ancient geography, a town of Apulia, about thirty miles from Brunduſium, badly ſupplied with water. *Horatius.*

To GNAW, *v. a.* [ȝnaȝan, Sax. *knaghen*, Dut.] To eat by degrees; to devour by ſlow corroſion:

A knowing fellow, that would *gnaw* a man
Like to a vermine, with his helliſh braine,
And many an honeſt ſoule, even quick had ſlain. *Chapm.*

To bite in agony or rage.—They *gnawed* their tongues for pain. *Rev.* xvi. 10.

Alas, why *gnaw* you ſo your nether lip?
Some bloody paſſion ſhakes your very frame. *Shakeſpeare.*

To wear away by biting:

Like rotten fruit I fall, worn like a cloth,
Gnawn into rags by the devouring moth. *Sandys.*

To fret; to waſte; to corrode. To pick with the teeth.—His bones clean pick'd, his very bones they *gnaw*. *Dryden.*

To GNAW, *v. n.* To exerciſe the teeth. It is now uſed actively.—I might well, like the ſpaniel, *gnaw* upon the chain that ties me; but I ſhould ſooner mar my teeth than procure liberty. *Sidney.*

I thought I ſaw a thouſand fearful wrecks,
A thouſand men that fiſhes *gnaw'd* upon. *Shakeſpeare.*

GNAW'ER, *ſ.* One that gnaws.

GNE'IS, *ſ.* the Saxon term, often ſtill uſed, for a rock containing mica, lapis ollaris, and quartz.

GNE'MON, *ſ.* in botany. See GNETUM.

GNE'SEN, or GNES'NO, a town of Poland, in the palatinate of Kaliſch, and ſaid to be the moſt ancient town in the country: founded in 550. In the year 1000 it was erected into an archbiſhopric; and at the council of Conſtance the primate was declared primate of Poland: one hundred miles north-eaſt of Breſlau, and one hundred and ſixty weſt of Cracow. Lat. 52. 28. N. lon. 35. 55. E. Ferro.

GNE'TUM, *ſ.* in botany, a genus of the claſs monoecia, order monadelphia, natural order piperitæ, (urticæ, *Juſſ.*) The generic characters are—Ament of whorls remote, callous, thickened, propped underneath with a partial calycle: this is peltate, orbicular, flat, quite entire, and contains ſeſſile floſcules; the males at the bottom, the females above, in the ſame whorl. I. Males. Calyx: ſcale ovate, minute, coloured. Corolla: none. Stamina: filament ſingle, filiform, longer than the ſcale; antheræ double, connected.—II. Females. Calyx: ſcale torn, rude. Corolla: none. Piſtillum: germ ovate, immerſed in the receptacle of the whorl, the length of the ſtamens; ſtyle conic, ſhort; ſtigma trifid, acute. Pericarpium: drupe ovate, one-celled. Seed: nut oblong, ſtreaked.—*Eſſential Character.* Male: an ament with ſcales; corolla, none; filament, one, with two anthers. Female: an ament with ſcales; corolla, none; ſtyle, with a bifid ſtigma; drupe, with one ſeed.

Gnetum gnemon, a ſingle ſpecies. Native of the Eaſt Indies; where the leaves, male catkins, and fruits, are eaten, but not raw. *Gnemon* is the vernacular name in Ternate, &c.

GNIAF'DA, a town of Hungary: ſeven miles weſt-ſouth-weſt of Palotza.

GNI'DIA, *ſ.* In botany, a genus of the claſs octandria, order monogynia, natural order vepreculæ, (thymeleæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, funnel-form, coloured; tube filiform, very long; border four-parted, flat. Corolla: petals four, ſeſſile, flat, ſhorter than the calyx, and inſerted into it. Stamina: filaments eight, briſtle-ſhaped, erect, almoſt the length of the flower; antheræ ſimple. Piſtillum: germ ovate; ſtyle filiform, inſerted into the ſide of the germ, the length of the ſtamens; ſtigma capitate, hiſpid. Pericarpium: none; fruit in the bottom of the calyx. Seed: ſingle, ovate, obliquely acute. It differs from Paſſerina in the corolla only.—*Eſſential Character.* Calyx, funnel-form, four-cleft; petals, four, inſerted into the calyx; ſeed, one, ſomewhat berried.

Species. 1. Gnidia pinifolia, or pine-leaved gnidia: leaves ſcattered, linear; floral leaves in whorls. Theſe are ſhrubby plants, except the laſt; and moſtly natives of the Cape of Good Hope. The leaves are oppoſite only in one or two ſorts; in the reſt they are ſcattered. The firſt ſpecies has a ſtem three or four feet high, with a few ſide-branches; leaves reſembling thoſe of roſemary; the flowers come out almoſt in whorls from between the leaves at the extremities of the branches on ſhort peduncles; calyx white; petals lanceolate, ſhorter than the calyx, white; four of the ſtamens are within, and four without, the tube. Cultivated by Mr. Miller in 1768. It varies with blue flowers.

2. Gnidia radiata, or radiated gnidia: leaves ſubulate, three-ſided, erect; heads terminating, ſeſſile, radiate; bractes lanceolate. 3. Gnidia ſimplex, or flax-leaved gnidia: all the leaves linear, acute; flowers terminating, ſeſſile. 4. Gnidia tomentoſa, or rough gnidia: leaves ſcattered, ovate-oblong, ſmooth, ſcabrous about the edge. 5. Gnidia ſericea, or ſilky gnidia: leaves ovate, tomentoſe; floral leaves in fours. Introduced in 1786 by Mr. Francis Maſſon.

6. Gnidia oppoſitifolia, or oppoſite-leaved gnidia: leaves oppoſite, lanceolate. The uppermoſt leaves are blood red at the extremity. Cultivated in gardens, it acquires petals. Flowers villoſe on the outſide; ſtamens, beſides the four calluſes above the throat, are four under the throat, and four in the middle of the tube. Introduced in 1788, by Maſſon.

7. Gnidia capitata, or headed gnidia: leaves ſcattered, lanceolate, ſmooth; flowers in heads fortified with bractes; peduncles naked. Stem ſhrubby, with upright,

u pright, round, purpliſh, branches; leaves very narrow and remote, ſmooth, and even; ſtamens ten, five without and five within the throat; the flower reſembles that of Paſſerina; and perhaps it may be a ſpecies of Dais.

8. Gnidia filamentoſa, or filamentous gnidia: leaves elliptically ovate, very ſmooth, approximating; flowers in heads; filaments capillary. This is a very ſmooth ſhrub, tubercled with the ſcars of fallen leaves; leaves alternate, ſeſſile, quite entire, without apparent veins. There is a variety with narrower leaves, but it is eaſily known by the filaments.

9. Gnidia imbricata, or imbricated gnidia: leaves oblong, imbricated in four rows, ſilky; flowers terminating in the axils of the leaves. Found at the Cape by Thunberg.

10. Gnidia Sparrmanni, or Sparrmann's gnidia: leaves linear-ſubulate, flat above, ſharp; flowers in pairs, axillary. Branches ſmooth and even, not tomentoſe; leaves not prickly, convex underneath, ſmooth and even, patulous; flowers from the uppermoſt twigs, ſmooth; border ſharp, twice the length of the tube. This is the Gn. pinifolia of Linnæus. It was obſerved at the Cape by Sparrmann.

11. Gnidia daphnæfolia, or dais gnidia: decandrous; leaves oblong, flat, quite entire; head terminating, peduncled, involucred; flowers five-cleft. This has the habit, leaves, manner of flowering, involucre, form, and hairineſs, of the calyx, as in Dais cotinifolia; the ſtructure and ſituation of the parts in the flower is exactly as in this genus, but not the number; the leaves are alternate, not oppoſite, as in Dais; the involucre as in Dais, but five-leaved. Found by Thouin in the iſland of Madagaſcar.

There are two varieties. α. hirſuta: leaves oblong, ſpatulate, hirſutely hoary; flowers ſmaller. β. glabra: leaves oblong, alternated towards the baſe, almoſt naked; flowers larger. It is difficult to aſcertain the limits between Dais and Gnidia; as alſo between Daphne and Paſſerina.

Propagation and Culture. Theſe are uſually increaſed by cuttings planted during the ſummer months in pots filled with light earth, plunged into a very moderate hot-bed, covering the pots cloſely with bell or hand glaſſes to exclude the air, and ſhading them during the day. They will put out roots in ſix weeks, when they ſhould be gradually inured to the open air. In winter place them in a dry airy glaſs-caſe, where they may enjoy free air in mild weather, and be protected from froſt and damp air. See DAPHNE.

GNO'MA, *ſ.* [from the Greek γινωσκω, to know.] A ſhort inſtructive ſentence, a pertinent and uſeful obſervation. *Scott.*

GNOMES, *ſ.* With the cabaliſts, a fabulous inviſible people ſuppoſed to inhabit the internal parts of the earth. *Scott.*

GNOMOLO'GIC, or GNOMOLOGICAL, *adj.* Pertaining to gnomology.

GNOMOL'OGY, *ſ.* [from the Greek γνωμη, a ſentiment, and λογος, a diſcourſe.] A treatiſe on ſentiment.

GNO'MON, *ſ.* [γνωμων, Gr. an index.] In aſtronomy, an inſtrument or apparatus for meaſuring the altitudes, declinations, &c. of the ſun and ſtars. The gnomon is uſually a pillar, erected upon level ground. For making the more conſiderable obſervations, both the ancients and moderns have made great uſe of it, eſpecially the former; and many have preferred it to the ſmaller quadrants, both as more accurate, and more eaſily applied. The moſt ancient obſervation of this kind extant, is that made by Pytheas, in the time of Alexander the Great, at Marſeilles, where he found the height of the gnomon was in proportion to the meridian ſhadow at the ſummer ſolſtice, as 213⅜ to 600; juſt the ſame as Gaſſendi found it to be, by an obſervation made at the ſame place almoſt two thouſand years after.

Ulugh Bey, king of Parthia, uſed a gnomon in 1437, which was one hundred and eighty Roman feet high. That erected by Ignatius Dante, in the church of St. Petronius, at Bologna, in 1576, was ſixty-ſeven feet high. M. Caſſini erected another of twenty feet high, in the ſame church, in 1655. The Egyptian obeliſks are alſo ſuppoſed to have been uſed as gnomons; and it is thought by ſome modern travellers that this was the very uſe they were built for. It may be added, that the Spaniards, in their conqueſt of Peru, found pillars of curious and coſtly workmanſhip, ſet up in ſeveral places, by the meridian ſhadows of which their philoſophers had, by long experience and repeated obſervations, learned to determine the times of the equinoxes; which ſeaſons of the year were celebrated with great feſtivity and rich offerings, in honour of the ſun.

GNOMON, in dialling, is the ſtyle, pin, or cock, of the dial, the ſhadow of which points out the hours. This is always ſuppoſed to repreſent the axis of the globe, to which it is therefore parallel, or coincident, the two ends of it pointing ſtraight to the north and ſouth poles of the world. See HOROLOGY.

GNOMO'NIC, or GNOMONICAL, *adj.* Belonging to the art of dialling.

GNOMO'NICS, *ſ.* [γνωμονικη, Gr.] The ſcience of dialling; for which ſee the article HOROLOGY.

GNOMONOLO'GICAL, *adj.* Belonging to the art of dialling. *Scott.*

GNOMONOL'OGY, *ſ.* [from the Greek γνωμων, the ſtyle of a dial, and λογος, a diſcourſe.] A treatiſe on dialling. *Not much uſed.*

GNOSIM'ACHY, *ſ.* [from the Greek γνωσις, knowledge, and μαχεομαι, to oppoſe.] In church hiſtory, a ſect who oppoſed all kinds of knowledge in divinity acquired by ſtudy and learning.

GNOS'SIS, or GNOSSIA, an epithet given to Ariadne, becauſe ſhe lived, or was born, at Gnoſſus. The crown which ſhe received from Bacchus, and which was made a conſtellation, is called *Gnoſſia Stella. Virgil.*

GNOS'SUS, in ancient geography, a famous city of Crete, the reſidence of king Minos. The name of *Gnoſſia tellus* is often applied to the whole iſland. *Strabo.*

GNOS'TICS, *ſ.* [*gnoſtiques*, Fr. *gnoſtici*, It. and Lat. γνωστικοι, of γνωσις, Gr. knowledge.] A ſect of heretics which roſe up in the firſt and ſecond centuries, and then conſiſted only of the philoſophers of thoſe times, who formed for themſelves a peculiar ſyſtem of theology, agreeable to the philoſophy of Pythagoras and Plato; to which they accommodated all their interpretations of Scripture. But *gnoſtic* afterwards became a generical name for divers heretics, who, though they differed among themſelves as to circumſtances, yet all agreed in ſome common principles. They corrupted the doctrine of the goſpel by a profane mixture of the tenets of the oriental philoſophy, concerning the origin of evil and the creation of the world, with its divine truths. Such were the Valentinians, Simonians, Carpocratians, Nicolaitans, &c. They built their theology not only on the goſpels and the epiſtles of St. Paul, but alſo on the law of Moſes and the prophets, whoſe doctrines they groſsly perverted. Their perſuaſion that evil reſided in matter, as its centre and ſource, made them reject the doctrine of the reſurrection of the body, and its re-union with the immortal ſpirit. Their notion, that malevolent genii preſided over men, and occaſioned diſeaſes and calamities, wars, and deſolations, induced them to apply themſelves to the ſtudy of magic, in order to weaken the powers or ſuſpend the influence of their malignant agents.

The gnoſtics conſidered Chriſt as the ſon of God, and conſequently inferior to the Father, who came into the world for the reſcue and happineſs of miſerable mortals, oppreſſed by evil beings: but they rejected Chriſt's humanity, on the principle that every thing corporeal is

eſſentially and intrinſically evil; and therefore the greateſt part of them denied the reality of his ſufferings. They ſet a great value on the beginning of the goſpel of St. John, where they fancied they ſaw their æons or emanations under the *Word*, the *Life*, the *Light*, &c. They divided all nature into three kinds of being, viz. *hylic*, or material; *pſychic*, or animal; and *pneumatic*, or ſpiritual. On the like principle they alſo diſtinguiſhed three ſorts of men; *material*, *animal*, and *ſpiritual*. The firſt, who were material, and incapable of knowledge, inevitably periſhed; the third, ſuch as the gnoſtics themſelves pretended to be, were all certainly ſaved: the pſychic, or animal, who were of the middle nature, were capable either of being ſaved or damned, according to their good or evil actions.

With regard to their moral doctrines and conduct, they were much divided. The greateſt part of this ſect adopted very auſtere rules of life, recommended rigorous abſtinence, and preſcribed ſevere bodily mortifications, with a view of purifying and exalting the mind. Others, however, maintained, that there was no moral difference in human actions; and thus, confounding right with wrong, they gave a looſe to all the paſſions, and aſſerted the innocence of following blindly all their motions, and of living by their tumultuous dictates. The tenets of the ancient gnoſtics were revived in Spain, in the fourth century, by a ſect called the *Priſcillianiſts*.

GNU, or GNOU, *ſ.* A ſpecies of antelope. See the article CAPRA, vol. iii. p. 775.

To GO, *v. n.* pret. *I went*; *I have gone*: [ȝan, Saxon. This was probably changed to *gone*, or *gang*, then contracted to *go*. *Went* is the preterite of the old verb *wend*.] To walk; to move ſtep by ſtep:

You know that love
Will creep in ſervice where it cannot *go*. *Shakeſpeare.*

To move; not ſtand ſtill.—Riſe, let us be *going*. *Matt.* xxvi. 46.—To walk ſolemnly.—If there be cauſe for the church to *go* forth in ſolemn proceſſion, his whole family have ſuch buſineſs come upon them that no one can be ſpared. *Hooker.*—To walk leiſurely; not run.—And muſt *I go* to him?—Thou muſt run to him; for thou haſt ſtaid ſo long, that *going* will ſcarce ſerve the turn. *Shakeſpeare.*—To march or walk a-foot.—I will only *go* through on my feet. *Num.* xx. 19.—To travel; journey:

From them I *go*,
This uncouth errand ſole. *Milton.*

To proceed; to make a progreſs:

Thus others we with defamation wound,
While they ſtab us; and ſo the jeſt *goes* round. *Dryden.*

To remove from place to place:

Stept in ſo far, that, ſhould I wade no more,
Returning were as tedious as *go* o'er. *Shakeſpeare.*

To depart from a place; to move from a place; the oppoſite of *to come*.—And when ſhe had ſo ſaid ſhe *went* her way. *John*, xi. 28.—I will let you *go*, that ye may ſacrifice, only you ſhall not *go* very far away. *Exod.* viii. 28.

Go firſt the maſter of thy herds to find,
True to his charge, a loyal ſwain and kind. *Pope.*

To move or paſs in any manner, or to any end.—The mourners *go* about the ſtreets. *Eccl.* xii. 5.—The ſun ſhall *go* down over the prophets, and the day ſhall be dark over them. *Mac.* iii. 6.—Put every man his ſword by his ſide, and *go* in and out from gate to gate throughout the camp. *Exod.* xxxii. 27.

Though the vicar be bad, or the parſon be evil,
Go not for thy tything thyſelf to the devil. *Tuſſer.*

To paſs in company with others.—Thou ſhalt again be adorned with thy tabrets, and ſhalt *go* forth in the dances of them that make merry. *Jer.* xxxi. 4.—He *goeth* in company with the workers of iniquity, and walketh with wicked men. *Job.*

Away, and with thee *go*, the worſt of woes,
That ſeek'ſt my friendſhip, and the gods thy foes.
Chapman.

To proceed in any courſe of life, good or bad.—And the Levites that are *gone* away far from me, when Iſrael *went* aſtray, which *went* aſtray away from me after their idols, they ſhall even bear their iniquity. *Ezek.* xliv. 10.—To proceed in mental operations.—Thus I have *gone* through the ſpeculative conſideration of the Divine Providence. *Hale.*—I hope, by *going* over all theſe particulars, you may receive ſome tolerable ſatisfaction about this great ſubject. *South.*—To take any road.—I will *go* along by the highway; I will neither turn to the right hand, nor to the left. *Deut.* ii. 27.—Who ſhall bemoan thee? Or who ſhall *go* aſide to aſk how thou doeſt? *Jer.* xv. 5.—To march in a hoſtile or warlike manner.—Let us *go* down after the Philiſtines by night, and ſpoil them until the morning light. 1 *Sam.* xiv. 36.—The remnant of Jacob ſhall be among the Gentiles as a lion among the beaſts of the foreſt; who, if he *go* through, both treadeth down and teareth in pieces, and none can deliver. *Mic.* v. 8.

You were advis'd his fleſh was capable
Of wounds and ſcars, and that his forward ſpirit
Would lift where moſt the trade of danger rang'd;
Yet did you ſay *go* forth. *Shakeſpeare.*

To change ſtate or opinion for better or worſe.—We will not hearken to the king's words to *go* from our religion. 1 *Mac.* ii. 22.

All *goes* to ruin, they themſelves contrive
To rob the honey, and ſubvert the hive. *Dryden.*

To apply one's ſelf.—Becauſe this atheiſt *goes* mechanically to work, he will not offer to affirm that all the parts of the embryon could, according to his explication, be formed at a time. *Bentley.*—To have recourſe to.—Dare any of you, having a matter againſt another, *go* to law before the unjuſt, and not before the ſaints? 1 *Cor.*—To be about to do.—So extraordinary an example, in ſo degenerate an age, deſerves for the rarity, and, I was *going* to ſay, for the incredibility of it, the atteſtation of all that knew him. *Locke.*—To ſhift; to paſs life not quite well.—Clothes they muſt have; but if they ſpeak for this ſtuff, or that colour, they ſhould be ſure to *go* without it. *Locke.*—To decline; to tend towards death or ruin. This ſenſe is only in the participles *going* and *gone*:

He is far *gone*, and, truly, in my youth,
I ſuffer'd much extremity for love. *Shakeſpeare.*

To be in party or deſign:

They with the vanquiſh'd prince and party *go*,
And leave their temples open to the foe. *Dryden.*

To eſcape.—Timotheus himſelf fell into the hands of Doſitheus and Soſipater, whom he beſought with much craft to let him *go* with his life. 2 *Mac.* xii. 24.—To tend to any act:

There be ſome women, Silvius, had they mark'd him,
In parcels as I did, would have *gone* near
To fall in love with him. *Shakeſpeare.*

To be uttered.—His diſciples perſonally appeared among them, and entertained the report which had *gone* abroad concerning a life ſo full of miracles. *Addiſon.*—To be talked of; to be known.—It has the greateſt town in the iſland that *goes* under the name of Ano-Capreä, and is in ſeveral places covered with a very fruitful ſoil. *Addiſon on Italy.*—To paſs; to be received.—And the man *went* among men for an old man in the days of Saul. 1 *Sam.* xvii. 12.—A kind imagination makes a bold

a bold man have vigour and enterprize in his air and motion: it ſtamps value upon his face, and tells the people he is to *go* for ſo much. *Collier.*—To move by mechaniſm.—This pope is decrepid, and the bell *goeth* for him. *Bacon.*

Clocks will *go* as they are ſet; but man,
Irregular man's never conſtant, never certain. *Otway.*

'Tis with our judgments as our watches, none
Go juſt alike, yet each believes his own. *Pope.*

To be in motion, from whatever cauſe.—Clipt and waſhed money *goes* about, when the entire and weighty lies hoarded up. *Waller.*—To move in any direction.—Shall the ſhadow *go* forward ten degrees, or *go* back ten degrees? 2 *Kings*, xx. 9.—To flow; to paſs; to have a courſe:

The god I am, whoſe yellow water flows
Around theſe fields, and fattens as it *goes*,
Tyber my name. *Dryden.*

To have a tendency:

Athenians, know
Againſt right reaſon all your counſels *go*. *Dryden.*

To be in a ſtate of compact or partnerſhip.—There was a hunting match agreed upon betwixt a lion, an aſs, and a fox, and they were to *go* equal ſhares in the booty. *L'Eſtrange.*—To be regulated by any method; to proceed upon principles.—We are to *go* by another meaſure. *Spratt.*—The principles I there *went* on, I ſee no reaſon to alter. *Locke.*—To be pregnant.—Of living creatures ſome are a longer time in the womb, and ſome ſhorter: women *go* commonly nine months. *Bacon.*

The fruit ſhe *goes* with,
I pray that it good time and life may find. *Shakeſpeare.*

To paſs; not to remain.—She began to afflict him, and his ſtrength *went* from him. *Judges*, xvi. 19.—When our merchants have brought them, if our commodities will not be enough, our money muſt *go* to pay for them. *Locke.*—To paſs, or be looſed; not to be retained.—Let *go* the hand of that arch-heretic. *Shakeſpeare.*

Then he lets me *go*,
And, with his head over his ſhoulder turn'd,
He ſeem'd to find his way without his eyes. *Shakeſpeare.*

To be expended.—Scholars are cloſe and frugal of their words, and not willing to let any *go* for ornament, if they will not ſerve for uſe. *Felton.*—To be in order of time or place.—We muſt enquire farther what is the connexion of that ſentence with thoſe that *go* before it, and thoſe which follow it. *Watts.*—To reach or be extended to any degree.—No man's knowledge here can *go* beyond his experience. *Locke.*—To extend to conſequences.—It is not one maſter that either directs or takes notice of theſe: it *goes* a great way barely to permit them. *L'Eſtrange.*—To reach by effects.—Conſidering the cheapneſs, ſo much money might *go* farther than a ſum ten times greater could do now. *Wilkins.*—To extend in meaning.—His amorous expreſſions *go* no further than virtue may allow. *Dryden.*—To ſpread; to be diſperſed; to reach:

Whoſe fleſh, torn off by lumps, the rav'nous foe
In morſels cut, to make it farther *go*. *Tate.*

To have influence; to be of weight; to be of value.—'Tis a rule that goes a great way in the government of a ſober man's life, not to put any thing to hazard that may be ſecured by induſtry, conſideration, or circumſpection. *L'Eſtrange.*—To be rated one with another; to be conſidered with regard to greater or leſs worth.—I think, as the world *goes*, he was a good ſort of man enough. *Arbuthnot.*—To contribute; to conduce; to concur; to be an ingredient.—The medicines which *go* to the ointments are ſo ſtrong, that, if they were uſed inwards, they would kill thoſe that uſe them. *Bacon.*—To fall out, or terminate; to ſucceed.—I will ſend to thy father, and they ſhall declare unto him how things *go* with thee. *Tob.* x. 8.

Howe'er the buſineſs *goes*, you have made fault
I' th' boldneſs of your ſpeech. *Shakeſpeare.*

To be in any ſtate. *This ſenſe is imperſonal.*—It ſhall *go* ill with him that is left in his tabernacle. *Job*, xx.—He called his name Beriah, becauſe it *went* evil with his houſe. 1 *Chron.* vii. 23.—To proceed in train or conſequence.—Duration in itſelf is to be conſidered as *going* on in one conſtant, equal, uniform, courſe. *Locke.*

I had hope,
When violence was ceaſed, and war on earth,
All would have then *gone* well. *Milton.*

To Go *about.* To attempt; to endeavour; to ſet one's ſelf to any buſineſs.—They never *go about*, as in former times, to hide or palliate their vices; but expoſe them freely to view. *Swift.*

O dear father,
It is thy buſineſs that I *go about*. *Shakeſpeare.*

To Go *aſide.* To err; to deviate from the right.—If any man's wife *go aſide*, and commit a treſpaſs againſt him. *Numb.* v. 12.

To Go *between.* To interpoſe; to moderate between two.—I did *go between* them, as I ſaid; but more than that, he loved her; for, indeed, he was mad for her. *Shakeſpeare.*

To Go *by.* To paſs away unnoticed.—What's that to us? The time *goes by*; away. *Shakeſpeare.*

Do not you come my tardineſs to chide,
That laps'd in time and paſſion, lets *go by*
Th' important acting of your dread command. *Shakeſp.*

To find or get in the concluſion.—He's ſure to *go by* the worſt, that contends with an adverſary that is too mighty for him. *L'Eſtrange.*

In argument with men a woman ever
Goes by the worſe, whatever be her cauſe. *Milton.*

To obſerve as a rule.—The frequency of the fits, and violence of the ſymptoms, are a better rule to *go by*. *Sharp.*

To Go *down.* To be ſwallowed; to be received, not rejected.—Folly will not eaſily *go down* in its own natural form with diſcerning judges. *Dryden.*—If he be hungry, bread will *go down*. *Locke.*

To Go *in and out.* To do the buſineſs of life.—The Lord ſhall preſerve thy *going out* and thy coming *in*. *Pſalms.*—To be at liberty.—He ſhall *go in and out*, and find paſture. *John.*

To Go *off.* To die; to go out of life; to deceaſe.—In this manner he *went off*, not like a man that departed out of life, but one that returned to his abode. *Tatler.*

I would the friends we miſs were ſafe arrived,
Some muſt *go off*; and yet, by theſe I ſee,
So great a day as this is cheaply bought. *Shakeſpeare.*

To depart from a poſt:

The leaders having charge from you to ſtand,
Will not *go off* until they hear you ſpeak. *Shakeſpeare.*

To Go *on.* To make attack:

Bold Cethegus,
Whoſe valour I have turn'd into his poiſon,
And praiſed ſo to daring, as he would
Go on upon the gods. *Ben Jonſon.*

To proceed.—He that deſires only that the work of God and religion ſhould *go on*, is pleaſed with it, whoever is the inſtrument. *Taylor.*—*Go on* chearfully in the glorious courſe you have undertaken. *Addiſon.*

To Go *over.* To revolt; to betake himſelf to another

ther party.—In the change of religion, men of ordinary underſtandings don't ſo much conſider the principles as the practice of thoſe to whom they *go over*. *Addiſon*.

To Go *out*. To go upon any expedition.—You need not have pricked me: there are other men fitter to *go out* than I. *Shakeſpeare*.—To be extinguiſhed.—Spirit of wine burned till it *go out* of itſelf, will burn no more. *Bacon*.

Think'ſt thou the fiery fever will *go out*,
With titles blown from adulation! *Shakeſpeare*.

To Go *through*. To perform thoroughly; to execute.—The powers in Germany are borrowing our money, in order to *go through* their part of the expence. *Addiſon*.—To ſuffer; to undergo.—I tell thee that it is abſolutely neceſſary for the common good that thou ſhouldeſt *go through* this operation. *Arbuthnot*.

To Go *upon*. To take as a principle.—This ſuppoſition I have *gone upon* through thoſe papers. *Addiſon*.

The ſenſes of this word are very indiſtinct: its general notion is motion or progreſſion. It commonly expreſſes paſſage from a place, in oppoſition to *come*. This is often obſervable even in figurative expreſſions. We ſay, The words that *go* before and that *come* after; To-day *goes* away and to-morrow *comes*. *Johnſon*.

GO TO, *interj*. Come, come, take the right courſe. A ſcornful exhortation.—*Go to*, *go to*, thou art a fooliſh fellow. *Shakeſpeare*.

My favour is not bought with words like theſe:
Go to; you'll teach your tongue another tale. *Rowe*.

GO'-BY, *ſ*. Deluſion; artifice; circumvention; overreach.—Except an apprentice is inſtructed how to adulterate and varniſh, and give you the *go-by* upon occaſion, his maſter may be charged with neglect. *Collier*.

GO'-CART, *ſ*. A machine in which children are incloſed to teach them to walk, and which they puſh forward without danger of falling:

Young children, who are try'd in
Go-carts, to keep their ſteps from ſliding,
When members knit, and legs grow ſtronger,
Make uſe of ſuch machine no longer. *Prior*.

GO'A, an iſland in the Indian Sea, near the weſt coaſt of Hindooſtan, ſeparated from the continent by a river called Mandova, which ſoon after runs into the ſea; about eight leagues in circumference. The ſoil is fertile, eſpecially in the valleys; the trees are always covered with leaves, flowers, and fruit; and abundance of ſprings iſſue from the mountains. The rainy ſeaſon continues here from June till September or October; and the land floods bring down ſuch quantities of mud and ſand, as ſtop up the haven and impede the navigation. During this time the weather is very hot after ſun-riſe, when the rains ceaſe; yet before the rains begin, that is, in the months of April and May, the weather is ſtill more ſultry, but from October to March it is very moderate.

GO'A, a city, and capital of the Portugueſe ſettlements in India, the ſeat of a viceroy, and ſee of an archbiſhop, taken by the Portugueſe general Albuquerque, in 1510. The port of Goa is repreſented as one of the beſt in the Indies, and for this character it ſtands in ſome meaſure obliged to nature; but the Portugueſe have ſpared no pains to heighten and improve thoſe advantages, as well as to fortify it with many caſtles and towers, furniſhed with abundance of good cannon. Beyond theſe caſtles the channel becomes narrower, ſometimes to one, ſometimes to two, miles; and its banks are planted with the beſt fruits and fineſt trees India affords. Eight miles up is the town of Goa. Half way upon the right ſide, is a palace, called *Paſſo de Dangi*, where formerly the viceroys reſided, but at preſent it ſerves as a barrack for the garriſon: there begins a ſtrong broad wall, two miles in length, for a foot-path when the country is overflowed, and a great deal of ſalt is gathered round it. This channel, that makes ſo noble a port, runs many miles up the country, dividing it into ſeveral fruitful iſlands and peninſulas, which plentifully furniſh the city with neceſſaries. Adjoining to this port is the haven of Murmugon, formed by the other channel, that runs between the iſland of Goa and peninſula of Salſete, and ſupplies a ſafe retreat to the ſhips that come from Portugal, and other parts, when they are ſhut out of the port by the ſands which the river Mandova brings down, when ſwollen by the firſt rains of June; the paſſage not being open till October. This port of Murmugon is defended by the caſtle of the ſame name, ſeated in the iſland of Salſete, in which there is a good garriſon, and the fortifications are well ſupplied with cannon. At the ſouth entrance into the channel, a little beyond the forts on the right hand, are the remains of Old Goa, and from thence to the new city there is a commodious road, elegantly adorned with trees for fruit and ſhade. Yet what is ſtyled the new city, carries evident marks of decay; for, though the walls are kept in good repair, and are every where well ſupplied with cannon, ſince they occupy a ſpace of twelve miles, they ſerve to ſhew what the city once was, in compariſon of what it now is. In the time of its proſperity, there was nothing could be compared with it in the Indies; and very few cities in Europe were either larger or better built. The public ſtructures ſtill remain, and bear inconteſtible evidence of its former grandeur.

Among its other eſtabliſhments, it had a famous ſpiritual inquiſition for the puniſhment of heretics, where the moſt unheard-of cruelties were long exerciſed over thouſands of the poor ignorant unſuſpecting inhabitants, on the ſcore of religion; but for the intereſts of humanity, and the honour of the Chriſtian name, the tribunal of the inquiſition of Goa was aboliſhed by a royal decree in Portugal, under the adminiſtration of the marquis de Pombal, prime miniſter to king Don Joſeph, who died in February 1777. The building ſtill remains, and by its black outſide appears a fit emblem of the cruel and bloody tranſactions that paſſed within its walls!

Here are ſeveral beautiful churches of modern conſtruction; and in that dedicated to Bon Jeſus, is the chapel of St. Franciſco de Xaviere, whoſe tomb it contains: this chapel is a moſt ſuperb and magnificent ſtructure: the tomb of the ſaint is entirely of marble, brought from Liſbon; on the four ſides of it the principal actions of the life of the ſaint are moſt elegantly carved in baſſo relievo; theſe repreſent his converting the different nations to the catholic faith: the ſculpture is moſt admirably executed: it extends to the top in a pyramidical form, which terminates with a coronet of mother-of-pearl. On the ſides of this chapel are excellent paintings, done by Italian maſters; the ſubjects from ſcripture.

The number of inhabitants is now ſaid to be about twenty thouſand; of theſe the native Portugueſe amount to a very ſmall number; the Meſtizos are more numerous; the Canarins, or natives, are as black as jet, but have long black hair, and many of them fine features; multitudes of negro ſlaves, and pagans of different nations, make up the reſt of the people. It is generally agreed, that the men are for the moſt part proud, indolent, jealous, revengeful, and indigent; the women, lazy, laſcivious, and as well ſkilled in poiſoning as any in the world. Two hundred and fifteen miles ſouth-ſouth-eaſt of Bombay. Lat. 15. 28. N. lon. 73. 46. E. Greenwich.

GO'A, a town of the iſland of Celebes, near the ſouth coaſt. Lat. 5. 12. S. lon. 120. 30. E. Greenwich.

GOAD, *ſ*. [ȝaȝ, Saxon.] A pointed inſtrument with which oxen are driven forward.—Oft in his harden'd hand a *goad* he bears. *Pope*.

To GOAD, *v. a.* To prick or drive with the goad. To incite; to ſtimulate; to inſtigate; to drive forward:

Moſt dangerous
Is that temptation, that doth *goad* us on
To ſin in loving virtue. *Shakeſpeare.*

GOAL, *ſ.* [*gaule*, Fr.] A long pole, ſet up to mark the bounds of the race. The landmark ſet up to bound a race; the point marked out to which racers run:

As at the Olympian games, or Pythian fields,
Part curb their fiery ſteeds, or ſhun the *goal*
With rapid wheels. *Milton.*

The ſtarting poſt:

Haſt thou beheld, when from the *goal* they ſtart,
The youthful charioteers with heaving heart
Ruſh to the race? *Dryden.*

The final purpoſe; the end to which a deſign tends.—Our poet has always the *goal* in his eye, which directs him in his race: ſome beautiful deſign, which he firſt eſtabliſhes, and then contrives the means, which will naturally conduct him to his end. *Dryden.*

Each individual ſeeks a ſeveral *goal*,
But heav'n's great view is one, and that the whole. *Pope.*

It is ſometimes improperly written for GAOL, or *jail*; which ſee.

GOAR, *ſ.* [*goror*, Welſh.] Any edging ſewed upon cloth to ſtrengthen it. *Skinner.*

GOAR (James), a learned French dominican monk, born at Paris in 1601, and entered into the order of preaching friars in 1619. Being ſent on a miſſion into the Levant, he there made the doctrines and ceremonies of the Greek church the ſubjects of his diligent inveſtigation. Returning afterwards to Rome, he formed an acquaintance with the moſt learned men of the times, and particularly with Leo Allatius. He alſo carefully examined the different printed books and manuſcripts in the libraries of that city, which treat of the Greek rituals; and from the materials which he collected drew up a very learned work, conſiſting of a collection of the Greek liturgies, &c. illuſtrated with numerous valuable notes, highly uſeful in explaining the dogmas and eccleſiaſtical ceremonies of the eaſtern churches. It was publiſhed at Paris in 1647, in Greek and Latin, under the title of *Eucologion, ſive Rituale Græcorum*, folio. This work having become ſcarce, was reprinted at Venice in 1730, folio. Father Goar alſo tranſlated into Latin ſome of the Greek writers on the Byzantine hiſtory, which form the curious collection printed at the Louvre: ſuch as, 1. The Treatiſe of George Codinus concerning the Officers of the Palace, and thoſe of the Great Church at Conſtantinople, with Notes, 1648. 2. The Chronography of George Syncellus, and that of Nicephorus, Patriarch of Conſtantinople, 1652. 3. The Annals of George Cedrenus, with Notes, 1647. 4. The Chronography of Theophanes, with Notes, and the various Readings collected by Father Combeſis, 1655. 5. The Lives of the modern Emperors, by Leo the Grammarian, 1655. He died in 1653.

GOARS'HAUSEN, a town of Germany, in the circle of the Upper Rhine, and county of Katzenelnbogen, ſituated on the eaſt ſide of the Rhine: two miles eaſt of St. Goar.

GOAT, *ſ.* [ȝaꝛ, Saxon and Scottiſh.] A ruminant animal that ſeems a connecting ſpecies between the deer and ſheep. For its natural hiſtory and particular ſpecies, ſee the article CAPRA, vol. iii. p. 770.

The little bear that rock'd the mighty Jove,
The ſwan whoſe borrow'd ſhape conceal'd his love,
Are grac'd with light; the nurſing *goat's* repaid,
With heav'n, and duty rais'd the pious maid. *Creech.*

GO'AT's BEARD, *ſ.* See TRAGOPOGON.

GOAT I'SLAND, an iſland of the American States, in the ſtate of Rhode Iſland, oppoſite to the town of Newport, on which is Fort Waſhington. The fort has been lately repaired, and a citadel erected in it.

GOAT I'SLAND (Great), a ſmall iſland near the ſouth coaſt of Jamaica. Lat. 17. 53. N. lon. 76. 51. W. Greenwich.

GOAT I'SLAND (Little), a ſmall iſland, about a mile north-weſt from Great Goat Iſland.

GOAT's I'SLAND, the ſouthernmoſt of the Baſhee Iſlands, in the Eaſtern Indian Sea. Lat. 20. 6. N. lon. 121. E. Greenwich.

GO'AT's MILK, *ſ.* The milk of goats.—After the fever and ſuch like accidents are diminiſhed, aſs's and *goat's milk* may be neceſſary. *Wiſeman.*

GO'AT's RUE, *ſ.* See GALEGA.

GO'AT-SKIN, *ſ.* Skin of a goat; a veſſel made of the hide of a goat:

Then fill'd two *goat-ſkins*, with her hands divine;
With water one, and one with ſable wine. *Pope.*

GO'AT-SUCKER, *ſ.* in ornithology. See CAPRIMULGUS, vol. iii. p. 778.

GOAT's THORN, *ſ.* See ASTRAGALUS.

GO'AT WEED, *ſ.* See CAPRARIA.

GO'ATH, a place in Paleſtine, ſituated near Jeruſalem. *Jer.* xxxi. 39.

GOAT'HERD, *ſ.* [ȝaꝛ and hỳnd, Sax. a feeder or tender.] One whoſe employment is to tend goats:

Is not thilk fame *goatherd* proud,
That ſits on yonder bank,
Whoſe ſtraying herd themſelf doth ſhroud
Among the buſhes rank? *Spenſer's Paſtorals.*

GOAT'ISH, *adj.* Reſembling a goat in any quality: as, rankneſs; luſt.—The laſt is notorious for its *goatiſh* ſmell, and tufts not unlike the beard of that lecherous animal. *More.*

GOA'VE (Grand), a town of the iſland of St. Domingo: ten miles ſouth-weſt of Leogane.

GOA'VE (Petit), a ſeaport town of the iſland of St. Domingo, with a harbour capable of receiving veſſels of the largeſt ſize ſafe from winds; the environs contain plantations of ſugar, coffee, indigo, and cotton. This town is the ſtaple to which the inhabitants of Grand Goave and other places ſend their commodities: twenty miles weſt-ſouth-weſt of Leogane. Lat. 18. 30. N. lon. 55. 5. W. Ferro.

GOB, *ſ.* [*gobe*, Fr.] A ſmall quantity. *A low word.*—Do'ſt think I have ſo little wit as to part with ſuch a *gob* of money? *L'Eſtrange.*

GOB, or GEZER. See GEZER.

GO'BAN, a town of Perſia, in the province of Chuſiſtan: ſeventy-five miles ſouth of Suſa.

GO'BAR, a governor of Meſopotamia, who checked the courſe of the Euphrates, that it might run rapidly through Babylon. *Pliny.*

GOB'BET, *ſ.* [*gobe*, Fr.] A mouthful; as much as can be ſwallowed at once.—The cooks ſlice it into little *gobbets*. *Sandy.*

The giant, gorg'd with fleſh, and wine, and blood,
Lay ſtretch'd at length, and ſnoring in his den,
Belching raw *gobbets* from his maw, o'ercharg'd
With purple wine, and cruddled gore confus'd. *Addiſon.*

To GOB'BET, *v. a.* To ſwallow at a mouthful. *A low word.*—Down comes a kite powdering among them, and *gobbets* up both together. *L'Eſtrange.*

GOB'BI, a country of Africa, between the country of Camma and Cape Lopez Gonſalvo; the chief trade of the place conſiſts in elephants and ivory; the principal town is ſituated about a day's journey from the Atlantic.

To GOB'BLE, *v. a.* [*gober*, old French, to ſwallow.]

To

To ſwallow haſtily with tumult and noiſe.—The ſheep were ſo keen upon the acorns, that they *gobbled* up now and then a piece of the coat along with them. *L'Eſtrange.*

Of laſt year's corn in barn great ſtore;
Fat turkies *gobbling* at the door. *Prior.*

GOB'BLER, *ſ.* One that devours in haſte; a gormand; a greedy eater.

GOB'BO (Pietro Paolo Cortoneſe), a celebrated painter of fruit and landſcapes, born at Cortona in 1580, and acquired the principles of deſign from his father; but was afterwards the diſciple of Creſcentio at Rome, and perfected himſelf in the moſt eſſential parts of his profeſſion by ſtudying after nature. His merit ſoon recommended him to the notice and eſteem of the moſt able judges at Rome; and he found a generous patron in cardinal Borgheſe, who employed him to adorn his palace. The fruit which he painted was ſo expreſſive of nature, that nothing could poſſibly excel it. He died in 1640.

GOB'ELIN (Giles), a celebrious French dyer in the reign of Francis I. diſcovered a method of dying a beautiful ſcarlet, and his name has been given ever ſince to the fineſt French ſcarlets. His houſe, in the ſuburb of St. Marcel at Paris, and the river he made uſe of, are ſtill called *the Gobelins*. An academy for drawing, and a manufactory of fine tapeſtries, were erected under his inſpection in 1666; for which reaſon the tapeſtries are called *the Gobelins*. See the article DYING, vol. vi. p. 142.

GO'BETWEEN, *ſ.* One that tranſacts buſineſs by running between two parties. *Commonly in an ill ſenſe.*—Even as you came in to me, her aſſiſtant, or *gobetween*, parted from me: I ſay, I ſhall be with her between ten and eleven. *Shakeſpeare.*

GO'BI, an immenſe deſert of Aſia, which originates on the north ſide of the fountains of the Ganges, and of the Indus, in about latitude 37. 30. its courſe is north-eaſterly between longitude 74. 45. and 105. eaſt, bounding or dividing part of Hindooſtan, Thibet, weſtern Tartary, Tangut, and the Monguls, and ends in latitude 49. 20. at the lake Dalay-nor, in Chineſe Tartary; the whole extent is not leſs than two thouſand three hundred and ninety-ſeven miles. It is named the *Gobi*, by the Indians; and by the Chineſe, *Shamo* and *Han Kai*. It conſiſts of ſands equally fleeting and tremendous as thoſe of Arabia, which would be impaſſable had not nature placed acroſs them, at very remote diſtances, three chains of hills, or narrow tracts of ſolid ground, the roads which travellers muſt take; and amidſt this ocean of ſand were pleaſant vallies, entirely inſulated by the ſand. Occaſionally, in the middle ages, theſe roads were the paſſage which merchants took, either from the countries bordering on the Caſpian Sea, or from Europe, as their buſineſs might call them through Tartary and Bucharia into India, or the diſtant China.

GOBIOMO'RUS, *ſ.* The name of a genus inſtituted by Cepede, for ſome of the ſpecies of GOBIUS, which ſee.

GO'BIUS, *ſ.* [κωβιος, Gr. from גב *goba*, Heb.] In ichthyology, the GOBY; a genus of fiſhes belonging to the order of thoracici. The generic character is—ventral fins united and funnel-ſhaped. Theſe fins, according to ſome writers, ſerve them to faſten themſelves to the rocks; which, however, does not appear probable, as they have no capability of penetrating the ſmooth ſurface of a ſtone; from this idea they have nevertheleſs received their name, *rock-fiſh*, among us; or rather becauſe they commonly keep at the bottom of the water, among rocks or ſtones. They have a long body, covered with ſcales; and do not grow very large. The head is ſmall, laterally compreſſed in ſome ſpecies, and flattened in others; but in all, the body is ſomewhat rounded. The eyes are at the top of the head, and ſtand near together; between them, and behind one another, are two little round holes, which doubtleſs are the noſtrils and the openings of the ears. The aperture of the mouth is ſmall, and the jaws are armed with little ſharp teeth; the tongue is ſhort and truncated, and the palate armed with four rugged bones. The gills lie one over the other, and contain from four to five rays; the aperture is ſmall and round. The lateral line goes ſtraight from one end of the body to the other. One thing remarkable in this genus is, that the end of the paſſage of the ovarium turns towards the anus, and is wart-ſhaped. Theſe fiſh live on worms, aquatic inſects, ſpawn, and young fry. They are moſtly ſea-fiſh, whence they obtained the name of *ſea-gudgeons*; but ſome of the ſpecies ſince diſcovered are found to inhabit rivers. Cepede has diſtributed them into ſeveral genera, and the genera into ſubdiviſions; and the ſpecies he arranges according to the number of rays in the ſecond dorſal fin. Thirty-ſix ſpecies have been aſcertained, which are as follow:

1. Gobius niger, the black goby, or rock-fiſh. This is eaſily diſtinguiſhed by the yellow and black ſpots on a whitiſh ground, and by having fourteen rays in the ſecond dorſal fin; there are four rays in the membrane of the gills, ten in the ventral fin, twelve in the anal, fourteen in the tail, and ſix in the firſt dorſal. The whole fiſh is ſhaped like a wedge; the head is large, and diminiſhes gradually to the tail; it is alſo inſenſibly flattened; and the body, which is laterally compreſſed, becomes round towards the tail; the jaws are of equal length, armed with two rows of ſharp teeth; the eyes are lozenge-ſhaped, pupil black, iris ſilvery; the membrane of the gills is large, as well as their aperture; the back is arched, marked with black rings, the lateral line not viſible; the belly is large and yellow; the anus is in the middle of the body, which is ſtudded with little black and yellow ſpots. The fins are of a bluiſh brown, and ornamented with ſmall ſpots; the rays of the dorſal and anal fins are ſingle; the reſt branched; they are all ſoft, except thoſe of the firſt dorſal, which are ſomewhat hard; the pectoral fins are ſhort, the others long; the tail fin is rounded. See the Plate, fig. 2. This is a rapacious fiſh; feeds on the young fry, and aquatic inſects. It is found in the ſeas of Europe and Aſia. In ſpring they approach the ſhores and the mouths of rivers, to propagate; they ſpawn in May and June, caſting their ova on ſtones, as remarked by Ariſtotle and confirmed by Pontoppidan. They grow to the length of ſix inches, and while young are themſelves often the prey of ſome ſpecies of cod. The fleſh is well-taſted, reſembling the ſmaller perch. They are taken in the gulphs near Heiligoland, where they fiſh for them in the ſame manner as for cod: according to Falck, they are taken alſo in the Achtuba and Volga.

2. Gobius bicolor, the black-finned goby. Specific character, body and tail brown; fins black. There are ſix rays in the firſt dorſal fin, ſixteen in the ſecond, nineteen in the pectorals, twelve in the ventrals, fifteen in the anal, and ſeventeen in the tail. This is found in the Mediterranean; and is about three inches long. The rays of the fins appear beyond the membrane which unites them. It was firſt diſcovered by Brunniche.

3. Gobius cruentatus, the bloody goby. Specific character, the mouth ſpotted with red; the rays of the dorſal fins reaching beyond the membrane. There are five rays in the membrane of the gills, ſix in the firſt dorſal, ſixteen in the ſecond, nineteen in the pectorals, twelve in the ventrals, in the anal and tail fifteen each. This inhabits the Mediterranean, and is perhaps only a variety of the jozo; it much reſembles alſo the following ſpecies. Not the mouth only, but the throat, opercula, and ſeveral of the fins, are marked with red ſpots like pimples, whence Bonaterra calls it *puſtulcux*. The general colour is a pale white, with brown tranſ-

verſe ſtripes; there are ſmall brown bands on the tail fin, which is rounded; the ventrals are of a bluiſh colour.

4. Gobius paganellus, the ſea-gudgeon. Specific character, the firſt dorſal fin edged with yellow; the ſecond and the anal purple at the baſe. The firſt dorſal fin has ſix rays, the ſecond ſeventeen, the pectorals ſeventeen each, the ventrals twelve, the anal ſixteen, and the tail twenty. Found in the Mediterranean Sea, among rocks, whence its trivial name of ſea-gudgeon or goby. It grows ſometimes ten inches long; its colour white ſhaded with yellow, and ſometimes with green; it has beſides ſome little black ſpots; the tail fin is almoſt ſtraight; the teeth are ſmall; mouth large. According to Ariſtotle, it feeds on marine plants. The fleſh is lean, and ſomewhat criſp. They approach the ſhores to depoſit their ſpawn; as there, ſays Rondeletius, they find cool water, plenty of food, and ſafety from the attacks of larger fiſh.

5. Gobius Arabicus, the Arabian goby. Specific character, the five laſt rays of the firſt dorſal fin twice as long as the membrane, and ending in a red filament. The firſt dorſal fin has ſix rays, the ſecond fourteen, the pectorals ſixteen, the ventrals twelve, the anal thirteen, and the tail ſeventeen. Forſkael diſcovered this fiſh at Jedda in Arabia; it is not longer than one's little finger, but its colours are beautiful. The upper ſurface is moſtly of a greeniſh brown, ſet off by a great number of blue and violet ſpots, running one into the other, and moſtly upon the fins; the tips of the long rays which form the ſpecific character are red. Its ſkin is ſoft; ſcales ſmall, and ſtrongly adherent; tail fin wedge-ſhaped.

6. Gobius nebuloſus, the clouded goby. Specific character—the ſecond ray of the firſt dorſal terminating in a black filament twice as long as the membrane. The membrane of the gills is ſuſtained by ſeven rays, the firſt dorſal by ſix, the ſecond by eleven, the pectorals have eighteen each, the ventrals twelve, the anal eleven, and the tail fourteen. This alſo was found by Forſkael at Jedda; it is three inches long; of a white colour clouded with brown ſpots on the upper ſurface; the pectoral fins are ſea-green; the dorſal, anal, and tail, fins, are tranſparent; the anal edged with black; the under part of the body is entirely white, without any ſpot; the ſcales are large, rough, and lozenge-ſhaped; tail fin rounded at the end; the pupil of the eye is blue, the iris white.

7. Gobius eleotris, the Chineſe goby. Specific character—nine rays in the anal fin. There are five rays in the membrane of the gills, ſix in the firſt dorſal, eleven in the ſecond, twenty in the pectorals, ten in the ventrals, and twenty in the tail. This is a Chineſe ſpecies; the general colour white; the ſecond dorſal fin is as high as the firſt; tail fin rounded; the body is furniſhed with large, round, ſmooth, ſcales, with a violet ſpot on the back, near the gill-covert.

8. Gobius patella, Thunberg's goby. Specific character—twelve rays in the ſecond dorſal fin, jaws even, ſcales ſmall, two dorſal fins of equal height, twenty-eight rays in the caudal fin. There are five rays in the firſt dorſal fin, fifteen in each pectoral, and nine in the anal. This ſpecies, diſcovered by Thunberg in the Indian Sea, much reſembles the Chineſe goby. Its length is about four inches; there are ſeveral rows of teeth in the mouth, and the ſnout is blunt; the ventral fins are ſhorter than the pectorals; colour whitiſh, without ſpots or bars.

9. Gobius aphya, the loach goby. Specific character—brown bands on the dorſal and anal fins. The firſt dorſal fin has ſix rays, the ſecond ſixteen, the pectorals eighteen, the ventrals twelve, the anal fourteen, and the tail thirteen. This inhabits the Nile, and the Mediterranean Sea into which it falls; thus it is both a freſh and ſalt water fiſh, and has been noticed by moſt naturaliſts ancient and modern. It ſeldom reaches four inches long; its general colour is whitiſh, with ſome ſmall ſpots of black.

10. Gobius minutus, the ſmall goby. Specific character—colour white, with ferruginous ſpots, and faint ſtripes of the ſame on the dorſal and tail fins. The firſt dorſal fin has ſix rays, the ſecond and the anal eleven each. The head is depreſſed; the eyes large and prominent, iris ſapphire-colour; the dorſal fins are diſtant from each other; tail fin ſtraight. It is about three inches long, and was firſt deſcribed by Pallas.

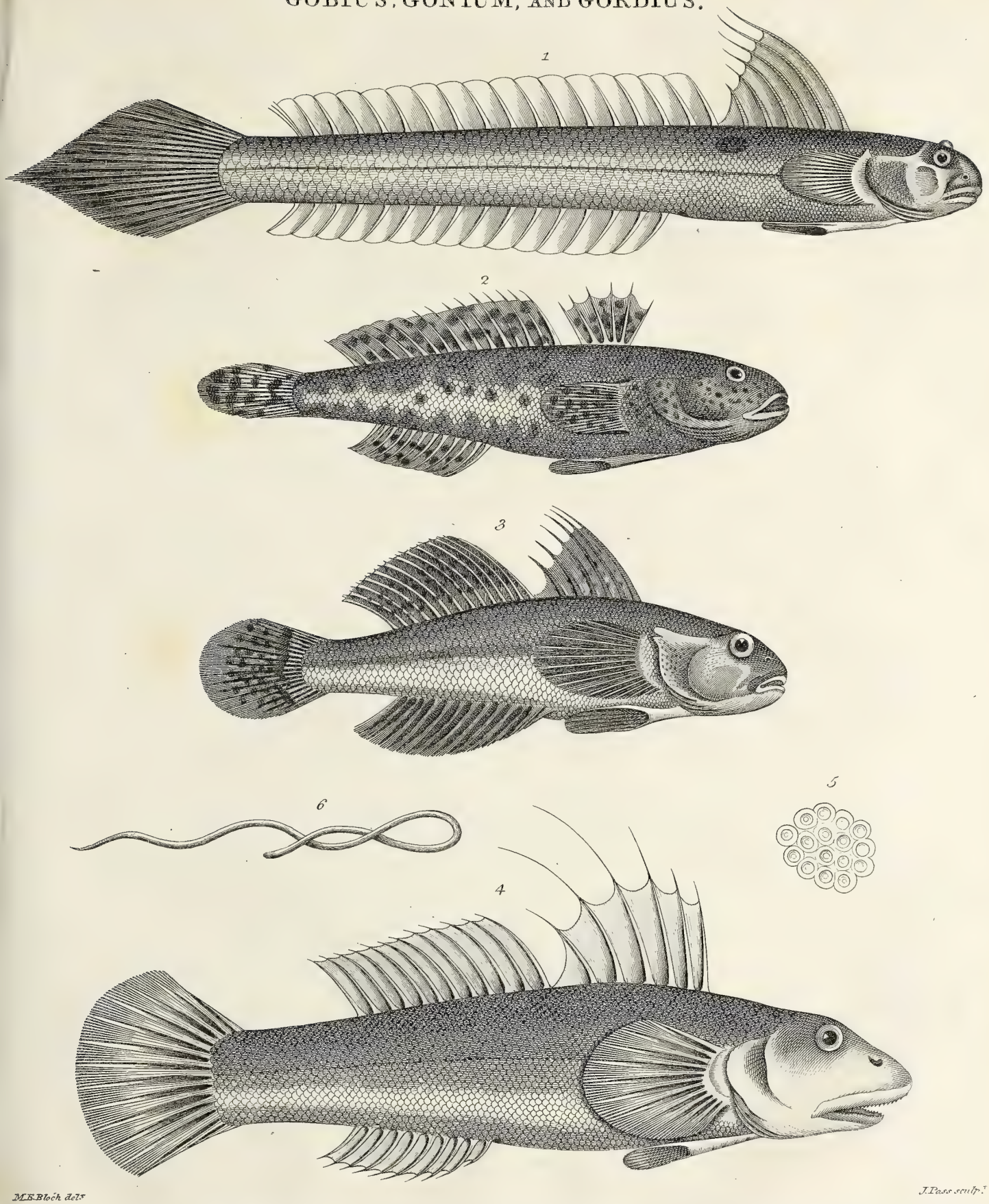
11. Gobius jozo, the blue goby. This ſpecies is diſtinguiſhed by the blue colour of the fins, and by the rays of the firſt dorſal fin protruded beyond the membrane. There are four rays in the membrane of the gills; ſixteen in the pectoral fins, twelve in the ventrals, fourteen in the anal, ſixteen in the tail, ſix in the firſt dorſal, and fourteen in the ſecond. The head is compreſſed at the ſides; jaws equal; pupil of the eye black, iris white; the back is round, and of a brown colour; the ſides whitiſh; the ſcales middle-ſized. This fiſh inhabits the North Sea and the Baltic; being natural alſo to the Mediterranean, it was not unknown to Ariſtotle. It is commonly found near ſand banks. They live on ſpawn, crabs, ſnails, and ſmaller fiſh, growing to about ſix inches long; but are themſelves often the prey of other voracious fiſh who approach the ſhores for the purpoſe of caſting their ſpawn. They lay their eggs on ſmooth places covered with ſand; though their ova are very numerous, they do not increaſe very faſt, becauſe, being ſmall, they are ſo often devoured by larger fiſh. They are frequently caught in nets ſpread out for other fiſh; being lean and hard, they are not much eſteemed as food. The figure given of this ſpecies by Rondeletius is very incorrect: we have preſented a more exact delineation in the annexed Plate, fig. 3.

12. Gobius pectiniroſtris, the comb-toothed goby. Specific character—the teeth in the lower jaw ſtanding horizontally. There are five rays in the membrane of the gills, five in the firſt dorſal fin, twenty-ſix in the ſecond, nineteen in the pectorals, twelve in the ventrals, twenty-five in the anal, and fifteen in the tail. This ſpecies is from China. The teeth in the lower jaw are ſo diſpoſed as to reſemble the ſemicircular combs with which ladies faſten up their hair behind.

13. Gobius barbarus, the obſcure goby. Specific character—the pectoral fins ſpread like a fan. Twelve rays in the firſt dorſal fin, and thirteen in the ſecond. Nothing more is known of this ſpecies, which hence has been named *barbarus*, i. e. foreign or obſcure.

14. Gobius Schloſſeri, Schloſſer's goby. Specific character—the firſt dorſal fin conſiſting of ſpiny or ſtiff rays. There are three rays in the membrane of the gills, eight in the firſt dorſal fin, thirteen in the ſecond, ſixteen in the pectorals, twelve in the ventrals and anal, and nineteen in the tail. Pallas firſt deſcribed this ſpecies from a ſpecimen and notes ſent him by the learned Schloſſer, whoſe name he has given it. It is eight inches in length; the head long, broader than the body, and covered with ſcales; the lips are thick, hard, and rough inſide; the upper lip is double; the teeth are large, of various ſizes, ſharp, jagged, and placed without any order; the eyes are very cloſe together, and placed on the top of the head; their orbits are much raiſed, but ſo ſituated that the cornea is turned, of the one to the right, of the other to the left. The ſcales are large, round, and ſoftiſh; the lateral line is not eaſily diſtinguiſhed; the colour is blackiſh-brown on the back, on the belly whitiſh. The pectoral fins are placed at the end of fleſhy productions like arms, which enables the animal not only to move theſe fins with more eaſe by means of a longer lever, ſo as to ſwim with greater celerity in the muddy waters it inhabits, but alſo to crawl along the ſhores like many of the amphibia; by means of fins ſo formed, it can penetrate into the mud to avoid

GOBIUS, GONIUM, AND GORDIUS.



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1. The Lancet Goby. 2. The black Goby. 3. The blue Goby. 4 Plumier's Goby. 5 Gonium pectorale. 6. Gordius aquaticus.

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its enemies; and it can follow the crabs, which are its favourite food, upon the ſands. This fiſh is caught at Amboyna in marſhy places, and is eſteemed good food; the Dutch in India call it Chineſe fiſh.

15. Gobius melanuros, the black-tailed goby. Specific character—only one dorſal fin; the tail black.

16. Gobius anguillaris, the red-finned goby. Specific character—one dorſal fin, tail red. Fifty-two rays in the dorſal fin, twelve in the pectorals, ten in the ventrals, forty-three in the anal, and ten in the tail. This comes from the Eaſt, eſpecially the Indian Archipelago and China, where indeed many of the ſpecies are found. Cepede ſeparates this and the preceding into a new genus, which he calls *gobioides*, or "ſhaped like the goby," on account of their having but one dorſal fin. As its name imports, it has ſome likeneſs to the *murena anguilla*, or common eel, from the length of the dorſal and anal fins, which reach almoſt to the tail; and alſo the ſmall ſize of the pectorals, which are rounded; but eſpecially from the viſcoſity of the ſkin, which is ſo impregnated with oil as to be ſemipellucid. The jaws are furniſhed with ſmall teeth; all the fins are bright red.

17. Gobius edentulus, the toothleſs goby. Specific character—one dorſal fin, no teeth. There are ſeven rays in the membrane of the gills, forty-three in the dorſal fin, thirty-three in each pectoral, twenty-nine in the anal, and twelve in the tail. The head is large, indented with very perceptible pores, ſo that the ſkin is viſcous and oily like the preceding; along each jaw runs a bony plate inſtead of teeth; for no teeth, properly ſo called, have been hitherto diſcovered; the pectoral fins are very broad; and the dorſal riſes in height as it approaches the tail.

18. Gobius Brouſſonettii, Brouſſonet's goby. Specific character—one dorſal fin, body very long and thin, teeth in the jaws, tail fin pointed. The dorſal fin conſiſts of twenty-three rays, the pectorals ſeventeen, the ventrals ſeven each, the anal ſeventeen, the tail ſixteen. This was firſt deſcribed by Cepede from a ſpecimen in a collection, which, he ſays, the Hollanders *gave* to the French nation: he has named it after Brouſſonet, as a compliment to that gentleman's zeal for natural hiſtory. The teeth are very ſmall; the ventral fins long, and ſo joined as to form a deep funnel; the pectorals are ſmall, and rounded; the dorſal and anal fins reach to the end of the tail; the body is extremely long and taper; and the ſkin is ſufficiently tranſparent for the number and poſition of the principal muſcles to be diſtinguiſhed.

19. Gobius Boddaerti, Boddaert's-goby. Specific character—two dorſal fins, the five rays of the firſt dorſal filamentous, of which the third is very long. The ſecond dorſal has twenty-five rays, the pectorals twenty-one, the ventrals thirty-four, the anal twenty-five, the tail eighteen. This ſpecies is caught in the Indian Sea; it is named after a very celebrated naturaliſt, but more particularly deſcribed by Pallas. It grows to about ſix inches long, of a bluiſh brown above, and reddiſh white beneath; ſpots of brown and white appear on the head; the membrane of the gills and the tail fin are white ſhaded with blue; on each ſide of the back are ſeven brown ſpots; and under them, on the ſides, ſeven others dotted with white; the anal aperture is encircled with a black ring; on the lateral line are ſome ſpots as white as ſnow, and a number of very minute papillæ; the firſt dorſal fin is dotted with white, and five or ſix white lines run tranſverſely between the rays of the ſecond; the head is large, with a blunt ſnout and thick lips; the eyes incline to an oval ſhape, and are vertical, but not very prominent; behind the anus appears a fleſhy appendage of a conical ſhape, probably a paſſage for the ſpawn; which has been improperly called *pedunculus*, or a ſmall foot.

20. Gobius lagocephalus, the hare-lipped goby. Specific character—the upper jaw hemiſpherical; no tongue nor lateral line. There are three rays in the membrane of the gills, ſix in the firſt dorſal, eleven in the ſecond, fifteen in the pectorals, eight in the ventrals, ten in the anal, and twelve in the tail. The head is ſhort, thick, and free from ſcales; the upper jaw is ſemicircular, thick, covered with a double lip much protruded, fleſhy, and cleft like a hare's; there is a ſimilar cleft in the lower; the under jaw contains a few jagged teeth larger than the reſt; the palate alſo is furniſhed with numerous ſmall teeth; the eyes are near together, and veiled by a continuation of the epidermis. This fiſh is ſeldom more than a finger's length; its colours are grey, brown, and black, with ſmall ſcales; the firſt dorſal fin has ſimple rays, the ſecond and caudal branched; the tail fin rounded at the end.

21. Gobius cyprinoides, the cyprinus goby.—Specific character—the ſcales large and ſomewhat ciliated; the tail fin rounded. The firſt dorſal fin has ſix rays, the ſecond ten, the pectorals eighteen, the ventrals twelve, the anal one ſtiff and nine articulated, the tail fifteen. This received its name from a ſuppoſed reſemblance to ſome of the ſpecies of Cyprinus, on account of its large fringed ſcales; but perhaps it is more like the Sparus. It is found about the iſland of Amboyna, and was firſt deſcribed by Pallas. The upper ſurface is grey, the lower white; length about three inches; the head is rather wider than the body, and covered with lines interſected like net-work. A little black tuft or creſt riſes between the eyes; it is of a triangular ſhape, placed lengthwiſe, and might be miſtaken for a ſmall dorſal fin. The canal behind the anus has a furrow in the tail to receive it.

22. Gobius lanceolatus, the lancet goby. The broad tail, ſhaped like the end of a lancet, is the diſtinguiſhing character of this ſpecies. There are five rays in the membrane of the gills, ſixteen in the pectoral fin, eleven in the ventral, ſixteen in the anal, twenty in the tail, ſix in the firſt dorſal, and eighteen in the ſecond. The body is long, and very little larger at the extremity of the head than near the end of the tail; the head is oblong, and truncated; the jaws of equal length, armed with ſmall ſharp teeth; the covering of the gills is two little plates, and their aperture is broad; the eyes are at the top of the head, and near each other, black pupil, and gilt iris; the neck is round, ſo is the body, and of a brown colour; the cheeks are bluiſh edged with red; the ſides are compreſſed, and of a pale yellow colour. Where the two dorſal fins meet, there is a brown ſpot on each ſide; the ſcales are round in their exterior form, and lie one over the other like tiles on the roof of a houſe; thoſe at the tail are much larger than thoſe at the head; the pectoral fins are yellow bordered with blue; their rays are divided near the extremities like thoſe of the belly and tail; but the rays of the dorſal and anal fins are ſingle; and all are ſoft; thoſe of the firſt dorſal have long points which come out very far, but ſtill they are ſoft; the rays of the anal and dorſal fins are diſtant, but united by a tender tranſparent ſkin; the two ventral fins are confounded one in the other, and form a ſtrong cavity; the tail fin at its origin is a greeniſh-yellow, but the outer part is violet. See the Plate, fig. 1. This is an American ſpecies, found abundantly in the rivers and ſtreams of Martinico, where Plumier ſaw a great many. According to him, they are very good eating; and are about eight or nine inches long.

23. Gobius Plumieri, Plumier's goby. The protruſion of the upper jaw is the diſtinctive character of this ſpecies. There are four rays in the membrane of the gills, twelve in the pectoral fins, ſix in the ventrals, ten in the anal, fourteen in the tail, ſix in the firſt dorſal, and twelve in the ſecond. The body is brawny, and round; head large, lips ſtrong; mouth wide; jaws armed with ſharp teeth; pupil of the eye black, iris ſilvery; between the mouth and eyes are four minute holes,

holes; the head is reddiſh brown above, yellow at the ſides; the gill-covert is ſingle; the aperture is large, and the membrane lies partly bare; the body is covered with little ſcales; the back is round, of a brown-red colour, inclining to yellow towards the belly, which is white; the fins are all yellow; the pectorals and tail edged with black. See the Plate, fig. 4. Plumier deſcribes this ſpecies as inhabiting the ſtreams of the Antilles: it multiplies faſt; is good eating and eaſy of digeſtion. Plumier is the firſt who deſcribed it; his manuſcript calls it, *Cephalus fluviatilis minor, vulgo ſucet*; by the word *ſucet* he probably meant that by means of its ventral fins it could faſten itſelf to other ſubſtances; but this Bloch pronounces to be an error.

24. Gobius ocellaris, the one-eyed goby. Specific character—the upper jaw the longeſt; a ſpot like an eye, and ſix rays, in the firſt dorſal fin. There are five rays in the membrane of the gills, eleven in the ſecond dorſal fin, ſixteen in the pectoral fins, ſix in the ventrals, eleven in the anal, and twenty-two in the tail, which is much rounded. This ſpecies is found in the freſh waters of the iſland of Otaheite in the great equinoxial ocean; and was deſcribed and figured by Brouſſonet from an individual brought over by ſir Joſeph Banks. It is probably called *awaou* by the natives; at leaſt that is the name given it in the new Hydrographic Nomenclature preſented by Fleurieu to the national inſtitute at Paris in May 1799, and now adopted by the French writers. The body is long and compreſſed; the ſcales ciliated; head ſmall, furrowed at the top; the teeth in the lower jaw are the ſmalleſt, and there are little ſharp teeth in the throat both above and below; the belly is of a ſea-green colour; dark ſhades of olive and black prevail on the back; the anal and tail fins are greeniſh, with ſtripes of the ſame colour and of brown upon the rays and upon thoſe of the ſecond dorſal; the pectorals and ventrals are blackiſh. A black ocellated ſpot appears on the hinder edge of the firſt dorſal fin.

25. Gobius ſtrigatus, the ſtriped goby. Specific character—the ventral fins not united, ſix rays in the firſt dorſal. There are ſix rays in the membrane of the gills, twenty in the ſecond dorſal fin and in each pectoral, twelve in the ventrals, nineteen in the anal, and twenty-two in the tail. This and the three following are made a diſtinct genus by Cepede, from the ventral fins ſtanding apart or diſtinct: he calls it *gobiomorus*, "near or allied to the goby." This is alſo an Otaheitan ſpecies, and found in the Pacific Ocean. The deſcription was derived by Brouſſonet from the ſame ſource with the preceding. It is one of the moſt beautiful of the genus. The body is long and taper; ſcales almoſt ſquare, and ſomewhat ſerrated; the head is compreſſed, yet is wider than the body; the upper jaw is rather the longeſt; both are furniſhed with irregular teeth; the tongue and palate are ſmooth, but the throat is rough with ſharp teeth bending back; the rays of the firſt dorſal fin are very long; the tail fin is broad and rounded. The back is red inclining to blue; the under part whitiſh; the head is yellow mingled with green, ſtriped and dotted; brown ſtripes appear about the pectoral fins, and reddiſh ſpots on each ſide of the body and tail; the dorſal, anal, and tail, fins, are green with ſome ſhades of red and yellow, and a number of red ſtreaks in different directions; and the rays are moſtly of a bright red; the pupil of the eye is black, the iris green and white.

26. Gobius Koelreuteri, Koelreuter's goby. Specific character—ventrals diſtinct, eleven rays in the firſt dorſal. There are only two rays in the membrane of the gills, thirteen in the ſecond dorſal fin and in each pectoral, twelve in the ventrals, eleven in the anal, and thirteen in the tail. This is named after a learned naturaliſt at Baden. It is of a light grey colour, ſhort, and thick; the eyes are vertical, and very cloſe together, as in the Schlofferi, to which it bears a farther reſemblance from the pectoral fins being attached to fleſhy productions, and ſo originating at ſome diſtance from the body. The lips are double, and fleſhy; the teeth irregular, but conical in ſhape; the tail-fin is lanceolate, and behind it appears that canal which Linnæus calls *pedunculus genitale*. The firſt dorſal fin is brown edged with black; the ſecond is yelloviſh, with a longitudinal ſtripe of black, and is tranſparent.

27. Gobius Gronovii, Gronovius's goby. Specific character—ventrals apart, ten rays in the firſt dorſal fin, the tail bifurcated. There are five rays in the membrane of the gills, thirty in the ſecond dorſal fin, twenty-four in the pectorals, and ten in the ventrals. We are indebted to Gronovius for a knowledge of this ſpecies, and it juſtly bears his name: he found it amid the torrid zone, in the American Ocean. It has ſome relation to the Scomber genus. The ſcales are ſmall and ſilvery, except on the back, where they are black; black ſpots are ſpread over the ſides; the head is covered with broad ſcaly plates; the eyes are large, and at the ſides of the head, not vertical as in many ſpecies; the mouth is ſmall; both jaws and the palate are furniſhed with even rows of teeth; the tongue is ſmooth, ſmall, and rounded; the ventral fins are very large; the anus is nearly midway the whole length.

28. Gobius dormitor, the ſleeping goby. Specific character—eight rays in the anal fin and in each pectoral. This ſpecies is added by Cepede from Plumier's manuſcripts. It is found in freſh water, eſpecially in marſhy places in South America. The lower jaw is the longeſt; the tail fin is much rounded. It is named ſleepy from its dulneſs and ſlow motions.

29. Gobius Piſonis, Piſo's goby. Specific character—the lower jaw the longeſt, the ventral fins diſtinct. The dorſal fin has forty-five rays, each pectoral ſeventeen, each ventral ſix, the anal twenty-three, and the tail twelve. This ſpecies forms in Cepede a genus of itſelf, the Gobiomoroides, from the ventrals being diſtinct, and only one fin on the back. Piſo, in his work on India, has mentioned this fiſh, and ſucceeding writers have given it his name. The head is flatted and laterally compreſſed, covered with ſcales almoſt as large as thoſe on the back; there are ſeveral rows of ſtrong ſharp teeth in the jaws; but the lower jaw contains one row of larger ſtronger teeth, more bent, and ſtanding farther apart; the fin of the tail is rounded. Native of South America.

30. Gobius cephalus, the great-headed goby. Specific character—head long and large; ventrals diſtinct; only one dorſal fin, placed very far back. The dorſal fin has eight rays, the pectorals eleven, the ventrals five, the anal four or five, and the tail eleven. This again is made a diſtinct genus by Cepede, though it has the ſame characters as the preceding, namely, the ventral fins ſeparate, and but one fin on the back. Plumier, from whoſe manuſcript it is deſcribed, calls it *cephalus* and *teſtar*, from its having a large head; but the head ſeems rather long than large. It is found in the freſh waters of South America; the head is broader than the body, rounded before, rather flat at the top; the eyes are very near each other; the lips are double, and flexible; there is a ſlight indention at the hind-head, as if to diſtinguiſh the head from the body; and a ſimilar one on the back; the belly is thick, much protruded, and clearly diſtinguiſhed from the under part of the tail; the dorſal fin is very ſmall, and placed juſt upon the end of the tail near the caudal fin; a conformation ſimilar to the pike, and hence Cepede's generic term *Gobieſox*, or pike goby. The anal fin begins ſtill farther back than the dorſal, but is nearly under or oppoſite to it; the tail fin, then, is very near the anal and dorſal fins; it is moreover very broad and much rounded. The prevailing colour of this fiſh is red, darker on the back than on the lower parts; there are neither

neither ſtripes, bands, nor ſpots. The colour ſometimes ſhines like gold; and the eyes, with a beautiful blue iris, appear like two ſapphires ſet in that precious metal. This, and all the following, are introduced by Cepede.

31. Gobius alepidotus, the naked goby. Specific character—two dorſal fins; the four firſt rays of the firſt dorſal end filamentous; ſeven tranſverſe ſtripes of whitiſh on the body. The firſt dorſal fin has ſeven rays, the ſecond fourteen, the pectorals eighteen, the ventrals eight, the anal ten, and the tail, which is ſpear-ſhaped, eighteen. An account of this fiſh was ſent by citizen Boſc to Cepede, who has given it his name; Boſc obſerved it in Charleſton-bay, North America. The head is broader than the body; the jaws of equal length, with very ſmall teeth; the eyes are prominent; the noſtrils jut out; the gill-covert terminates in a point; the four firſt rays of the firſt dorſal fin are long, and each end in a thin filament or briſtle. There are no viſible ſcales; the colour is grey dotted with brown. Seven irregular bands of a pale colour appear on the ſides, and extend over the dorſal fin; the fins are brown. This is a ſmall ſpecies; about two inches long, and half an inch broad; it is not uſed as food.

32. Gobius cæruleus, the red-tailed goby. Specific character—the laſt ray of the ſecond dorſal fin twice as long as the reſt; the tail fin red edged with black. There are four rays in the membrane of the gills, ſix in the firſt dorſal, twelve in the ſecond, twenty in each pectoral, twelve in each ventral, twelve in the anal, and fourteen in the tail, which is rounded. This is deſcribed from Commerſon's manuſcripts. The body is entirely of a bright blue, lighter on the under parts than upon the back; only the tail is red with a black edging; it makes a moſt beautiful appearance in calm ſun-ſhiny weather. It is found in the ſea on the eaſtern part of Africa, at the mouth of the rivers of the Iſle of Reunion. The negroes reject it as food on account of the ſmallneſs of its ſize, being ſcarcely four inches long; ſo that it is only uſed as bait to attract larger fiſh. The ſnout is blunt; teeth ſharp, thoſe in the under jaw the largeſt; the eyes are round, prominent, and farther apart than in many of the ſpecies; the firſt dorſal fin is triangular, with briſtly rays protruded beyond the membrane; the tail fin is rounded; ſcales ſmall and rough.

33. Gobius totus niger, Commerſon's goby. Specific character—ſix rays in the firſt dorſal fin, the laſt ray ſtanding apart. The membrane of the gills has four rays, the ſecond dorſal fin, the ventrals, and the anal, twelve each, the pectorals twenty, and the tail fourteen. For this ſpecies we are alſo indebted to Commerſon. It is about ſeven inches long, very thin and narrow, not above a line broad according to Cepede. The body is entirely black, a few ſhades of blue and green only make it appear more dark and gloſſy; there is a light or livid appearance on a part of the belly. It is ſufficiently diſtinguiſhed from the Gobius niger of Linnæus by the want of ſpots and ſtripes, and by other particulars. The ſcales are very ſmall, but raiſed up ſo as to be rough to the touch. Commerſon obſerved two tubercles at the baſe of the membrane of the gills, which could only be ſeen by raiſing the operculum; he remarked alſo beyond the anal aperture the *papilla genitali* which is found in ſo many of this genus; and which he compares to a filament or barble. It is found in the Indian Sea, at the mouths of thoſe ſmall rivers which run into it, preferring a muddy bottom. It is agreeable and wholeſome food.

34. Gobius boſtrichus, the bearded goby. Specific character—colour brown, two barbles from the upper jaw. This and the two following are taken from ſome Chineſe coloured drawings belonging to a cabinet brought from Holland to the Paris muſeum. It is not eaſy to ſay how they ſhould be claſſed; for the underneath fins are not viſible from the poſition of the fiſh in the deſigns; and, if they are really wanting, then of courſe they ſhould go among the Apodes, and very near to the genus Muræna. Cepede, however, ſuppoſes that theſe fins are not wanting in the fiſhes themſelves, and has placed them in two diſtinct genera, immediately before the Echeneis. To avoid creating new genera, we have placed them in the genus to which they have the greateſt reſemblance. Cepede's generic name, *boſtrichus*, which ſignifies a filament or barble, we have taken to diſtinguiſh the preſent ſpecies. The prevailing colour is brown; on each ſide of the tail, near the fin, appears a blue ſpot encloſed in a circle, which is blue towards the body, red towards the tail. This fiſh has no viſible ſcales. The head is large; the aperture of the mouth round; gill-covert ſingle; the firſt dorſal fin much ſhorter than the ſecond; tail-fin lanceolate.

35. Gobius boſtrichus maculatus, the bearded goby with ſpots. This differs very little from the preceding. It is ſtrewed with very minute green ſpots.

36. Gobius boſtrichoides, bearded goby with one dorſal fin. Specific character—long eel-ſhaped body, one long dorſal fin ſeparate from the fin of the tail; two barbles from the upper lip. In this ſpecies ſmall ſcales are viſible on the head, body, and tail. The head is thinner than the fore-part of the body. The pectoral fins are ſmall and rounded, the caudal lanceolate. The colour is brown, with tranſverſe ſtripes of a darker ſhade, and a great number of ſmall green ſpots; a large ſpot of green encircled with red, like the pupil and iris of an eye, appears on each ſide of the extremity of the tail. In other reſpects it reſembles the two preceding ſpecies.

GOB'LET, *ſ.* [*gobelet*, Fr.] A bowl, or cup, that holds a large draught.—My figur'd *goblets* for a diſh of wood. *Shakeſpeare.*

We love not loaded boards, and *goblets* crown'd;
But free from ſurfeits our repoſe is ſound. *Denham.*

Crown high the *goblets* with a cheerful draught;
Enjoy the preſent hour, adjourn the future thought.
Dryden.

GOB'LIN, *ſ.* [French; *gobeline*, which Spenſer has once retained; writing it in three ſyllables. This word ſome derive from the *Gebellines*, a faction in Italy; ſo that *elfe* and *goblin* is *Guelph* and *Gibelline*, becauſe the children of either party were terrified by their nurſes with the name of the other: but it appears that *elfe* is Welſh, and much older than thoſe factions. *Eilff Uiſhon*, are *phantoms of the night*, and the Germans likewiſe have long had ſpirits among them named *Goboldi*, from which *gobeline* might be derived.] An evil ſpirit; a walking ſpirit; a frightful phantom.—Always, whilſt he is young, be ſure to preſerve his tender mind from all impreſſions and notions of ſpirits and *goblins*, or any fearful apprehenſions in the dark. *Locke.*

Angels and miniſters of grace defend us!
Be thou a ſpirit of health, or *goblin* damn'd,
Bring with thee airs from heav'n, or blaſts from hell!
Shakeſpeare.

A fairy; an elf.—Solemn goes the *goblin* ſtory round. *Thomſon.*

His ſon was Elfinel, who overcame
The wicked *gobbelines* in bloody field. *Spenſer.*

GOCH, a town of Germany, in the circle of Weſtphalia, and duchy of Cleves, on the Niers, ſurrounded with walls in 1291. It contains three churches. It was taken by the Spaniards in 1599: in the year 1614, it was taken by the Dutch; it paſſed after into other hands, till 1625, when it was again in the poſſeſſion of the United States till the year 1640, when it fell to the elector of Brandenburg: ſix miles ſouth of Cleves.

GOCH'SHEIM, or GOCHSEN, a town of Germany, in the circle of Swabia, and duchy of Wurtemberg: ſixteen miles ſouth of Heidelberg, and twenty-four north-north-weſt of Stuttgart.

GOCIA'NO, a town of the iſland of Sardinia: thirty miles eaſt of Algeri.

GOCLE'NIUS (Conrad), a learned philologiſt, born in 1485, in a village of Weſtphalia. He was long a profeſſor in the college of Buſleiden at Louvain, where he died in 1539. He was honoured with the intimate friendſhip of Eraſmus, from whom there is extant a very confidential letter to him. His principal works are, Notes on Cicero de Officiis; an edition of Lucian; and a tranſlation into Latin of that writer's Dialogue, entitled *Hermotimus*.

GOD, [from the Saxon Gob, which LYE interprets GOD, DEUS. And the ſame Saxon word, when uſed adjectively, means GOOD, BONUS, PROBUS.] The ſacred, awful, and revered, name of that Supreme Being and Source of all Exiſtence, who in the language of our moſt elegant, and, in this paſſage, devout Poet, is addreſſed as

Father of All! in every age
In every clime ador'd,
By Saint, by Savage, and by Sage,
Jehovah! Jove! or Lord! *Pope's Univerſal Prayer.*

The Exiſtence of GOD is demonſtrated by a very ſhort mode of proof. The Univerſe exiſts, therefore God exiſts. For as the Univerſe could not make itſelf, it muſt have been made by ſomething without itſelf, and antecedent to itſelf; and that is, GOD. Again; as the Univerſe cannot guide and preſerve itſelf, it muſt be guided and preſerved by ſomething diſtinct from itſelf; and that is, GOD. This truth is ſo obvious, that independently of all Revelation, it was known, and maintained, by the wiſeſt and beſt of the Heathens.

GOD in his Eſſential Nature is Self-originate, Eternal, Spiritual. In his Moral Attributes, GOD is infinitely perfect; moſt holy, moſt juſt, moſt good. In wiſdom, in knowledge, in power, He is univerſally Intelligent, infallibly Diſcerning, irreſiſtibly Mighty; to GOD therefore, in the moſt unbounded ſenſe of the words, (conſiſtent with every idea which implies not contradiction,) we aſcribe Omniſcience and Omnipotence.

By philoſophers, who have reaſoned deeply on the ſubject, God is conſidered as the firſt Cauſe, the firſt Being, who has exiſted from the beginning, has created the world, or who ſubſiſts neceſſarily, or of himſelf; and this knowledge of God, his nature, attributes, word, and works, with the relations between him and his creatures, make the extenſive ſubject of Theology, the ſiſter-ſcience of Aſtronomy.

Sir Iſaac Newton conſiders and defines God, not as is uſually done, from his perfection, his nature, exiſtence, or the like; but from his DOMINION. The word GOD, according to him, is a relative term, and has regard to ſervants; it is true it denotes a Being eternal, infinite, and abſolutely perfect; but a Being, however eternal, infinite, and abſolutely perfect, without dominion, would not be God. The ſame author obſerves, that the word God frequently ſignifies Lord; but every lord is not God; it is the dominion of a ſpiritual being or lord, that conſtitutes God; true dominion, true God; ſupreme, the ſupreme; feigned, the falſe god. From ſuch true dominion it follows, that the true God is living, intelligent, and powerful; and, from his other perfections, that he is ſupreme, or ſupremely perfect: he is eternal, and infinite; omnipotent and omniſcient; that is, he endures from eternity to eternity, and is preſent from infinity to infinity. He governs all things that exiſt, and knows all things that are to be known; he is not eternity nor infinity, but eternal and infinite; he is not duration or ſpace, but he endures, and is preſent; he endures always, and is preſent every where; and by exiſting always, and every where, he conſtitutes the very thing, duration and ſpace, eternity and infinity. He is omnipreſent, not only virtually, but alſo ſubſtantially; for power without ſubſtance cannot ſubſiſt. All things are contained and move in him, but without any mutual paſſion; he ſuffers nothing from the motions of bodies; nor do they undergo any reſiſtance from his omnipreſence. It is confeſſed that God exiſts neceſſarily; and by the ſame neceſſity he exiſts always, and every where. Hence, alſo, he muſt be perfectly ſimilar; all eye, all ear, all brain, all arm, all the power of perceiving, underſtanding, and acting; but after a manner not at all corporeal, after a manner not like that of men, after a manner wholly to us unknown. He is deſtitute of all body, and all bodily ſhape; and therefore cannot be ſeen, heard, or touched; nor ought to be worſhipped under the repreſentation of any thing corporeal. We have ideas of the attributes of God, but do not know the ſubſtance even of any thing; we ſee only the figures and colours of bodies, hear only ſounds, touch only the outward ſurfaces, ſmell only odours, and taſte taſtes; but do not, cannot, by any ſenſe, or any reflex act, know their inward ſubſtances; and much leſs can we have any notion of the ſubſtance of God. We know him by his properties and attributes; by the moſt wiſe and excellent ſtructure of things, and by final cauſes: but we adore and worſhip him only on account of his dominion; for God, ſetting aſide dominion, providence, and final cauſes, is nothing elſe but fate and nature.

The admirable metaphyſician and divine Dr. Clarke, has demonſtrated the being of a God, with that clearneſs and force of reaſoning, for which he is ſo eminently diſtinguiſhed, by a ſeries of propoſitions, mutually connected and dependent, and forming a complete and unanſwerable argument in proof of the attributes of the Deity. Something, he ſays, has exiſted from all eternity; for, ſince ſomething now is, ſomething always was: otherwiſe the things that now are muſt have been produced out of nothing, abſolutely and without cauſe, which is a plain contradiction in terms. There muſt have exiſted from all eternity ſome one unchangeable and independent Being; or elſe, there has been an infinite ſucceſſion of changeable and dependent beings, produced one from another in an endleſs progreſſion, without any original cauſe at all. For otherwiſe this ſeries of beings can have no cauſe of its exiſtence, becauſe it includes all things that are or ever were in the univerſe; nor is any one being in this infinite ſucceſſion ſelf-exiſtent or neceſſary, and therefore it can have no reaſon of its exiſtence within itſelf; and it was equally poſſible, that from eternity there ſhould never have exiſted any thing at all, as that a ſucceſſion of ſuch beings ſhould have exiſted from eternity. Conſequently their exiſtence is determined by nothing; neither by any neceſſity in their own nature, becauſe none of them are ſelf-exiſtent; nor by any other being, becauſe no other is ſuppoſed to exiſt. The unchangeable and independent Being, which has exiſted from eternity, without any external cauſe of its exiſtence, muſt be ſelf-exiſtent; it muſt exiſt by an abſolute neceſſity originally in the nature of the thing itſelf, and antecedent in the natural order of our ideas to our ſuppoſition of its being. For whatever exiſts, muſt either come into being without a cauſe; or it muſt have been produced by ſome external cauſe; or it muſt be ſelf-exiſtent: but the two former ſuppoſitions are contrary to the two firſt propoſitions. From this laſt propoſition it follows, that the only true idea of a ſelf-exiſtent or neceſſarily-exiſting being, is the idea of a being, the ſuppoſition of whoſe non-exiſtence is an expreſs contradiction; and this idea is that of a moſt ſimple being, abſolutely eternal and infinite, original and independent. It follows alſo, that nothing is ſo certain as the exiſtence of a ſupreme independent cauſe; and likewiſe, that the material world cannot poſſibly be the firſt and original being, uncreated, independent, and of itſelf eternal; becauſe it does not exiſt by an abſolute neceſſity in its own nature, ſo as that it muſt be an expreſs contradiction to ſuppoſe it not to exiſt. With reſpect both to its form and matter, the material world

may

may be conceived not to be, or to be in any reſpect different from what it is, without a contradiction. The ſubſtance or eſſence of the ſelf-exiſtent being is abſolutely incomprehenſible by us. We are ſure however that Eſſential Godhead can be but One. In that unity of Godhead there may co-exiſt Three Intelligences of one and the ſame nature. Dr. Clarke's words are: "Whether in the unity of the divine nature there may not co-exiſt with the ſupreme cauſe, ſuch emanations from it as may themſelves be equally eternal, infinite, and perfect, by an abſolute and complete communication of all the divine attributes, excepting only ſelf-origination; as there is nothing in bare reaſon, by which it can be demonſtrated, ſo neither is there any argument by which it can be proved impoſſible, or unreaſonable; and therefore, when made known to us by revelation, it ought to be believed." *1ſt Edit. on the Attributes, &c.*

Many of the eſſential attributes of his nature are ſtrictly demonſtrable, as well as his exiſtence. The ſelf-exiſtent being, having no cauſe of its exiſtence but the abſolute neceſſity of its own nature, muſt of neceſſity have exiſted from everlaſting, without beginning; and muſt of neceſſity exiſt to everlaſting, without end. The ſelf-exiſtent being muſt of neceſſity be infinite and omnipreſent. Such a being muſt be every where, as well as always unalterably the ſame. It follows from hence, that the ſelf-exiſtent being muſt be a moſt ſimple, unchangeable, incorruptible, being, without parts, figure, motion, diviſibility, and other properties of matter, which are utterly inconſiſtent with complete infinity. The ſelf-exiſtent being muſt of neceſſity be but one; becauſe in abſolute neceſſity there can be no difference or diverſity of exiſtence; and, therefore, it is utterly impoſſible, that there ſhould be two independent ſelf-exiſtent principles, ſuch as God and matter. The ſelf-exiſtent and original cauſe of all things muſt be an intelligent being. This propoſition cannot be demonſtrated ſtrictly and properly *à priori*; but, *à poſteriori*, the world affords undeniable arguments to prove that all things are the effects of an intelligent and knowing cauſe. The cauſe muſt be always more excellent than the effect; and, therefore, from the various kinds of powers and degrees of excellence and perfection, which viſible objects poſſeſs; from the intelligence of created beings, which is a real diſtinct quality or perfection, and not a mere effect or compoſition of unintelligent figure and motion; from the variety, order, beauty, wonderful contrivance, and fitneſs of all things to their proper and reſpective ends; and from the original of motion; the ſelf-exiſtent creating being is demonſtrated to be intelligent. The ſelf-exiſtent and original cauſe of all things is not a neceſſary agent, but a being endued with liberty and choice. Liberty is a neceſſary conſequent of intelligence; without liberty, no being can be ſaid to be an agent, or cauſe of any thing; ſince to act neceſſarily, is really and properly not to act at all, but to be acted upon. Beſides, if the ſupreme cauſe be not endued with liberty, it will follow, that nothing which is not, could poſſibly have been; that nothing which is, could poſſibly not have been; and that no mode or circumſtance of the exiſtence of any thing could poſſibly have been in any reſpect otherwiſe than what it now actually is. Farther, if there be any final cauſe in the univerſe, the ſupreme cauſe is a free agent; and, on the contrary ſuppoſition, it is impoſſible that any effect ſhould be finite; and in every effect, there muſt have been a progreſſion of cauſes *in infinitum*, without any original cauſe at all. The ſelf-exiſtent being, the ſupreme cauſe of all things, muſt of neceſſity have infinite power; ſince all things were made by him, and are entirely dependent upon him; and all the powers of all things are derived from him, and perfectly ſubject to him; nothing can reſiſt the execution of his will. The ſupreme cauſe and author of all things muſt of neceſſity be infinitely wiſe. This follows from the propoſitions already eſtabliſhed; and the proof *à poſteriori*, of the infinite wiſdom of God, from the conſideration of the exquiſite perfection and conſummate excellency of his works, is no leſs ſtrong and undeniable. The ſupreme cauſe and author of all things muſt of neceſſity be a being of infinite goodneſs, juſtice, and truth, and all other moral perfections; ſuch as become the ſupreme governor and judge of the world. The will of a being, infinitely knowing and wiſe, independent and all-powerful, can never be influenced by any wrong affection, and can never be miſled or oppoſed from without; and, therefore, he muſt do always what we know fitteſt to be done; that is, he muſt act always according to the ſtricteſt rules of infinite goodneſs, juſtice, and truth, and all other moral perfections; and, more particularly, being infinitely and neceſſarily happy and all-ſufficient, he muſt be unalterably diſpoſed to do and to communicate good or happineſs.

To this more abſtruſe argument, *à priori*, for the exiſtence of God, we may add another, more generally obvious, and carrying irreſiſtible conviction, which is deduced from the frame of the world, and from the traces of evident contrivance and fitneſs of things for one another, that occur through all the parts of it. Theſe conſpire to prove, that the material world, which in its nature is originated and dependent, could not have been the effect of chance or neceſſity, but of intelligence and deſign. The beautiful, harmonious, and beneficial, arrangement of the various bodies that compoſe the material ſyſtem; their mutual dependence and ſubſerviency; the regularity of their motions, and the aptitude of theſe motions for producing the moſt beneficial effects, and many other phenomena reſulting from their relation, magnitude, ſituation, and uſe, afford unqueſtionable evidences of the creating power and wiſe diſpoſal of an intelligent and almighty agent. The power of gravity, by which the celeſtial bodies perſevere in their revolutions, deſerves our particular conſideration. This power penetrates to the centres of the ſun and planets, without any diminution of its virtue, and is extended to immenſe diſtances, regularly decreaſing, and producing the moſt ſenſible and important effects. Its action is proportional to the quantity of ſolid matter in bodies, and not to their ſurfaces, as is uſual in mechanical cauſes; and, therefore, ſeems to ſurpaſs mere mechaniſm. But however various the phenomena that depend on this power, and may be explained by it, no mechanical principles can account for its effects; much leſs could it have produced, at the beginning, the regular ſituation of the orbs, and the preſent diſpoſition of things. Gravity could not have determined the planets to move from weſt to eaſt, in orbits nearly circular, almoſt in the ſame plane; nor could their power have projected the comets, with all the variety of their directions. If we ſuppoſe the matter of the ſyſtem to be accumulated in the centre by its gravity, no mechanical principles, with the aſſiſtance of this power, could ſeparate the huge and unwieldy maſs into ſuch parts as the ſun and planets; and, after carrying them to their different diſtances, project them in their ſeveral directions, preſerving ſtill the equality of action and re-action, or the ſtate of the centre of gravity of the ſyſtem. Such an exquiſite ſtructure of things could only ariſe from the contrivance and powerful influences of an intelligent, free, and moſt potent, agent. The ſame powers, therefore, which at preſent govern the material world, and conduct its various motions, are very different from thoſe, which were neceſſary to have produced it from nothing, or to have diſpoſed it in the admirable form in which it now proceeds.

But we ſhould exceed the limits of our plan, even if, confining our obſervation to the earth, our own habitation, we were to enumerate only the principal traces of deſign and wiſdom, as well as goodneſs, which are diſcernible in its figure and conſtituent parts, in its diurnal and annual motion, in the poſition of its axis with regard

gard to its orbit, in the benefit which it derives from the light and heat of the ſun, and the alternate viciſſitudes of the ſeaſons; in the atmoſphere which ſurrounds it, and in the different ſpecies and varieties of vegetables and animals with which it is repleniſhed. No one can ſurvey the vegetable productions of the earth, ſo various, beautiful, and uſeful, nor the various gradations of animal life, in ſuch a variety of ſpecies, all preſerved diſtinct, and propagated by a ſettled law, each fitted to its own element, provided with proper food, and with inſtincts and organs ſuited to its rank and ſituation, and eſpecially with the powers of ſenſation and ſelf-motion, and all more immediately or remotely ſubſervient to the government and uſe of man, without admiring the ſkill and deſign of the original Former. But theſe are more ſignally manifeſted in the ſtructure of the human frame, and in the noble powers and capacities of the human mind; more eſpecially in the moral principles and faculties, which are a diſtinguiſhing part of our conſtitution, and lead to the perception and acknowledgment of the exiſtence and government of God. In thoſe inſtances that have now been recited, and a variety of ſimilar inſtances ſuggeſted by them, or naturally occurring to the notice of the curious and reflecting mind, contrivance is manifeſt, and immediately, without any nice or ſubtle reaſoning, ſuggeſts a contriver. It ſtrikes us like a ſenſation; and artful reaſonings againſt it may puzzle us, without ſhaking our belief. No perſon, for example, that knows the principles of optics, and the ſtructure of the eye, can believe that it was formed without ſkill in that ſcience; or that the ear was formed without the knowledge of ſounds; or that the male and female, created and preſerved in due proportion, were not formed for each other, and for continuing the ſpecies. All our accounts of nature are full of inſtances of this kind. The admirable and beautiful ſtructure of things for final cauſes, exalt our idea of the contriver; and the unity of deſign ſhews him to be one. The great motions in the ſyſtem, performed with the ſame facility as the leaſt, ſuggeſt his almighty power, which gave motion to the earth and the celeſtial bodies, with equal eaſe as to the minuteſt particles; the ſubtilty of the motions and actions in the internal parts of bodies, ſhews that his influence penetrates the inmoſt receſſes of things, and that he is equally active and preſent every where. The ſimplicity of the laws that prevail in the world, the excellent diſpoſition of things, in order to obtain the beſt ends, and the beauty which adorns the works of nature, far ſuperior to any thing in art, ſuggeſt his conſummate wiſdom. The uſefulneſs of the whole ſcheme, ſo well contrived for the intelligent beings who enjoy it, with the internal diſpoſition and moral ſtructure of thoſe beings, ſhews his unbounded goodneſs. Theſe are arguments which are ſufficiently open to the views and capacities of the unlearned, while at the ſame time they acquire new ſtrength and luſtre from the diſcoveries of the learned. The Deity's acting and interpoſing in the univerſe, ſhew that he governs it, as well as that he formed it; and the depth of his counſels, even in conducting the material univerſe, of which a great part ſurpaſſes our knowledge, tends to preſerve an inward veneration and awe of this great Being, and diſpoſes us to receive what may be otherwiſe revealed to us concerning him. His eſſence, as well as that of all other ſubſtances, is beyond the reach of all our diſcoveries; but his attributes clearly appear in his admirable works. We know that the higheſt conception we are able to form of them, are ſtill beneath his real perfections; but his dominion over us, and our duty towards him, are abundantly manifeſt.

Another ſubſtantial argument to prove the exiſtence of God, as the creator and governor of the univerſe, may be deduced from what Grotius, in his book "De Veritate Religionis Chriſtianæ," and biſhop Wilkins, in his valuable Reflexions on "The Principles and Duties of Natural Religion," have obſerved, the univerſal conſent of mankind, and the uniform tradition of this belief through every nation and every age; it is impoſſible to conceive that a fallacy, ſo perpetual and univerſal, ſhould be impoſed on the united reaſon of mankind. No credible and ſatisfactory account can be given of this univerſal conſent, without aſcribing it to the original conſtitution of the human mind, in conſequence of which it cannot fail to diſcern the exiſtence of a Deity, and to the undeniable traces of his being, which his works afford. Fear, ſtate-policy, and the prejudices of education, to which the concurrence of mankind in this principle has been ſometimes reſolved, are founded on this univerſal principle, ſuppoſe its being and influence, and are actuated by it. It is much more reaſonable to imagine, that the belief of a God was antecedent to their operation, than that it ſhould have been produced by them; and that it was dictated by reaſon and conſcience, independent of the paſſion and policy of men. The uniform and univerſal tradition of this belief, and of the creation of the world by the divine power, affords concurring evidence both of the principle and of the fact. The exiſtence of God is alſo farther evinced by thoſe arguments which have been uſually alleged to prove, that the world had a beginning, and, therefore, that it muſt have been created by the energy of divine power. In proof of this, the hiſtory of Moſes, conſidered merely as the moſt ancient hiſtorian, deſerves particular regard. His teſtimony is confirmed by the moſt ancient writers, among the heathens, both poets and hiſtorians. It may be alſo fairly alleged, that we have no hiſtory or tradition more ancient than that which agrees with the received opinion of the world's beginning, and that of the manner in which it was produced; and that the moſt ancient hiſtories were written long after that time. And that this conſideration is urged by Lucretius, the famous Epicurean, as a ſtrong preſumption that the world had a beginning:

——— Si nulla fuit genitalis origo
Terrarum & cœli, ſemperque æterna fuere;
Cur ſupra bellum Thebanum, & funera Trojæ,
Non alias alii quoque res cecinere poetæ?

Beſides, the origin and progreſs of learning, and the moſt uſeful arts, confirm the notion of the world's beginning, and of the common era of its creation; to which alſo may be added, that the world itſelf, being material and corruptible, muſt have had a beginning; and many phenomena occur to the obſervation of the aſtronomer and mathematician, which furniſh a ſtrong preſumption, that it could have had no long duration, and that it now gradually tends to diſſolution. From theſe conſiderations we may infer the abſolute being and providence of God; even on principles of reaſon and deductions from facts, to which hitherto we have chiefly attended.

Conſidering however that we are bleſſed with the Light of Revelation, we are bound to ſet forth what the Scriptures declare on the ſubject before us. The ſubſtance of them is thus collected by CRUDEN:

"The HEBREWS give to GOD generally the name of JEHOVAH; he who exiſts of himſelf and gives being and exiſtence to others. This is a name ineffable, and myſterious, which denotes the eternity, immutability, and independence, of God, and the infallible certainty of his word and promiſes. The HEBREWS had ſuch a veneration for this holy name, that they never pronounced it; but inſtead of it made uſe of that of ADONAI, which ſignifies properly MY LORDS, in the plural number; and of ELOI, ELOHI, or ELOHIM. They likewiſe called him EL, which ſignifies STRONG; or SHADDAI, whereby may be meant one who is ſelf-ſufficient.

"GOD is taken either ESSENTIALLY for the whole Trinity, *If.* xl. 8. *John*, iv. 24. or, PERSONALLY, for

the Father, *Eph.* i. 3. for the Son, *John*, i. 1. for the Holy Ghoſt, *Acts*, v. 3, 4."

Offences againſt God and Religion were formerly proſecuted only in the eccleſiaſtical courts, which corrected the offender *pro ſalute animæ*. But now, by ſtat. 9 and 10 Will. III. c. 32, if any perſon educated in, or having made profeſſion of, the Chriſtian religion, ſhall by writing, printing, teaching, or *adviſed* ſpeaking, deny the Chriſtian religion to be true, or the Holy Scriptures to be of divine authority, he ſhall upon the firſt offence be rendered incapable to hold any office or place of truſt; and for the ſecond, be rendered incapable of bringing any action, being guardian, executor, legatee, or purchaſer of lands, and ſhall ſuffer three years impriſonment without bail. To give room however for repentance, if within four months after the firſt conviction the delinquent will in open court publicly renounce his error, he is diſcharged from all diſabilities.

GODS OF THE HEATHENS. See the article MYTHOLOGY.

GOD's MER'CY (Iſlands of), three or four ſmall iſlands at the north-weſt extremity of Hudſon's Straits. Lat. 63. 45. N. lon. 73. W. Greenwich.

GOD'ALMING, a neat and pleaſant town in the county of Surrey, delightfully ſituated in a beautiful valley, encompaſſed with fine hanging woods at a ſmall diſtance, with the river Wye running cloſe to the town, which is navigable to London. It is governed by a warden and eight aſſiſtants, with a bailiff, conſtables, &c. It has very conſiderable manufactories for the weaving of all kinds of ſtockings. The highly-eſteemed manufactory of the patent fleecy hoſiery is very extenſively carried on here; alſo a manufactory of combing wool, and making worſteds; beſides which is a large manufactory for making blankets, and another for tilts and collar-cloths. The church is deſervedly admired for its neatneſs and the height of its ſpire. Here is a charity-ſchool, and an hoſpital built and endowed for ten old men. In 1739, the ſmall-pox carried off above five hundred perſons here in three months, which was more than a third of the inhabitants. Market on Wedneſdays; fairs, February 13 and July 10. Godalming is ſituated in the great road to Portſmouth, Chicheſter, Midhurſt, and Arundel; and is diſtant from Guildford four miles; from Farnham, nine miles; from Chicheſter, twenty-eight miles; from Portſmouth, thirty-eight miles; and from London, thirty-four miles.

GODAN'NA, a town of Perſia, in the province of Irak: 105 miles eaſt of Iſpahan.

GOD'ARD, [of God, Sax. God, or good, and *aerd*, Dut. nature, *q. d.* one endowed with a compliant and divine diſpoſition of mind.] A proper name.

GODA'VERY, or GUN'GA, a river of Hindooſtan, which riſes about ſeventy miles north-eaſt of Bombay, and falls into the Bay of Bengal by ſeveral mouths, between lat. 16. 20. and 16. 50. N. lon. 81. 40. and 82. 30. E. Greenwich. It is the *Tyndis* of Ptolemy; and riſes nearly in the parallel of St. John's Point; it performs a courſe of above ſix hundred miles, of which about two-thirds are navigable for boats of one ton and a half burthen. Not far remote from its ſource is Naſſir Turmeck. The waters of the river, which in this part is named *Gunga*, are eſteemed peculiarly ſacred, and are the great reſort of pilgrims to perform their ablutions. It enters the Nizam's dominions, and croſſes ſouth-weſterly till it reaches the borders of Berar.

GOD'BOTE, *ſ.* A fine or amerciament anciently paid for offences againſt God.

GOD'CHILD, *ſ.* A term of ſpiritual relation; one for whom one became ſponſor at baptiſm, and promiſed to ſee educated as a Chriſtian.

GOD'DARD (Jonathan), a phyſician and chemiſt, born at Greenwich in 1617. In 1672 he became a commoner of Magdalen-hall, Oxford, where he continued till he was of ſtanding ſufficient for the degree of B. A. and then left the univerſity to travel abroad for improvement in the ſtudy of medicine. In 1640 he took the degree of M. B. at Cambridge, and ſoon after ſettled as a phyſician in London. In January 1642, he proceeded doctor of phyſic in Cambridge. He was elected a fellow of the college of phyſicians in 1646, and appointed to read the anatomy lecture of the enſuing year. Dr. Goddard was appointed phyſician to the parliament army, and attended Cromwell in his expeditions to Ireland and Scotland. On September 9, 1651, the parliament at Cromwell's recommendation appointed him warden of Merton-college, Oxford, upon the reſignation of ſir Nathaniel Brent; and in January, 1651-2, he was incorporated doctor of phyſic in that univerſity. After this he was choſen to repreſent the univerſity in the parliament ſummoned in 1653; and alſo appointed a member of the council of ſtate.

On November 7, 1655, Dr. Goddard was elected profeſſor of phyſic in Greſham-college, in the room of Dr. Winſton. He continued at the head of Merton-college till the reſtoration, when by a letter from Charles II. dated July 3, 1660, Dr. Reynolds was appointed warden, as ſucceſſor to ſir Nathaniel Brent, no notice being taken of Dr. Goddard, whoſe election was conſidered as illegal, and the place, of conſequence, vacant. After this he fixed himſelf at Greſham-college, and was continued a fellow of the college of phyſicians by their new charter, in 1663. He was likewiſe nominated one of the council of the royal ſociety at its firſt inſtitution in the ſame year, to which he was a peculiarly uſeful member on account of his chemical knowledge. He reſided in Greſham-college till his death, which happened on March 24, 1674. During Dr. Goddard's life, he publiſhed many papers on medical ſubjects in the Philoſ. Tranſactions; and to the ſecond edition of the *Pharmacopœia Bateana*, printed in 1691, the *Arcana Goddardiana* are ſubjoined. Theſe are ſome medicinal receipts, taken from Dr. Goddard's manuſcripts, and particularly uſed by him.

The famous *Guttæ Goddardianæ*, or *Angelicæ*, or *Arcanum Goddardianum*, for the receipt of which Charles II. is ſaid to have given fifteen hundred pounds, and which, after all, is only a volatile alkaline ſpirit impregnated with an empyreumatic oil, like ſpirit of hartſhorn, was not, as Salmon informs us, invented by this phyſician, but by Dr. WILLIAM GODDARD, a contemporary, and an older man. This perſon ſtudied and took a degree at Padua; was afterwards incorporated at Oxford in 1634, ſettled in London, and became a member of the college of phyſicians.

GOD'DAUGHTER, *ſ.* A girl for whom one became ſponſor in baptiſm. A term of ſpiritual relation.

GOD'DESS, *ſ.* A female divinity. See MYTHOLOGY.—Hear, nature hear; dear *goddeſs*, hear a father! *Shakeſpeare.*

A woman I forſwore: but I will prove,
Thou being a *goddeſs*, I forſwore not thee:
My vow was earthly, thou a heav'nly love. *Shakeſpeare.*

GOD'DESS-LIKE, *adj.* Reſembling a goddeſs:

Then female voices from the ſhore I heard;
A maid amidſt them *goddeſs-like* appear'd. *Pope.*

GODEAU' (Anthony), an eminent French writer, born at Dreux in 1605. He was one of thoſe who gave occaſion to the eſtabliſhment of the French academy of belles lettres, and became one of the original members. As he poſſeſſed a ſerious turn of mind, he was led to write ſome verſes upon religious ſubjects; and he began with a paraphraſe on the *Benedicite*. The manner in which this poem was executed, gained him no little reputation among his contemporaries; but modern critics have thought leſs favourably of its merits. Mr. Godeau took orders in 1735; and having enriched his mind with the moſt pure maxims of Chriſtian morality, he taught

them from the pulpit with an eloquence that was natural to him, and practiſed them in all his actions. As he had obtained the patronage of cardinal Richelieu, he was nominated to the biſhopric of Graſſe, in 1636. Immediately after his conſecration, he retired to his dioceſe, where he divided his time between his ſtudies and the diligent diſcharge of his epiſcopal functions. He died of a ſtroke of apoplexy, in 1672, at the age of ſixty-ſeven years. The moſt important of his works are: 1. The Hiſtory of the Church from the Commencement of the World to the End of the ninth Century, in 3 vols. folio. This is the firſt eccleſiaſtical hiſtory written in the French language; and though compoſed with leſs preciſion than that of the abbé Fleury, will be peruſed with more pleaſure by the generality of readers. 2. Paraphraſes on the Epiſtles of St. Paul, and the canonical Epiſtles, 4to. 3. The New Teſtament tranſlated and explained, in 2 vols. 8vo. to which are ſubjoined Meditations on the Epiſtle to the Hebrews. 4. Chriſtian Morality, for the Inſtruction of the Curés and Prieſts of the Dioceſe of Vence, in 3 vols. 12mo. 5. The Lives of St. Paul, St. Auguſtine, and St. Charles Borromeo, each in 4to. 6. Panegyrics on ſuch Biſhops as in all Ages of the Church have been eminent for Learning and Sanctity, 4to. 7. Homilies. 8. Tracts, and other proſe pieces. 9. The Pſalms of David, tranſlated into French Verſe, 12mo. to which might be added a long liſt of Chriſtian Eclogues, and other ſpiritual and devotional Poems, more to be admired for the ſentiments of piety which they breathe, than for their poetic beauties.

GO'DEFROI (Denys), a learned juriſt, the ſon of a counſellor of the Chatelet in Paris, where he was born in 1549. He ſtudied at Louvain, Cologne, and Heidelberg, and upon his return to France acquired great reputation in the parliament, in which he was nominated to a counſellor's place. But being of the Calviniſt perſuaſion, the civil wars on account of religion cauſed him to take refuge at Geneva, where, in 1580, he was admitted a burgher, and made profeſſor of law. Henry IV. in 1589, created him bailiff of ſome villages at the foot of mount Jura, and a ſupernumerary counſellor in the parliament of Paris. He was deprived of his employment and his library by the invaſion of the duke of Savoy, on which account he accepted, in 1524, the chair of law in the univerſity of Straſburg. In 1604, he complied with the invitation of Frederic elector-palatine to ſettle at Heidelberg. That prince, in 1618, ſent him on an embaſſy to Louis XIII. who received him with many marks of eſteem. Again purſued by the tumults of war, he quitted the palatinate in 1621, and retired to Straſburg, where he died in 1622. He was the author of, 1. *Corpus Juris Civilis cum Notis*, 4to. *Ludg.* 1583, many times reprinted; beſt editions are thoſe of Vitré, 1628, and of Elzevir, 1683, 2 vols. folio. 2. *Notæ in IV Libros Inſtitutionum.* 3. *Opuſcula varia Juris.* 4. *Praxis Civilis ex antiquis & recentioribus Scriptoribus.* 5. *Index chronologicus Legum & Novellarum a Juſtiniano Imp. compoſit.* 6. *Conſuetudines Civitatum & Provinciarum Galliæ.* 7. *Quæſtiones Politicæ.* 8. *Diſſertatio de Nobilitate.* 9. *Statuta Regni Galliæ cum Jure Communi collatæ.* 10. *Synopſis Statutorum municipalium.* 11. *Antiquæ Hiſtoriæ ex 27 Auctoribus contextæ.* 12. *Autores Latinæ Linguæ in unum redacti Corpus.*

GO'DEFROI (Theodore), eldeſt ſon of the preceding, born at Geneva in 1580. He ſtudied in Straſburg, and then went to Paris, where he embraced the catholic religion. In 1643, the office of counſellor of ſtate was conferred upon him; and he acted during the ſix laſt years of his life as counſellor and ſecretary to the French embaſſy for the general peace at Munſter. In that city he died in 1649. He was particularly verſed in the genealogical hiſtory of France, and publiſhed ſeveral learned works for its illuſtration. Of theſe are, 1. *Le Cérémonial de France*, 4to. a curious collection, afterwards republiſhed by his ſon Denys, in an enlarged form, in 2 vols. folio. 2. *Mém. concernant la Preſſéance des Rois de France ſur les Rois d'Eſpagne.* 3. *De la véritable Origine de la Maiſon d'Autriche.* 4. *Généalogie des Ducs de Lorraine.* 5. *Généal. des Comtes & Ducs de Bar.* 6. *Généal. des Rois de Portugal iſſus de la Maiſon de France.* 7. *Traité touchant les Droits du Roi Très-chrétien ſur pluſieurs Etats voiſines.* He alſo edited ſeveral ancient French biographical works, and enriched them with notes and diſſertations.

GO'DEFROI (James), brother to the above, born at Geneva in 1587, imitated his father Denys in adherence to the reformed religion, and in the ſtudies of law, hiſtory, and philoſophy. He was created profeſſor of law at Geneva, in 1619, and entered into the council in 1629. He filled with the greateſt ability every public office with which he was entruſted, and few have paſſed a more laborious life. He was made ſecretary of ſtate; was five times choſen ſyndic of the republic; and was employed in various negociations in France, Piedmont, Swiſſerland, and Germany: at the ſame time he continued his public lectures in juriſprudence, and compoſed a variety of learned works. He maintained a correſpondence with the moſt learned men of the age, by whom he was highly reſpected. Poſſeſſed of the eſteem and gratitude of his countrymen, he died, univerſally regretted, in 1652. The profound erudition of James Godefroi is diſplayed by the following works: 1. *Fragmenta Duodecim Tabularum*, 1616, republiſhed in 1653 in the *Quatuor Fontes Juris Civilis.* 2. *Animadverſiones Juris Civilis.* 3. *Opuſcula varia Juridico-politica, Hiſtorico-critica.* 4. *Commentar. de Regulis Juris.* 4. *De famoſis Latronibus inveſtigand.* 5. *De Jure Præcedentiæ.* 6. *De Salario.* 7. *De ſuburbicariis Regionibus.* 8. *De Statu Paganorum ſub Imp. Chriſt.* 9. *Fragmenta Legum Juliæ & Papiæ.* 10. *Codex Theodoſianus*; this is a poſthumous work, and is accounted a moſt valuable monument of ancient juriſprudence. He edited the works of *Cicero, cum notis Lambini & Gothofredi*; *Deſcriptio Orbis, Gr. & Lat.* and *Philoſtorgii Cappadocis Hiſt. Eccleſiaſt.* He alſo made large collections for the hiſtory of Geneva, afterwards made uſe of by Spon.

GO'DEFROI (Denys), ſon of Theodore, born at Paris in 1615. He followed the ſteps of his father in his reſearches into French hiſtory, and reprinted ſeveral of the works edited by him, adding to them new illuſtrations. He was alſo the author of *Mémoires & Inſtructions pour ſervir dans les Negotiations & les Affaires concernant les Droits du Roi*, 1665, folio, which has been attributed to the chancellor Seguier, by whoſe order it was compiled. He continued it to his own time, and corrected Feron's *Hiſt. des Officiers de la Couronne.* He was appointed, in 1668, the director and keeper of the chamber of accounts at Lille in Flanders, where he died in 1681.

GO'DEFROI (John), ſon of the preceding, ſucceeded his father in the direction of the chamber of accounts in Lille, at which place he died, much advanced in years, in 1732. He inherited a ſtrong thirſt for hiſtorical enquiries, and publiſhed, 1. The Memoirs of Philip de Comines, 5 vols. 8vo. 2. The Journal of Henry III. 2 vols. 8vo. 3. The Memoirs of Queen Margaret; and other pieces. He is allowed to have contributed more than any other writer to the elucidation of the affairs of the League. His elder brother DENYS, advocate in parliament, gave a new edition of the *Satyre Menippée*; and of the Treatiſes concerning the Hiſtory of France, collected by Peter Dupin.

GO'DERVILLE, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Montivilliers: three leagues north-eaſt of Montivilliers, and five north-weſt of Caudebec.

GODESCHA'LC, or GOTTESCHALC, ſurnamed *Fulgentius*, a benedictine monk in the ninth century, born in ſome part of Saxony, and appears to have entered into the monaſtic order in the convent of Fulda. In the year 846 he went to Rome, to viſit the holy places there; and thence proceeded to Pannonia and Dalmatia, where he commenced preaching the doctrine of predeſtination, which he had imbibed from cloſely ſtudying the writings of

of St. Auguſtine. Upon the promulgation of this doctrine, a council was ſummoned to meet at Mentz, in 848, to which Godeſchalc preſented a juſtification of his opinions, and reſolutely perſiſted in maintaining them to be conſiſtent with the Scriptures, and the ſenſe of the orthodox fathers. The council, however, paſſed a ſentence of condemnation on him, and ſent him in cuſtody to Hincmar archbiſhop of Rheims, within whoſe juriſdiction he had received the prieſthood. Hincmar aſſembled a council at Quiercy, in 849, in which Godeſchalc was condemned a ſecond time, and ordered to be treated in a manner equally repugnant to the principles of religion, and the dictates of humanity. He was degraded from the prieſthood, and ſcourged in the ſeverеſt manner, until the force of his pain overpowering his conſtancy, obliged him, in compliance with the commands of his perſecutors, to throw into the fire the juſtification of his opinions which he had delivered to the council of Mentz. After theſe proceedings, the unfortunate monk was committed cloſe priſoner to the monaſtery of Hautvilliers, in the dioceſe of Rheims. While Godeſchalc lay in priſon, his doctrine gained him followers, his ſufferings excited compaſſion, and both together produced a conſiderable ſchiſm in the Latin church. As the ſpirit of controverſy ran high between the contending parties, Charles the Bald ſummoned a council to meet at Quiercy, in 853, in which, by the credit and influence of Hincmar, the decrees of the former council were confirmed, and Godeſchalc was again condemned. But the decrees of this council were declared null, and Godeſchalc and his doctrine vindicated and defended, in a council aſſembled at Valence in Dauphiny, in 855; the decrees of which were confirmed in the council of Langres, held in 859, and that of Touſi, held in 860. Such was the origin of the famous diſputes concerning predeſtination and grace, which from that time have divided the catholic world into two parties, and which have alſo ſubſiſted in full force among the proteſtants. In 1650, the celebrated Maguin publiſhed at Paris, in two volumes quarto, a collection of the early treatiſes produced on both ſides of this controverſy, entitled, *Veterum Auctorum qui nono Sæculo de Prædeſtinatione & Gratia ſcripſerunt, &c.* The unfortunate Godeſchalc died in priſon about the year 869, maintaining with his laſt breath the doctrine for which he had ſuffered. None of his writings have reached our times, excepting two Confeſſions of Faith, inſerted in the celebrated Uſher's Hiſtoria Godeſchalci, printed at Dublin in 1661, 4to. An Epiſtle to Ratramnus, preſerved in Cellot's Hiſtoria Godeſchalci, publiſhed at Paris in 1655; and Fragments of other pieces noticed by Cave, in his Hiſt. Lit. vol. ii.

GOD'FATHER, *ſ.* The ſponſor at the font.—Confirmation, a profitable uſage of the church, tranſcribed from the apoſtles, conſiſts in the child's undertaking in his own name the baptiſmal vow; and, that he may more ſolemnly enter this obligation, bringing ſome *godfather* with him as his procurator. *Hammond.*—See BAPTISM, vol. ii. p. 699.

GOD'FREY, [of God, Sax. God, or good, and frið or friede, peace, *q. d.* godlike peace.] A proper name.

GOD'FREY OF BOUILLON, commander of the firſt cruſade, and made king of Jeruſalem, was the ſon of Euſtace II. count of Boulogne, and in his mother's right was heir of the Lower Lorrain. When the religious enthuſiaſm of the times ſet on foot an expedition for the recovery of the Holy Land, Godfrey was one of the firſt and moſt illuſtrious of the princes who took the croſs, and the command of the principal army was entruſted to him in acknowledgment of his ſuperior talents and virtues. It is agreed by hiſtorians, that of all the leaders none was actuated by purer motives; and the prudence and moderation of his character well fitted him for directing the motions of a furious and diſunited band. He was accompanied by two of his brothers; Euſtace, who had ſucceeded to the county of Boulogne, and Baldwin. With a diminiſhed army, he at length proceeded to the great object of the enterpriſe, the conqueſt of Jeruſalem. The ſiege of this famous city began in June, 1099, and it was carried by ſtorm on July 15. The furious fanaticiſm of the victors indulged itſelf in a horrid maſſacre of the vanquiſhed, which Godfrey was probably unable to prevent. Eight days after the conqueſt, the unanimous voice of the army proclaimed Godfrey ſovereign of the new acquiſition. He was ſoon called again into the field to oppoſe the ſultan of Egypt, who advanced againſt the Chriſtians with a vaſt but undiſciplined hoſt. This was completely overthrown at the battle of Aſcalon by the ſuperior valour and ſkill of the Chriſtians, and the reduction of all Paleſtine was the conſequence of their proweſs. Godfrey eſtabliſhed the feudal inſtitution in his new kingdom; and a code of juriſprudence, under the title of The Aſſize of Jeruſalem, which gave a model of the pureſt form of European liberty in the midſt of Aſiatic deſpotiſm. But he did not long occupy a throne which he adorned. After a year's reign, he died in July, 1100, and was ſucceeded by his brother Baldwin. The fame of Godfrey is immortaliſed as the hero of Taſſo's Jeruſalem Delivered, one of the fineſt of epic poems.

GOD'FREY OF VITERBO, a writer of the twelfth century, ſuppoſed to be either a native of that Italian city, or to have derived his anceſtry thence; but, from the circumſtance of his receiving his early education at Bamberg, and paſſing the greateſt part of his life in Germany, a ſuſpicion has ariſen that Wittemberg, and not Viterbo, was the place of his birth, and one of the manuſcripts of his work entitles him *Wittembergenſis*. He was chaplain and ſecretary of the emperors Conrad III. Frederic I. and Henry IV. His chronicle, entitled Pantheon, as treating on the gods of earth, is dedicated to pope Urban III. and is a general hiſtorical record from the creation of the world to the year 1186. It is written in Latin, with a mixture of proſe and verſe, tainted with barbariſm; yet he is reckoned worthy of credit for the events of his own time. This work was firſt printed at Baſil in 1559; afterwards at Frankfort in 1584, and at Hanover in 1613, in the collection of German hiſtorians edited by Piſtorius. Muratori has reprinted in his collection that part which relates to Italy, beginning with the fourth century. Another work of this author, entitled *Speculum Regum, ſive de Genealogia omnium Regum, &c.* is preſerved in manuſcript in the imperial library of Vienna.

GODHEAB', or GOOD HOPE, a ſettlement of Weſt Greenland. Lat. 64. 25. N. lon. 50. 10. W. Greenwich.

GOD'HEAD, *ſ.* Godſhip; deity; divinity; divine nature:

> At the holy mount
> Of heav'n's high-ſeated top, th' imperial throne
> Of *godhead*, fix'd for ever firm and ſure. *Milton.*

GO'DIN (Louis), an able aſtronomer, born at Paris in 1704; ſtudied aſtronomy under the de l'Iſles, and in 1725 was made adjunct of the academy of ſciences. The academy afterwards entruſted him with the care of editing its Memoirs, and he ſuperintended the publication of eleven volumes. In 1735, when the academy ſent ſome of its members to Peru, to meaſure a degree of the meridian, Godin was placed at the head of the undertaking. He was ſome time profeſſor of mathematics at Lima; and having returned to Europe in 1751, he was next year appointed a colonel in the Spaniſh ſervice, and director of the naval academy at Cadiz, where he died in 1760. His literary labours were: 1. *Machines & Inventions approuvées par l'Academie des Sciences, Paris*, 1735, 6 vols. 4to. 2. Index to the Memoirs of the Academy from 1666 to 1740, ibid. 1743, 5 vols. 4to. 3. *Connoiſſances des Tems*, which he conducted for five years. 4. *Cours de Mathematiques*, 1756. He was the author of ſeveral aſtronomical papers in the Memoirs of the Academy, from 1726 to 1739.

GODI'VA,

GODI'VA, the name of a woman.

GOD'LESS, *adj.* Without ſenſe of duty to God: atheiſtical; wicked; irreligious; impious.—Of theſe two ſorts of men, both *godleſs*, the one has utterly no knowledge of God, and the other ſtudies how to perſuade themſelves that there is no ſuch thing to be known. *Hooker.*

For faults not his, for guilt and crimes
Of *godleſs* men, and of rebellious times,
Him his ungrateful country ſent,
Their beſt Camillus, into baniſhment. *Dryden.*

GOD'LIKE, *adj.* Divine; reſembling a divinity; ſupremely excellent.—That prince ſhall be ſo wiſe and *godlike*, as, by eſtabliſhed laws of liberty, to ſecure protection and encouragement to the honeſt induſtry of mankind. *Locke.*

Thus Adam his illuſtrious gueſt beſought,
And thus the *godlike* angel anſwer'd mild. *Milton.*

GOD'LING, *ſ.* A little divinity; a diminutive god:

The puny *godlings* of inferior race,
Whoſe humble ſtatues are content with braſs. *Dryden.*

GOD'LINESS, *ſ.* Piety to God. General obſervation of all the duties preſcribed by religion.—Virtue and *godlineſs* of life are required at the hands of the miniſter of God. *Hooker.*

GOD'LY, *adj.* Pious towards God.—Grant that we may hereafter live a *godly*, righteous, and ſober, life. *Common Prayer.*—Good; righteous; religious.—Help, Lord, for the *godly* man ceaſeth, for the faithful fail among the children of men. *Pſ.* xii. 1.

GOD'LY, *adv.* Piouſly; righteouſly. By analogy it ſhould be *godlily*, but the repetition of the ſyllable is too harſh.—The apoſtle St. Paul teacheth, that every one that will live *godly* in Chriſt Jeſus muſt ſuffer perſecution. *Hooker.*

GOD'LYHEAD, *ſ.* Goodneſs; righteouſneſs. *An old word:*

For this, and many more ſuch outrage,
I crave your *godlyhead* to aſſwage
The rancorous rigour of his might. *Spenſer.*

GOD'MAN, the Son of God; the mediator.

GOD'MANCHESTER, [from *Gorman*, or *Guthern*, a Dane, who firſt of all the Daniſh princes embraced Chriſtianity, and erected there a palace.] A ſmall neat town in the vicinity of Huntingdon, in Huntingdonſhire, the inhabitants of which are for the moſt part farmers, and vie with each other in good huſbandry; ſparing neither expence nor labour to promote every uſeful improvement. When James I. was paſſing through this town on his way to the metropolis, the farmers met him, about a mile from the place, with ſeventy ploughs drawn by as many teams of horſes; which novel ſight was ſo agreeable to the king, that he granted them a charter, to be governed by two bailiffs and twelve aſſiſtants. At the ſame time the ſocial monarch condeſcended to partake of a cold collation, which they had prepared for him under a large white-thorn; which, time having decayed, the farmers, to commemorate the grateful event, replaced it, and it ſtill goes by the name of *king's buſh*. Many ancient coins having from time to time been dug up near Godmancheſter, proves it to have been a Roman town. Its ancient name was *Duraliponte*; but, being ceded to a Daniſh general called *Gorman*, he gave it the name of *Gorman-ceſter*, which word became in time corrupted to Godmancheſter. The river Ouſe ſeparates it from Huntingdon, over which there is a noble free-ſtone bridge. The church is a venerable Gothic edifice, large, commodious, and in perfect order. Here is a free Engliſh ſchool endowed; alſo ſeveral alms-houſes, where the aged, of reduced circumſtances, experience, during the years of decrepitude, a quiet and comfortable aſylum. A fair for cattle is held annually on Tueſday and Wedneſday in Eaſter week.

GOD'MOTHER, *ſ.* A woman who has undertaken ſponſion in baptiſm. A term of ſpiritual relation.

GODOL'PHIN, [*godolcan*, i. e. a white eagle, in the dialect of Cornwall.] The name of a noble Engliſh family, which bears a white eagle in its coat of arms.

GODOL'PHIN (John), an eminent Engliſh civilian, born in the iſland of Scilly in 1617, and educated at Oxford. In 1642-3, he was created doctor of civil law; in 1653, he was appointed one of the judges of the admiralty; and at the reſtoration, he was made one of his majeſty's advocates. He was eſteemed as great a maſter of divinity as of law, and publiſhed, 1. The Holy Limbeck. 2. The Holy Arbour. 3. A View of the Admiral's Juriſdiction. 4. The Orphan's Legacy. 5. *Repertorium Canonicum, &c.* He died in 1678.

GO'DRA, a town of Hindooſtan, and capital of a circar of the ſame name, in the country of Guzerat: fifty-five miles eaſt of Amedabad. Lat. 22. 50. N. lon. 73. 40. E. Greenwich.

GOD'RIC, [of God, Sax. God, or good, and ric, rich, q. d. rich in God, or goodneſs.] A proper name.

GOD'SCAL, [of God, Sax. God, or good, and ſcalk, a ſervant.] A proper name.

GOD'SHIP, *ſ.* The rank or character of a god; deity; divinity:

Diſcourſing largely on this theme,
O'er hills and dales their *godſhips* came. *Prior.*

GOD'SON, *ſ.* One for whom one has been ſponſor at the font:

What, did my father's *godſon* ſeek your life?
He whom my father named? your Edgar? *Shakeſpeare.*

GOD'WARD, *adj.* To *Godward* is *toward God.* So we read, *Hac Arethuſa tenus*, for *hactenus Arethuſa.*—And ſuch truſt have we through Chriſt to *Godward.* 2 *Cor.*

GOD'WIN, [of God, Sax. God, or good, and pin, a conqueror, q. d. a conqueror in God.] A proper name.

GOD'WIN (Earl), a potent Saxon baron, ſon of Wolfnoth, governor of Suſſex, and father of Harold, who ſucceeded to the crown of England. He was earl of Kent, and lord of great poſſeſſions in that county, as well as in Suſſex. For his hiſtory, ſee the article ENGLAND, vol. vi. p. 555–566.

GOD'WIN (Thomas), a worthy Engliſh prelate, born at Oakingham in Berkſhire, in 1517. His early education he received at the free-ſchool in his native town; where the proofs which he afforded of excellent natural abilities, attracted the notice of Dr. Richard Layton, archdeacon of Bucks, who received him into his houſe, and took care of his farther inſtruction in claſſical literature. In 1538, Dr. Layton ſent him to Magdalen-college, Oxford, where that gentleman granted him an exhibition as long as he lived; and upon the death of that patron, Mr. Godwin's merits procured him other friends, by whoſe aſſiſtance he was enabled to purſue his academic ſtudies. He took his degree of bachelor of arts in 1543; and in the following year was elected a fellow of his college, by which event he no longer depended on his friends for pecuniary aſſiſtance. In 1547, he proceeded to the degree of maſter of arts. His ſituation in college, however, was rendered uneaſy, in conſequence of the zealous attachment to the principles of the reformation which he had imbibed in the family of Dr. Layton, and which expoſed him to the ill offices of ſome of the fellows. This circumſtance made him embrace the opportunity of a vacancy in the maſterſhip of the free-ſchool of Brackley in Northamptonſhire, which was in the gift of his college, to accept that appointment, and to reſign his fellowſhip. To this ſituation he retired in 1549, and continued there as long as king Edward lived, devoting what time he could ſpare from his attention to the ſchool, to the ſtudy of divinity and phyſic. After the acceſſion of queen Mary, he met with perſecution from Bonner biſhop of London, on account of his religious ſentiments; and, being obliged to reſign

his

his ſchool, turned his attention more particularly to medical ſtudies. In 1555, he took his degree of bachelor of phyſic at Oxford, and ſupported his family by practiſing that profeſſion till queen Elizabeth aſcended the throne. Upon this event he reſolved to enter into the church, to which he was encouraged by Dr. Nicholas Bullingham, biſhop of Lincoln, who admitted him into holy orders, and made him his chaplain. That prelate alſo introduced him to public notice, by procuring him the honour of preaching before the queen; who was ſo well pleaſed with his pathetic eloquence, that ſhe appointed him one of her Lent preachers. This poſt he filled for eighteen years; but he received no preferment in the church till 1565, when he was promoted to the deanery of Chriſtchurch, Oxford, and had, in the ſame year, the prebend of Milton-Eccleſia beſtowed upon him by biſhop Bullingham. In the following year he was promoted to the deanery of Canterbury, and attended queen Elizabeth in her viſit to the univerſity of Oxford; on which occaſion he took his degree of doctor of divinity with uncommon applauſe. After he had remained eighteen years at Canterbury, he was nominated by the queen to the vacant ſee of Bath and Wells, in 1584. He died at Oakingham, whither he had removed for the benefit of his native air, in 1590, in the ſeventy-third year of his age. He is highly ſpoken of for his learning, piety, and moderation; and was beloved and revered for his cheerful hoſpitality and benevolence.

GOD'WIN (Francis), a learned Engliſh prelate and hiſtorian, ſon of the preceding, born at Havington in Northamptonſhire, in 1561. He was ſent to Chriſtchurch college, Oxford, in the ſixteenth year of his age, and in 1578 was elected a ſcholar of that inſtitution. In that ſeminary he took his degree of bachelor of arts in 1580; and proceeded to the degree of maſter of arts in 1583, when he had the character of being one of the moſt aſſiduous ſtudents in the univerſity. About this time he wrote an entertaining philoſophical fiction, which was publiſhed five years after his death, under the title of, The Man in the Moon, or a Diſcourſe of a Voyage thither, by Domingo Gonzales, 1638, 8vo. In 1587 he was made a canon in the cathedral church of Wells, and promoted to the ſubdeanery of Exeter. The hiſtory and antiquities of his country now became favourite ſubjects of his enquiries; and in 1590 he accompanied the learned Camden into Wales, in ſearch of objects to illuſtrate them. For ſome years he devoted his leiſure hours to enquiries of this nature; but at length, leaving to Mr. Camden the more general ſubjects, he confined himſelf to ſuch antiquities as related to eccleſiaſtical cauſes or perſons. Finding afterwards that his collections relating to eccleſiaſtical matters would add ſcarcely any thing to Mr. Fox's laborious work on the ſame ſubject, he ſtill farther reſtricted his enquiries to the lives and actions of eccleſiaſtical perſons. In 1595 he took the degree of doctor of divinity; at which time, beſides poſſeſſing the dignities already mentioned, he was rector of Samford-Orcais in Somerſetſhire, prebendary of Wells, and rector of Biſhop's Lidiard in the ſame county. He was eſteemed by the beſt judges a very able preacher, and is commended for the freedom and ſpirit with which he reprehended the glaring vices of the age in which he lived. Having, in conſequence of his reſearches, digeſted into a regular chronological order the ſucceſſion of prelates in the reſpective dioceſes within this kingdom, he was encouraged, in 1601, to commit his labours to the preſs, and publiſhed a Catalogue of the Biſhops of England ſince the firſt planting of the Chriſtian Religion in this Iſland; together with a brief Hiſtory of their Lives and memorable Actions, 4to. This catalogue, which was a new attempt in Engliſh eccleſiaſtical hiſtory, met with ſuch general approbation, that, in reward of the author's diligence in compiling it, queen Elizabeth promoted him in the ſame year to the vacant ſee of Llandaff; and as this biſhopric, from the low ſtate of its perſonalities, was then but of ſmall value, he was allowed to retain in connection with it the ſubdeanery of Exeter, and to hold *in commendam* the rectory of Kingſton-Seymour, in the dioceſe of Bath and Wells. While biſhop Godwin continued to hold the ſee of Llandaff, he employed his leiſure hours in improving his Catalogue, and in making collections relative to civil and eccleſiaſtical hiſtory. In 1615, he publiſhed a new edition of his Catalogue, with conſiderable additions, and a diſcourſe prefixed, Concerning the firſt Converſion of Britain unto the Chriſtian Religion. Owing, however, to the author's great diſtance from the preſs, this impreſſion was ſo erroneouſly printed, that he determined to republiſh it, and, by the advice of his learned friends, in the Latin language. This he did in the following year, under the title of *De Præſulibus Angliæ Commentarius, &c.* 4to. In the ſame year he publiſhed *Rerum Anglicarum Henrico VIII. Edwardo VI. & Maria, regnantibus, Annales*, folio, which met with a very favourable reception, and were deſervedly admired, as well as the preceding work, for the elegance of their ſtyle. As a reward for theſe learned labours, king James tranſlated him from the ſee of Llandaff to that of Hereford, in 1617. Biſhop Godwin now devoted ſuch time as the diſcharge of his epiſcopal functions and his growing infirmities would permit, chiefly to the improvement of his former works. In ſubſerviency to this object, he publiſhed, in 1621, *Appendix ad Comment. de Præſul. Angliæ*, which contains his laſt corrections and additions to that performance. In 1628, he publiſhed the ſecond edition of his *Annales*, in a more correct form than the preceding; and in the following year his diſcourſe already mentioned on the ſeveral methods of conveying ſecret and ſpeedy intelligence, under the title of *Nuncius Inanimatus, Utopiæ*, 1629, 8vo. This diſcourſe is written in very obſcure and enigmatical language, with the deſign of concealing the author's ſecret; but from ſome of his expreſſions it ſhould ſeem that a part of it conſiſts in the uſe of ſignals, which, if reduced to a ſyſtem, might have given an earlier date to the eſtabliſhment of public telegraphs. In 1630, he publiſhed a third edition of his *Annales*, which was immediately followed by a tranſlation of them, under the title of Annales of England, &c. corrected, and enlarged; in folio. In the ſame year a learned Latin diſſertation by biſhop Godwin, on the value of the Roman ſeſterce and Attic talent, was printed at the end of Dr. Hakewell's Apology for Divine Providence, in folio. This was the biſhop's laſt literary exertion, who, in the latter part of his life, was affected with a low and languiſhing diſeaſe, which gradually terminated his life in 1633, when about ſeventy-two years of age. Of his learning, diligence in enquiry, and claſſical taſte, his works bear honourable teſtimony; and they exhibit him in the exalted light of a zealous friend to that pure religious eſtabliſhment of which he was a member.

GOD'WIN (Thomas), a learned Engliſh writer on Jewiſh antiquities, born in Somerſetſhire, in 1587. When fifteen years of age he was ſent to Magdalen-hall, in the univerſity of Oxford, where he was entered a ſcholar. In 1606, he was made a demy of Magdalen-college, and took his degree of bachelor of arts. In 1609, he proceeded to the degree of maſter of arts, and ſoon afterwards was choſen maſter of the free-ſchool at Abingdon in Berkſhire. For the benefit of his pupils, he publiſhed, in 1613, *Romanæ Hiſtoriæ Anthologia*: An Engliſh Expoſition of the Roman Antiquities, 4to. which underwent many impreſſions. Not long after this he entered into orders, and was appointed chaplain to Dr. James Montague, biſhop of Bath and Wells. In 1616, he was admitted to the degree of bachelor of divinity; and in the ſame year publiſhed *Synopſis Antiquitatum Hebraicarum ad Explicationem utriuſque Teſtamenti valde neceſſaria, &c. Lib. III.* 4to.

4to. Becoming weary of the fatigue of his ſchool, he reſigned it, upon obtaining a preſentation to the rectory of Brightwell, near Wallingford, in Berkſhire. In 1625, he publiſhed his moſt celebrated work, entitled Moſes and Aaron; civil and eccleſiaſtical Rites uſed by the ancient Hebrews, obſerved, and at large opened, for the clearing many obſcure Texts throughout the whole Scripture, 4to. This work met with ſo favourable a reception, that it paſſed rapidly through repeated editions, and has ſince been uſed as a text-book by theological tutors both at home and abroad. Annotations and comments have been written upon it by different authors, and among others by Dr. David Jennings in our own country, and the learned Hottinger in Holland. In 1636, our author was admitted to the degree of doctor of divinity. Beſides the articles already noticed, Dr. Godwin was the author of *Florilegium Phraſicon*; or, A Survey of the Latin Tongue, 8vo. and, Three Arguments to prove Election upon Foreſight of Faith. He died at his parſonage-houſe in 1642-3, when about fifty-five years of age.

GOD'WIN SANDS, ſands of the coaſt of Kent, which were formerly the lands of earl Godwin, a powerful baron in the time of Edward the Confeſſor, who died miſerably; and in the reign of William Rufus his lands were ſwallowed up by the ſea.

GOD'WIT, *ſ.* [ȝoȣ, good, and pιτa, Sax. an animal.] A bird of peculiar delicacy.—Nor ortolans nor *godwits* crown his board. *Cowley.*—See the article SCOLOPAX.

GOD'YELD, or GODYIELD, *adv.* [corrupted from *God ſhield*, or protect.] A term of thanks. *Not now uſed:*

Herein I teach you,
How you ſhould bid *godyeld* us for your pains,
And thank us for your trouble. *Shakeſpeare.*

GO'EL, *adj.* [ȝolen, Sax.] Yellow. *An old word:*

In March, at the furtheſt, dry ſeaſon or wet,
Hop-roots ſo well choſen let ſkilful go ſet;
The *goeler* and younger, the better I love;
Well gutted and pared, the better they prove. *Tuſſer.*

GO'ELAN's POINT, a promontory on the north ſide of Lake Ontario, in North America, about thirty-three miles ſouthweſterly of Fort Frontinac.

GO'ELL, a town of Germany, in the duchy of Holſtein: one mile north-eaſt of Oldeburg.

GOELWA'RA, a circar, or diſtrict, of Hindooſtan, in the diſtrict of Guzerat, ſituated on the weſt coaſt of the Gulf of Cambaye.

GO'ER, *ſ.* One that goes; a runner:

I would they were in Afric both together,
Myſelf by with a needle, that I might prick
The *goer* back. *Shakeſpeare.*

A walker; one that has a gait or manner of walking good or bad.—The earl was ſo far from being a good dancer, that he was no graceful *goer*. *Wotton.*—The foot. *Obſolete:*

A double mantle, caſt
Athwart his ſhoulders, his faire *goers* grac'd
With fitted ſhoes. *Chapman.*

GOERE'E (William), a learned Dutch bookſeller, and various writer, born at Middleburg in Zealand, in 1635. Notwithſtanding the time which he was neceſſarily obliged to devote to his buſineſs, he ſo well employed his vacant moments, that he made a conſiderable proficiency in different branches of literature, and ſucceſsfully cultivated an acquaintance with the fine arts, as well as botany and medicine. His works, written in the Dutch language, are honourable monuments of his induſtry and learning. He died at Amſterdam in 1711. The principal of his productions are: 1. Jewiſh Antiquities, in 2 vols. folio. 2. The Hiſtory of the Jewiſh Church, founded on the Moſaic Records, 1700, in 4 vols. folio. 3. Hiſtory, Sacred and Profane, 4to. 4. An Introduction to the Art of Painting, 8vo. 5. A Treatiſe on Architecture, according to the Principles of the Ancients and Moderns, &c.—His father, HUGH WILLIAM GOEREE, who died at Middleburg in 1643, is alſo entitled to be claſſed among the learned men of his time. He publiſhed a Dutch tranſlation of Peter Cunæus's treatiſe *De Republica Hebræorum*, 1682, 8vo. to which he added, A Continuation, in 2 vols. This work was afterwards augmented by a fourth volume, written by William Outram, and publiſhed in 1701. A French edition of the whole was printed at Amſterdam in 1705. —William Goeree had a ſon named JOHN, who roſe to high reputation as a painter, and who produced the beautiful pictures which adorn the burgher's-hall at the town-houſe in Amſterdam. He died at that city in 1731.

GO'ES, a town of Portugal, in the province of Beira: three leagues eaſt of Coimbra.

GO'ES, or TER-GOES, a town of Zealand, ſituated on the north coaſt of the iſland of South Bevelandt, on an arm of the Scheld, with which it is connected by means of a canal. It was beſieged by the Flemings in 1300, and the inhabitants defended themſelves with ſuch bravery, that their enemies were compelled to raiſe the ſiege, after having loſt 1800 men. It anciently belonged to the lords of Borſſele; but that illuſtrious family becoming extinct, the town deſcended to Jacqueline comteſſe of Holland, who permitted the inhabitants to build ramparts round it in 1417. It was nearly deſtroyed by an inundation of the ſea, in 1548; ſix years after, great part of it was conſumed by fire; but it ſoon recovered, by means of privileges granted it by Charles V. and its great ſale of ſalt. The Dutch became maſters of it in 1577, and prince Maurice cauſed it to be fortified. It has at preſent ſix gates, that next the water fortified with two good baſtions; on the other ſide of the town are two more. The great church being burned down in 1618, was afterwards rebuilt, and is now a handſome ſtructure; the town is not large, but carries on conſiderable trade, particularly in ſalt and grain: ten miles eaſt of Fluſhing. Lat. 51. 30. N. lon. 21. 22. E. Ferro.

GOE'TZE (George-Henry), a learned German lutheran divine, born at Leipſic in 1668. After purſuing his ſtudies in the univerſities of Wittemberg, and Jena, where he diſtinguiſhed himſelf by the learning and ingenuity of the theſes which he maintained in the public ſchools, he was admitted to the degree of maſter of arts in 1687. In 1690 he was appointed miniſter of Burg, in the duchy of Magdeburg, whence he removed in the ſame year to Chemnitz, in Miſnia, to fill the poſt of deacon in the church of that town. Four years afterwards we find him miniſter of the church of St. Sophia at Dreſden; whence he removed to Annaberg, in 1697, to exerciſe the office of ſuperintendant over the churches in that diſtrict. In 1699 he was admitted to the degree of doctor of divinity at Leipſic; and in 1702 was choſen ſuperintendant of the churches at Lubec. The reſt of his days he ſpent in that city, where he died in 1729, aged ſixty-one. He was the author of a multitude of learned Theſes, Diſſertations, &c. hiſtorical, critical, and theological; Controverſial Treatiſes againſt the Catholics, Arminians, &c.; Eulogies, &c. principally written in the Latin language, of which Moreri enumerates no fewer than one hundred and fifty-two different articles. Several of theſe pieces were collected together, and printed at Lubec under the titles of, *Selecta ex Hiſtoria Literaria*, 1709, 4to. and *Melethemata Annebergenſia*, 1706, in 3 vols. 12mo.

GO'EZ (Damian a), a learned Portugueſe, born at Alenquer. He was brought up in the court of Emanuel king of Portugal, to whom his brother Fructo was gentleman of the chamber. He had an early paſſion for travelling, which was gratified by his being employed in various negociations from his court to France, Germany,

many, Poland, and the Low-countries, in which he ſpent fourteen years. In 1534 he viſited the univerſity of Padua, in which he ſtudied four years under Lazaro Buonamico; and he contracted a friendſhip in Italy with the cardinals Bembo, Sadolet, and Madrutio. He afterwards purſued his ſtudies at Louvain, where he cultivated the acquaintance of all the men of learning in thoſe parts, and acquired a taſte for muſic, poetry, and polite literature. He married at the Hague, and then fixed his reſidence at Louvain, which city he was a principal means of defending againſt the attack of Martin van Roſſem. He was, however, ſeized upon by the enemy, under pretence of a violation of the truce, and obliged to ranſom himſelf. In an advanced age he was recalled by the king of Portugal in order to be employed in writing the hiſtory of that country; but he found the archives in ſuch a confuſed ſtate, that he was unable to finiſh more than a very ſmall part of his taſk. In conſequence of ſome calumnious accuſation, he was arreſted, and obliged to plead his cauſe in fetters. He was at length allowed to return to his own houſe, where he was found dead one morning with his body half burnt, probably from the accident of falling into the fire in a fit. The works of Damian a Goez are: 1. *Legatio magni Indorum Imperatoris ad Emanuelem Luſitaniæ Regem*, 1532. 2. *Fides, Religio, Moreſque, Æthiopum.* 3. *Hiſpaniæ Laudatio.* 4. *Urbis Lovanienſis Obſidio.* 5. *Comment. Rerum Geſtarum in India a Luſitanis.* 6. *Urbis Ulyſſiponenſis Deſcriptio.* 7. *Hiſtoria del Rey Dom Manuel.* 8. *Chronica de Principe D. Juao* II.

GOE'ZE (John Auguſtus Ephraim), a celebrated naturaliſt, born at Aſcherleben in 1731. Having received the rudiments of his education in the ſchool of that place, he was ſent to the univerſity of Halle, where he applied chiefly to theology; and ſoon after his return, in 1751, he obtained an appointment as a preacher at Quedlingburg, which he retained till the period of his death. In conſequence of ſome accidental circumſtances, he began, about the fortieth year of his age, to turn his attention to natural hiſtory. Becoming poſſeſſed of a compound microſcope conſtructed by Hoffman of Leipſic, he began to collect objects of various kinds; and every thing curious that fell in his way was ſubjected to examination. His microſcopic reſearches conducted him to the ſtudy of the natural hiſtory of inſects. He wrote down his obſervations for his own private uſe, and cauſed many of the objects he ſaw to be correctly delineated. He tranſlated Bonnet's Treatiſe on Inſectology, which was the firſt work he publiſhed, and which met with a favourable reception from naturaliſts. After this period he publiſhed various papers in the Berlin Miſcellany. He made himſelf completely acquainted with the Linnæan arrangement of inſects; after which he publiſhed his Entomological Collections, intended as a ſupplement to Linnæus, which appeared between 1771 and 1781, in four parts, and which excited the aſtoniſhment of thoſe beſt acquainted with the ſubject. The ſame plan he afterwards adopted in regard to other claſſes of the animal kingdom. His friend Dr. Wagler, of Brunſwick, who during the latter part of his life had applied to microſcopical obſervations, being a great anatomiſt, recommended to him an examination of the inteſtines of animal bodies, as likely to afford a new field for his reſearches. Goeze was ſtruck with this idea; and by an indefatigable uſe of every opportunity of diſſection which came in his way, he became poſſeſſed of a multitude of inteſtinal worms from the human body; and in a few years he had a moſt valuable collection, which he daily increaſed by diſſecting the inteſtines of quadrupeds, fiſh, and birds. All curious objects he prepared with great dexterity, examined with the utmoſt care, and cauſed drawings to be made of them. This gave riſe to his celebrated work on the natural hiſtory of inteſtinal worms, *Verſuch über die Naturgeſchichte der Eingeweide-Wurmer*, publiſhed, in quarto, in 1782, with forty-four plates. This original work, on a ſubject of ſo much curioſity and importance to the medical art, contributed not a little to increaſe his reputation as a naturaliſt. About the year 1783 the education of his children induced him to publiſh ſome ſmall works on natural hiſtory and other branches of knowledge connected with it. Being an agreeable writer, theſe productions were well received, and particularly on account of the ſimple and familiar manner in which he inculcates the principles of religion and morality. When he had communicated to the public the reſult of his obſervations on inteſtinal worms, he ſent the collection to Pavia, where it was ſold for a thouſand dollars, as he found himſelf incapable, on account of age and infirmity, to continue his labours in that department. A few weeks after the bargain was concluded, he received a letter from Dr. Hunter, who offered him 1800 dollars for the collection; but this offer arrived too late. Goeze had long ſuffered under a diſorder of the cheſt. This weakneſs, as he had to preach every Sunday, made him wiſh for ſome duty that required leſs exertion. This wiſh was gratified by the intereſt of Anna Amelia, ſiſter of Frederic the Great, who paid him a viſit to ſee his natural curioſities: he obtained the diaconate of the principal church of Quedlingburg, and he entered on his new office with the hope of living ſome years in the boſom of peace and tranquillity; but his diſorder increaſing, he died on the 27th of June, 1786.

GOFF, or GOLF, *ſ.* A very ancient Engliſh game at ball, performed with a light bat, about four feet in length, faced with horn and backed with lead in the curvature. The ball is a little one, but exceedingly hard, being made with leather and ſtuffed with feathers. There are generally two players, who have each of them his bat and ball. The game conſiſts in driving the ball into certain holes made in the ground, which he who achieves the ſooneſt, or in the feweſt number of ſtrokes, obtains the victory. It ſhould ſeem that goff was a faſhionable game among the nobility at the commencement of the ſeventeenth century, and it was one of the exerciſes with which prince Henry, eldeſt ſon to James I. occaſionally amuſed himſelf, as we learn from the following anecdote recorded by a perſon who was preſent: "At another time playing at goff, the prince lifting up his goff-club to ſtrike the ball; one ſtanding by ſaid to him, Beware that you hit not maſter Newton; wherewith he, drawing back his hand, ſaid, Had I done ſo, I had but paid my debts."

GOFFS'TOWN, a town of the American States, in Hillſborough county, New Hampſhire, on the weſtern bank of Merrimack river, three miles from Amuſkeag Falls, and ſixty weſt of Portſmouth. It was incorporated in 1761, and contains by the cenſus 1,275 inhabitants. Some pieces of baked earthenware have been dug up in this townſhip, from which it is ſuppoſed that the Indians had learned the potter's art; but of what antiquity theſe remnants are, is uncertain.

GOG, and MA'GOG, two names uſually joined together in Scripture; *Ezek.* xxxviii. 2, 3, &c. xxxix. 1, 2, &c. *Rev.* xx. 8. Moſes ſpeaks of Magog the ſon of Japhet, but ſays nothing of Gog; *Gen.* x. 2. 1 *Chr.* i. 5. Gog was prince of Magog, according to Ezekiel. Magog ſignifies the country or people, and Gog the king of that country. The generality of the ancients made Magog the father of the Scythians and Tartars; and ſeveral interpreters diſcovered many footſteps of their name in the provinces of Great Tartary. Others have been of opinion that the Perſians were the deſcendants of Magog; and ſome have imagined that the Goths were deſcended from Gog and Magog; and that the wars deſcribed by Ezekiel, and undertaken by Gog, are no other than thoſe which the Goths carried on in the fifth age againſt the Roman empire. Mr. Bryant, in his Analyſis of Ancient Mythology, has ſhewn that

Magog

Magog was the father or founder of the genuine Scythæ, and that Hierapolis in Syria, was in early times called the *city of Magog*. Bochart has placed Gog in the neighbourhood of Caucasus. He derives the name of this celebrated mountain from the Hebrew *Gog chasan*, "the fortress of Gog." He maintains that Prometheus, said to be chained to Caucasus by Jupiter, is Gog, and no other. There is a province in Iberia called the Gogarene. But the generality of commentators believe, that Gog and Magog, mentioned in Ezekiel and the Revelations, are to be taken in an allegorical sense, for such princes as were enemies to the chosen people of God. Thus by Gog in Ezekiel, they understand Antiochus Epiphanes, the persecutor of those Jews who were firm to their religion; and by the person of the same name in the Revelations, they suppose Antichrist to be meant; the great enemy of the church and faithful. Some have endeavoured to prove that Gog, spoken of in Ezekiel, and Cambyses king of Persia, were one and the same person; and that Gog and Magog in the Revelations denote all the enemies of the church, who should be persecutors of it to the consummation of ages.

GO'GARD, a town of Sweden, in the province of East Gothland: twenty-three miles north-north-west of Linkioping.

GO'GET, *s.* The sea-gudgeon. See GOBIUS.

GOG'GLE, *s.* A strained motion of the eyes.—Others will have such a divided face between a devout *goggle* and an inviting glance, that the unnatural mixture will make the best look to be at that time ridiculous. *Marq. of Halifax.*—Used adjectively by *B. Jonson.*—Give him admonition to forsake his saucy glavering grace, and his *goggle* eye. *Poetaster.*

To GOG'GLE, *v. n.* To look asquint.—Nor sighs, nor groans, nor *goggling* eyes, did want. *Dryden.*

Inflam'd all over with disgrace,
To be seen by her in such a place,
Which made him hang his head, and scoul,
And wink and *goggle* like an owl. *Hudibras.*

GOG'GLE-EYED, *adj.* [roezl egen, Sax.] Squint-eyed; not looking straight.—They are deformed, unnatural, and very unseemly to look upon, except to men that be *goggle-eyed* themselves. *Ascham.*

GOG'LAND, a small island of Russia, in the Gulf of Finland: eighty miles west of Petersburg. Lat. 60. 10. N. lon. 44. 48. E. Ferro.

GOGLIO'NIS, a town of Italy, in the kingdom of Naples, and province of Capitinata: seven miles and a half south of Termoli.

GOG'MAGOG HILLS, remarkable hills in the county of Cambridge: three miles east from Cambridge, and adjoining to an ancient Roman city. The intrenchments and other works which cover these hills, prove it to have been a Roman station of considerable strength and importance.

GOG'NO, a river of Piedmont, which runs into the Po near St. Nogaro.

GO'GO, a town of Hindoostan, in the country of Guzerat, near the Gulf of Cambay: eighty-four miles south-south-west of Amedabad, and sixty-four north-west of Surat. Lat. 21. 45. N. lon. 71. 53. E. Greenwich.

GOG'OLEV, a town of Russia, in the government of Kiov: twenty miles east of Kiov.

GO'GRA, or SOORJEW, a river of Hindoostan, which rises in lat. 33°, out of a lake in the kingdom of Thibet, called Lankee-Dee, or Dewah, almost close to the head of the Ganges; from thence it takes a southern course, pent in between parallel chains of lofty and snow-capt mountains, bursts through the great chain of the Emodus, and continues its confined passage, rushing through another chain parallel to that of Emodus, named the mountains of Kemaoon, till it gains the plains of Oude; and after a course of about eight hundred miles, is lost in the Ganges, near fifty miles above Patna.

GOGUET' (Antony-Yves), an esteemed writer, born in 1716 at Paris, where his father was an advocate. After his education was finished, he purchased the place of a counsellor to the parliament. An assiduous application to study enabled him to produce, in 1758, a work of great reputation, entitled, *Origine des Loix, des Arts, des Sciences, & de leur Progrès chez les anciens Peuples*, 3 vols. 4to. reprinted in 1778, in 6 vols. 12mo. It has been translated into English. In this performance the author treats on the origin and progress of human knowledge, from the creation to the time of Cyrus, and displays much erudition in his historical discussions, though less of science and philosophy than might have been wished. He did not long enjoy the literary credit he acquired, dying of the small-pox in 1758, at the age of forty-two. He had made a commencement of a great work on the Origin and Progress of the Laws, Arts, Sciences, &c. in France, from the beginning of the monarchy; which not being finished, was considered as a public loss.

GO'HUD, a town of Hindoostan, and capital of a circar of the same name, in the country of Agra, the revenues of which are estimated at twenty or thirty lacks of rupees per annum: fifty-five miles south-south-east of Agra. Lat. 26. 24. N. lon. 78. 44. E. Greenwich.

GO'JAK, a town of Croatia, on the river Mresnitza: eighteen miles south of Sluin.

GO'JAM, a country of Africa, and province of Abyssinia, about twenty-five leagues long, and fourteen wide, the country is generally flat and in pasture, with few mountains, but those very high. It is almost surrounded by the Nile.

GOJEE'DA, or GOJIDA, a town of Africa, in the country of Algiers: ninety miles south-east of Otan.

GOIGN (The), the southern extremity of the county of Argyle, in Scotland: seven miles south-south-west of Cambletown.

GO'IN, a town of France, in the department of the Moselle, and chief place of a canton, in the district of Metz: three leagues south of Metz.

GO'ING, *s.* The act of walking:

When nobles are their taylors tutors,
No heretics burnt, but wenches suitors,
Then comes the time, who lives to see't,
That *going* shall be us'd with feet. *Shakespeare.*

Pregnancy.—The time of death has a far greater latitude that of our birth; most women coming, according to their reckoning, within the compass of a fortnight; that is, the twentieth part of their *going*. *Grew.*—Departure:

Thy *going* is not lonely; with thee goes
Thy husband; him to follow thou art bound. *Milton.*

GOIT, a river of England, in the county of Chester, which runs into the Mersey three miles east of Stopford.

GOI'TO, a town of Italy, in the duchy of Mantua, situated on the Mincio river, taken by the allies in 1701; and by the prince of Hesse in 1706: nine miles north-north-west of Mantua.

GOI'TRE, *s.* a term given to an indurated protuberance or swelling, which forms itself on the necks or throats of a race of people called *Cretins*, who inhabit the Lower Valais at the foot of the Appenines or Alps of Swifferland. See the article CRETINS, vol. v. p. 355.

The late sir George Staunton, in his journey through that part of Tartary which the British embassy under lord Macartney was obliged to travel, observed the same deformity among the natives of the deep and gloomy vales which intersect that country; and of which he gives the following account:

"In villages dispersed through such vales, many of the inhabitants labour under a disorder observed in similar situations in the Alps, and known there by the name of *goitres*, or swelled necks. The glands of the throat begin

begin at an early age to ſwell, and gradually increaſe, in ſome, to an enormous ſize. The ſwelling begins immediately below the parotid gland, and generally extends under the jaws from ear to ear, affecting all the ſubmaxillary glands. Doctor Gillan eſtimated that nearly one-ſixth of the inhabitants he ſaw had this deformity; which is ſaid, however, not to appear ſuch in the eyes of thoſe villagers. Both ſexes are ſubject to theſe ſwellings; but females more than males; the latter removing oftener from the ſpots where the cauſes exiſt, whatever they may be, that occaſion them. Theſe preternatural tumours did not appear to be attended with any other ſymptoms affecting the general health or corporal functions of thoſe in whom they were obſerved. But the minds of many of them were much weakened, and perhaps of all in a leſs degree. Some were reduced to a ſtate of abſolute idiocy. The ſpectacle of ſuch objects, which fails not to convey a ſerious and even a melancholy impreſſion to perſons who view them for the firſt time, produces no ſuch effect upon thoſe among whom they are bred. The objects themſelves are in their general habits cheerful, and lead a mere animal life, as contradiſtinguiſhed from that in which any thought or reflection is concerned. As they act alone from inſtinct, or the mere impulſe of the ſenſes, ſo their actions, however injurious they may happen to prove to others, are free from intentional malice, and occaſion no reſentment. Their perſons are conſidered in ſome degree as ſacred; and they are maintained by their families with peculiar care. Whatever be the cauſe which occaſions goitres in the human frame, it has no perceptible effect upon other animals. This cauſe is generally ſuppoſed, both in Europe and Aſia, to be the frequent uſe of ſnow water. Melted ſnow is found indeed, to contain a little more calcareous earth than rain water, together with a very ſmall proportion of the acids of nitre and ſea-ſalt; but ſnow water, however much uſed in ſuch open countries as are often covered with ſnow, has not been obſerved to produce ſimilar obſtructions. It is likely, that a particular ſtate of the atmoſphere among mountains, muſt concur towards operating this effect. The part of Tartary where this diſeaſe abounds, has many alpine features, much reſembling Savoy and Swiſſerland.

GO'KIA, a town of China, of the third rank, in the province of Yun-nan: twenty miles eaſt-north-eaſt of King-ton.

GO'LA, *ſ.* The ſame with CYMATIUM.—In a cornice the *gola*, or cymatium of the corona, the coping, the modillions or dentelli, make a noble ſhow. *Spectator.*

GOLABAD', a town of Perſia, in the province of Irak: forty-five miles eaſt of Iſpahan.

GO'LAN, a city of Paleſtine, belonging to the half-tribe of Manaſſeh in Baſhan; one of the cities of Levites of the family of Gerſhon, and one of the ſix cities of refuge. *Joſh.* xx. 8. xxxi. 27.

GO'LAN, a town of Poland, in the palatinate of Poſnania: ten miles north-eaſt of Poſen.

GOLCON'DA, a country of Hindooſtan, in the Deccan, bounded on the north by the country of Berar, on the eaſt by the Circars, on the ſouth by the Myſore country and the Carnatic, and on the weſt by Dowlatabad and Viſiapour. The king of Golconda, at one time, maintained in his pay above five hundred thouſand ſoldiers; but, in the year 1667, the reigning prince became tributary to Aurengzebe. The kings had vaſt revenues, ariſing from the properties of lands, cuſtoms of merchandizes and proviſions; but chiefly the diamond mines; Golconda being much celebrated for the produce of diamonds. Thoſe who were allowed to work towards Maſulipatam, paid a pagoda every hour they worked, whether they found diamonds or not. In the chief mines the king had ſix thouſand men continually at work in them, who daily found near three pounds weight of theſe precious ſtones; and no one was ſuffered to dig in theſe but for the king's uſe. See the article DIAMOND, vol. v. p. 789.

This rich and fertile country once formed a part of the ancient Tellingana, which extended as far as the Bower of Viſiapour, and along the coaſt quite from the river Pennaar ſouth, to Orixa northward; and where to this day, according to major Rennell, the language of Tellingana continues to be ſpoken. In 1687, Golconda was ſubjugated by Aurengzebe, the Great Mogul, and the king ſurrendered himſelf in the moſt abject manner in ſilver chains. He was in a few days reſtored to his dominions; but in a ſhort time afterwards, the conqueror hearing of his immenſe riches, repented of his generoſity, and again took the field, fixing his head-quarters at Hydrabad, the capital of the kingdom. The unfortunate king finally took refuge in his ſtrong fortreſs of Golconda, from which the kingdom received its name. The aſſailants, unable to force the works, effected by treachery what they could not accompliſh by valour: the king was betrayed by the officers on-guard, who in the night abandoned their poſt. The enemy ruſhed in, and a dreadful carnage enſued. When the king was taken, he was treated with great inhumanity; and being brought before Aurengzebe, it is even ſaid that he cauſed him to be ſcourged in his preſence, in order to extort from him the full diſcovery of his treaſures. The rightful king, after being plundered, and ſuffering ſo many indignities, ſtill offered to pay a tribute of 3,700,000 rupees, and become his vaſſal: but the conqueror refuſed, and from that period he annexed the kingdom to the Mogul empire.

Winter begins in Golconda early in June, with rain and thunder. The thunder is of a ſhort continuance; but the rains pour down, with furious ſtorms of wind, till the middle of July, with ſome intervals of fine weather. In September, and October, great rains fall again, and ſwell the rivers to a very dangerous degree of depth and rapidity. Theſe rains render the land exceedingly fertile, eſpecially in fruits. Vines are in great plenty; and of the grapes, which are ripe in January, they make excellent white wine. They have yearly two crops of rice, and ſeveral other kinds of grain. The country alſo produces abundance of fine cattle and ſheep, with great plenty of fiſh, which are found in the numerous rivers and canals formed by the joint efforts of nature and art. Nature contributes in many parts by the vaſt hollows between the hills; but the water contained in them is increaſed by dams made acroſs their diſcharges, ſometimes half a league in length. After theſe have been completely filled by the rainy ſeaſons, the inhabitants let off the water at pleaſure into the lower country by means of ſluices, which ſpreads unſpeakable fertility over all the ſubjacent grounds.

Golconda, ſince it has been poſſeſſed by the nizam, has been enlarged by the addition of the territory of Dowlatabad, ſince named Aurungabad; and alſo part of Berar. The nizam's dominions from ſouth to north are from lat. 15. 50. near Canoul to lat. 21. 25. near Gawile. The greateſt breadth from eaſt to weſt is about three hundred and ſeventy miles.

GOLCON'DA, a fortreſs of Hindooſtan, the famed reſidence of the kings of Golconda. This fortreſs, for extent, might be called a city, in the middle of which riſes a hill like a ſugar loaf, the ſides of which are ſurrounded by the king's palace. The walls of the fortreſs are built of ſtone, three feet diameter, encompaſſed with deep ditches, divided into tanks full of water. The fortifications conſiſt of five towers, which, as well as the walls, are mounted with a great number of cannon. The lower defences were ſix miles in circumference, and above them others of far greater ſtrength, ſome of which were hewn out of the ſolid rock, and ſaid to be impregnable on every ſide. The palace is very large, and well ſituated for air, and has a good

a good proſpect over the city of Hydrabad. The ſepulchres of the king who built Golconda, and his five ſucceſſors, are about two muſket ſhot from the caſtle; each in the middle of a garden, with the tombs of their relations about them: five miles weſt-north-weſt of Hydrabad.

GOLD, *ſ.* [ʒolꝺ, Sax. *golud*, riches, Welſh. It is called *gold* in our Engliſh tongue, either of *geel*, as Scaliger ſays, which is in Dutch to mine; or of another Dutch word, which is *gelten*, and ſignifies in Latin *valere*, in Engliſh to be of price or value: hence cometh their ordinary word *gelt*, for money. *Johnſon.*] The moſt beautiful and valuable of the metals. The limits of the ductility and malleability of gold have never yet been fully aſcertained; but its tenacity is known to exceed that of every other metal. The method of extending gold uſed by the gold-beaters, conſiſts in hammering a number of thin-rolled plates between ſkins or animal membranes. By the weight and meaſure of the beſt wrought gold-leaf, it is found that one grain is made to cover fifty-ſix ſquare inches and three-quarters; and from the ſpecific gravity of the metal, together with this admeaſurement, it follows, that the leaf itſelf is $\frac{1}{282000}$ part of an inch thick. This, however, is not the limit of the malleability of gold; for the gold-beaters find it neceſſary to add three grains of copper in the ounce to harden the gold, which otherwiſe would paſs round the irregularities of the neweſt ſkins, and not cover them; and in uſing the old ſkins, which are not ſo perfect and ſmooth, they proceed ſo far as to add twelve grains. The wire which is uſed by the lace-makers is drawn from an ingot of ſilver, previouſly gilded. In this way, from the known diameter of the wire, or breadth when flattened, and its length, together with the quantity of gold uſed, it is found, by computation, that the covering of gold is only $\frac{1}{72}$ part of the thickneſs of gold-leaf, though it ſtill is ſo perfect as to exhibit no cracks even when viewed by a microſcope.

Gold is found moſtly in the metallic ſtate, though generally alloyed with ſilver, copper, iron, or all three. It is found either in ſeparate lumps, or viſible grains, among the ſands of rivers in many parts of the world. The quantity found among ſands is too often inſufficient to pay the coſt of ſeparating it; yet it is thought to be more univerſally diffuſed in ſands and earths than any other metal, except iron. Some ſands afford gold by ſimple waſhing; the heavy metallic particles ſubſiding ſooneſt: but when it is bedded in earths or ſtones, theſe ſubſtances are pounded, and boiled with one-tenth of their weight of mercury together with water. The mercury, after a certain time, abſorbs the gold, and may be ſeparated by preſſure through leathern bags, and ſubſequent diſtillation.

Mr. Park, in his Travels in the Interior of Africa, p. 300, remarks that the gold of Mandingo is never found in any matrix or vein, but always in ſmall grains, nearly in a pure ſtate, from the ſize of a pin's head to that of a pea; ſcattered through a large body of ſand or clay; and in this ſtate it is called by the Mandingoes *ſanoo munko*, "gold powder." It is, however, extremely probable, that moſt of it has originally been waſhed down by repeated torrents from the neighbouring hills. The manner in which it is collected, is nearly as follows: About the beginning of December, when the harveſt is over, and the ſtreams and torrents have greatly ſubſided, the manſa, or chief of the town, appoints a day to begin *ſanoo koo*, "gold waſhing;" and the women are ordered to be in readineſs by the time appointed. A hoe, or ſpade, for digging up the ſand, two or three calabaſhes for waſhing it in, and a few quills for containing the gold duſt, are all the implements neceſſary for the expedition. On the morning of their departure, a bullock is killed for the firſt day's entertainment, and a number of prayers and charms are uſed to enſure ſucceſs. While ſome of the party are buſied in waſhing the ſands, others employ themſelves farther up the torrent, where the rapidity of the ſtream has carried away all the clay, ſand, &c. and left nothing but ſmall pebbles. The ſearch among theſe is a very troubleſome taſk; ſometimes, however, they are rewarded by finding pieces of gold, which they call *ſanoo birro*, "gold ſtones," that amply repay them for their trouble. But the moſt certain and profitable mode of waſhing, is practiſed in the height of the dry ſeaſon, by digging a deep pit, like a draw-well, near ſome hill which has previouſly been diſcovered to contain gold. The pit is dug with ſmall ſpades, and the earth is drawn up in large calabaſhes. As the negroes dig through the different ſtrata of clay or ſand, a calabaſh or two of each is waſhed, by way of experiment; and in this manner the labourers proceed, until they come to a ſtratum containing gold; or until they are obſtructed by rocks, or inundated by water. In general, when they come to a ſtratum of fine reddiſh ſand, with ſmall black ſpecks therein, they find gold, in ſome proportion or other, and ſend up large calabaſhes full of the ſand, for the women to waſh; for, though the pit is dug by the men, the gold is always waſhed by the women.

The manner of ſeparating the gold from the ſand is very ſimple, and is frequently performed in the middle of the town; for, when the ſearchers return from the valleys in the evening, they commonly bring with them each a calabaſh or two of ſand, to be waſhed by ſuch of the females as remain at home. The operation is as follows:—A portion of ſand or clay (for the gold is ſometimes found in a brown-coloured clay) is put into a large calabaſh, and mixed with a ſufficient quantity of water. The woman, whoſe office it is, then ſhakes the calabaſh in ſuch a manner, as to mix the ſand and water together, and give the whole a rotatory motion; at firſt gently, but afterwards more quick, until a ſmall portion of ſand and water, at every revolution, flies over the brim of the calabaſh. The ſand thus ſeparated, is only the coarſeſt particles mixed with a little muddy water. After the operation has been continued for ſome time, the ſand is allowed to ſubſide, and the water poured off; a portion of coarſe ſand which is now uppermoſt in the calabaſh, is removed by the hand, and freſh water being added, the operation is repeated until the water comes off almoſt pure. The woman now takes a ſecond calabaſh, and ſhakes the ſand and water gently from the one to the other, reſerving that portion of ſand which is next the bottom of the calabaſh, and which is moſt likely to contain the gold. This ſmall quantity is mixed with ſome pure water, and being moved about in the calabaſh, is carefully examined. If a few particles of gold are picked out, the contents of the other calabaſh are examined in the ſame manner; but, in general, the party is well contented if ſhe can obtain three or four grains from the contents of both calabaſhes. Some women, however, by long practice, become ſo well acquainted with the nature of the ſand, and the mode of waſhing it, that they will collect gold where others cannot find a ſingle particle. The gold-duſt is kept in quills, ſtopt up with cotton; and the waſhers are fond of diſplaying a number of theſe quills in their hair. Generally ſpeaking, if a perſon uſes common diligence, in a proper ſoil, it is ſuppoſed that as much gold may be collected by him in the courſe of the dry ſeaſon, as is equal to the value of two ſlaves.

Thus ſimple is the proceſs by which the negroes of Africa obtain gold; and it is evident, from this account, that the country contains a conſiderable portion of this precious metal; for many of the ſmaller particles muſt neceſſarily eſcape the obſervation of the naked eye; and as the natives generally ſearch the ſands of ſtreams at a conſiderable diſtance from the hills, and conſequently far removed from the mines where the gold

was originally imbedded, the labourers are ſometimes but ill-paid for their trouble. Minute particles only of this heavy metal can be carried by the current to any conſiderable diſtance; the larger muſt remain depoſited near the original ſource from whence they came. Were the gold-bearing ſtreams to be traced to their fountains, and the hills from whence they ſpring properly examined, the ſand in which the gold is there depoſited would, no doubt, be found to contain particles of a much larger ſize; as was found to be the caſe on the diſcovery of the gold-mine at Wicklow in Ireland. But even the ſmall grains might be collected to conſiderable advantage by the uſe of quickſilver, and other improvements, with which the poor negroes are at preſent unacquainted.

Part of this gold is converted into ornaments for the women, but, in general, theſe ornaments are more to be admired for their weight, than their workmanſhip. They are maſſy and inconvenient, particularly the earrings, which are commonly ſo heavy as to pull down and lacerate the lobe of the ear; to avoid which they are ſupported by a thong of red leather, which paſſes over the crown of the head from one ear to the other. The necklace diſplays greater fancy; and the proper arrangement of the different beads and plates of gold, is the great criterion of taſte and elegance. When a lady of conſequence is in full dreſs, her gold ornaments may be worth altogether, from fifty to eighty pounds ſterling. A ſmall quantity of gold is likewiſe employed by the Slatees, in defraying the expences of their journeys to and from the coaſt; but by far the greater proportion is annually carried away by the Moors in exchange for ſalt, and other merchandize.

The iſland of Celebes or Macaſſar, in the Eaſtern Indian Ocean, is ſaid to abound very much with this precious metal. Whenever the workmen begin to dig for gold, they firſt conduct water to the ſpot; and if the ſituation of the ground will not admit of the water being conducted in furrows, they make a kind of gutters of hollow wakka trees, which they ſupport with props. When they have brought the water to the place where the mine is to be opened, they make a pit of twenty, thirty, or forty, feet in circumference, according to the number of workmen. As long as the water has room to run off, they ſuffer it to carry with it the earth, which they keep continually turning and ſtirring in the pit; but when the pit becomes ſo deep that there is no paſſage for the water, they bale it out till they arrive at the ſtones. Theſe they waſh clean, and build them up regularly around the ſides of the pit, but without lime or mortar. When the pit is carried to a conſiderable depth, they ſecure theſe ſtones by means of boards and beams of wood. When all the earth, clay, dirt, and ſtones, have been thrown from the pit, and a kind of black ſand begins to appear, they are then pretty certain that they ſhall find gold. This ſand they take up with ſmall ſhovels made for the purpoſe; and, having placed themſelves in the water, they put one handful of the ſand after another on ſmall round wooden diſhes named *dulangs*. The dulangs are about eighteen inches in diameter and ſomewhat hollow, and have a ſmall cavity in the middle which can be cloſed with a wooden cover. When all the ſand has been waſhed from the dulang by being continually ſtirred round with the hand, the gold, which is much heavier, remains in the above-mentioned cavity. When it can receive no more, they take the gold which has been collected, and hold it over the fire in a cocoa-nut ſhell till it is dry; after which they blow away the remaining ſand, and preſerve the pure gold. Frederic Dühr, a ſervant of the Dutch Eaſt-India company, viſited theſe mines a few years ago, for the purpoſe of aſcertaining more ſatisfactorily their probable extent; and from his report it appears that the iſland is very abundant in gold, both in the ſands and rocks. He obſerved that the workmen, when they had dug to the depth of five, and in ſome places of twelve, feet, came to a horizontal ſtratum of rock, which with their inſtruments they were not able to penetrate. They inſiſted, however, that they ſhould find gold below theſe rocks, if they could break through them. He alſo ſaw, where a ſtratum of ſuch rock is found, at the depth of from twelve to fifteen feet, that there were fiſſures in it, two or three inches wide, which contained a blackiſh ſubſtance almoſt like ruſt of iron, mixed with a great many pieces of gold, and which the workmen, after they waſhed the rock perfectly clean, dug out to as great a depth as they could reach with their tools. In all the mines of Celebes, the gold, when ſeparated from the ſand, is of conſiderable fineneſs. See MACASSAR.

With reſpect to the gold of China, ſir George Staunton obſerves, vol. ii. p. 539, that this precious metal is eſteemed in that country more for its rarity than its uſe, ariſing from a decree of the emperor which prohibits the mines from being worked. Small grains of it, however, are collected in the province of Yun-nan and Sechuen, among the ſand in the beds of the rivers and torrents which carry it down from the mountains. It is peculiarly pale, ſoft, and ductile. A few mandarins, and many women of rank, wear bracelets of it round the wriſt, not more for ornament than from a notion that they preſerve the wearer from a variety of diſeaſes. The Chineſe artiſts beat it into leaf, for gumming it upon paper to burn in their tripods, and for gilding the ſtatues of their deities. The ſilk and velvet weavers uſe it in their tiſſues and embroideries. Trinkets are alſo made of it at Canton, which the Chineſe do not wear; they being manufactured on purpoſe to be ſold in Europe as eaſtern ornaments.

A great deal has been ſaid relative to the gold-mine diſcovered a few years ago in Ireland; but the moſt ſatisfactory account of its production was publiſhed by Mr. Mills in the Philoſophical Tranſactions for 1796. From that gentleman's account it appears that eight hundred ounces of gold, of the average value of 3l. 15s. per ounce, were collected in the ſix weeks during which the country people were allowed to carry on their ſearch. The gold is of a bright yellow colour, perfectly malleable; the ſpecific gravity of an apparently clean piece 19·000. A ſpecimen aſſayed by Mr. Weaver, in the moiſt way, produced from 24 grains, $22\frac{58}{100}$ grains of pure gold, and $1\frac{43}{100}$ of ſilver. Some of the gold is intimately blended with, and adherent to, quartz; ſome was found united to the fine-grained iron-ſtone, but the major part was entirely free from the matrix; every piece more or leſs rounded on the edges, of various weights, forms, and ſizes, from the moſt minute particle, up to 2 oz. 17 dwt. only two pieces are known to have been found of ſuperior weight, and one of thoſe is 5, and the other 22, ounces.—See IRELAND.

The greateſt part of the gold employed in Europe, is brought from South America, where, except in Africa, it appears to abound in the greateſt plenty; as does likewiſe the valuable metal *platina*; but the Spaniſh miniſtry has now prohibited the exportation of platina from America, leſt it ſhould be uſed in adulterating their gold; though this does not appear to be a danger which need be feared, ſince chemiſtry has long been in poſſeſſion of ſeveral ſimple and expeditious methods of detecting the fraud; which, beſides, is evident to the ſight, whenever the quantity of debaſement is conſiderable. It may be queſtioned, likewiſe, whether the value of platina would not ſoon equal that of gold, if its properties and uſes were better known in ſociety. M. Guyton, the celebrated mineralogiſt, publiſhed ſeveral intereſting experiments in 1804, on purpoſe to determine how far platina could be made ſubſervient to the fabrication of counterfeit pieces of gold. For this purpoſe, it was neceſſary to arrive at ſuch proportions, that the alloy ſhould be at the ſame degree of ſpecific

weight

weight with the gold iſſued from the mint, which is that of 17·64; and that, nevertheleſs, the quantity of gold ſhould be ſufficiently reduced to afford ſome profit to the coiners. The condition of attaining the ſpecific weight, or the ſame volume for an equal weight, does not permit the ſtandard to be lowered beyond 0·700; otherwiſe the exceſs of weight would betray the fraud. The button of alloy which M. Guyton ſubmitted to this experiment, contained only 0·155 of platina; and yet the alteration of colour was ſo conſiderable, that even the paleſt gold colour could not be recognized in it. Thus we are at once able to appreciate the apprehenſions, which have been ſo much exaggerated, of the abuſe that may be made of platina alloyed or fuſed with gold. Or if platina be covered with gold-leaf, the exceſs of ſpecific weight, which is more than 19, ſoon cauſes it to be ſuſpected; and if we have any doubts, it will be ſufficient to let a drop of nitro-muriatic acid fall upon the piece, and it will inſtantly expoſe the grey colour.

Gold, till very lately, was conſidered as a metal wholly indeſtructible and unalterable by fire, or by means of any chemical proceſs. Modern chemiſtry, however, has not only convinced us of the fallacy of this hypotheſis, but has even ſhewn that the hardeſt adamant, even the diamond, the moſt fixed of every ſubſtance known, cannot reſiſt the force of caloric. But for particulars of this, and of all the chemical operations upon gold, and the method of preparing fulminating gold, &c. ſee the article CHEMISTRY, vol. iv. p. 242, 312, 314, 316, 330, and 387.—For the various uſes of gold in the manufacture of ornamental works, ſee the article GILDING, in this volume; and for the different ſpecies, and the countries producing them, ſee the article MINERALOGY.

"All is not GOLD that glitters."

The French ſay, *Tout ce qui reluit n'eſt pas or.* The Germans, *Eſt iſt nicht alles gold, was da glaentzet.* The Latins, *Fronti nulla fides.* The Italians, *Non è oro tutto quel che luce.* This proverb is intended as an admonition to us, not to found our notions and opinions of perſons and things by glittering pomp and outſide ſhow; which are oftener calculated to impoſe on the credulous multitude, than to afford to a wiſe and thinking man the ſmalleſt proof of permanent riches, or of a ſolid and durable eſtabliſhment.

"GOLD will enter in at every Gate, except that of Heaven."

The Germans ſay, *Das gold machet alle thüre auf nur des himmels nicht.* Philip of Macedon is reported to have ſaid, that he could take any fort or caſtle, let the taſk be ever ſo difficult, provided he could drive an aſs laden with gold up to the gate. This ſecret appears to have been well known to the conqueror Napoleon.

GOLD COAST, a name given to a country of Africa, near the Atlantic, about 120 leagues in length from eaſt to weſt, between the rivers Ancobar and Volta. It contains a variety of different ſtates and kingdoms, and received its name from the immenſe quantity of gold which it produces. Several of the European nations have ſettlements here. The climate is exceedingly hot from October to March, the reſt of the months are tolerable. The natives enjoy a good ſtate of health, and are ſubject to but few diſeaſes; to Europeans the climate is frequently unwholſome, and often proves fatal, eſpecially in the months of July and Auguſt. The domeſtic animals are bulls, cows, ſheep, and goats, the laſt of which are innumerable, and their fleſh excellent; the mutton and beef are neither of them good; but of all animal food dog's fleſh is moſt preferred by the negroes. Other animals are elephants, tigers, buffaloes, jackalls, wild boars, deer of different ſizes, wild cats, porcupines, ſeveral ſpecies of monkeys, rats, mice, &c. Among the birds are pheaſants, parrots, maccaws, turtle-doves, and ſeveral others. The reptiles are numerous, ſnakes, ſerpents, vipers, lizards, ſcorpions, &c. The coaſts, lakes, and rivers, abound with fiſh, and likewiſe with alligators. Among the trees are the palm, the cocoa-nut, the papay, the banana. The principal countries on the Gold Coaſt are Ancobar, Axem, Anta, Commenda, Fetu, Sabo, Adom, Agouna, Acra, Acambou, Labadde, Fantin, Incaſſan, Ningo, Sabu, and Soko.

GOLD CRO'NACH, a town of Germany, in the circle of Franconia, and principality of Bayreuth. It had formerly a gold mine, now neglected: five miles north of Bayreuth.

GOLD FOIL, *ſ.* Leaf gold.

GOLD-HEADED, *adj.* Having a head of gold.

GOLD SIKE, a little ſpring in Weſtmoreland, which caſts up ſmall thin pieces of ſubſtance which ſhines, and reſembles gold.

GOLD'APP, a town of Pruſſian Lithuania, founded in 1564, by the marggrave Albert: ſixty-eight miles eaſt-ſouth-eaſt of Komgſberg.

GOLD'APP, a river of Pruſſia, which runs into the Rominte, ſix miles north of Goldapp, in the province of Lithuania.

GOLD'AST (Melchior Heimensfeld), a learned and laborious writer, born at Biſchoffs-zell in Swifferland. He ſtudied the civil law at Altdorf, but capricious fortune prevented him from thriving in the world. After a life of poverty, he died in 1635. His works, which are chiefly compilations, were nevertheleſs much eſteemed. The principal are, 1. *Monarchia Sancti Imperii Romani*, 3 vols. folio, 1611-14; a collection of treatiſes on the civil and eccleſiaſtical juriſdiction of the empire. 2. *Alimaniæ Scriptores*, 3 vols. folio, 1730. 3. *Commentarius de Bohemiæ Regno*, 4to. 4. *Informatio de Statu Bohemia quoad Jus*, 4to. 4. *Sybilla Francica*, 4to. a collection of pieces relative to the maid of Orleans. 5. *Scriptores Rerum Suevicarum*, 4to. 6. *Collectio Conſuetudinum & Legum Imperialium*, folio. 7. *Politica Imperialia*, 2 vols. folio. A collection of letters, written to him by ſeveral men of learning, was printed at Frankfort in 1688.

GOLD'BACH, a town of Germany, in the circle of Upper Saxony, and principality of Gotha: two miles north of Gotha.

GOLD'BEATER, *ſ.* One whoſe occupation is to beat or foliate gold to gild other matter.—Our *goldbeaters*, though, for their own profit ſake, they are wont to uſe the fineſt gold they can get, yet they ſcruple not to employ coined gold. *Boyle.*

GOLD'BEATER's SKIN, *ſ.* The inteſtinum rectum of an ox, which goldbeaters lay between the leaves of their metal while they beat it, whereby the membrane is reduced thin, and made fit to apply to cuts or wounds. *Quincy.*—When your gilliflowers blow, if they break the pod, open it with a penknife at each diviſion, as low as the flower has burſt it, and bind it about with a narrow ſlip of *goldbeater's ſkin*, which moiſten with your tongue, and it will ſtick together. *Mortimer.*

GOLD'BERG, a town of Sileſia, in the principality of Lignitz. It receives its name from a gold mine near it, which was formerly very rich: ſealed earth is found in the neighbourhood, and the inhabitants are engaged in manufactures of woollen and linen: eight miles and a half ſouth-weſt of Lignitz, and eleven weſt-north-weſt of Jauer.

GOLD'BOUND, *adj.* Encompaſſed with gold:

Thy air,
Thou other *goldbound* brow, is like the firſt. *Shakeſpeare.*

GOLD'EGG, a town of Germany, in the archduchy of Auſtria: four miles weſt of St. Polten.

GOLD'EN, *adj.* Made of gold; conſiſting of gold:

Nine royal knights in equal rank ſucceed,
Each warrior mounted on a fiery ſteed,
In *golden* armour glorious to behold;
The rivets of their arms were nail'd with gold. *Dryden.*

Shining; bright; ſplendid; reſplendent.—Heaven's *golden*-winged herald late he ſaw. *Craſhaw.*

'Tis better to be lowly born
Than wear a *golden* ſorrow. *Shakeſpeare.*

Yellow; of the colour of gold.—*Golden* ruſſeting hath a gold-coloured coat under a ruſſet hair, and its fleſh of a yellow colour. *Mortimer.*—Excellent; valuable.—Thence ariſes that *golden* rule of dealing with others, as we would have others deal with us. *Watts.*

I have bought
Golden opinions from all ſort of people. *Shakeſpeare.*

Happy; reſembling the age of gold.—Many young gentlemen flock to him every day, and fleet the time careleſsly, as they did in the *golden* world. *Shakeſpeare.*

GOLD'EN AGE, *ſ.* That fabulous age of the world in which, as the poets tell us, the earth ſpontaneouſly produced every thing neceſſary for the accommodation and delight of mankind; and that, when the inhabitants had ſpent a length of days in the moſt perfect peace and harmony, exempted from all pain, diſeaſe, and infirmity, they were wafted in a kind of pleaſing dream to the regions of eternal bleſſedneſs.

GOLD'EN BULL, *ſ.* [from *golden*, and *bulla*, Lat. a ſeal.] An edict or conſtitution of the emperor Charles the Fourth, reputed to be the fundamental law of the German empire.

GOLD'EN CALF, *ſ.* in Jewiſh antiquity, the figure of a calf which the Iſraelites caſt in gold, and ſet up in the wilderneſs to worſhip it.

GOLD'EN-EYE, *ſ.* A kind of fiſh, otherwiſe called *gilthead*. See SPARUS.—B. Jonſon uſes the word for a tranſlation of SCARUS in Horace, which we now call the parrot-fiſh:

Nor Lucrine oyſters I could then more prize,
Nor turbot, nor bright *golden-eyes*.

GOL'DEN FLEECE, in ancient mythology, denoted the ſkin or fleece of the ram upon which Phryxus and Hella are ſuppoſed to have ſwam over the ſea to Colchis; and which being ſacrificed to Jupiter, was hung upon a tree in the grove of Mars, guarded by two golden-hoofed bulls, and a dragon that never ſlept; but was taken and carried off by Jaſon and the Argonauts. Many authors have endeavoured to ſhow that this fable is an allegorical repreſentation of ſome real hiſtory. Others have explained it by the profit of the wool trade to Colchis, or the gold which they commonly gathered there with fleeces in the rivers. For the fabulous account, ſee ARGONAUTS, vol. ii. p. 142.

ORDER OF THE GOLDEN FLEECE, a military order inſtituted by Philip the Good, duke of Burgundy, in 1429. It took its denomination from a repreſentation of the golden fleece, borne by the knights on their collars, as repreſented in the portrait of the emperor Charles V. in this volume. The king of Spain continues grand maſter of the order, in quality of duke of Burgundy: the number of knights is fixed to thirty-one. It is ſaid to have been inſtituted on occaſion of an immenſe profit which that prince made by wool; though others will have a chemical myſtery couched under it, as under that famous one of the ancients, which the adepts contend to be no other than the ſecret of the elixir, wrote on the fleece of a ſheep. But William biſhop of Tournay, chancellor of the order, aſſerts that the duke of Burgundy had in view both the golden fleece of Jaſon, and Jacob's fleece: in the firſt, under the ſymbol of the fleece of Jaſon, is repreſented the virtue of magnanimity which every knight ought to poſſeſs; and under the ſymbol of the fleece of Jacob, he repreſents the virtue of juſtice.

GOLD'EN FLOWER. See CHRYSANTHEMUM.

GOLD'EN ISLAND, a ſmall iſland at the entrance of the Gulf of Darien, in the province of Terra Firma, in South America; where there is a river of the ſame name, from its affording much gold-duſt after violent rains, which waſh it down from the mountains. Lat. 8. 20. N. lon. 72. 32. W. Greenwich.

GOLD'EN LAKE, a lake of the iſland of Borneo. Lat. 3. 55. N. lon. 115. 45. E. Greenwich.

GOLD'EN NUM'BER. See the article CHRONOLOGY, vol. iv. p. 538.

GOLD'EN ROD, *ſ.* in botany. See SOLIDAGO.

GOLD'EN ROD TREE. See BOSEA.

GOLD'EN RULE, alſo called the *Rule of Three*, and *Rule of Proportion*. See its extenſive uſe under the article ARITHMETIC, vol. ii. p. 170.

GOLD'ENLY, *adv.* Delightfully; ſplendidly.—My brother Jacques he keeps at ſchool, and report ſpeaks *goldenly* of his profit. *Shakeſpeare.*

GOL'DENSTETT, a town of Germany, in the circle of Weſtphalia, and county of Diepholz: eleven miles north of Diepholz.

GOLD'FINCH, *ſ.* [goldpinc, Sax.] A favourite ſinging bird. For its natural hiſtory, ſee the article FRINGILLA, in this volume.

GOLD'FINDER, *ſ.* One who finds gold. A term ludicrouſly applied to thoſe that empty jakes:

His empty paunch that he might fill,
He ſuck'd his vittels through a quill;
Untouch'd it paſs'd between his grinders,
Or't had been happy for *goldfinders*. *Swift.*

GOLD'FISH. See CYPRINUS, vol. v. p. 535.

GOL'DILOCKS, or GOL'DYLOCKS. See CHRYSOCOMA and GNAPHALIUM.

GOLD'ING, *ſ.* A kind of apple.

GOLDIN'GEN, a town of the duchy of Courland, ſituated near the river Weta, formerly the reſidence of the dukes, when it was more commercial and flouriſhing than it now is. It is defended by an old caſtle, and contains two churches: forty-eight miles weſt-north-weſt of Mittau, and one hundred north of Konigſberg. Lat. 56. 48. N. lon. 40. 6. E. Ferro.

GOLD'LACE, *ſ.* A lace made of gold thread.—By the common law, perſons that ſell orrice lace, mixed with other metal or materials than gold, ſilver, ſilk, and vellum, ſhall forfeit two ſhillings and ſixpence for every ounce: and there ſhall be allowed at leaſt ſix ounces of gold and ſilver prepared and reduced into plate, to cover four ounces of ſilk, except large twiſt, frize, &c. And laying the ſame on greater proportions of the ſilk, or in any other manner than directed, incurs the like forfeiture of two ſhillings and ſixpence the ounce. Copper, and lace inferior to ſilver, is to be ſpun upon thread, yarn, or incle, and not on ſilk; but this does not extend to tinſel apparel, uſed in theatres. No gold or ſilver lace, thread, fringe, or wire, &c. may be imported, on pain of being forfeited and burnt, and one hundred pounds penalty. 15 *Geo.* II. c. 20. 28 *Geo.* III. c. 7. The importation and making up of gold and ſilver lace, embroidery, brocade, &c. is prohibited, by 22 Geo. II. c. 36.

GOLD'LACED, *adj.* Trimmed with lace made of gold thread.

GOLD'LEAF, *ſ.* Gold beat into thin plates or leaves for gilding.

GOLD'MAN (Nicholas), a German mathematician, born at Breſlau in Sileſia, in 1623, and died at Leyden in 1665. He was the author of ſeveral works of merit, of which thoſe moſt generally eſteemed are, 1. *Elementa Architecturæ Militaris*, 1643, 8vo. 2. *De Uſu Proportionarii Circuli*. 3. A treatiſe *De Stylometricis*, 1662; and another treatiſe On Architecture, which Leonard-Chriſt. Sturm publiſhed at Wolfenbuttel, in 1696, accompanied with numerous excellent engravings, and the life of the author.

GOLDO'NI (Charles), an eminent writer of comedy, born in 1707 at Venice, of which city his father was a phyſician. His propenſity to the drama appeared in his childhood, and it was encouraged by his father, who erected a theatre in his own houſe, at which young

Goldoni with a few of his companions were performers. Comic writers were his ſtudy as ſoon as he could read, and he ſketched a plan of a comedy of his own invention when only eight years of age. He was ſent to learn rhetoric at the Jeſuits' college of Perugia, and philoſophy at Rimini. He attended, however, more to the ſtage than to Ariſtotle or Quintilian, and he made an elopement from the latter place with the company of comedians at their removal to Chiozza. His father in vain tried to initiate him in his own profeſſion, and in that of an advocate. He deſerted the bar, and went to Milan, where he was entertained by the Venetian reſident as his ſecretary. There he brought out his firſt piece for the ſtage, entitled *Il Gondoliere Veneziano*; and ſoon after, removing to Verona, he attached himſelf to a company of players, for whom he compoſed ſeveral pieces. He next came to Venice, and ſet himſelf ſeriouſly to reform the Italian ſtage, which was over-run with low farce and indecent buffoonery. He ſtudied the true character of comedy, and confined his repreſentations within the limits of nature and decorum. Probably with a view of improving his language, he viſited Tuſcany, and reſided ſome time at Florence and Piſa. He again returned to Venice; and ſuch was his induſtry and fertility, that he is ſaid in the courſe of twelve months to have produced ſixteen comedies, beſides forty-two other pieces for the theatre, and among theſe are reckoned ſome of his beſt performances. The firſt edition of his works was printed in 1753, in 10 vols. 8vo. An edition under the title of the New Comic Theatre contained ſeveral more pieces, and in 1761 his new pieces amounted to fifty-nine. At that period he received an invitation from the manager of the Italian theatre at Paris to make an engagement for two years as compoſer for that ſtage. He accordingly repaired to that capital; but his firſt attempt to ſubſtitute ſober comedy to pantomimic drollery was not ſucceſsful, and he was obliged to make ſome ſacrifice to the received character of that theatre in his ſubſequent compoſitions, of which twenty-four were the product of his engagement. When it was finiſhed, and he was about to depart for Italy, he obtained an introduction to court, and the appointment of Italian maſter to the princeſſes. He had lodgings in Verſailles, and a penſion, which, however, did not allow him to lay aſide writing for the ſtage. He even, in his ſixty-ſecond year, ventured upon the arduous taſk of compoſing in a foreign language, and brought out at the court theatre his French comedy of *Le Bourru Bienfaiſant*, which met with extraordinary ſucceſs. It was followed by *L'Avare Faſteux*. On the acceſſion of Louis XVI. he was appointed Italian teacher to the princeſſes Clotilde and Elizabeth. Infirmities at length obliged him to leave the court and retire to Paris, and he had the misfortune in his old age to be deprived of his penſion, in conſequence of the Revolution, and reduced to indigence. The French nation was about to make him honourable amends when he died, in 1792, at the age of eighty-five. He has been termed the Moliere of Italy; but the title is too flattering. His collected works were printed at Leghorn, in 31 vols. 8vo. 1788-91.

GOLDS'BOROUGH, a poſt-town of the American States, in Hancock county, diſtrict of Maine. It was incorporated in 1789, and is the ſouth-eaſternmoſt town in the county. On the waters of its harbour is the town of Waſhington. It is 47 miles eaſterly of Penobſcot, 188 ſouth-eaſt of Portland, and 330 north-eaſt of Boſton. Lat. 44. 19. N.

GOLD'SIZE, *ſ.* A varniſh of a golden colour, uſed by gilders. See the article GILDING, in this volume.

GOLD'SMITH, *ſ.* [ȝolꝺ and ꝼmiꝛ, Sax.] One who manufactures gold. A banker; one who keeps money for others in his hands.—The *goldſmith* or banker who takes all your fortune to diſpoſe of, when he has beforehand reſolved to break the following day, does ſurely deſerve the gallows. *Swift.*

Goldſmith's work is either performed in the mould, or beat out with the hammer or other engine. All works that have raiſed figures are caſt in a mould, and afterwards poliſhed and finiſhed: plates or diſhes, of ſilver or gold, are beat out from thin flat plates; and tankards, and other veſſels of that kind, are formed of plates ſoldered together, and their mouldings are beat, not caſt. The buſineſs of the goldſmiths formerly required much more labour than it does at preſent; for they were obliged to hammer the metal from the ingot to the thinneſs they wanted: but the flatting mills now reduce metals to the thinneſs that is required, at a very ſmall expence. The goldſmith is to make his own moulds; and for that reaſon ought to be a good deſigner, and have a taſte in ſculpture: he ought alſo to know enough of metallurgy to be able to aſſay mixed metals, and to mix the alloy.

Gold and ſilver goods are to be aſſayed by the warden of the goldſmiths company in London, and marked; and gold is to be of a certain touch. 28 *Edw.* I. c. 20. By 37 Edw. III. c. 7, goldſmiths were to have their own marks on plate, after the ſurveyors have made their aſſay; and falſe metal was to be ſeized and forfeited to the king. Work of ſilver made by goldſmiths, &c. is to be as fine as ſterling, except the ſolder neceſſary; and marking other work, incurs a forfeiture of double value. 2 *Hen.* VI. c. 14. Goldſmiths ſhall not take above one ſhilling the ounce of gold, beſide the faſhion, more than the buyer may be allowed for it at the king's exchange: and if the work of any goldſmith be marked and allowed by the maſter and wardens of the myſtery, and afterwards found faulty, the wardens and corporation ſhall forfeit the value of the thing ſo ſold or exchanged. 18 *Eliz.* c. 15.

Molten ſilver is not to be tranſported by goldſmiths before it is marked at goldſmiths hall, and a certificate made thereof on oath; and officers of the cuſtoms may ſeize ſilver ſhipped otherwiſe. 6 and 7 *Will.* III. c. 17. The cities of York, Exeter, Briſtol, Cheſter, Norwich, and town of Newcaſtle, are alſo appointed places for aſſaying and marking wrought plate of goldſmiths, &c. 12 *Will.* III. c. 4. 1 *Anne*, c. 9. A duty is granted on ſilver plate of ſixpence per ounce; and goldſmiths are to make entries thereof with the weight, on pain of one hundred pounds, &c. And goldſmiths muſt work their plate according to the old ſtandard; which is to be touched, aſſayed, and marked, before expoſed to ſale. 6 *Geo.* I. c. 11.

Gold-plate made by goldſmiths ſhall contain twenty-two carrats of fine gold: and ſilver plate eleven ounces and two pennyweights of ſilver, in every pound troy, or they forfeit ten pounds. And no goldſmith ſhall ſell any ſuch plate, until marked with the firſt letters of the maker's chriſtian and ſurname, the marks of the city of London, being the leopard's head, lion paſſant, &c. and thoſe made uſe of by the aſſayers at York, Exeter, &c. All perſons making plate, are to enter their marks, names, and places of abode, in the aſſay-office; they are likewiſe to ſend with the plate required to be marked, a particular account thereof, in order to be entered, &c. or forfeit five pounds. The aſſayers determine what ſolder is neceſſary about plate, and judge of the workmanſhip, and for good cauſe may refuſe to aſſay it; and if any parcel be diſcovered of a coarſer alloy than the ſtandard, it may be broke and defaced; alſo the fees for aſſaying and marking are particularly limited by 12 Geo. II. c. 26.

GOLD'SMITH (Oliver), an eminent poet and miſcellaneous writer, ſon of the Rev. Charles Goldſmith, born at Pallas, near Athlone, in Ireland, in 1729. His father had ſeven children, viz. five ſons and two daughters. Of his eldeſt ſon, the Rev. Henry Goldſmith, to whom his brother dedicated his Traveller, their father had formed the moſt ſanguine hopes, as he had diſtinguiſhed himſelf both at ſchool and at college; but he unfortunately married at the age of nineteen, which confined him to a

curacy, and brought on an early family, without any preferment in the church. Oliver was his ſecond ſon, and born very unexpectedly after an interval of ſeven years from the birth of the former child, and the liberal education which their father was then beſtowing on his eldeſt ſon bearing hard upon his ſmall income, he could only propoſe to bring up Oliver to ſome mercantile employment. With this view he was inſtructed in reading, writing, and arithmetic, by a ſchool-maſter in his father's village, who had been a quarter-maſter in the army in queen Anne's wars, in that detachment which was ſent to Spain: having travelled over a conſiderable part of Europe, and being of a romantic turn, he uſed to entertain Oliver with his adventures; and the impreſſions theſe made on his ſcholar were believed by the family to have given him that wandering and unſettled turn which ſo much appeared in his future life. Oliver, however, was from his earlieſt infancy very different from other children, ſubject to particular humours, for the moſt part uncommonly ſerious and reſerved, but when in gay ſpirits none ever ſo agreeable as he; and he began at ſo early a period to ſhew ſigns of genius, that he quickly engaged the notice of all the friends of the family, many of whom were in the church. At the age of ſeven or eight he diſcovered a natural turn for rhyming, and often amuſed his father and his friends with early poetical attempts. When he could ſcarcely write legibly, he was always ſcribbling verſes, which he burnt as he wrote them. Obſerving his fondneſs for books and learning, his mother, with whom he was always a favourite, pleaded with his father to give him a liberal education; but his own narrow income, the expence attending the education of his eldeſt ſon, and his numerous family, were ſtrong objections. Oliver, in the mean time, was placed under the Rev. Mr. Griffin, then ſchoolmaſter of Elphin, and was received into the houſe of his father's brother, John Goldſmith, eſq. of Ballyoughter near that town, who with his family conſidered him as a prodigy for his age, and have handed down the following inſtance of his early wit. "A large company of young people of both ſexes were aſſembled one evening at his uncle's; and Oliver, then but nine years old, was required to dance to a youth then playing on a fiddle. Being but newly recovered from the ſmall-pox, by which he was much diſfigured, and his figure being ſhort and thick, the muſician very archly, as he ſuppoſed, compared him to Æſop dancing; and ſtill harping on this idea which he conceived to be very bright, he had the laugh turned ſuddenly againſt him, by Oliver's ſtopping ſhort in the dance with this retort:—

Our herald hath proclaim'd this ſaying,
See Æſop dancing, and his monkey playing."

This ſmart reply decided his fortune; for from that time it was determined to ſend him to the univerſity; and ſome of the relations, who were reſpectable clergymen, kindly offered to contribute towards the expence, particularly the Rev. Thomas Contarine, who had married Oliver's aunt, a gentleman of diſtinguiſhed learning and good preferment. With this view he was removed to the ſchool of Athlone, about five miles from his father's houſe, and was for about two years there under the Rev. Mr. Campbel, who had the character of being an ingenious maſter; but he being obliged to reſign the ſchool for want of health, Oliver was ſent to the Rev. Patrick Hughes, at Edgeworthſtown, where he was fitted for the univerſity.

In June 1744, Oliver was ſent to Dublin College, and entered under the Rev. Mr. Wilder, one of the fellows, to whom, as he was the ſon of a neighbouring gentleman, the young pupil was particularly recommended. But he was a man of harſh temper and violent paſſions, and Oliver no leſs thoughtleſs and unguarded, ſo that they very ſoon diſagreed. Oliver formed ſome acquaintance in the city of Dublin, and was indiſcreet enough to invite company of both ſexes to partake of a ſupper and a dance in his rooms. This circumſtance, unfortunately for him, came to the ears of his tutor, who abruptly entered in the midſt of all their gaiety, which he ſoon extinguiſhed; for he not only proceeded to the higheſt exceſs of perſonal abuſe, but concluded with manual chaſtiſement before all the company. The diſgrace attending this ſavage treatment drove the poor ſtudent into deſpair, and he determined never more to ſee any of his friends, but to remove to ſome other country, where, totally unknown, he might ſeek his fortune. He accordingly diſpoſed of his books and clothes, and left the college, but loitered about in Dublin till he had only a ſhilling left in his pocket, when he ſet out on his travels. His intention was to go on ſhip-board at Cork, for ſome other country, he knew not whither. On this ſhilling he ſupported himſelf, as he affirmed, for three days, and then parting by degrees with the clothes off his back, was reduced to ſuch extremity of famine, that, after faſting twenty-four hours, he thought a handful of grey-peaſe, given him by a girl at a wake, the moſt comfortable repaſt he ever made. By this time he began to be ſenſible of his folly, and, like the prodigal ſon, deſirous of returning to his indulgent father. From his father's houſe he now was not ſo diſtant but that he contrived to ſend to his brother, who came to him, clothed and carried him back to college, where he effected ſomething of a reconciliation with his tutor; but, as may eaſily be imagined, they were never afterwards on cordial terms.

Soon after this event his worthy father died, of whom he gives an account in the Citizen of the World, under the character of the man in black. His good uncle Contarine endeavoured to ſupply his loſs, and wiſhed him to prepare for holy orders. But for the clerical profeſſion he had no liking, having always a ſtrong inclination for viſiting foreign countries; and when he did apply to the biſhop, he was rejected becauſe he was too young. His uncle however procured him the office of private tutor in the family of a neighbouring gentleman, where he continued about a year; but being averſe to the neceſſary confinement, he quitted his friends, and having ſaved about thirty pounds, and procured a good horſe, he left the country. His friends, after an abſence of ſix weeks, without having heard what had become of him, concluded he had quitted the kingdom; when he ſuddenly returned to his mother's houſe without a penny, upon a poor little horſe not worth twenty ſhillings. His friends, as might be expected, were highly offended; yet his brothers and ſiſters had contrived to meet him, and at length effected a reconciliation. Being required to account for the loſs of his money and linen, and the horſe on which he had departed, he told them that he had been at Cork, where he had ſold his horſe, and paid for his paſſage for America to a captain of a ſhip. But the winds proving contrary for three weeks, he had amuſed himſelf by ſeeing every thing curious in and about that city; and on the day the wind proved fair, being engaged in an excurſion into the country, his friend, the captain, had ſet ſail without him. He continued in Cork till he had only two guineas left, out of which he paid forty ſhillings for his hack; and when he wiſhed to return home, he had only the remaining change to carry him a journey of a hundred and twenty miles.

By the aſſiſtance of his uncle Contarine, to whoſe perſevering friendſhip he always acknowledged himſelf greatly obliged, Goldſmith removed, about the year 1752, from Ireland to Edinburgh, for the purpoſe of ſtudying phyſic. From Edinburgh he embarked for Holland, and paſſing though Flanders, proceeded to Leyden; where he reſided about a year, and ſtudied chemiſtry under Gaubius, and anatomy under Albinus.

In

In this ſituation, he ſuffered many viciſſitudes of fortune; for here he ſhewed himſelf addicted to gaming, a practice which occaſioned all the future hardſhips that he underwent, and in the fatal conſequences of which originated thoſe ſtains that ſullied his moral character. On leaving Leyden, he paſſed ſome time at the univerſities of Straſburg and Louvain, at the latter of which he took the degree of bachelor of phyſic, and thence accompanied an Engliſh gentleman to Geneva. At that city he was engaged as travelling tutor to a young man who had become heir to a large fortune, but who ſeems to have been deſtitute of a proportional liberality of mind. They diſagreed and parted in the ſouth of France; and Goldſmith was left to contend as he could with the hardſhips of indigence in a foreign country. But he found means to get back to England in the beginning of 1756. In a great part of thoſe peregrinations he appears to have truſted for ſupport to his own caſual efforts; and he had learning and addreſs ſufficient to enſure a hoſpitable reception at the monaſteries. A vigorous conſtitution alſo enabled him to reſiſt the fatigues of pedeſtrian travel and the inclemencies of the ſeaſon, and he could not fail to receive much gratification from the ſcenes of nature and the different forms of human life which preſented themſelves to his mind; but there were, doubtleſs, many ſolitary hours in which he ſenſibly felt thoſe circumſtances of his ſituation which form the pathetic exordium of his Traveller.

On his arrival in London, he could obtain no better employment than that of aſſiſtant in the laboratory of a chemiſt near Fiſh-ſtreet hill. Luckily he diſcovered the reſidence of his old college friend Dr. Sleigh, who liberally ſhared his purſe with him, and gave him a countenance which probably was the cauſe of his being recommended as an uſher to Dr. Milner, who kept an academy at Peckham. His activity of mind, however, allowed him to remain but a ſhort time in that ſituation, and he then took lodgings in London with a view of following the profeſſion of an author. He firſt publiſhed a weekly pamphlet, entitled, The Bee; and an Enquiry into the State of Polite Learning in Europe. He had been for ſome years exerciſing his pen in obſcurity, when, in 1765, he ſuddenly burſt from the clouds as a poet, in his Traveller, or a Proſpect of Society. This performance had lain by him ſome years in manuſcript, and it was at the inſtigation of Dr. Johnſon that he enlarged and finiſhed it for publication. That great critic liberally and juſtly ſaid that "there had not been ſo fine a poem ſince Pope's time." The public were equally ſenſible of its merit, and it conferred upon him a celebrity which gave him an introduction to ſome of the moſt eminent literary characters of the time. In 1766 was publiſhed his novel of the Vicar of Wakefield. It was received with merited applauſe, and has ever ſince borne a diſtinguiſhed rank among ſimilar compoſitions. He now took rooms in the Temple, and at the ſame time joined with a friend in a country-houſe. At the latter he compoſed one of his moſt pleaſing and ſucceſsful works, A Hiſtory of England, in a Series of Letters from a Nobleman to his Son, 2 vols. 12mo. The elegance and liberal ſpirit of this hiſtorical ſketch cauſed it to be generally attributed to lord Lyttleton. That he poſſeſſed a rich vein of comic humour he had proved by his Vicar of Wakefield; and it was further evinced by his comedy of The Goodnatured Man, acted at Covent-Garden in 1768. Yet the piece was not very ſucceſsful; which might partly be attributed to defects of plot and want of dramatic effect, and partly to the fondneſs for ſentimental writing, which then characteriſed the public taſte. By gratifying this taſte, Kelly had about the ſame time obtained great applauſe for his Falſe Delicacy; and this ſucceſs loſt him the friendſhip of Goldſmith. A Roman Hiſtory, in 2 vols. 8vo. and a Hiſtory of England, in 4 vols. 8vo. diſplayed his induſtry at this period. A periodical publication, called The Gentleman's Journal, in which he bore a ſhare with ſeveral other writers, enjoyed but a ſhort life; dying, as he himſelf ſaid, "of too many doctors."

His poetical fame reached its ſummit in 1770, by the publication of The Deſerted Village, a charming piece, which was univerſally admired. The price offered for it by the bookſeller (viz. 100l.) appeared to him ſo exorbitantly great, being nearly five ſhillings a couplet, that he refuſed at firſt to take it; but the ſale the poem met with convinced him that he might fairly appropriate that ſum out of the profit. This incident proves that he made a very modeſt eſtimate of his labours. His ſpleen againſt the ſentimental drama of Kelly, incited him to make a bold effort to bring back the reliſh of the public for broad humour; and in 1772 he produced She Stoops to Conquer; or, the Miſtakes of a Night. The characters and plot of this piece certainly make a near approach to farce; yet ſuch was its comic power, that the ſpectators received it with uncommon favour. Goldſmith cleared a conſiderable ſum by this play, and it is ſtill occaſionally repreſented to applauding audiences. This was a gainful year to him; yet thoughtleſs profuſion, and inconſiderate bounty to acquaintances in diſtreſs, left him conſiderably in debt at the cloſe of it; and he therefore continued to exerciſe his induſtry in compilation. Beſides a Grecian Hiſtory, he ſupplied the bookſellers with a Hiſtory of the Earth and Animated Nature, in 8 vols. 8vo. 1774. Goldſmith was by no means a man of ſcience; but he poſſeſſed good taſte and a charming ſtyle; and with the help of Buffon and other writers, he produced a work that was both amuſing and inſtructive. Such was the confidence he had in his native induſtry and ſkill at compilation, that he formed a plan for a much greater work; no leſs than an Univerſal Dictionary of Arts and Sciences, in which he was to receive aſſiſtance from ſome of his literary friends; but this and all other ſchemes were cut off by his untimely death. He was attacked with the ſymptoms of a fever in March, and died on April 4, 1774, aged forty-five. He was buried in the Temple church-yard; and a monument has ſince been erected to his memory in Weſtminſter-abbey, with a Latin inſcription by Dr. Johnſon.

Doctor Goldſmith (ſo he was uſually ſtyled, though only M. B.) appears to have been more admired for his genius, and beloved for his benevolence, than ſolidly eſteemed. The beſt part of his moral character was a warmth of ſenſibility, which made him in all fortunes ready to ſhare his purſe with the indigent, and rendered him in his writings the conſtant advocate of the poor and oppreſſed. His worſt feature was a tincture of envy and jealouſy of ſucceſsful rivals, which he ſometimes diſplayed in a manner not a little ridiculous. Yet, perhaps, no writer of his time was poſſeſſed of more true humour, or was capable of more poignancy in marking the foibles of other individuals. This laſt talent he has diſplayed in a very amuſing manner in his unfiniſhed poem of Retaliation, written as a kind of retort to the jocular attacks made upon him in the literary club. Under the maſk of epitaphs, he has given maſterly ſketches of ſome of the principal members, with a mixture of ſerious praiſe and good-humoured raillery. His character of Garrick, however, is particularly ſevere, and was ſo much felt by that witty actor, as to provoke a ſtill ſeverer return in kind; and it is not probable that any friendſhip could ſubſiſt between them after thoſe hoſtilities.

Goldſmith's literary fame ſtands higheſt as a poet, in which character a place may be given him perhaps at the head of the minor claſs, reſtraining the term *minor* rather to the quantity, than the excellence, of his compoſitions. It would not be eaſy to point out in the whole compaſs of Engliſh poetry pieces that are read with more delight than The Traveller, and The Deſerted Village. The elegance of the verſification; the force

force and ſplendour, yet ſimplicity, of the diction; the happy mixture of animated ſentiment with glowing deſcription; are calculated to pleaſe equally the refined and the uncultivated taſte. The moral and philoſophical views of ſociety they exhibit, may in ſome reſpects be objectionable; yet upon the whole they exert a favourable influence over the heart. In addition to theſe capital works, his pleaſing ballad of The Hermit, and ſome ſhort humorous and miſcellaneous pieces, complete the catalogue of his performances in verſe. As a proſe writer he deſerves high praiſe for ſtyle, which he adapts with great felicity to his ſubject; and which, whether elevated or plain, is always clear, pure, and unaffected. Many of his compilations have all the merit that can be required in works of that kind; and his hiſtorical abridgments have proved very uſeful in the education of youth. Dr. Johnſon's encomium in his epitaph may be admitted as juſt ſummary of his literary character; *Qui nullum fere ſcribendi genus non tetigit, nullum quod tetigit non ornavitu*; "Who left ſcarcely any kind of writing untouched, and adorned all he touched." An edition of Goldſmith's Miſcellaneous Works complete, with an Account of his Life, was publiſhed in 1806, in 5 vols. 12mo.

GOLD'WIRE. See the article WIRE.

GOLES'Z, a town of Poland, in the palatinate of Sandomirz: ſixty miles ſouth-ſouth-weſt Sandomirz.

GOLET'TA, or GOULET'TA, a fortreſs of Africa, ſituated on a canal, in the kingdom of Tunis, ſeized by Barbaroſſa in 1535. Charles V. became maſter of it in 1536, and it continued in the poſſeſſion of the Spaniards till 1574, when it was taken from them by Selim II. twenty-five miles north of Tunis.

GOL'GOM, a town of the iſland of Ceylon: forty-eight miles north-weſt of Candi.

GOLGO'THA, [i. e. the place of a ſkull.] The name of the place where Jeſus Chriſt was crucified. Matth. xxvii. 33. See CALVARY.

GOLI'ATH, [Heb. a heap.] A man's name, a giant.

GO'LICH, a town of Ruſſia, in the government of Irkutſch, on the Lena: two miles ſouth of Orlenga.

GO'LIUS (James), born at the Hague in 1596. He diſtinguiſhed himſelf at the univerſity of Leyden by the ardour with which he purſued the ſtudy of the languages, of antiquities, philoſophy, medicine, and mathematics. He particularly attached himſelf to the celebrated Erpenius, the Arabic profeſſor, under whom he acquired an accurate knowledge of the oriental tongues. In 1622 he accompanied an ambaſſador of the United States to Morocco, where he preſented to the emperor, Muley Zeidan, a requeſt written in Arabic, which excited great admiration, as being the work of a Chriſtian. The emperor deſired to ſee him, and converſed with him in his own language; while Golius replied in Spaniſh, not being able to pronounce the Arabic. After his return, he ſucceeded to the Arabic profeſſorſhip on the death of Erpenius in 1624. He obtained permiſſion in 1625 to travel in the Levant, and paſſed more than a year at Aleppo, whence he made excurſions into Arabia and Meſopotamia. Thence he travelled by land to Conſtantinople, at which capital he made friends who procured him acceſs to ſeveral libraries. During his abſence he was appointed profeſſor of mathematics; and he returned to Leyden in 1629, and applied to the duties of his double office. He died in 1667, after having with great credit filled his laborious ſtation nearly forty years, and paſſed through all the academical honours. He publiſhed the Saracen Hiſtory of Elmacin, the verſion of which was begun by Erpenius, and completed by himſelf: alſo, a Life of Tamerlane, 1636, written by an eminent Arabian author; The Aſtronomical Elements of Alfergan, with a new verſion and learned commentaries; an Arabic Lexicon, 1659; and a Perſian Dictionary, printed in London. Late in life he ſtudied the Chineſe, and became able to read books in that difficult language.

GO'LIUS (Peter), elder brother of the preceding, born at Leyden, but in what year is uncertain. He entered when young among the barefooted Carmelites of the reformed order of St. Thereſa, when he took the name of Celeſtine de Sainte Liduvine. Like his brother, he excelled in a knowledge of the Arabic language, and taught it in the ſeminary belonging to his order at Rome, where thoſe monks were educated who were intended to be ſent on miſſions into the Eaſt. By the choice of his ſuperiors, Peter Golius was deſtined to that ſervice; and, after viſiting every part of Syria and Paleſtine, he founded a monaſtery of his order on mount Libanus, over which he preſided until he was recalled to Rome. In that city he was employed as one of the principal aſſiſtants of Sergius Riſius, a Maronite, and archbiſhop of Damaſcus, in preparing his edition of the Arabic Bible, which, after the death of that prelate, was publiſhed in 1671, by the direction of the college *De Propaganda*; and he had the principal ſhare in correcting the proof ſheets of that work. Soon after it was completed, he was appointed by the general of the order, viſitor of the miſſions in the Eaſt Indies. He died while fulfilling with great zeal the duties of that appointment, at Surat, about the year 1673. He was the author of tranſlations into Arabic of The Imitation of Jeſus Chriſt, by Thomas a Kempis, 1663; Sermons upon the Evangeliſts; an hiſtoric Diſcourſe of St. Gregory of Decapolis; ſeveral ſmall devotional pieces; and a tranſlation from the Arabic into Latin of A Collection of Parables and Proverbs, taken from different Arabic writers.

GOLL, *ſ.* [corrupted, as Skinner thinks, from pal or pol, whence pealdan, to handle or manage.] Hands; paws; claws. *Uſed in contempt.*—They ſet hands, and Mopſa put her golden *golls* among them; and blind fortune, that ſaw not the colour of them, gave her the pre-eminence. *Sidney.*

GOL'LACH, a river of Germany, in the circle of Franconia, which runs into the Tauber: five miles ſouth-weſt of Aub.

GOL'LERSDORF, a town of Germany, in the archduchy of Auſtria: four miles ſouth-ſouth-eaſt of Sonneberg.

GOLLI, or COLLI, a town of Africa, near the river Grande, whoſe inhabitants trade in ſlaves, ivory, and cotton.

GOL'LING, a town of Germany, in the circle of Bavaria, and archbiſhopric of Saltzburg; twenty-two miles north-north-weſt of Radſtadt, and fourteen ſouth-ſouth-eaſt of Saltzburg.

GOL'NITZ, a town of Germany, in the circle of Upper Saxony, and duchy of Anhalt Zerbſt: ſeven miles north-weſt of Zerbſt.

GOL'NITZ, a town of Hungary, on a river of the ſame name: fourteen miles ſouth-eaſt of Kapſdorff.

GOL'NIZ, a town of Germany, in the duchy of Carinthia: three miles ſouth of St. Andre.

GOL'NOW, a town of Germany, in the circle of Upper Saxony, in Anterior Pomerania, ſituated on the Ihna, ſurrounded with walls in 1190, but much injured by fires and war: twelve miles north of Stargard, and thirteen north-eaſt of Old Stettin. Lat. 53. 31. N. lon. 32. 35. E. Ferro.

GO'LO, a department of France, one of the two formed of the iſland of Corſica. It is bounded on the north and eaſt by the Mediterranean; on the ſouth, by the department of Liamone; and on the weſt, by the Mediterranean. Its ſuperficies is about 1,017,472 ſquare acres, or 519,301 hectares; its population is about 157,874 individuals. It is divided into three communal diſtricts.

GO'LO, a river of the iſland of Corſica, which riſes nearly in the centre of the iſland, and taking a north-eaſt courſe, runs into the ſea, twelve miles ſouth-ſouth-eaſt of Baſtia, and ten north-north-weſt of St. Pellegrina.

GOLOGRIZ'ZA, a town of Auſtrian Iſtria: ſix miles ſouth of Pedena.

GOL'PHINGTON, the chief town of the American

States in Washington county, Georgia, situated near the head of Ogeechee river, about twenty-six miles east-south-east of Oconee town, thirty-seven of Augusta, and fifty north-west of Louisville.

GOLSCH, a river of Germany, in the circle of Upper Saxony, which rises a little to the south of Auerbach, in the Vogtland, and runs into the Elster, near Greitz.

GOLTCHIN'SKOI, a settlement of Russia, in the government of Tobolsk: 380 miles north of Turuchansk. Lat. 72. 5 N. lon. 103. E. Ferro.

GOLTIAVI'NA, a town of Russia, in the government of Tobolsk: 188 miles east of Eniseisk. Lat. 58. 20. N. lon. 116 E. Ferro.

GOLT'VA, a town of Russia, in the government of Kiev: 112 miles south-east of Kiev. Lat. 49. 15. N. lon. 51. E. Ferro.

GOLT'ZE, a town of Germany, in the circle of Upper Saxony, and Ucker Mark of Brandenburg: five miles south-west of New Augermunde.

GOLT'ZIUS, or Goltz (Henry), born at Mulbracht in the duchy of Juliers in 1558, was an eminent engraver, and published many prints from designs brought from Italy, which are much esteemed. He died in 1617.

GO'LUB, a town of Prussia, in the territory of Culm: twenty-four miles south-east of Culm.

GOLUBEN'SKA, a town of Russia, in the country of the Cosacs, on the Don: 200 miles east-north-east of Azoph, and forty west-north-west of Tzaritzin.

GOL'ZIUS (Hubert), an eminent antiquary, born at Venloo in 1526, was the son of Roger Goltz, a painter at Wurtzburg. Hubert was instructed in his father's art, and at the same time applied to the study of polite literature, history, and antiquities. He particularly cultivated the knowledge of medals and inscriptions, and spared neither labour nor expence in this pursuit. He resided for some years at Antwerp, whence, in 1558, he removed to Bruges. He took several journeys through the Low-countries, Germany, France, and Italy, every where finding access to the cabinets of the curious, and enriching his collection with the monuments of antiquity. His reputation obtained for him the citizenship of Rome, and he was honoured by the patronage of the emperor Ferdinand, and other persons of rank. He died at Bruges in 1583. Golzius was a printer, painter, and engraver in wood, as well as a writer. He published 1. *Fasti Romani ex Antiquis Numismatibus & Marmoribus*, folio. 2. *Icones Imp. Romanorum & Series Austriacorum*, folio; these are effigies of emperors from medals, &c. from Julius Cæsar to Charles V. 3. *Julii Cæsaris & Augusti Vit. ex numismatibus.* 4. *Sicilia & Magna Græcia ex numismat.* folio; a work of great erudition and much esteemed. 5. *Fasti Consulares.* 6. *Thesaurus Antiquitatum.* All his works were printed together at Antwerp, in three volumes folio, 1645 and 1708.

GO'MAR (Francis), the celebrated opponent of Arminius, from whom the Calvinistic party in Holland received the name of *Gomarists*, was born at Bruges, in 1563. His parents, having embraced the protestant religion, retired into the palatinate in 1578, for the sake of living in peace and security. Young Gomar was now sent to the university of Strasburg, and placed under the instructions of the famous John Sturm; after which he went to pursue his studies at Newstadt. In 1582 he came to England, and attended the divinity lectures in the universities of Oxford and Cambridge. He was admitted to the degree of bachelor in 1584. The two following years he spent at Heidelberg, where he applied himself with great assiduity to perfect his knowledge in the Greek and Hebrew languages. In 1587 he was invited to become pastor of the Dutch congregation at Frankfort, and continued to discharge his ministerial functions in that connection until 1593, when his flock was entirely dispersed by persecution. In the following year he was invited to fill the chair of theological professor at Leyden; and after he had been admitted to the degree of doctor of divinity at Heidelberg, entered on the duties of that employment. From this time, nothing is related concerning him worthy of notice till the year 1603, when James Arminius was appointed his colleague in the professorship of divinity. This celebrated man had no sooner entered on his office, than he openly declared his opinions in opposition to those of Calvin, and made many converts in the university. He soon, however, met with a zealous and violent adversary in Gomar, who disputed with him in the schools of Leyden; published treatises to excite the orthodox to make a firm stand against his doctrines, which he represented to be profane and impious; and endeavoured to provoke against him the indignation of the states of Holland, before whom the two combatants disputed twice, in the year 1608. When, upon the death of Arminius, Vorstius, who was of the same sentiments, was proposed to become his successor, Gomar and his party used all their diligence to prevent his appointment, but without success. This defeat determined Gomar no longer to continue in a situation where his adversaries were daily increasing in numbers and reputation; and in 1611 he resigned his post, and retired to Middleburg. In that city he officiated as minister, and delivered public lectures till 1614, when he accepted of an invitation to become professor of divinity in the academy at Saumur. After exercising that employment for four years, he removed to the university of Groningen, where he was first appointed to the professorship of divinity, and afterwards to that of the Hebrew language. He was present in the synod of Dort, and took an active part in procuring the persecuting decrees by which the Arminians were condemned, and proscribed as corrupters of the true faith, and enemies to their country. He was also concerned in revising the translation of the Old Testament, printed at Leyden, with notes, in 1637. He died at Groningen in 1641, deservedly commended for his great learning, particularly in the oriental languages, but under the reproach of having disgraced his character as a Christian minister, by bigotry and intolerance. The different treatises which he wrote on controversial and other subjects were collected together, and printed at Amsterdam, in 1645.

GOMAUN', mountains of Asia, which separate Hindoostan from Grand Thibet, the same with Himmalch. Lat. 30. 30. to 31. 20. N. lon. 76. to 77. E. Greenwich.

GOM'BAULD (John Ogier de), a French poet, native of St. Just de Luffac, in Saintonge. He was a younger son of a gentleman of the protestant religion, to which he adhered. Possessing more quality than wealth, after finishing his education at Bourdeaux, he came to Paris about the time of the death of Henry IV. and frequented the court of queen Mary de Medicis. He so well ingratiated himself with her, that he not only obtained a pension, but was also appointed gentleman in ordinary of the king's chamber, and had some patrons of rank; yet he passed his life in a state little above indigence. He took a seat among the wits and poets of the time, was a constant visitor at the hotel de Rambouillet, and was one of the first members of the French academy. By means of regularity and sobriety he protracted his life to an advanced period, dying in 1666. The works of this writer were tragedies, tragi-comedies, pastorals, romances, sonnets, epigrams, &c. which obtained reputation in their time, but are at present little esteemed. He also engaged in theological controversy, and wrote Treatises and Letters concerning Religion, in favour of the principles of the Protestants.

GOM'BERVILLE (Marin le Roi, sieur de), a man of letters, born in 1599 at Chevreuse in the diocese of Paris. He made himself known at the age of fourteen by a collection of quatrains in honour of old age. Some romances and other works gave him a reputation which caused him to be one of the number of literary men assembled by cardinal Richelieu in 1635, for the purpose

of founding the French academy. He is mentioned in high terms of commendation by Flechier, who ſpeaks of him as having joined the chriſtian virtues to thoſe of morality. He died in 1674. His works are: 1. *Poeſies Diverſes*, in the collection of Lomenie de Brienne; of theſe, his ſonnets on the Holy Sacrament, and on Solitude, are thought excellent. 2. Romances, viz. *Polexandre*; *La Cytherea*; *La Jeune Alcidiane*; theſe were for a time popular. 3. *Diſcours ſur les Vertus & les Vices de l'Hiſtoire, & de la Manière de bien écrire*; a ſenſible and judicious performance. 4. An edition of the Memoirs of the Duke de Nevers, with additions. 5. A Relation of the River of the Amazons, from the Spaniſh. 6. *La Doctrine des Meurs, tirée de la Philoſophie des Stoiques*; a work more in requeſt for its hundred plates, than for the hundred diſcourſes illuſtrating them.

GOMBEZCA'LA, a town of Perſia, in the province of Farſiſtan; one hundred miles north-north-weſt of Schiras.

GOM'BIN, or GAMBIN, or GABIN, a town of Poland, in the palatinate of Rawa, ſituated on the Bſura river: thirty-four miles north-north-eaſt of Rawa.

GOMBROO'N. See GAMBRON.

GOME, *ſ.* a provincial term for the tar or black greaſe of a cart-wheel.

GOMEG'NIES, a town of Hanaut: four miles eaſt of le Queſnoy.

GO'MER, [גומר, Heb. conſuming.] A man's name; a ſon of Japhet. Alſo a Jewiſh meaſure of dry things, containing five hundred and ten pints, one ſolid inch, and two hundred and eleven decimal parts.

GOM'ERA, or VELEZ DE GOMERA, or VELEZ DE PEGNON, a fortreſs of Africa, built on a rock near the coaſt of the Mediterranean, in the kingdom of Fez: eighty-five miles weſt of Melilla, and fifty-five eaſt of Tetuan.

GOM'ERA, a river of Africa, which runs into the Straits of Gibraltar, near Velez de Gomera, in the kingdom of Fez.

GOM'ERA, a ſmall iſland of Scotland, near the weſt coaſt of the iſland of Mull.

GOM'ERA, or GOMARA, one of the Canary iſlands, about twenty miles long, and ten wide, with a capital of the ſame name. It is well cultivated and fertile, producing abundance of ſugar-canes and wine, with corn enough to ſupply the want of the inhabitants. The town is ſituated on the eaſt coaſt, and has a good harbour, where the Spaniſh Weſt India fleet ſtops to take in wine and fruits, and other proviſions of the country: ſix leagues ſouth-weſt from the iſland of Teneriffe. Lat. 28. 6. N. lon. 17. 8. W. Greenwich.

GO'MEZ DE CIVIDAD REAL (Alvarez), a Latin poet, in born in 1488, at Guadalaxara in Spain. He was page of honour to the archduke Charles, afterwards emperor. He married a natural daughter of the duke d'Infantado, and died in 1558. Gomez poſſeſſed a great facility in writing Latin verſe, which he proved by ſeveral works of conſiderable length. Theſe are, 1. *Thalia Chriſtiana*, or the Triumph of Jeſus Chriſt, in twenty-five books; 2. *Muſa Paulina*, or the Epiſtles of St. Paul, in elegiac verſe; 3. The Proverbs of Solomon; 4. The Seven Penitential Pſalms; 5. *De Principis Burgundi Militia quam Velleris aurei vocant, Lib. V.* This laſt poem, on the order of the Golden Fleece, is reckoned his maſterpiece. He alſo compoſed poems in the Spaniſh language, but their reputation is not great.

GO'MEZ DE CASTRO (Alvarez), a native of St. Eulalia, near Toledo, was educated at Alcala, where he obtained a high character for learning. He was recommended to Philip II. who engaged him to prepare an edition of the works of St. Iſidore, which death prevented him from completing. He compoſed ſeveral works in proſe and verſe, of which the moſt eſteemed is a Life of Cardinal Ximenes, inſerted in a collection of the writers on Spaniſh hiſtory. He died in 1580, at the age of ſixty-five.

GO'MEZ (Magdalen-Angelica Poiſſon de), born at Paris in 1684, was the daughter of Paul Poiſſon, an actor. Don Gabriel de Gomez, a Spaniſh gentleman, married her with the hopes of finding a reſource againſt indigence in her talents. She, on the other hand, took him for a man of fortune; but finding her miſtake, ſhe ſat quietly down to obtain a livelihood by writing. Her fertile pen poured forth a great variety of productions of the gallant and romantic claſs, which were much read at the time. Of theſe the principal are: 1. *Les Journées Amuſantes*, 8 vols. 12mo. 2. *Anecdotes Perſanes*, 2 vols. 12mo. 3. *Hiſt Secrète de la Conquête de Grenade.* 4. *Hiſtoire du Comte d'Oxford, avec celle d'Euſtache de St. Pierre.* 5. *La Jeune Alcidiane.* 6. *Les Cent nouvelles Nouvelles*, 8 vols. 12mo. Mad. de Gomez alſo wrote ſome tragedies, but her genius had not ſtrength enough for this ſpecies of compoſition. She died at the age of eighty-ſix in 1770.

GO'MI, a town of China, of the third rank, in the province of Se-tchuen: twelve miles weſt-north-weſt Kia-ting.

GOM'MERN, a town of Germany, in the circle of Upper Saxony, and electorate of Saxony, ſituated on the river Ehle: eight miles ſouth-eaſt of Magdeburg, and twenty north-weſt of Deſſau. Lat. 52. 5. N. lon. 29. 36. E. Ferro.

GOM'MERVILLE, a town of France, in the department of the Eure and Loire, and chief place of a canton, in the diſtrict of Janville: three leagues and a half north of Janville.

GOMOR'RAH, or GOMOR'RHA, a city of Canaan, ſituated in the vale of Siddim, or Sodom, (now the Dead Sea,) and was the ſeat of ſome of the Canaaniſh kings, the laſt of which was named Birſha. It was deſtroyed (together with Sodom, Admah and Zeboim), by fire and brimſtone rained as it were from heaven, in the days of the patriarch Abraham, and Lot. *Gen.* xiv. 2, 3, 10. xix. 24.

GOMO'ZIA, *ſ.* in botany. See NERTERIA.

GOM'PHI, in ancient geography, a town of Theſſaly, near the ſprings of the Peneus.

GOM'PHIA, *ſ.* [from γομφος, Gr. a nail, knob, or button, the flowers being of a roundiſh form before they open.] In botany, a genus of the claſs decandria, order monogynia. The generic characters are—Calyx: perianthium five-leaved; leaflets lanceolate, ſharpiſh, nerved, coloured, deciduous; two with a membrane on both ſides, one with a membrane on one ſide only, and two without any. Corolla: petals five, ſpreading, longer than the calyx, ſomewhat unequal; claws ſhorter than the calyx, widening gradually into roundiſh, flat, entire, laminas. Stamina: filaments ten, thick, angular, very ſhort; antheræ upright, parallelopiped, drawn to a point at the top, gaping at the tip on the outſide with a double hole, ſhorter than the calyx. Piſtillum: germ ſitting on a ſhort, fleſhy, angular, receptacle, five-cornered, and five-cleft; ſtyle longer than the ſtamens, five-furrowed; ſtigma ſharp. Pericarpium: berries from one to five, generally two, ovate, obliquely attenuated at the baſe, ſomewhat compreſſed, obtuſe, upright, ſitting on a very large globular receptacle (for receiving a ſingle berry) or lobed for ſeveral berries, each fixed to each lobe. Seeds: ſolitary, ovate.—*Eſſential Character.* Calyx, five-leaved; corolla, five-petalled; berries, one to five, on a large receptacle; ſeed, ſolitary.

Species. 1. Gomphia anguſtifolia, or rough-leaved gomphia: leaves lanceolate, ſerrate on the outſide; panicle terminating; petals longer than the calyx. This tree is only about twelve feet high, with a ſlender trunk; the bark is browniſh-red, the wood whitiſh, with a greeniſh heart; the flowers are yellow, and have no ſcent. Native of the Eaſt Indies.

2. Gomphia

2. Gomphia nitida, or clean gomphia: leaves ovate-lanceolate, acuminate, ferrate; panicles terminating; calyxes equal to the corolla. Native of the Weſt Indies.

3. Gomphia lævigata, or ſmooth gomphia: leaves lanceolate, very obtuſe, quite entire, emarginate; panicle terminating. Very ſmooth. Native of the Eaſt Indies.

GOMPHI'ASIS, *ſ.* [Greek.] A diſtemper of the teeth, when they are looſe, and ready to drop out.

GOMPHOLO'BIUM, *ſ.* In botany, a genus of the claſs decandria, order monogynia. Generic characters—Calyx: campanulate, ſimple, five-parted. Corolla: papilionaceous; ſtigma ſimple, acute; legume ventricoſe, one-celled, many-ſeeded. There is but one ſpecies, a native of Auſtralaſia. It is a ſhrub, with the leaves ternate or unevenly pinnate. From the Linn. Tranſ. vol. iv.

GOM'PHOSIS, or GOMPHO'MA, *ſ.* [γομφωμα, Gr. from γομφος, a nail.] In anatomy, a ſpecies of articulation which reſembles a nail driven in, of which the teeth in their ſockets are an inſtance.

GOM'PHOSUS, *ſ.* [γομφος, Gr. a nail, from the ſhape of the ſnout.] The name of a genus of fiſhes inſtituted by Cepede; for the ſpecies of which, ſee LABRUS.

GOMPHRE'NA, *ſ.* [of Pliny: from γομφος, Gr. a nail, knob, or button.] GLOBE AMARANTH; in botany, a genus of the claſs pentandria, order digynia, natural order amaranthi, *Juſſ.* miſcellaneæ, *Linn.* The generic characters are—Calyx: perianthium coloured; outer three-leaved; leaflets two, converging, keeled. Corolla: five-petalled, upright; petals ſubulate, permanent, rude, villoſe; nectary, a cylindric tube, the length of the corolla, with a five-toothed, patulous, mouth. Stamina: filaments five, ſcarcely obſervable, within the mouth of the nectary; antheræ upright, cloſing the mouth of the nectary. Piſtillum: germ ovate, with a point; ſtyle cloven half way, filiform; ſtigmas ſimple, the length of the ſtamens. Pericarpium: capſule roundiſh, circumciſed. Seed: ſingle, large, roundiſh, with an oblique tip.—*Eſſential Character.* Calyx, coloured; outer, three-leaved; leaflets, two, converging, keeled; petals, rude, villoſe; nectary, cylindric, five-toothed; ſtyle, cloven half way; capſule, one-ſeeded.

Species. 1. Gomphrena globoſa, or annual globe amaranth: ſtem upright; leaves ovate-lanceolate; heads ſolitary; peduncles two-leaved. This is an annual plant, riſing with an upright branching ſtalk, about two feet high; leaves oppoſite, ſeſſile, quite entire, hiſpid; branches and peduncles alſo oppoſite; the latter axillary, long and naked, except that there are two ſhort leaves cloſe under each head of flowers; theſe heads at their firſt appearance are globular, but as they increaſe in ſize become oval. Native of India. It was cultivated in 1714 by the ducheſs of Beaufort; but was not common in the Engliſh gardens till 1725. It was raiſed firſt in Holland about 1670. Mr. Miller ſays that he received ſeeds of the white ſort from Holland in 1722. The flowering heads are beautiful, and, if gathered before they are too far advanced, will retain their beauty ſeveral years. The ſeed ripens late in autumn, and the plant decays ſoon after.

There are two varieties, one with fine bright purple heads, the other has white or ſilvery heads, and theſe never alter from ſeeds, ſo that they are permanent varieties, though in other reſpects they do not differ. There are alſo two varieties of this which grow naturally in the Weſt Indies, one with purple, and the other with white heads, which are much ſmaller and rounder than thoſe before-mentioned. The plants grow much larger, and ſpread more into branches, and they are later before they flower, ſo that in cold ſeaſons the ſeeds rarely ripen in England; theſe are called *bachelors buttons* by the inhabitants of America. Loureiro alſo mentions a variety in Cochinchina, with white ovate heads, in which all the florets are fertile; whereas in the purple variety moſt of them are barren.

2. Gomphrena perennis, or perennial globe amaranth: leaves lanceolate; heads two-leaved; florets ſeparated by a proper perianth. Stems upright, hairy, ſlender; heads of flowers terminating, ſmall, ſpreading ſo that the calyxes appear diſtinct; they are of a pale ſtraw-colour, and appear in July. It was cultivated in the Eltham garden before 1732, and was there raiſed from ſeeds brought from Buenos Ayres.

3. Gomphrena hiſpida, or hairy globe-amaranth: ſtem upright; heads two-leaved; leaves crenate. Height a cubit and half; heads of flowers rounded-oblong, at firſt white, but becoming blue. Native of Malabar.

4. Gomphrena Braſilienſis, or Braſilian globe-amaranth: leaves ovate-oblong; ſtem upright; heads pedunculed, globular, leafleſs. This is ſomewhat higher than the firſt ſort; the heads are white, ſmaller, and compoſed of ſmaller calyxes, without any leaves at the baſe. Native of Braſil.

5. Gomphrena ſerrata, or ſerrated globe-amaranth: ſtem upright, brachiate; heads ſolitary, terminating, ſeſſile; calyxes ferrate. Stems more ſlender and tall than thoſe of the firſt, and growing irregularly; leaves ſmaller, but of the ſame ſhape; flowers in ſpikes at the ends of the branches, broken or divided into three or four parts, ſmall, and of a pale purple colour. The ſeeds were ſent by Dr. Houſtoun from Campeachy; and it was cultivated by Mr. Miller before 1733.

6. Gomphrena interrupta, or interrupted globe-amaranth: ſtem almoſt upright; ſpike interrupted. Root annual; ſtem ſhrubby at the bottom, from one to two feet high. Native of dry ſandy fields in the ſouthern parts of Jamaica; and other parts of the Weſt Indies. Introduced into Kew garden in 1784 by Monſ. Thouin. See CELOSIA *procumbens*.

7. Gomphrena flava, or yellow globe-amaranth: peduncles oppoſite, bifid, three-headed; middle head ſeſſile. Native of Vera Cruz, where it was found by Houſtoun.

8. Gomphrena arboreſcens, or arboreſcent gomphrena: arboreſcent, hairy, ſomewhat twining. Found in New Granada, by Mutis.

9. Gomphrena anguſtifolia, or rough-leaved globe-amaranth: leaves linear-lanceolate, ſmooth; heads terminating, oblong, ſubtriphyllous. Native of the Eaſt Indies, where it was found by Koenig.

Propagation and Culture. The firſt ſort is a very ornamental plant in gardens, and is now very commonly cultivated in the Engliſh gardens. In Portugal, and other warm countries, it is cultivated to adorn their churches in the winter; for if the flowers are gathered when they are fully grown, and dried in the ſhade, they will retain their beauty a long time, eſpecially if they are not expoſed to the air; this plant is annual, and therefore is only propagated by ſeeds, which ſhould be ſown on a good hot-bed the beginning of March; but if the ſeeds are not taken out of their chaffy covering, it will be proper to ſoak them in water for twelve hours before they are ſown, which will greatly facilitate their growing. When the plants are come up half an inch high, they ſhould be tranſplanted on a freſh hot-bed, at about four inches diſtance, obſerving to ſhade them till they have taken root; then they ſhould have freſh air admitted to them every day, in proportion to the warmth of the ſeaſon; they will alſo require to be frequently refreſhed with water. In about a month's time, if the hot-bed is of a proper warmth, the plants will have grown ſo large as nearly to meet, therefore they will require more room, otherwiſe they will draw up weak; then a freſh hot-bed ſhould be prepared, into which there ſhould be a ſufficient number of three-farthing pots plunged, filled with light rich earth, and when the bed

bed is in a proper temperature of warmth, the plants ſhould be carefully taken up with balls of earth to their roots, and each planted into a ſeparate pot, obſerving to ſhade them till they have taken new root; afterward they muſt be treated in the ſame manner as other tender exotic plants. When the plants have filled theſe pots with their roots, they ſhould be ſhaken out of the pots, and their roots on the outſide of the ball of earth muſt be carefully pared off; then they ſhould be put into pots a ſize larger, and, when there is conveniency of a deep frame to plunge the pots into another gentle hot-bed, it will bring the plants early to flower, and cauſe them to grow much larger than thoſe which are placed abroad. In July the plants ſhould be inured gradually to bear the open air, into which they may be removed about the middle of that month, and intermixed with other annual plants to adorn the pleaſure-garden; but it will be proper to keep a plant or two of each ſort in ſhelter for ſeeds, becauſe when the autumn proves cold or wet, thoſe plants which are expoſed abroad, ſeldom produce good ſeeds. The fifth ſort will live two or three years in a ſtove; and the ſeeds will ſometimes ripen in England. See ILLECEBRUM.

GOM'RON. See GAMBRON.

GOMS, a town of Swiſſerland, which gives name to one of the departments of the Valais: thirty-three miles eaſt of Sion.

GONAG'RA, *ſ.* [from the Greek γονυ, the knee, and αγρα, a capture.] The gout in the knees.

GONAI'VES (Les), a ſeaport town of the iſland of St. Domingo, with an excellent harbour. Here is a medicinal ſpring; and, in the year 1772, baths were erected, with lodgings to accommodate company, and an hoſpital for ſoldiers and ſailors. Lat. 19. 36. N. lon. 54. 40. W. Ferro.

GONA'PI, or GOUNONG-API, one of the Bandas or Spice Iſlands belonging to the Dutch, ſituated in the Eaſtern Indian Sea, in the middle of which is a volcano. This iſland, from having been overwhelmed with burning lava, is become wholly uninhabited. In 1621, its volcano emitted fire, ſmoke, and cinders; and had, perhaps, long before left neither woods, fruits, nor water. The eruptions continued at times ſo violent as to carry deſolation to part of the neighbouring iſland of Banda, overwhelming the woods and loftieſt trees, and to fling ſtones of three or four tons weight from one iſland to the other. In the Phil. Tranſ. Abridg. vol. ii. p. 393, is an account of a moſt horrible eruption of this mountain in November 1694, attended with noiſes like the diſcharge of artillery. It caſt up ſuch a quantity of ſtones, as entirely to fill a noted fiſhing place in the neighbouring ſea of the depth of forty fathoms, ſo as to leave it entirely dry. The ſame volume fully accounts for the appearance of theſe iſlands, and the Banda, ſo graphically deſcribed by the abbé Raynal, who thus ſpeaks of them: "The Banda, or Spice Iſlands, ſeem to have been thrown up by the ſea, and may with reaſon be ſuppoſed to be the effect of ſome ſubterraneous fire. Lofty mountains, the ſummits of which are loſt in the clouds, enormous rocks heaped one upon another, horrid and deep caverns, torrents which precipitate themſelves with extreme violence, volcanoes perpetually announcing impending deſtruction; are the phenomena that give riſe to this idea, or aſſiſt in confirming the riſe of theſe barren rocks, fertile only in ſpiceries."

In 1693 and 1694, ſeveral other iſlands, as if by mutual conſent, raged with volcanic fury. The mountains of Celebes, Sorea, Ternate, Banda, and Neyra, at one and the ſame time, caſt up fire, lava, aſhes, cinders, and boiling water. There was no approaching the water by reaſon of the exceſſive heat. In Sorea the ground ſunk in and diſcovered a great lake:

A fiery deluge, fed
With ever-burning ſulphur unconſum'd:

Which, ſpreading farther and farther, threatening the whole iſland, terrified the inhabitants ſo much, that they unanimouſly tranſported themſelves to Banda, leaving their moveables behind for want of veſſels. All theſe iſlands are ſubject to terrible earthquakes, which affect the ſea ſo greatly as particularly to endanger the ſhips lying at anchor in the contiguous harbour. See the article BANDA ISLANDS, vol. ii. p. 666.

GONAQUA'IS, a tribe or nation of Africa, bordering on the Cape of Good Hope. See HOTTENTOTS.

GONAR'CHA, *ſ.* in antiquity, a dial delineated in ſeveral ſurfaces.

GONATOCAR'PUS, *ſ.* [from γονυ, γονατος, Gr. the knee, and καρπος, fruit.] In botany, a genus of the claſs tetrandria, order monogynia. The generic characters are—Calyx: none. Corolla: four-cleft, permanent. Stamina: filaments four, inſerted into the corolla. Piſtillum: germ inferior; ſtyle ſingle. Pericarpium: drupe ſubglobular, eight-cornered, crowned with the permanent corolla, one-celled. Seed ſingle.—*Eſſential Character.* Corolla, four-cleft; drupe, eight-cornered, one-ſeeded.

Gonatocarpus micranthus, a ſingle ſpecies. Root fibrous, annual; ſtem one or more, four-cornered, decumbent at the baſe, branched at the top, ſcarcely a ſpan in height; leaves oppoſite, on very ſhort petioles, ovate, acute, ſerrate, ſmooth, ſpreading, a line in length; flowers on the branches in ſpikes, remote, moſtly on one ſide, drooping, minute. Found by Thunberg abundantly about Nagaſaki, flowering in Auguſt.

GONA'VE (La), an iſland in the Weſt Indies, thirty miles long, and five wide, near the weſt coaſt of St. Domingo. Lat. 18. 51. N. lon. 73. 4. W. Greenwich.

GON'CELIN, a town of France, in the department of the Iſere, and chief place of a canton, in the diſtrict of Grenoble: four leagues and a half north-north-weſt of Grenoble.

GON'DAR, a town of Africa, and capital of Abyſſinia, ſituated on a hill of conſiderable height, ſurrounded on every ſide by a deep valley. It conſiſts of ten thouſand families in time of peace; the houſes are chiefly of clay, the roofs thatched in the form of cones, which is always the conſtruction within the tropical rains. On the weſt end of the town is the king's houſe, formerly a ſtructure of conſiderable conſequence; it was a ſquare building, flanked with ſquare towers; it was formerly four ſtories high, and, from the top of it, had a magnificent view of all the country ſouthward to the lake Tzama. Great part of this houſe is now in ruins, having been burnt at different times; but there is ſtill ample lodging in the two loweſt floors of it; the audience chamber being above one hundred and twenty feet long. The palace, and all its contiguous buildings, are ſurrounded by a ſubſtantial ſtone wall, thirty feet high, with battlements upon the outer wall, and a parapet roof between the outer and inner, by which you can go along the whole and look into the ſtreet. There appears to have never been any embraſures for cannon, and the four ſides of this wall are above an Engliſh mile and a half in length.

GON'DEBAUD, or GUNDOBALD, third king of the Burgundians, deſerves to be recorded as a legiſlator. He was one of the ſons either of Gondicaire or of his ſon Gundiac, and by the maſſacre of his brother Chilperic, after a civil war between them, obtained the crown of Burgundy in 491. In the firſt year of his reign, under pretence of aſſiſting Odoacer againſt Theodoric king of the Oſtrogoths, he entered Italy, and carrying fire and ſword through Æmilia and Liguria, as narrated in the article FRANCE; which ſee. He reigned with great clemency over the Burgundian nation, which

he rendered flouriſhing by the arts of civiliſation, and by a regular ſyſtem of laws. Theſe were in general founded upon the principles of equity, and diſplay conſiderable ſagacity in preventing all cauſes of diſpute; yet they enjoin the barbariſm of judicial combats, which the legiſlator juſtified as an inference from the admitted doctrine of the interference of a particular providence in human affairs. The Burgundian code, called *La Loi Gombette*, has been publiſhed in ſeveral collections of ancient laws. Gondebaud died in 516; and two of his letters, upon theological topics, to Avitus biſhop of Vienne, are extant.

GON'DELAY, *ſ.* Uſed by Spenſer for *Gondola*, which ſee.

GON'DET, a town of France, in the department of the Upper Loire, and chief place of a canton, in the diſtrict of Le Puy-en-Velay: ten miles ſouth of Le Puy.

GON'DI (John Francis Paul), cardinal de Retz, ſon of Philip Emanuel de Gondi, count de Joigny, born in 1613. From a doctor of the Sorbonne, he became coadjutor to his uncle John Francis de Gondi, whom he ſucceeded in 1654 as archbiſhop of Paris; and was finally made a cardinal. At the age of 23, he was at the head of a conſpiracy againſt the life of cardinal Richelieu; he precipitated the parliament into cabals, and the people into ſedition; and is ſaid to have been the firſt biſhop who carried on a civil war without the maſk of religion. However, his intrigues and ſchemes turned out ſo ill, that he was obliged to quit France; and he lived the life of an exile for ſix years, till the death of his enemy cardinal Mazarin, when he returned on certain ſtipulated conditions. After aſſiſting in the conclave at Rome, he retired from the world, and ended his life like a philoſopher in 1679; which made Voltaire ſay, that in his youth he lived like Catiline, and in his old age like Atticus. He wrote his Memoirs in his retirement; the beſt edition of which is that of Amſterdam, 4 vols. 12mo. 1719.

GON'DOLA, *ſ.* [Italian; *gondole*, Fr. Du Cange derives it from κουνέλλας, a bark; Lancelot, from γονδυ, a term in Athenæus for a ſort of vaſe.] A boat, very long and narrow, chiefly uſed at Venice to row on the canals. The middle-ſized gondolas are about thirty feet long and four broad: they always terminate at each end in a very ſharp point, which is raiſed perpendicularly to the full height of a man. The addreſs of the Venetians, in paſſing along their narrow canals, is very remarkable: there are uſually two men to each gondola, and they row by puſhing before them. *Gondola* is alſo the name of a paſſage-boat of ſix or eight oars, uſed in other parts of the coaſt of Italy.

GONDOLI'ER, *ſ.* A boatman; one that rows a gondola:

Your fair daughter,
Tranſported with no worſe nor better guard,
But with a knave of hire, a *gondolier*,
To the groſs claſps of a laſcivious moor. *Shakeſpeare.*

GON'DON, a town of France, in the department of the Upper Pyrenees: ſeven miles ſouth-eaſt of Tarbes.

GON'DORF, a town of Germany, in the circle of the Lower Rhine, and archbiſhopric of Treves: four miles eaſt-north-eaſt of Munſter Mainfeld.

GON'DRAIN, a town of France, in the department of the Gers, and chief place of a canton, in the diſtrict of Condom: two leagues and a half ſouth-weſt of Condom, and ſix and three-quarters north-weſt of Auch. Lat. 44. 53. N. lon. 17. 53. E. Ferro.

GON'DRECOURT, a town of France, and ſeat of tribunal, in the department of the Meuſe: ſeven leagues ſouth-ſouth-eaſt of Bar-le-Duc, and three ſouth-weſt of Vaucouleurs.

GON'DREVILLE, a town of France, in the department of the Meure, on the Moſelle: one league north-eaſt of Toul.

GONDWA'NAH, or KONDUANNAH, mountains of Hindooſtan, ſituated in the ſouth-eaſt part of the country of Malwa, extending from Huſſingabad to Mundellah, about one hundred and ſeventy miles in length. Lat. 22. 40. to 23. N. lon. 78. to 81. E. Greenwich.

To GONE, *v. n.* [the old word for] To go:

Down from the hill deſcended moſt and leaſt,
And to the Chriſtian duke by heaps they *gone*. *Fairfax.*

GONE, *part. preter.* [from *go*. See *To* Go.] Advanced; forward in progreſs.—I have known ſheep cured of the rot, when they have not been far *gone* with it, only by being put into broomlands. *Mortimer.*—Ruined; undone.—He muſt know 'tis none of your daughter, nor my ſiſter; we are *gone* elſe. *Shakeſpeare.*—The particular accidents *gone* by. *Shakeſpeare.*—Loſt; departed. When her maſters ſaw that the hope of their gains was *gone*, they caught Paul and Silas. *Acts.* xvi. 19.—Speech is confined to the living, and imparted to only thoſe that are in preſence, and is tranſient and *gone*. *Holder.*—Dead; departed from life.—I mourn Adonis dead and *gone*. *Oldham.*

GONET' (John-Baptiſt), a French eccleſiaſtic, born at Beziers in 1616. In 1640 he was admitted to the degree of doctor by the univerſity of Bourdeaux. From that time he filled the chair of profeſſor of theology in that univerſity until 1671, when he was appointed provincial of his order. He died at his native place in 1681, aged ſixty-five. He was the author of a ſyſtem of divinity, entitled *Clypæus Theologiæ Thomiſticæ, contra novos ejus Impugnatores*, firſt publiſhed at Bourdeaux in 1666, in 18 vols. 12mo. and afterwards at Paris in 1669, in 5 vols. folio. M. Gonet was alſo the author of a *Manuale Thomiſtarum, ſeu brevis Theologiæ Curſus*, which has paſſed through different editions, the beſt of which was publiſhed at Lyons in 1681, in folio; and *Diſſertatio Theologica de Probabilitate*, 1664, 12mo.

GON'FALON, or GON'FANON, *ſ.* [*gonfanon*, Fr. Iſlandic, from *gunn*, a battle, and *fani*, a flag.] An enſign; a ſtandard:

Ten thouſand thouſand enſigns high advanc'd,
Standards and *gonfalons*, 'twixt van and rear,
Stream in the air. *Milton.*

GONFALONI'ER, *ſ.* The pope's ſtandard-bearer.

GON'FEDE, a town of Africa, near the river Grande.

GON'GA, a town of European Turkey, in Romania, ſituated near the Sea of Marmora: thirty-ſix miles north-eaſt of Gallipoli.

GON'GA, or BAIN GONGA, a river of Hindooſtan, which riſes near the circar of Gurry-Mundella, and joins the Godavery, thirty-five miles north of Rajamundry.

GON'GORA (Louis), a celebrated Spaniſh poet, born of a noble family at Cordova in 1562. He ſtudied at Salamanca, and, being brought up to the church, was made chaplain to the king, and a prebendary of the cathedral of Cordova, where he died in 1627. Gongora obtained high reputation by his poems, of which a volume in quarto was publiſhed under the title of *Obras de Dom. Louis de Gongora-y-Argore*. They conſiſt of a variety of compoſitions, chiefly of the ſhorter kind, eſpecially lyrical, in which ſtyle he ſo much excelled, as to be termed by his countrymen "the prince of lyric poets." He is applauded for having enriched the language by the introduction of a number of Latin words, happily employed.

GO'NI, a town of China, in the province of Se-tchuen; fifty-ſeven miles weſt of Oumong.

GO'NIA, a town of Aſiatic Turkey, in the province of Natolia: ſixteen miles weſt of Aphiom Karahiſſar.

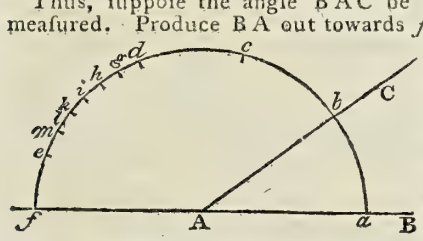
GO'NINS, a town of Poland, in the palatinate of Bielſk; forty-eight miles north-weſt of Bielſk.

GONIOMET'RICAL *Lines*, are lines uſed for meaſuring or determining the quantity of angles: ſuch as ſines, tangents, ſecants, verſed ſines, &c.

GONIO'METRY,

GONIO'METRY, a method of meaſuring angles, ſo named by M. de Lagny, who publiſhed ſeveral papers, on this method, in the Memoirs of the Royal Academy for 1724, 1725, 1729. The method conſiſts in meaſuring the angles with a pair of compaſſes, and that without any ſcale whatever, except an undivided ſemicircle. Thus, having any angle drawn upon paper, to be meaſured; produce one of the ſides of the angle backwards behind the angular point; then with a pair of fine compaſſes deſcribe a pretty large ſemicircle from the angular point as a centre, cutting the ſides of the propoſed angle, which will intercept a part of the ſemicircle. Take then this intercepted part very exactly between the points of the compaſſes, and turn them ſucceſſively over upon the arc of the ſemicircle, to find how often it is contained in it, after which there is commonly ſome remainder: then take this remainder in the compaſſes, and in like manner find how often it is contained in the laſt of the integral parts of the firſt arc, with again ſome remainder: find in like manner how often this laſt remainder is contained in the former; and ſo on continually, till the remainder become too ſmall to be taken and applied as a meaſure. By this means M. de Lagny obtained a ſeries of quotients, or fractional parts, one of another, which being properly reduced into one fraction, give the ratio of the firſt arc to the ſemicircle, or of the propoſed angle to two right angles, or 180 degrees, and conſequently that angle itſelf in degrees, and minutes.

Thus, ſuppoſe the angle BAC be propoſed to be meaſured. Produce BA out towards *f*; and from the centre A deſcribe the ſemicircle *abcf*, in which *ab* is the meaſure of the propoſed angle. Take *ab* in the compaſſes, and apply it 4 times on the ſemicircle, as at *b*, *c*, *d*, and *e*; then take the remainder *fe*, and apply it back upon *ed*, which is but once, viz. at *g*; again take the remainder *gd*, and apply it 5 times on *ge*, as at *h*, *i*, *k*, *l*, and *m*; laſtly, take the remainder *me*, and it is contained juſt 2 times in *ml*. Hence the ſeries of quotients is 4, 1, 5, 2; conſequently the 4th or laſt arc *em* is $\frac{1}{2}$ the third *ml* or *gd*, and therefore the 3d arc *gd* is $\frac{1}{5\frac{1}{2}}$ or $\frac{2}{11}$ of the 2d arc *ef*; and therefore again this 2d arc *ef* is $\frac{1}{1-\frac{2}{11}}$ or $\frac{11}{13}$ of the 1ſt arc *ab*; and conſequently this 1ſt arc *ab* is $\frac{1}{4\frac{11}{13}}$ or $\frac{13}{63}$ of the whole ſemicircle *af*. But $\frac{13}{63}$ of 180° are $37\frac{1}{2}$ degrees, or 37° 8′ 34″ $\frac{2}{7}$, which therefore is the meaſure of the angle ſought. See GEOMETRY of the COMPASS, p. 443 of this volume.



GONI'UM, *ſ.* [γονη, Gr. ſo named from its reſemblance to ſemen or ſeed.] In helmintology, a genus of worms belonging to the order of infuſoria; the characters of which are: body very ſimple, flat, angular and inviſible to the naked eye. There are five ſpecies, viz.

1. Gonium pectorale: quadrangular, pellucid, with ſixteen ſphærical molecules, nearly equal in ſize, of a greeniſh colour, and ſet in a quadrangular membrane like jewels, reflecting light on both ſides. Its animality is evinced by its ſpontaneous motion, advancing alternately towards the right and left; theſe little bodies ſeem oval when in motion, and round when at reſt. It is found in pure water.—This ſpecies is correctly repreſented in the engraving at fig. 5, as it appears under a powerful magnifier.

2. Gonium pulvinatum: body opake, with four cylindrical protuberances. This appears like a little quadrangular membrane, plain on both ſides; but with a large magnifier it looks like a bolſter, formed of three or four cylindric pillows, flattened or ſunk here and there. Thus it appeared to Müller on his firſt examination; ſome days after all the ſides were plain, without any convexity, and divided into little ſquare ſpaces by lines croſſing each other. It is found upon dunghills.

3. Gonium polyſphæricum: body orbicular, pellucid, with innumerable ſphærical molecules connected in a membrane. It is found in ſtagnant water, and is of a greeniſh-yellow colour.

4. Gonium rectangulum: body rectangular, the hind-part a little arched. It forms a right angle at the baſe; and the larger veſicle is tranſparent, the reſt green.

5. Gonium truncatum: body compoſed of obtuſe angles, the hind-part arched. This is larger than the preceding; but its motion appears more languid; the fore-part conſiſts of a ſtraight line, with which the ſides form obtuſe angles, the ends of the ſides being united by a curved line; the internal molecules are of a dark green, with two little bright veſicles in the middle. It is found in pure water.

GON'KEER, a town of Chineſe Tartary. Lat. 44. 50. N. lon. 135. 37. E. Ferro.

GONKO'FEN, or GANKOFEN, a town of Germany, in the circle of Lower Bavaria: ten miles ſouth of Dinglefingen, and fourteen eaſt of Landſhut.

GON'NESSE, a town of France, and principal place of a diſtrict in the department of the Seine and Oiſe: three leagues north of Paris.

GONNEVIL'LE, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Montivilliers: two leagues north of Montivilliers.

GON'NI, or GONOCOND'YLOS, in ancient geography, a town of Theſſaly at the entrance into Tempe. *Livy.*

GON'NORD, or GONNORT, a town of France, in the department of the Mayne and Loire, and chief place of a canton, in the diſtrict of Vihiers: one league and a half north-north-weſt of Vihiers, and five ſouth of Angers.

GO'NON-BESAR, a mountain on the eaſtern ſide of the iſland of Java; celebrated for the quantity of pepper gathered from the trees which grow on it.

GONOES'SA, a town of Troas. *Seneca.*

GONORRHŒ'A, *ſ.* [γονυῤῥοια, from γονη, the ſeed, and ῥεω to flow.] An involuntary diſcharge of the ſeminal fluid. This word is improperly applied to the diſcharge of a whitiſh fluid from the urethra in conſequence of a venereal taint.

GONS, a town of Hungary: twenty-two miles ſouth-ſouth-weſt of Zatmar.

GON'TANT, or GONTAUT, a town of France, in the department of the Lot and Garonne, and chief place of a canton, in the diſtrict of Tonneins: one league and a quarter north of Tonneins, and two eaſt-ſouth-eaſt of Marmande.

GONUS'SA, in ancient geography, a town of Sicyon. *Pauſanias.*

GONYAL'GIA, *ſ.* [from γονυ, the knee, and αλγος, Gr. pain.] The gout in the knee.

GONZA'GA, a town of Italy, in the duchy of Mantua: ſixteen miles ſouth of Mantua.

GONZA'GA (Lucretia), an illuſtrious lady of the 16th century, celebrated for her wit, learning, and delicate ſtyle of writing. Hortenſio Lando wrote a beautiful panegyric upon her, and dedicated to her his dialogue of moderating the paſſions. Her beautiful letters have been collected and publiſhed with the greateſt care. Her huſband John Paul Manfrone, was engaged in a conſpiracy againſt the duke of Ferrara; but though condemned by the judges, he was not put to death. She did all in her power to obtain his enlargement; but he died in priſon. She never would liſten afterwards to any propoſals of marriage, though ſeveral were made to her. All that came from her pen was much eſteemed.

GONZA'GA

GONZA'GA (Scipio), cardinal, born in 1542. He was carefully inſtructed in letters, and ſent to ſtudy at Padua, where he diſtinguiſhed himſelf in claſſical literature. In that city he inſtituted the academy Degli Eterei, of which he was the head and patron; and ſome of his verſes appear in their firſt publication in 1567. He afterwards turned his ſtudies to theology and philoſophy, in which he acquired a great name. The learned Muretus in 1571 dedicated to him the firſt volume of his Orations with a high panegyric. Guarini ſubmitted his *Paſtor Fido* to his criticiſm, and he held an intimate correſpondence with Taſſo. On account of ſome difference with the duke of Mantua, he was arreſted at Rome by order of pope Gregory XIII. but he was liberated by Sixtus V. who created him cardinal in 1587. He died at Sanmartino in 1593. He left in manuſcript, commentaries of his own life, written in elegant Latin.

GONZA'GA (Veſpaſian), duke of Sabbioneta, born in 1531, obtained great reputation as a commander in the ſervice of Charles V. and Philip II. He is, however, chiefly worthy of commemoration as a ſplendid promoter of the arts and ſciences. He built from the ground the little city of Sabbioneta, which, for the breadth and regularity of its ſtreets, the architecture of the private houſes, the beauty of the churches, the elegance of the public places, and the ſtatues and pictures which adorn the whole, excited univerſal admiration. He alſo founded in it a public ſchool for the Latin and Greek languages, to which he invited as a profeſſor Mario Nizzoli, one of the moſt learned men of the age. His palace was always full of men of learning, of whom he was the liberal patron. He employed the celebrated Scammozi in the erection of a very fine theatre for the performance of dramatic pieces; and he is recorded as being himſelf an elegant Italian poet. He was likewiſe a great collector of books. Taſſo mentions him with high commendation. He died in 1591.

GONZA'LEZ (Thyrſus), a Spaniſh Jeſuit, whoſe merits raiſed him to the poſt of general of his order, died at Rome in 1705. Among other pieces, he was the author of an acute treatiſe On the Doctrine of Probability, 1694, folio; in which he ably refuted the opinions on that ſubject maintained by the greater part of the caſuiſts belonging to his order; but he did not attempt dogmatically to impoſe his ſenſe of the doctrine on the brotherhood, declaring that he wrote merely in the character of an individual, and not as general.—He had a contemporary, named EMMANUEL GONZALEZ-TELLEZ, who was a profeſſor of law in the univerſity of Salamanca, and publiſhed A Commentary on the Decretals, 1693, in 4 vols. folio.

GONZIN'GEN, a town of Germany, in the circle of the Upper Rhine, and county of Salm: four miles north-eaſt of Creutznach.

GOOCH'LAND, a county of the American States, in Virginia, ſurrounded by Louiſa, Fluvanna, Henrico, Hanover, and Powhatan, counties. It is about forty miles long and fourteen broad, and contains, by the cenſus, nine thouſand and fifty-three inhabitants.

GOOD, *adj.* [comp. *better*, ſuperl. *beſt*; ȝoð, Sax. *goed*, Dut.] Having, either generally or for any particular end, ſuch phyſical qualities as are expected or deſired. Not bad; not ill.—God ſaw every thing that he had made, and behold it was very *good*. *Gen.* i. 31.

Ah! ne'er ſo dire a thirſt of glory boaſt,
Nor in the critic let the man be loſt!
Good nature and *good* ſenſe muſt ever join;
To err is human, to forgive, divine. *Pope.*

Proper; fit; convenient; right; not wrong.—Amongſt a man's inferiors one ſhall be ſure of reverence, and therefore it is *good* a little to be familiar. *Bacon.*—It was a *good* time to comply with the importunity of the gentlemen of Suſſex. *Clarendon.*—Conducive to happineſs.—It is not *good* that the man ſhould be alone. *Gen.* ii. 18.—We may as well pretend to obtain the *good* which we want without God's aſſiſtance, as to know what is *good* for us without his direction. *Smalridge.*—Uncorrupted; undamaged.—He bartered away plumbs, that would have rotted in a week, for nuts, that would laſt *good* for a whole year. *Locke.*—Wholeſome; ſalubrious:

A man firſt builds a country ſeat,
Then finds the walls not *good* to eat. *Prior.*

Medicinal; ſalutary.—The water of Nilus is ſweeter than other waters in taſte, and it is excellent *good* for the ſtone and hypochondriac melancholy. *Bacon.*—Pleaſant to the taſte.—Eat thou honey, becauſe it is *good*; and the honeycomb, which is ſweet. *Prov.* xxiv. 13.—Complete; full.—The proteſtant ſubjects of the abbey make up a *good* third of its people. *Addiſon on Italy.*—Uſeful; valuable.—All quality, that is *good* for any thing, is originally founded upon merit. *Collier.*—Sound; not falſe; not fallacious.—He is reſolved now to ſhew how ſlight the propoſitions were which Luther let go for *good*. *Atterbury.*—Legal; valid; rightly claimed or held.—According to military cuſtom, the place was *good*. *Wotton.*—Confirmed; atteſted; valid:

Ha! am I ſure ſhe's wrong'd? Perhaps 'tis malice!
Slave, make it clear, make *good* your accuſation. *Smith.*

With *as* preceding. It has a kind of negative or inverted ſenſe; *as good as*; no better than.—Therefore ſprang there even of one, and him *as good as* dead, ſo many as the ſtars of the ſky in multitude. *Heb.* xi.—With *as* preceding. No worſe.—The maſter will be *as good as* his word, for his own buſineſs. *L'Eſtrange.*—Well qualified; not deficient.—If they had held their royalties by that title, either there muſt have been but one ſovereign over them all, or elſe every father of a family had been *as good* a prince, and had *as good* a claim to royalty as theſe. *Locke.*—Skilful; ready; dexterous.—Thoſe are generally *good* at flattering, who are *good* for nothing elſe. *South.*

I make my way where-e'er I ſee my foe;
But you, my lord, are *good* at a retreat. *Dryden.*

Happy; proſperous.—Behold how *good* and how pleaſant it is for brethren to dwell together in unity. *Pſ.* cxxxiii. 1.

Many *good* morrows to my noble lord!
—*Good* morrow, Cateſby; you are early ſtirring. *Shakeſp.*

Honourable:

Silence, the knave's repute, the whore's *good* name,
The only honour of the wiſhing dame. *Pope.*

Cheerful; gay. Joined with any words expreſſing temper of mind.—They may be of *good* comfort, and ever go cheerfully about their own affairs. 2 *Mac.* xi. 26.—Conſiderable; not ſmall, though not very great.—A *good* while ago God made choice that the Gentiles by my mouth ſhould hear the word. *Acts*, xv. 7.—The plant doth prey upon the graſs a *good* way about, by drawing the juice of the earth from it. *Bacon.*—Real; ſerious; not feigned.—Love not in *good* earneſt, nor no farther in ſport neither, than with ſafety of a pure bluſh thou may'ſt in honour come off again. *Shakeſpeare.*—Rich; of credit; able to fulfil engagements.—Antonio is a *good* man: my meaning, in ſaying that he is a *good* man, is to have you underſtand me that he is ſufficient. *Shakeſpeare.*—Having moral qualities, ſuch as are wiſhed; virtuous; pious; religious; applied both to perſons and actions. Not bad; not evil.—For a *good* man ſome would even dare to die. *Rom.* v. 7.—The woman hath wrought a *good* work upon me. *Matt.*

All man's works on me,
Good or not *good*, ingraft; my merit, theſe
Shall perfect, and for theſe my death ſhall pay. *Milton.*

No farther intercourſe with Heav'n had he,
But left *good* works to men of low degree. *Harte.*

Kind; ſoft; benevolent. Favourable; loving.—But the men were very *good* unto us, and we were not hurt. 1 *Sam.* xxv. 15.—Truly God is *good* to Iſrael, even to ſuch as are of a clean heart. *Pſ.* lxxiii. 1.—You have *good* remembrance of us always, deſiring greatly to ſee us, as we alſo to ſee you. 1 *Theſſ.* iii. 6.—Companionable; ſociable; merry. Often uſed ironically.—Though he did not draw the *good* fellows to him by drinking, yet he eat well. *Clarendon.*—It is ſometimes uſed as an epithet of ſlight contempt, implying a kind of negative virtue or bare freedom from ill.—She had left the *good* man at home, and brought away her gallant. *Addiſon.*—Hearty; earneſt; not dubious.—The *good* will of the nation to the preſent war has been ſince but too much experienced by the ſucceſſes that have attended it. *Temple.*

Good will, ſhe ſaid, my want of ſtrength ſupplies;
And diligence ſhall give what age denies. *Dryden.*

In GOOD *time.* Not too faſt.—In *good time*, replies another: you have heard them diſpute againſt a vacuum in the ſchools. *Collier.*

In GOOD *ſooth.* Really; ſeriouſly:

What! muſt I hold a candle to my ſhame?
They in themſelves, *good ſooth*, are too too light. *Shakeſp.*

To make GOOD. To keep; to maintain; not to give up; not to abandon.—He forced them to retire in ſpite of their dragoons, which were placed there to *make good* their retreat. *Clarendon.*

He without fear a dangerous war purſues;
As honour made him firſt the danger chuſe,
So ſtill he *makes* it *good* on virtue's ſcore. *Dryden.*

To confirm; to eſtabliſh.—Theſe propoſitions I ſhall endeavour to *make good.* *Smalridge.*

I farther will maintain
Upon this bad life to *make* all this *good.* *Shakeſpeare.*

To perform:

While ſhe ſo far extends her grace,
She *makes* but *good* the promiſe of her face. *Waller.*

To ſupply.—Every diſtinct being has ſomewhat peculiar to itſelf, to *make good* in one circumſtance what it wants in another. *L'Eſtrange.*

GOOD, *ſ.* That which phyſically contributes to happineſs; benefit; advantage; the contrary to evil or miſery.—The leſſening or eſcaping of evil is to be reckoned under the notion of *good:* the leſſening or loſs of *good* is to be reckoned under the notion of evil. *Wilkins.*—*Good* is what is apt to cauſe or increaſe pleaſure, or diminiſh pain in us; or elſe to procure or preſerve us in the poſſeſſion of any other *good*, or abſence of any evil. *Locke.*—A thirſt after truth, and a deſire of *good*, are principles which ſtill act with a great and univerſal force. *Rogers.*

Thus may our life, exempt from public haunt,
Find tongues in trees, books in the running rill,
Sermons in ſtones, and *good* in every thing. *Shakeſpeare.*

Proſperity; advancement:

If he had employ'd
Thoſe excellent gifts of fortune and of nature
Unto the *good*, not ruin, of the ſtate. *Ben Jonſon.*

Earneſt; not jeſt.—The good woman never died after this, 'till ſhe came to die for *good* and all. *L'Eſtrange.*—Moral qualities, ſuch as are deſireable; virtue; righteouſneſs; piety; the contrary to wickedneſs.—Depart from evil, and do *good.* *Pſ.* xxxiv. 14.—Not only carnal good from evil does not juſtify; but no *good*, no not a purpoſed *good*, can make evil good. *Holyday.*

Nor holds this earth a more deſerving knight,
For virtue, valour, and for noble blood,
Truth, honour, all that is compriz'd in *good.* *Dryden.*

GOOD placed after *bad*, with *as*, ſeems a ſubſtantive; but the expreſſion is vicious; and *good* is rather an adjective elliptically uſed, or it may be conſidered as adverbial. See GOOD, *adv.*—The pilot muſt intend ſome port before he ſteers his courſe, or he had *as good* leave his veſſel to the direction of the winds, and the government of the waves. *South.*—Without good-nature and gratitude, men had *as good* live in a wilderneſs as in a ſociety. *L'Eſtrange.*—Proper behaviour:

In word and deede that ſhew'd great modeſtee,
And knew his *good* to all of each degree. *Spenſer.*

GOOD, *adv.* Well; not ill; not amiſs.

As GOOD. No worſe.—Says the cuckow to the hawk, Had you not *as good* have been eating worms now as pigeons? *L'Eſtrange.*

GOOD, *interj.* Well! right! It is ſometimes alſo uſed ironically.

"GOOD wine needs no buſh."

Morally, this proverb intimates, that virtue is valuable on its own innate account; and that internal goodneſs ſtands in need of no external ornaments to recommend it. It ſeems to be of Latin original: as, *Vino vendibili hedera ſuſpenſa nihil eſt opus*; and accordingly the French ſay, *A bon vin il ne faut point d'enſeigne.*—The origin of the proverb, in its literal ſenſe, is explained thus: In early times, before inns were eſtabliſhed on public roads, thoſe who had wine to ſell, by way of ſign hung out a buſh; and hence it came to be a ſaying, "that good wine would find cuſtomers without a buſh."

GOOD ABEAR'ING, *ſ.* [*bonus geſtus*, Lat.] In law, ſignifies an exact carriage or behaviour of a ſubject towards the king and the people; whereunto ſome perſons, upon their miſbehaviour, are bound; and he that is bound to this, is ſaid to be more ſtrictly bound than to the peace; becauſe where the peace is not broken, the ſurety *de bono geſtu* may be forfeited by the number of a man's company, or by their weapons. See ſtat. 34 *Edw.* III. c. 1. GOOD BEHAVIOUR, differs very little from *good abearing.* A juſtice of the peace may demand it *ex officio*, according to his diſcretion, when he ſees cauſe; or at the requeſt of any other under the king's protection: his warrant alſo is to be iſſued when he is commanded to do it by writ of ſupplicavit out of chancery, or the court of king's bench.

GOOD-BREED'ING, *ſ.* Elegance; decency; delicate behaviour.—If the critic has publiſhed nothing but rules and obſervations in criticiſm, I then conſider whether there be a propriety and elegance in his thoughts and words, clearneſs and delicacy in his remarks, wit and *good-breeding* in his raillery. *Addiſon.*

GOOD-CHE'AP, *adj.* Reaſonably cheap:

I wonder
That we ſhould wiſh more rivers in the city,
When they ſell water ſo *good-cheap.* *Webſter's White Devil.*

GOOD-CONDI'TIONED, *adj.* Without ill qualities or ſymptoms. Uſed both of things and perſons, but not elegantly.—No ſurgeon dilates an abſceſs of any kind by injections, when the pus is *good-conditioned.* *Sharp.*

GOOD'-FELLOW, *ſ.* A jolly companion.—Shall the king of gods turn the king of *good-fellows?* *B. Jonſon.*

GOOD-FEL'LOWSHIP, *ſ.* Jolly ſociety.—The firſt and moſt owned is that which they call *good-fellowſhip:* one man drinks to keep another company at it. *Whole Duty of Man.*

GOOD FOR'TUNE, or PORA, an iſland in the Eaſtern Sea, near the weſt coaſt of Sumatra, about twelve leagues long, and two broad. Lat. 1. 5. S. lon. 98. 30. E. Greenwich.

GOOD FRI'DAY, a ſolemn faſt of the Chriſtian church, in memory of the ſufferings and death of Jeſus

Chriſt. It is obſerved on the Friday in *holy* or *paſſion week*; and it is called, by way of eminence, *good*, becauſe of the bleſſed effects of our Saviour's ſufferings, which were a propitiatory or expiating ſacrifice for the ſins of the world. The commemoration of our Saviour's ſufferings has been kept from the very firſt ages of Chriſtianity, and was always obſerved as a day of the ſtricteſt faſting and humiliation. Among the Saxons it was called *Long-Friday*; on account of the long faſtings and prayers then uſed.

GOOD HEN'RY, *ſ.* in botany. See CHENOPODIUM.

GOOD HOPE, a valuable ſettlement or colony planted by the Dutch, on that peninſula or neck of land, which forms the moſt ſouthern part of Africa, and which, according to Mr. Barrow's ſtatiſtical account publiſhed in 1804, contains upwards of 120,000 ſquare miles; and yet the population of the whole colony is ſaid to amount to no more than 60,000 perſons! a moſt ſtriking inſtance of bad policy and internal miſmanagement; ſince, though the land is in many places barren and arid, yet food is in great abundance, and many parts of the interior highly capable of improvement for objects of commerce. The whole extent of this ſettlement has been uſually confounded under the general name of the *Cape of Good Hope*; but the Cape itſelf is only the lofty promontory or elevated point of land, uſually called the moſt ſoutherly extremity of Africa; though it is not truly ſo; for there is a point of land to the eaſtward of it, called the *Needle Cape*, which certainly projects ſtill more to the ſouthward. Cape Town is the capital of this ſettlement, ſecured on a bold ſhore about thirty miles within the Cape, at the entrance of a rich vale.

The moſt remarkable eminences which ſtrike the eye on a near approach to theſe ſhores, are, firſt, the Table mountain, ſo called becauſe it terminates at the top in a flat horizontal ſurface, like a table, from which the face of the rock deſcends almoſt perpendicularly. Second, the Lion mountain; which is divided into the lion's head, and lion's rump; for when a view is taken of the whole, it very much reſembles that animal with the head erect. Third, the Devil mountain, or devil's head, ſeparated by a ſmall chaſm, to the eaſtward of the Table mountain; and thus named, becauſe the violent and ſudden guſts of wind which occaſionally pervade this ſettlement, were ſuppoſed to iſſue from it, and which uniformly ſet in from the eaſtward. At a ſmall diſtance from the declivity or foot of the Table and Lion mountains Cape Town is ſituated, extending in a line from the one towards the other; its ſcite occupying the ſouth-eaſt angle of Table bay.

The promontory or cape was firſt diſcovered in 1487, by Bartholomew Diaz, a Portugueſe; who, though he did not venture to land, was an officer of diſtinguiſhed ſagacity and fortitude; and he called it, on account of the violence of the tempeſts which he encountered in thoſe ſeas, *Cabo Tormentoſa*, the Stormy Cape; but John II. king of Portugal, conceiving that Diaz had at laſt found out the long-deſired route to India, gave it a name of better omen, viz. "The Cape of Good Hope." In 1497, Emanuel king of Portugal, inheriting the enterpriſing genius of his predeceſſor, and perſiſting in the grand ſcheme of opening a paſſage to the Eaſt Indies by the Cape, equipped three veſſels for this important voyage, and gave the command of it to the celebrated Vaſco de Gama. Accordingly Gama ſet ſail from Liſbon on the 9th of July, and, after ſtruggling for four months with contrary winds, reached the Cape on the 20th of November. During an interval of calm weather he doubled the promontory, which had ſo long been the boundary of the European navigation; and, after touching at ſeveral parts along the eaſtern African coaſt, he terminated his voyage at Calicut on the coaſt of Malabar. De Gama, however, made no attempt to form a ſettlement at the Cape. Next to him was the Portugueſe admiral Rio d'Infante, who, in his voyage to India in 1498, went aſhore at ſome diſtance from the Cape; and, on his return, ſtrongly recommended to his government the eſtabliſhment of a colony on the ſouthern continent of Africa; and he fixed upon a ſpot for that purpoſe, to which was given his own name; but it is now called the "Great Fiſh River." Some other attempts, by different Portugueſe navigators, were made to colonize the Cape, but they all proved abortive.

After theſe events, the Engliſh and Dutch, equally adroit in the purſuit of Aſiatic luxuries, frequently viſited the bays of the Cape; and, in their voyages to and from the Eaſt Indies, called here as at a half-way-houſe, to take in water and proviſions, and to land and air their ſick and infirm, as the caſe might happen to require; and to whom the native Hottentots endeavoured to adminiſter every comfort and aſſiſtance that was in their power to give. The Engliſh, in their outward-bound voyages, had a cuſtom of burying their diſpatches for the directors under ſome large ſtone laid on a particular ſpot; and the Dutch uſed in like manner to bury a regiſter of the ſtate of their veſſels and cargoes outward-bound, which the next ſhips in coming home took up and carried to England and Holland for the information of the directors. In this manner the Engliſh, the Dutch, and the Portugueſe, continued, for more than a century, to refreſh at the Cape, without any deſign on the part of the two former of appropriating the ſoil, until the year 1620, when the commanders of two fleets of Engliſh ſhips, bound for Surat and Bantam, took a formal poſſeſſion of the ſoil, for, and in the name of, king James of Great-Britain, becauſe they diſcovered that the Dutch intended to eſtabliſh a colony there in the following year. It was not, however, until more than thirty years had expired after this event, that any ſettlement was really attempted to be made at the Cape. But at length, John Van Riebeck, who had previouſly made this voyage, and had conciliated the friendſhip of ſome of the natives, was ſent out with four ſhips, and a numerous colony, by the Dutch Eaſt-India company; and on their arrival in 1653, they laid the foundation of Cape Town, and took every prudent meaſure to fortify themſelves againſt any haſty or unforeſeen attack from the interior country. Like an able politician, Riebeck inſtantly employed every method to win upon the unſuſpecting natives, and to bind them ſecurely to his intereſt. But this proved a fatal epoch to the independence of the Hottentots. Beguiled by brandy and tobacco, the ſpecious deluder covered with honey the edge of the poiſoned bowl, and thus gained over to all his views theſe harmleſs ſavages, till then the unreſtrained maſters of all this part of Africa; but who did not perceive how many of their rights, and how much authority and happineſs, this guilty profanation would deprive them of. Indolent by nature, and little addicted to agriculture, they were not uneaſy that ſtrangers ſhould ſeize on a ſmall corner of their land, which was moſtly uninhabited. They thought that whether a little farther, or a little nearer, it was of no importance where their flocks, the only riches worthy of engaging their attention, ſought for their food, provided they could find it. The avaricious policy of the Dutch had a view of great hopes from ſo peaceful a beginning; and as it knew how to embrace the advantages offered it by fortune, ſo it did not fail completely to realize them. From that moment theſe unhappy ſavages bade adieu to that liberty which mankind inherit from nature; while the colony, inſenſibly increaſing, and acquiring more ſtrength, that formidable power, which now dictated laws to all this part of Africa, and removed to a great diſtance every thing that attempted to oppoſe its eager ambition, was ſeen to riſe on foundations that could no longer be ſhaken. The fame of its proſperity was ſoon ſpread, and drew thither every day a number of new ſettlers. It may be eaſily judged, that, according to the uſual practice, founded upon a logic which deſtroys the

the laws of property, ſo ſacred and ſo reſpectable, the will of the ſtronger party was a ſufficient title for it to extend its poſſeſſions. The Dutch ſeized indiſcriminately, at different times, and even without having occaſion for them, on all the lands which individuals, favoured by government, thought proper, or found convenient, to claim for themſelves. The Hottentots, thus confined, preſſed, and haraſſed on all ſides, divided themſelves, and purſued plans entirely oppoſite. Thoſe who were ſtill intereſted in the preſervation of their flocks, penetrated among the mountains towards the north and north-eaſt; whilſt others, and by far the greateſt number, for the ſake of brandy and tobacco, at firſt freely adminiſtered to them, became the ſlaves of their new maſters.

It does not appear that theſe ſelf-intereſted and wily people, at any period, have turned this acquiſition to any great account; at leaſt not to ſuch as its natural advantages and internal reſources might eaſily afford. Ever jealous of the commerce of other nations, the Dutch ſuffered no trade to be carried on with this ſettlement but what paſſed through the hands of their own ſervants; and theſe offered no encouragement to induſtry or exertion amongſt the farmers and planters in the interior; ſo that one general ſyſtem of ſelfiſhneſs, of indolence, and ſupineneſs, pervaded the whole colony. Such was its condition, when the menacing ſtrides of the French republican government, and their ſeizure of Holland, rendered it expedient that the Cape ſhould fall into the hands of the Engliſh. For this purpoſe an armament was diſpatched under admiral ſir G. Elphinſtone, and major-generals Clarke and Craig, who took poſſeſſion of the ſettlement by capitulation, in September 1795, after a faint reſiſtance, and very little loſs on either ſide. It continued under the Britiſh government till the peace of Amiens in 1802, when it was reſtored to the Batavian republic, ſubject to its being a free and open port for all the ſhips of the other contracting powers. But immediately after the war was re-commenced, in conſequence of the diſpute concerning the poſſeſſion of Malta, another armament was diſpatched to retake the Cape, under the command of admiral ſir Home Popham, and general ſir David Baird. This armament arrived at its deſtination the beginning of January 1806; a deſcent was made on the 6th and 7th of January; and an engagement took place on the 8th between the Britiſh troops conſiſting of 4000 men, and the troops of the garriſon conſiſting of 5000. The loſs of the Engliſh was about 200 men in killed and wounded; while that of the Batavians amounted to upwards of 700. A capitulation was ſigned on the 10th of January, by which the whole colony was again ſurrendered to the king of Great Britain.

While the ſettlement of Good Hope continued in the hands of the Dutch, very little was known of its internal polity, and ſcarcely any thing was done towards aſcertaining the geography of the country. When it came into the hands of the Engliſh, however, the interior of the country began to be explored, and a faithful and correct deſcription of it was given by our own countrymen, which we ſhall here epitomiſe.

On entering Cape Town by the way of the Caſtle, the eye is ſtruck with a number of elegant buildings. On one ſide is preſented the whole length of the gardens formerly belonging to the Dutch Eaſt-India Company; which are open to all genteel perſons. On the other are the fountains, whoſe waters deſcend from Table-Mountain by a channel, which may be ſeen from the town, and every part of the road. This water is excellent, and abundantly ſupplies the inhabitants, as well as the ſhipping in Table Bay. The number of houſes amounts to near ſix hundred, inhabited by about 5500 white people, and upwards of 10,000 blacks. In a town where ſo many perſons are continually arriving, it ſeems ſurpriſing that there ſhould have been neither coffee-houſe nor tavern; but the truth is, every private houſe is made to anſwer that purpoſe, by taking in ſtrangers to board and lodge, and who are abundantly ſupplied with the neceſſaries and comforts of life. But whatever enthuſiaſts may ſay of the Cape, it ſeems that the European fruits have much degenerated there. Nothing of the kind is very delicious except the grape. Moſt of the European vegetables ſeem indeed naturalized, and are gathered all the year, if the ſouth-eaſt wind does not dry the earth in ſuch a manner as to render it incapable of culture. This wind, when it ſets in, rages with ſuch fury, that in order to preſerve the plants, they are obliged to make a fence of hornbeam round each diviſion of the garden. They take the ſame care of the young trees; but notwithſtanding all their precaution, they never put out branches on the ſide next the wind, and always incline in an oppoſite direction, which gives them a very diſagreeable appearance; in general it is difficult to rear them; for the ravages of this wind are ſo great, that in the ſpace of twenty-four hours, the beſt cultivated gardens are ſometimes laid waſte; it rages moſt from January to April about the Cape, and much earlier up the country. This wind announces itſelf at the Cape by a ſmall white cloud, which at firſt reſts on the top of Table Mountain, on that ſide next the Devil Mountain: the air ſoon begins to freſhen; by degrees the cloud augments, enlarging in ſuch a manner that the whole ſummit appears covered; at this time they uſually ſay, "the mountain has put on its perriwig;" it now ſinks rapidly; and, hovering over the town, ſeems to threaten it with an immediate deluge; but as it approaches the foot of the mountain, it begins to diſappear, to evaporate, and reduce itſelf to nothing; the ſky continues uninterruptedly calm and ſerene; the mountain alone appears in mourning, which ſhrouds it from the radiance of the ſun. The inhabitants account for this phenomenon in the following manner: the wind at firſt blows very feebly, gently driving before it a ſort of miſt, which ſeems to detach itſelf from the ſurface of the ſea; this miſt collects, and preſſed together by means of the obſtacle it finds in its paſſage on the ſouth ſide of Table Mountain, not being able to free itſelf, heaps up by degrees, till it is elevated to the ſummit; it then exhibits to the town that ſmall white cloud which announces the wind, which in fact, has begun to blow ſome hours before on the ſides of the mountain, in the road or bay, and parts adjacent. The general duration of this kind of ſtorm is three days ſucceſſively; ſometimes it continues without intermiſſion much longer; it often likewiſe ceaſes all at once, the atmoſphere then becomes extremely ſultry; and, if during three months (the time it uſually prevails) it ſhould happen in this manner to have ſeveral ſudden intermiſſions, it is a certain prognoſtic of a great deal of ſickneſs.

Though this wind is not abſolutely dangerous to ſhipping, inſtances are not wanting of its ill effects on ſeveral; and when it becomes very impetuous, it is prudent, in order to avoid an accident, to gain the open ſea; when it does not bear the miſts, it only blows in the road, and is of no conſequence in the town, for it is only a vaſt collection of theſe fogs ruſhing violently along, that occaſions thoſe terrible hurricanes which they thus experience, and which render it almoſt impoſſible to walk in the ſtreets; and notwithſtanding the exactitude and care, with which they ſhut their doors and windows, the duſt at this time penetrates even into their cupboards and trunks. Yet whatever inconveniences may accompany it, this wind is of infinite ſervice to the town, by purging it of thoſe noxious vapours which ariſe from the filth that is naturally collected about the ſea coaſt, and from its peculiar ſituation. The moſt cruel and dangerous diſeaſe here is the ſore throat. People of the moſt robuſt conſtitutions, fall victims to this malady in three or four days. It is a ſudden and violent ſtroke which gives no warning. While the ſmall-pox is alſo another

another ſcourge to the colony. This part of the globe was a ſtranger to it till the arrival of the Europeans; while it was under the dominion of the Dutch, this diſorder once brought it to the very brink of deſtruction; when it firſt made its appearance, it ſwept off more than two thirds of the coloniſts. Its ravages were ſtill more dreadful among the Hottentots, both at the Cape and inland; it ſeemed as if this malady attacked them in preference to others, and even now they are extremely ſubject to it; inſomuch that all veſſels on their arrival in the road, are ſcrupulouſly examined, and, if they diſcover the leaſt veſtige of this diſorder, all communication with the inhabitants is rigorouſly forbidden; an embargo is laid on the cargo, of which they will not ſuffer the ſmalleſt article to be landed, and they keep day and night a very ſtrict guard over them.—It is however to be preſumed, that while the colony continues in the hands of the Engliſh, this fatal malady will be overcome by the mild influence of inoculation.

The rainy ſeaſon uſually commences about the end of April. It is more abundant and more frequent in the town than its environs; the natural reaſon of which is, that the north wind then brings a great number of clouds with it, which as they approach the town, are encountered and broken by the Table, Devil, and Lion, mountains. At this time it rains without intermiſſion at the Cape, though at two leagues diſtance all round they perhaps enjoy a clear ſky and dry weather. Sometimes the rain ſpreads over the whole ſpace between Table Bay and Falſe Bay, to the eaſt of that chain of mountains which extend themſelves to the very extremity of Africa, while the weſtern ſide is clear and without a cloud. This is a feeble image of what happens on the coaſt of Coromandel and Malabar, except that here this ſpectacle is more wonderful, becauſe, being nearer, it is more obvious, and is not unfrequently inſtanced in the following manner: ſuppoſe two friends were ſet off from the town at the ſame inſtant for Falſe Bay, he that takes the eaſt ſide of the mountain ſhould carry his *parapluie*, while he that takes the weſt would have occaſion for his *paraſol*: they arrive at the place of rendezvous, the one fatigued with heat, and panting under the burning ray; the other frozen with cold, or dropping with rain. The Table mountain, when viewed from the Bay, ſeems to join the town, though in fact it is a league diſtant from it. The ſkirts of this mountain are incumbered with a great quantity of fragments of rock, which ſeem at different times to have been broken from it; its baſe is formed of pure granite, and to its very ſummit it is compoſed of horizontal layers of granite and earth alternately. Its height, as lately computed, is four thouſand feet above the level of the ſea; and can only be climbed by the chaſm, through which the water flows, which ſupplies the town; this paſſage is extremely dangerous, particularly towards the top, where it runs very narrow, and is almoſt perpendicular. It requires two hours' labour to gain the ſummit; then we arrive at a very ſpacious plain, confuſedly ſcattered over with huge pieces of rock mingled with buſhes, which all together has the appearance of an immenſe city in ruins. Time, in conjunction with the clouds and winds, has worn off their aſperities, and given them a kind of uniformity. Here are ſome ſtones as completely rounded as thoſe pebbles which are picked up on the ſea ſhore. Towards the middle of the plain, there is a baſon of three or four hundred paces in circumference, from whence the waters flow which ſupply the town by the channel above-mentioned. Whether this water is ſupplied by ſprings, by rain, or by miſts, is a queſtion hitherto undecided; but it is a fountain which never fails. The mountain is interſected by a number of channels, which diſtribute theſe waters in every direction, and fertilize the ſcattered plantations which ſurround it. This place is the haunt of a great number of vultures, which are frequently driven from the mountains, by the ſouth-eaſt wind, with great precipitation into the very ſtreets of the town, where they are knocked down with ſticks by the inhabitants.

When people aſcend Table mountain for the firſt time, while climbing the chaſm, they are ſure to imagine that it rains, however fine the weather may be. This effect is cauſed by the water that is continually dropping from the rocks above, which in falling ſo far forms a kind of rain, which is ever more abundant in the morning than the reſt of the day; the damps and dews of the night eaſily account for this. At about a third of the way up this chaſm, the eye is preſented with a beautiful caſcade which falls from a flat piece of rock of conſiderable extent. From the town to this ſpot is a uſual walk; even the ladies can proceed thus far without difficulty, and enjoy the ſatisfaction of a moſt charming and picturesque ſcene which preſents itſelf from this place. It is impoſſible to paſs from Table to Devil mountain, though their ſummits ſeem only to have been ſeparated by earthquakes, or ſome other ſuch cauſe; but we can eaſily go from that to Lion mountain, which appears alſo to have been originally a part of the ſame; the top of the latter can only be gained by means of a rope, with which, by great difficulty, they help themſelves up. From this place, they give ſignals to ſhips at ſea.

During the prevalence of the winter months, Table Bay, which lies on the weſt ſide of the ſouth point of the Cape, is conſidered as very dangerous anchorage; a proof of which is, that in 1722, no leſs than twenty-five ſhips were daſhed to pieces on the rocks; and in 1736 ſeven more were loſt in a ſimilar manner; ſo that from June to September all the ſhips quit this bay, and run round the Cape to the eaſt ſide of the peninſula into a ſpacious harbour called Falſe Bay, which is very commodious, particularly that part of it which is called Simon's Bay. From Cape-town to this bay acroſs the iſthmus is only about nine miles; whereas by water it is more thirty leagues. The iſthmus is ſeen acroſs from Table Bay; and the Cape itſelf appears at that diſtance like a hanging iſland in the ſea, united to the continent by a ſmall neck of land. There are a number of other bays and ſafe harbours on both the eaſtern and weſtern ſides of the peninſula; but theſe are ſeldom viſited by any ſhipping except the ſmall craft which belongs to the country.

Behind Table mountain are the vineyards of Conſtantia. Round the vineyards are pleaſant groves of the ſilver-tree, beſides oak, elms, and other ſmaller plants, which completely ſhelter them from the violence of the winds. There are two diſtinct plantations of vines here, each of a different colour and quality, though both are called Conſtantia wines. The firſt farm, called Great Conſtantia, produces the red wine of that name; and at Leſſer Conſtantia, the white is made. The grape from which this wine is extracted is a ſpecies of the Muſcadel, extremely rich, ſweet, and luſcious. Its qualities proceed in ſome meaſure from the ſituation and ſoil, which are particularly favourable; but the exquiſite flavour is chiefly to be attributed to the great care taken in the rearing, dreſſing, and encouragement, of the vines, in preſerving the grapes wholly clean from ſand, and free from the ravages of the inſects which uſually attack them when full ripe. With the cleanlineſs and healthy ſtate of the grape when put into the preſs, another cauſe contributes much to the goodneſs of the wine, the not ſuffering the leaves, ſtalks, or unripe fruit, to be mixed in the preſs, as is too commonly the caſe. If the ſame attention were paid to the vines in other parts of the colony, and the ſame precautions uſed in compreſſing the fruit, Cape wine would no longer labour under its preſent diſrepute. The grapes of Conſtantia are indeed larger, and have a richer and more fleſhy pulp than thoſe of the other plantations, and conſequently give more juice in proportion. But there muſt be many parts of the ſoil equally adapted to the

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rearing of grapes as this of Conſtantia, although from negligence overlooked. The quantity of wine made at Conſtantia, on an average, is about ſeventy-five leagers a-year, each leager containing upwards of one hundred and fifty gallons of our meaſure. It is even here exceſſively dear and difficult to be procured, and muſt be often beſpoke a conſiderable time. The captains of veſſels touching at the Cape, who have wiſhed to procure a quantity of it, have been frequently obliged to contract for it a year or two before the wine was made.

Under the Dutch government the farmer divided the produce into three parts; one-third he was obliged to furniſh, at a certain price, to the Dutch Eaſt-India Company, who ſent it to the government in Holland. Another proportion was furniſhed to certain of the inhabitants of Cape Town, chiefly the people in high office and power, at the ſame rate; and the remaining quantity he was at liberty to diſpoſe of at what price he could to the paſſengers, and captains of ſhips of all nations. The Dutch inhabitants in Cape Town, at whoſe houſes and tables the paſſengers are accommodated, rarely ever produce a drop of this wine, except upon very extraordinary occaſions. The next wine in eſtimation to the Conſtantia is a kind of Muſcadel, or as they call it here Cape Madeira. The colour of this wine is a deep violet, and the appearance thick and muddy. Cape Madeira is a heavy, ſweetiſh, wine, with a ſtronger body than the generality of what is made here; for the various kinds of white wines at the Cape are moſtly thin, light, and acid: it is this wine which is generally uſed at the tables of the coloniſts. Except the red Conſtantia, no wine made at the Cape is ever ſo high-coloured as port or claret.

The whole ſpace acroſs the iſthmus from Table Bay to Falſe Bay, is interſperſed with ſummer houſes, and beautiful habitations, where they cultivate vegetables, fruits, and vines. The moſt eſteemed, and whoſe produce approaches the neareſt to the wine of Conſtantia, are thoſe of Becker and Hendrick. The Cape wine-merchants purchaſe theſe, and obtrude them upon the ignorant for real Conſtantia. Beſides their ſweet wines, other cantons of the colony, as Perle, Stellemboſch, and Drageſtein, furniſh thoſe dry wines, which are in ſo great eſtimation. Stellemboſch, Drageſtein, Franſche-Hoeek, Perle, and Dutch Hottentot, otherwiſe called Hottentot Holland, are different cantons, ſituated between the Cape and a great chain of mountains; theſe furniſh abundance of fruit and wine. The Stellemboſch diſtrict has a little town, where ſeveral inhabitants have retired from the Cape, who cultivate their own lands; they have a church and a miniſter of their own. The Franſche-Hoeek, in the heart of the mountains, between the Stellemboſch and the Drageſtein, has received its name from ſome French refugees that ſettled there about the end of the ſixteenth century, and who then firſt introduced the wine into this colony. The land here is good, and furniſhes plenty of corn and wine. The diviſion called Hottentot Holland, is ſo named becauſe this canton (originally inhabited by Hottentots) was the firſt that the Dutch violently ſeized upon. It furniſhes vegetables, fruit, and corn; the Stellemboſch bounds it on the north, a chain of mountains on the eaſt, Falſe Bay on the weſt, and the mountains where the native Hottentots ſtill retain ſome habitations, on the ſouth.

The firſt chain of mountains that are ſeen from Table Bay, are called the Tiger Mountains; on them are ſcattered excellent plantations for the growth of corn, which covering the hills, is a beautiful view from the town in the harveſt ſeaſon; their fruitfulneſs having given them the name of corn magazines to the whole colony. The farms on the other ſide of theſe mountains are but partially cultivated, as not being thought very profitable; whilſt thoſe in the neighbourhood of Cape Town are very profitable, on account of the eaſe with which they convey their vegetables, fruit, eggs, milk, and all other neceſſary proviſions to the market, an advantage which thoſe at a greater diſtance do not enjoy.

For twelve leagues round Cape Town the coloniſts do not ſo much employ Hottentots, as Negro, Moſambique, and Malay, ſlaves; but further inland, the Hottentots are atmoſt the only ſlaves; but to all of them the Dutch appear to have been in the habit of exerciſing the greateſt cruelties. The Malay ſlaves are ſaid to be the moſt active and docile, faithful and honeſt, but dangerous on account of their impetuous temper. Mr. Barrow relates an inſtance of refinement of revenge in one of theſe people, which is very extraordinary: a Malay ſlave, conceiving that he not only had ſerved his maſter ſufficiently long, and with great fidelity, but had alſo paid him ſeveral ſums of money, he was tempted to demand his liberty, and met with a refuſal. The following morning the Malay murdered his fellow-ſlave. On being taken and brought up for examination before a commiſſion of the court of juſtice, he acknowledged that the boy he had murdered was his friend; but he had conſidered that the moſt effectual way to be revenged of his maſter was, not by taking away his life, but by robbing him of the value of a thouſand rix-dollars, by the loſs of the boy, and another thouſand by bringing himſelf, in ſo doing, to the gallows; the recollection of which would prey upon his avaricious mind for the remainder of his life!—Many other inſtances of ſullen and outrageous conduct in the ſlaves is likewiſe mentioned; but when the cruelties of their Dutch maſters are conſidered, we muſt not wonder that human nature ſhould revolt. We have however to remark, with heart-felt exultation, that the uſe of the torture was aboliſhed by the Engliſh governor, immediately on his taking poſſeſſion of the Cape. Among the implements of death employed by the Dutch, were found many diſgraceful inſtruments of torture, all of which were deſtroyed by our people, as a reproach to human nature.

The mode of travelling and conveying merchandize at Good Hope, is in waggons. No object, ſays captain Percival, ſooner attracts the eye of a ſtranger at the Cape, than the conſtruction of theſe waggons, the number of cattle yoked to them, the uncommon manner in which they are driven, and the aſtoniſhing dexterity of the drivers. Theſe waggons are made extremely large and ſtrong; all great journies are undertaken in them; and for ſize and accommodation they may be compared to travelling houſes; while the very uneven and rugged roads require them to be very ſtrong, and of great ſolidity. The body of the waggon reſts on an axle or pole, running lengthwiſe; below, it is not unlike a coach, except that the body is ſeldom hung on ſprings. They are made broad, to prevent overturning, when driven over rocks and declivities at full gallop; it being a principle with the drivers never to ſpare the poor cattle. The inſide is roomy and ſpacious, with platforms and benches, which are employed for ſitting on, for bedſteads, or for holding goods. At one end they are furniſhed with a place for cooking. The ſides are conſtructed with ſtrong boards well put together, and ſecured by ſtrong pieces of wood placed perpendicularly. The roof is formed of boards, or thick ſail-cloth, well tarred, to keep out the rain. The Dutch planters, who inhabit the interior, during their long journies to Cape Town, entirely live in theſe moving habitations; whilſt at night, or when they ſtop to bait and refreſh their cattle, their ſlaves find ſhelter under the waggon, and the cattle quietly graze hard by, in a ſpot that has been pitched upon for its herbage, this being the only method of procuring provender in that country. In general the horſes and oxen are well made, ſtrong, and ſteady.

From four to ten or twelve pair of horſes or oxen are yoked to one waggon. The horſes, though a ſmall race, do a great deal of work on little food, and are capable of enduring great fatigue. A bunch or two of

carrots is ſometimes their only ſuſtenance during a long journey. Their hoofs being much harder than thoſe of the European horſes, they are not in general ſhod; and when they are, it is only on the fore feet. The Cape horſes are not ſwift travellers; they hardly ever exceed fourteen hands in height; and on account of the flies, which are exceedingly troubleſome, their tails are ſeldom cut. The Dutch never paid any attention to improving the breed of horſes; they ſcarcely ever thought of introducing thoſe of another country to croſs the breed, and improve the blood. The oxen are ſtrong, large, and bony; though of an aukward ſhape, being lank and long-legged. In general they are yoked both by the horns and the neck; and aſſiſt the draught with their heads as well as their breaſt and ſhoulders. In front of the body of the waggon there is a bar or piece of wood for a ſeat, like that placed before our hackney coaches: on this two of their ſlaves ſit, and from this ſtation guide the horſes or oxen. One of the ſlaves guides the reins, whilſt the other ſits beſide him with a long whip that trails on the ground till he has occaſion to uſe it on the cattle, which he does with both his hands. The handle of this prodigious whip is of bamboe, from twelve to fifteen feet long, and is fixed to a thick leather thong of buffalo hide, rudely platted, and of an equal length with the handle, with a laſh nearly three feet long attached to the extremity. The drivers are ſo very expert in the uſe of this immenſe whip, that they can touch a team of ten or twelve pair of cattle in any part they have a mind. When they come to a deep place in the road, or ſteep and difficult aſcent, they keep cutting amongſt the cattle to make them all pull together, and exert their ſtrength equally. By this means the animals will draw the waggon over the moſt difficult places, even rocks and precipices, whilſt the fellow who holds the reins, equally dextrous on his part, will guide them in complete ſafety. The means employed to render the cattle thus manageable are, however, revolting to humanity. It excites not only compaſſion but horror to ſee many of thoſe unfortunate beaſts cut and mangled, as they are, in various parts of the body; for a Dutch boor, or farmer, if he find his cattle lazy, or ſtopping from fatigue, or where they meet with obſtacles which their ſtrength cannot eaſily ſurmount, will not heſitate to draw out his knife and ſcore their fleſh, or even cut ſlices off, without mercy. Every waggon is provided with ſtrong chains, or drags, like thoſe uſed by our mail coaches, to prevent their being overturned in going down the precipices and ſteeps. Sometimes they are obliged to drag all the four wheels, and have for this purpoſe a machine which they call a lock-ſhoe, being a kind of ſledge or trough ſhod with iron, into which the wheels are ſet. This prevents the waggon from running down the cattle, and certainly is very ingenious in the invention.

Of the manners and cuſtoms of the inhabitants of Cape-Town, Mr. Barrow has given a very intelligent account.—"The education of their youth has hitherto been much neglected. The government never adopted any ſucceſsful plan for the eſtabliſhment of public ſchools; and the individua' had no other ambition but that of qualifying his ſons, by writing and accounts, to become ſervants of the company." This body of merchants had a number of perſons in their employ who were very ill paid. Their ſalaries were inſufficient to afford them a bare ſubſiſtence; but it allowed them to negociate for themſelves. The conſequence was, that every one became a kind of petty dealer. Each had his little private ſhop in ſome corner of his houſe. The moſt paltry articles were in the liſt of their commodities for ſale; and thoſe who ranked high in the government, and aſſumed a ſtring of ſounding epithets to their names, felt no ſort of indignity in retailing the produce of their gardens; not indeed avowedly, but through the medium of their ſlaves. In fact, the minds of every claſs, the governor, the clergy, the fiſcal, and the ſecretary of the court of juſtice excepted, were wholly bent on trade. *Koopman* or merchant was the title that conferred rank at the Cape, to which the military even aſpired. That portion of the day, not employed in the concerns of trade, they devoted to the gratification of the ſenſual appetites. Few have any taſte for reading, and none for the cultivation of the fine arts. They have no kind of public amuſements except occaſional balls; nor is there much ſocial intercourſe but by family parties. Money-matters and merchandiſe engroſs their whole converſation. Yet none are opulent, though many are in eaſy circumſtances. There are no beggars in the whole colony; and but a few who are the objects of public charity. The ſubſiſtence for theſe is derived from the intereſt of a fund eſtabliſhed out of the church ſuperfluities, from alms, donations, and collections made after divine ſervice, and not from any tax laid upon the public. Except, indeed, a few colonial aſſeſſments for the repairs of the ſtreets and public works, the inhabitants of this colony have little drawback on their profits or the produce of their labour.

"It has been the remark of moſt travellers that the ladies of Cape-Town are pretty, lively, and good-humoured; poſſeſſing little of that phlegmatic temper which is a principal trait in the national character of the Dutch. The difference in the manners and appearance of the young men and the young women, in the ſame family, is inconceivably great. The former are clumſy in their ſhape, aukward in their carriage, and of an unſociable diſpoſition; whilſt the latter are generally of a delicate form, below the middle ſize, of eaſy and unaffected manners, well dreſſed, and fond of ſocial intercourſe, an indulgence in which they are ſeldom reſtrained by their parents, and which they as ſeldom turn to abuſe. They are here indeed leſs dependant on, and leſs ſubject to, the caprice of parents than elſewhere. Primogeniture entitles to no advantages; but all the children, male and female, ſhare alike in the family property. No parent can diſinherit a child without aſſigning, on proof, one at leaſt of the fourteen reaſons enumerated in the Juſtinian code. By the law of the colony, a community of all property, both real and perſonal, is ſuppoſed to take place on the marriage of two perſons, unleſs the contrary ſhould be particularly provided againſt by ſolemn contract made before marriage. Where no ſuch contract exiſts, the children, on the death of either parent, are entitled to that half of the joint property which was ſuppoſed to belong to the deceaſed, and which cannot be withheld on application after they are come of age.

"It is but juſtice to the young females of the Cape to remark, that many of them have profited much more than could be expected from the limited means of education that the place affords. In the better families, moſt of them are taught muſic, and ſome have acquired a tolerable degree of execution. Many underſtand the French language, and they are now making great proficiency in the Engliſh. They are expert at the needle, at all kinds of lace, knotting, and tambour work, and in general make up their own dreſſes, following the prevailing faſhions of England brought from time to time by the female paſſengers bound to India, from whom they may be literally ſaid to

"Catch the manners living as they riſe."

Neither are the other ſex, while boys, deficient in vivacity or talent; but for want of the means of a proper education, to open their minds and excite in them a deſire of knowledge, they ſoon degenerate into the common routine of eating, ſmoaking, and ſleeping. Few of the male inhabitants ſeem anxious to aſſociate with the Engliſh, except ſuch as hold employments under the government. This backwardneſs may be owing in part to the different habits of the two nations, and partly,

partly, perhaps, to the reluctance that a vanquiſhed people muſt always feel in mixing with their conquerors. No real cauſe, however, of complaint or diſaffection could poſſibly be alleged againſt the Engliſh government at the Cape. No new taxes have been impoſed ſince the conqueſt; but, on the contrary, ſome of the old ones have been diminiſhed, and others modified. The demand and value of every production of the colony have very conſiderably increaſed, while the articles of import have fallen, in their prices. More than two hundred thouſand rix-dollars of arrears in rent of land have been remitted to the inhabitants by the Britiſh government, as well as one hundred and eighty thouſand rix-dollars of dubious debts. They have preſerved their laws and their religion, both of which continue to be adminiſtered by their own people. They enjoy as great a ſhare of rational liberty as men, bound to each other, and to the whole, by the ties that a ſtate of ſociety neceſſarily impoſes, could poſſibly expect, and much greater than under their former government. Property has been ſecured in every inſtance, and has been raiſed to double its former value: and none has the loſs of life of any friend or relation to lament ſince the capture. Their paper currency, fabricated by the government in order to get over a temporary diſtreſs, but which it had never been able to take out of circulation, bore a depreciation of 40 per cent. and a ſilver dollar was ſcarcely to be ſeen. The former is now at par with ſpecie, and not leſs than two millions of the latter have been ſent from England and thrown into circulation. Every perſon enjoys his ſhare of the general proſperity. The proprietor of houſes in town has more than doubled his rent; and the farmer in the country, where formerly he received a rix-dollar for each of his ſheep, now receives three." Thus increaſing proſperity, uninterrupted peace, and domeſtic tranquillity, have been the happy lot of the inhabitants of the ſettlement of Good Hope; ſince it has been in the hands of the Engliſh.

With reſpect to the interior of the colony, Mr. Barrow was deputed by earl Macartney, to whoſe government he was attached, to make ſeveral excurſions of enquiry and reſearch. He relates his journey from the Cape acroſs the Karroo, or Arid Deſert, to the Droſdy of Graaff Reynet, in the month of July 1797; and he thus deſcribes the character of the people, and the ſtate of population:—"A Dutch farmer or boor, as he ſtyles himſelf, has not the ſmalleſt idea of what an Engliſh farmer means by the word comfort. Placed in a country where not only the neceſſaries, but almoſt every luxury of life might by induſtry be procured, he has the enjoyment of none of them. Though he has cattle in abundance, he makes very little uſe of milk or of butter. In the midſt of a ſoil and climate moſt favourable for the cultivation of the vine, he drinks no wine. He makes uſe of few or no vegetables nor roots. Three times a-day his table is loaded with maſſes of mutton, ſwimming in the greaſe of the ſheep's tail. His houſe is either open to the roof, or covered only with rough poles and turf, affording a favourable ſhelter for ſcorpions and ſpiders; and the earthy floors are covered with duſt and dirt, and ſwarm with inſects, particularly with a ſpecies of *termes*, which, though not ſo deſtructive as ſome others of this genus, is nevertheleſs a very troubleſome and diſagreeable animal. His apartments, if he happens to have more than one, which is not always the caſe among the grazing farmers, are nearly deſtitute of furniture. Yet he is abſolute maſter of a domain of ſeveral miles in extent; and he lords it over a few miſerable ſlaves or Hottentots without controul. His pipe ſcarcely ever quits his mouth, from the moment he riſes till he retires to reſt, except to give him time to ſwallow his *ſopie*, or a glaſs of ſtrong ardent ſpirit, to eat his meals, and to take his nap after dinner. Unwilling to work, and unable to think; with a mind diſengaged from every ſort of reflexion, indulging to exceſs in the gratification of every ſenſual appetite, he grows to an unweildy ſize, and is carried off the ſtage by the firſt inflammatory diſeaſe that attacks him. How different is the lot of the labouring poor of England, who for ſix days in the week are doomed to toil for twelve hours every day, in order to gain a morſel of bread for their family, and the luxury of a little animal food for the ſeventh day!" The wives alſo of theſe farmers appear, in liſtleſs inactivity, to ſleep along the blank of life; exciting no love, interchanging no affections, harbouring no ſympathies, but alike inſenſible to the ſedate pleaſures of ſocial intercourſe, and to the tumultuous exhilarations of public feſtivals, paſs their time from the cradle to the grave. Yet, rude and illiterate as theſe people are, the virtues of hoſpitality are cultivated by them to exceſs; and all travellers are equally welcome to the beſt food and accommodation which their means can ſupply.

In croſſing the deſert, Mr. Barrow met with large quantities of a ſpecies of ſalſola or ſalt-wort, from the aſhes of which the Hottentots make their ſoap. He obſerves that theſe aſhes, when carefully burnt and collected, are a pure white cauſtic alkali, a ſolution of which, mixed up with the oily fat of the large broad tails of the ſheep of the colony, and boiled ſlowly for five or ſix days, takes the conſiſtency and the quality of an excellent white ſoap. This ſalſola grows in almoſt every part of Southern Africa, but particularly on thoſe plains known by the name of Karroo, and in ſuch abundance that, ſuppoſing the plant, after being cut down and burnt, to be re-produced in five years, the quantity of ſoda, or barilla, that might annually be made from the aſhes, would be ſufficient, beſides ſerving the colony, for the whole conſumption of Great Britain; and as enormous ſums of money have always been, and continue to be, drawn from England to pay the imports of this article, it may perhaps be conſidered as an object worthy the conſideration of the Britiſh government.

On the thirtieth day of his travels, Mr. Barrow reached the juriſdiction of Graaff Reynet, the reſidence of a *landroſt*; whoſe importance will not excite much envy, when his ſituation is duly appreciated. The village is chiefly inhabited by mechanics, and ſuch as hold ſome petty employment under the landroſt. Its appearance is more miſerable than that of the pooreſt place in England. The neceſſaries of life are with difficulty procured in it; for, though there be plenty of land, few are found induſtrious enough to cultivate it. No milk, no butter, no cheeſe, no vegetables, are to be had upon any terms. There is no butcher, no grocer, no baker. Every one muſt provide for himſelf as well as he can. They have neither wine nor beer; and the chief beverage of the inhabitants is the water of the Sunday river, which, in the ſummer ſeaſon, is ſtrongly impregnated with ſalt. When the landroſt, who accompanied Mr. Barrow, came to the *droſdy*, or houſe of reſidence, a long liſt of grievances was preſented, relative to the incurſions of the Caffers. Previouſly to the arrival of the landroſt, the farmers, actuated chiefly by the hope of plunder, had prepared to carry war into the country of the Caffers: but, very humanely and politically, theſe preparations were ſtopped.

On the 18th of Auguſt, Mr. Barrow arrived at Zwartkops, or Algoa bay, ſituated in latitude 33. 56. S. longitude 26. 53. E. Greenwich, and diſtant from the Cape in a direct line five hundred miles. He is of opinion that, from the vicinity of this place to the ſalt pans, from the eaſe of procuring bullocks incredibly cheap and in good condition, and from the abundance of excellent fiſh on the coaſt, great benefits would accrue to the Engliſh Eaſt India company, if an eſtabliſhment were formed there for the preparation of ſalted beef and fiſh.

Twenty years ago, the country beyond Camtoos river, which

which was then the eaſtern limit of the colony, abounded with villages of Hottentots, out of which the inhabitants came to meet travellers by hundreds in a groupe. Some of theſe villages might ſtill have been expected to remain in this remote part of the colony; but not one was to be found. There is not now in the whole extenſive diſtrict of Graaff Reynet a ſingle horde of independent Hottentots; and perhaps not a ſcore of individuals who are not actually in the ſervice of the Dutch; ſo completely have the natives been ſubjugated, or driven out. This has been effected by a diſcipline and practice highly diſgraceful to humanity. Beating and cutting them with thongs of the hide of the ſea-cow or rhinoceros, is a gentle puniſhment, though theſe ſort of whips, which they call *ſhambos*, are moſt horrid inſtruments, tough, pliant, and heavy almoſt as lead. Firing ſmall ſhot into the legs and thighs of a Hottentot is a puniſhment not unknown to ſome of the monſters who inhabit the neighbourhood of Camtoos river. Inſtant death is not unfrequently the conſequence of puniſhing theſe poor wretches in a moment of rage. This appears of little conſequence to the Dutch farmer; for though they are to all intents and purpoſes his ſlaves, yet they are not transferable property. It is this circumſtance which, in his mind, makes their lives leſs valuable, and their treatment more inhuman. For ſmall offences, the Dutch farmer flogs his ſlaves, not by any given number of laſhes, but by time; and as they have no clocks, he has invented an excuſe for the indulgence of one of his moſt favourite ſenſualities, by flogging them till he has ſmoked as many pipes as he may judge the magnitude the crime to deſerve! We truſt, however, that the Engliſh will ſpeedily ameliorate the miſerable condition of theſe wretched victims.

After Mr. Barrow had finiſhed his obſervations at Algoa bay and the adjacent country, he and his party proceeded along the ſea-coaſt into the country of the Caffers. Having croſſed the rivers Bosjeſmans and Haſſagai-boſch, they viſited the mouth of the *Infanté*, or Great-fiſh river; and then proceeded to the reſidence of the king of the Caffers, who readily concluded a treaty with the repreſentatives of the Engliſh government. See the article CAFFRARIA, vol. iii. p. 595, and the correſpondent Engraving.

The party next proceeded to examine the mouth of the river Keiſkamma: which is nearly as wide as the Thames at Woolwich, and apparently of great depth: but the entrance is guarded by a ſhore of ſand, on which the ſurf breaks with great violence. From the Keiſkamma, they returned by a new route to Graaff Reynet, which place they reached on the 30th September. They next proceeded northward, acroſs the Sneuwberg, in order to obſerve the manners of the race of ſavages called *Bosjeſmans*, or men of the buſhes, who neither cultivate the land nor breed cattle, but live by depredation; for an account of whom, ſee the article HOTTENTOTS. The travellers proceeded a conſiderable way along the bank of the Sea-cow river, and then came to its junction with a vaſt ſtream, called the Orange river; which, in ſize and bulk of water, more than equals all the other rivers of the colony taken collectively; its general breadth at five hundred miles diſtance from its mouth being three hundred yards, when free from inundations; for, like the Nile, the Orange river has its periodical overflowings.

In the route from Graaff Reynet back to the Cape, Mr. Barrow croſſed a chain of mountains; and encountered the point of the paſſage called *the Devil's head*: here the road is dreadfully ſteep and ſtoney, formed by ſteps, over ſome of which it was neceſſary to lift the waggons by main ſtrength. Juſt as they reached the ſummit, the weather, which had been remarkably pleaſant, the thermometer ſtanding at 74°, began inſtantly to be overcaſt, the wind blew freſh, and an immenſe ſheet of black vapour was obſerved to approach, borne upon the ſouth-eaſt wind from the ſea. Aſcending rapidly in rolling volumes, it completely immerſed the travellers upon the ſummit of the mountain. The temperature of the air was at once decreaſed to 39° of Fahrenheit. Before the waggon had got over the higheſt peak, the weather began to clear up, and it was curious to obſerve, that part of the country between the mountain and the ſea was involved in denſe clouds, and deluged with rain, whilſt the northern ſide of the ſame mountains enjoyed a ſunſhine unſullied by a ſingle cloud. Having next croſſed the Crocodile river, the Gauritz river, the ſudden and copious riſe of which is ſo extraordinary, as to have once deſtroyed a houſe nearly an hundred feet above the level of its channel, and various other ſtreams, the travellers reached Cape Town on the 18th of January 1788, after a tour of ſeven months' duration. A journey was then undertaken to explore the country of the Namaaquas, which the reader will find detailed under the article HOTTENTOTS.

Theſe journeys enabled Mr. Barrow to form a chart of the ſettlement of Good Hope, conſtructed entirely from actual obſervations of latitude and of bearings, from the eſtimation of diſtances, and from frequent angular interſections of remarkable objects, by which it appears that the extent and dimenſions of the territory compoſing the whole colony as now permanently fixed, are as follow:

Length from weſt to eaſt.	Miles.
Cape Point to Caffer Land - - - -	580
River Kouſſie to Zuureberg - - - -	520
Breadth from ſouth to north.	
River Kouſſie to Cape Point - - -	315
Nieuwveldt Mountains to Plettenberg's Bay -	160
Mouth of Tuſh-river to Plettenberg's baaken -	225

This gives a parallelogram whoſe mean length is 550, and mean breadth 233, Engliſh miles, comprehending an area of 120,100 ſquare miles. This great extent of country, deducting the population of Cape Town, is peopled by about fifteen thouſand white inhabitants; the reſidue, making a population of one hundred and ſixty thouſand, are blacks. A very great portion, however, of this territory, may be conſidered as an unprofitable waſte, unfit for culture, or even to be employed as paſture for the ſupport of cattle. Level plains, conſiſting of a hard impenetrable ſurface of clay, thinly ſprinkled over with cryſtallized ſand, condemned to perpetual drought, and producing only a few ſtraggling tufts of ſucculent plants, and chains of vaſt mountains that are either totally naked, or clothed in parts with ſour graſſes, compoſe nearly one half of the colony. The whole territory is divided into four diſtricts, viz. 1. The Cape-Town diſtrict. 2. Stellenboſch and Dragenſtein. 3. Zwellendam diſtrict. 4. Graaff Reynet. Over each diſtrict preſides a landroſt, who, with a council of ſix country burghers, regulates the police, ſuperintends the government, and determines petty cauſes; but his deciſions are ſubject to an appeal to the court of judicature in Cape Town.

Timber of all kinds for building is very ſcarce in the vicinity of Cape Town; yet little pains have been taken to cultivate it. In parts of the country not far diſtant, however, plantations of oak trees, of the white poplar, and of the ſtone pine, are to be found, and they thrive rapidly. The article of fuel was ſo ſcarce at Cape Town, that a ſmall cart load compoſed of the branches of the ſilver tree, of the larger heaths, &c. ſold from twenty to eight-and-twenty ſhillings. To remedy this evil, lord Macartney ordered a ſearch to be made for foſſil coal; and the miners had the good luck to diſcover a vein.

Though this ſettlement is annoyed by wild and ferocious animals, and poiſonous reptiles, it is nevertheleſs compenſated by plenty of antelopes, red deer, and other veniſon, numerous oxen, and large flocks of ſheep;

ſheep; ſo that the wool and hides might here be made valuable articles of commerce. Lions and tigers abounded in ſuch numbers, that the early ſettlers were obliged to levy a kind of capitation tax, called lion and tiger money, to reward thoſe who had courage to hunt and deſtroy them, and bring in their hides. This tax ſtill exiſts; but as the colony is no longer annoyed by theſe animals, the money is applied towards the repairs of the roads, water-courſes, and other public works. Zebras and wild horſes are found in the interior; and Mr. Barrow, noticing the figure of an unicorn cut on the ſmooth ſide of a cavern, ſuppoſed to have been the work of the wild Bosjeſmen, he concluded that this animal muſt be in exiſtence in Southern Africa; and he employed the moſt laborious ſearch in queſt of it, but in vain. Indeed, Vaillant, who explored almoſt the whole of this part of Africa, for the purpoſe of collecting curious ſubjects of natural hiſtory, never mentions the unicorn; though he figures and deſcribes the cameleopardalus, and other wild animals. And here, too, he collected the originals of thoſe curious and magnificent birds, which form his ſplendid and coſtly work in ornithology; the engravings of moſt of which will be found in this Encyclopædia.

The hippopotamus and elephant were formerly reckoned among the moſt valuable ſpoils of the hunters in this colony; but ſo ſucceſsful have their purſuits after ivory been, that, like the lion and tiger, theſe animals are now but ſeldom found within the territories of the ſettlement; and of courſe its trade in ivory is become very trifling; and ſuch muſt ever be the effects of agriculture and civilization: the empire of man will increaſe, while that of ferocious animals is narrowed, and their howlings confined to the arid waſtes of the deſert.

As to the policy of annexing this ſettlement in future to the permanent Britiſh dominions, much has been ſaid and written. The ſoil, it has been ſuggeſted, will afford us no encouragement, becauſe, in ſome ſeaſons, it labours exceſſively with drought: but this evil might, Mr. Barrow ſays, be remedied by planting trees, and incloſing the country. The want of ſprings, however, is too ſeverely felt; and this circumſtance renders the beſt bay in the colony uſeleſs for ſhipping. The reaſon aſſigned for this ſcarcity of ſprings appears to us very juſt, and it alſo points out the plan to be adopted in procuring water. All the continued chains of mountains in Southern Africa are compoſed of ſandſtone reſting upon a baſe of granite. This granite baſe is ſometimes elevated conſiderably above the general ſurface of the country, and ſometimes its upper part is ſunk as far beneath it. In ſituations where the former happens to be the caſe, numerous ſprings are ſure to be found, as in the inſtance of Table Mountain, where, on every ſide, copious ſtreams of pure limpid water, filtered through the immenſe maſs of ſuperincumbent ſandſtone, glide over the impenetrable ſurface of granite, furniſhing an ample ſupply to Cape-Town, the gardens, and the adjacent vineyards. But in all thoſe places where the ſandſtone continues to deſcend *below* the ſurface, and the upper part of the granite baſe is ſunk beneath the general level of the country, the ſprings that make their appearance will be few and ſcanty. The reaſoning that ſuggeſts itſelf on theſe facts, will lead to the following concluſion:—That the ciſterns or cavities in the ſandſtone mountains, being corroded and fretted away, in the lapſe of ages, to a greater depth than the openings or conduits which might, perhaps, at one time have given their waters vent, the ſprings can no longer find their way upon the ſurface, but, oozing imperceptibly between the granite and the ſandſtone, below the general level of the country, glide in ſubterraneous ſtreams to the ſea.

This concluſion has been verified from the experience of ſeveral facts. When admiral ſir Roger Curtis directed a ſpace of ground, between the Admiralty-houſe and the ſhore of Table Bay, to be incloſed as a naval yard, the workmen met with great impediment from the copious ſprings of pure freſh water that ruſhed out of the holes which they found neceſſary to ſink in the ſand for receiving the upright poſts. It is a well-known fact, that on almoſt every part of the iſthmus that connects the mountainous peninſula of the Cape to the continent, freſh water may be procured at the depth of ten or twelve feet below the ſandy ſurface. Even in the ſide of the Tiger Hills, at an elevation of twenty feet, at leaſt, above the general ſurface of the iſthmus, when the workmen were driving a level in ſearch of coal, a copious ſtream of water was collected within it in the month of February, which is the very dryeſt ſeaſon of the year. And on boring, for the ſame purpoſe, on Wynberg, they came to a rill of water at the depth of twenty feet below the ſurface.

But, ſuppoſing the ſoil to admit of every improvement, yet ſtill there are many various opinions concerning the importance and utility of making the Cape a military ſtation. It is aſſerted that the miniſtry of this country, who have recourſe to the beſt documents, have decided this poſt to be an important one, as the defence of the Eaſt Indies: but, on the other hand, the Eaſt India directors are ſaid to hold it cheap; and of late they have not even uſed it as a half-way houſe, but have ordered their ſhips not to touch at it. An Engliſh crew, they ſay, can bear the whole voyage without a halt: but, when the crew is compoſed of Laſcars, who require freſh proviſions, it is almoſt indiſpenſably neceſſary for their health, to ſtop at the Cape. It can ſcarcely be denied that this ſettlement, in the poſſeſſion of our enemies, would afford them the means of greatly annoying our trade; and in the former wars, the celebrated Suffrein went thither after his actions, to refit and revictual his ſhips; ſince which time the French do not ſeem ignorant of its importance. According to Mr. Barrow's account, this ſtation is admirably fitted to ſeaſon troops; ſince it is very healthy, proviſions are cheap and plentiful, and a few months' reſidence there enables ſoldiers to bear the Indian climate extremely well. Very convenient drafts were recently made from our force at the Cape, to Egypt and India; and the expedition under ſir Home Popham is ſaid not to have loſt a man by ſickneſs.

Conſidered as a naval ſtation, a fleet at this port may very cheaply be provided with beef, wine, and ſpirits. It is a convenient place for ſhips in diſtreſs; always neceſſary as a half-way houſe for tranſports carrying out raw ſoldiers to the Eaſt Indies; and it enabled our fleet to clear the Indian Sea of privateers. As for geographical advantages, the poſition of the Cape throws a vaſt weight into the ſcale of its importance to England. Its happy ſituation, with regard to climate, and the productions of the ſoil, ſtamp its value as a depoſitory of troops and ſeamen; and its relative poſition on the globe enhances that value by the ready communication it commands with almoſt every part of the world. We have ſeen during a former war, with what expedition more than two thouſand troops were thrown from hence into India, to the very walls of Seringapatam; and, on another occaſion, twelve hundred effective men into Egypt. With equal facility and diſpatch could the ſame, or a greater, number, have been conveyed to the eaſt coaſt of North America, the Weſt India iſlands, or the weſt coaſt of South America. At a month's notice, the whole coaſt of Brazil could be lined with cruizers from the Cape. The whole eaſtern coaſt of Africa, and the various iſlands contiguous to it, are at the mercy of whatever power holds the Cape; and the large iſland of Madagaſcar may be approached in ten or twelve days, thoſe of France and Bourbon in much leſs than a month, the Red Sea in five or ſix weeks, and the coaſts of Malabar and Coromandel in ſeven or eight weeks.

Theſe paſſages undoubtedly depend much on the ſeaſon of the year in which they are to be made, but when this is properly choſen, the different places may be arrived at within the periods here mentioned.

If, at any time, troops ſhould be wanted in the Weſt Indies, the homeward-bound Eaſt-Indiamen might be employed to tranſport them thither from the Cape, without retarding their paſſage more than ſixteen or twenty days, as the common practice of croſſing the line is now as far to the weſtward as twenty-ſix degrees of weſt longitude. Detachments of Hottentot corps might be well calculated for ſervice in the Weſt India iſlands. Should, at any future period, the French reſume their projects on India by the Red Sea, in three months from the time it was firſt known in England, a force from the Cape might be in poſſeſſion of the ſtraits of Babelmandel, and, by thus anticipating, completely fruſtrate their deſigns; but which, with the Cape in their poſſeſſion, or in that of the Dutch, they would eaſily accompliſh.

With reſpect to the Hottentots as ſoldiers, a very favourable idea is given by captain Percival in his account of the ſettlement of Good Hope recently publiſhed, and which has been peruſed with pleaſure. He ſtates as follows:—"When I firſt ſaw the corps of Hottentots in our ſervice, and converſed with the Engliſh officers who had an opportunity of knowing them, and the qualities they poſſeſſed, as well as the ſtate they were capable of being brought to, I had reaſon to conceive a very favourable opinion of the diſpoſition, as well as the talents, of a Hottentot. This corps formed a regiment, upwards of ſeven hundred ſtrong, many of them fine, active, and ſoldier-like, men; they ſeemed well diſciplined, and many exhibited a pride in their gait, that would do credit to an European ſoldier. They ſeemed much attached to the Engliſh; and ſhould the Cape ever fall permanently into the hands of Great Britain, thoſe people, under proper management, may ſpeedily arrive at a great degree of civilization. Their induſtry may be excited, and be turned to produce the moſt important advantages to the colony. By inſtructing them in the arts of huſbandry, by accuſtoming them to a mild and equitable treatment, by granting them thoſe rights which ought to be common to the whole human race, although barbarouſly withheld from them by the Dutch; the Hottentots would ſpeedily be allured from the remote parts and wilds of the interior of Southern Africa, to colonize the country nearer the Cape. The progreſs of civilization would ſoon inſpire thoſe already in the colony with confidence in themſelves, as a people who have a certain part to act in life, and recover them from that ſtate of utter degradation to which they have been reduced; while the knowledge of the comforts of life, and the means by which they are to be procured, would ſtimulate them to exertions of which they are at preſent incapable."

Mr. Barrow diſcuſſes the importance of the Cape of Good Hope, conſidered in a commercial point of view, and as a depôt for the Southern whale fiſhery. In its preſent condition, it is of very little importance to any nation, conſidered with reſpect to the articles of commerce it ſupplies for exportation to foreign markets. The ſurplus produce, beyond the ſupply of its own inhabitants, a garriſon, and navy of eight or ten thouſand men, and the refreſhments furniſhed to ſhips trading and caſually calling there, is ſo trifling as to merit no conſideration. But, by a new ſyſtem of things, it is certainly ſuſceptible of great improvement; and the ſupply of the moſt important articles might be extended to an almoſt indefinite amount.

It is further to be remarked, that though the ſugar-cane grows ſpontaneouſly at the Cape, the Dutch have never attempted to manufacture either ſugar or rum: yet both of theſe commodities might be produced in this part of Africa with greater facility than in the Weſt Indies. Every European nation acknowledges the importance of the Weſt India iſlands, from the two great ſtaple commodities of ſugar and rum. How much blood has been ſhed between the different powers in the conqueſt and attainment of them; while numberleſs lives have fallen victims to the unhealthy climate. Properties to an immenſe amount, conſiſting of large plantations of ſugar-canes, have often been deſtroyed in one night by furious hurricanes and tornadoes. Inſects and vermin deſtroy another great proportion; while the heat is ſo intolerable, that the planter cannot overſee his own works, much leſs aſſiſt by any exertion of his own. Thoſe diſadvantages are however ſtill borne up againſt from the value of the ſugar and rum which they afford. The Cape labours under none of thoſe diſadvantageous circumſtances. Though it is ſometimes ſubject to violent winds, yet they never ariſe to that degree as the tornadoes in the Weſt Indies, nor are their conſequences to be at all compared. The climate is mild, temperate, and healthy; the ſoil clean, and not ſubject to thoſe weeds and other obſtructions uſually found in tropical climates, which ſuddenly ſpring up and choak the tender plants. Inſects and vermin do but little damage compared to what is experienced in other parts of the world which can afford the ſame produce. The planter here can ſtand the whole day expoſed to the ſun without any ill conſequences, and can aſſiſt with his own bodily labour, if his circumſtances require it, or inclination prompt him. When the ſugar-cane grows ſo well ſpontaneouſly, it is ſurely capable of being brought to much more perfection by the care and culture of man. The Dutch, in exculpation of their own want of enterpriſe, allege that it would require more ſlaves than they can afford, or would riſk introducing into the colony; and that thoſe already in their poſſeſſion are only ſufficient for their houſhold and domeſtic purpoſes. Theſe reaſonings with regard to foreign ſlaves may hold good; but there is a ſtill greater benefit to be derived from entirely evading that objection, and employing the Hottentots and other natives of the interior as huſbandmen and ſervants. By theſe means the valuable articles in queſtion might be raiſed, and at the ſame time the natives brought to a degree of civilization and to habits of induſtry; from which comfort to themſelves and wealth to their employers would ſpeedily ariſe.

The colony of Good Hope is alſo capable of producing great quantities of tobacco; however, very little is exported, though it is ſaid to be good, when duly prepared, as that of Virginia. As all male perſons, old and young, ſmoke in this colony, and as American tobacco generally bears a high price, the conſumption of that of native growth is conſiderable. The inferior ſort is uſed by ſlaves and Hottentots. The total value of every kind of colonial produce, exported in four years, from 1799 to 1802, amounted to no more than 300,925 rix-dollars, or 60,185l. currency. The goods imported from England into the Cape during the ſame period, conſiſted of woollen cloths, Mancheſter goods, hoſiery, haberdaſhery, and millinery, boots, ſhoes, and hats, cutlery, iron tools, ſtationary, bar and hoop iron, ſmiths' coals, houſehold furniture, paint and oils, earthen ware, naval ſtores, tongues, hams, cheeſe, and pickles; and from India and China were imported Bengal, Madras, and Surat, piece-goods, tea, coffee, ſugar, pepper, ſpices, and rice. The Americans brought thither lumber, cargoes of deal plank, ſtaves, balk, ſalt-fiſh, pitch, turpentine, &c.; and the Danes, Swedes, and Hamburgh ſhips, aſſorted cargoes of iron, plank, French wines, beer, gin, Seltzer water, coffee, preſerves, pickles, &c. in exchange for refreſhments, to defray the charges of repairs and other neceſſaries, or for money to carry to India or China. The whole importation into the Cape by Britiſh or foreign bottoms, from Europe, Aſia, and America, in four years, including the value of the prize goods brought in, and of the

ſlaves

ſlaves imported within the ſame period, amounted to 5,977,535 rix-dollars 7 ſk. or 1,195,507l. 3s. 6d. currency. Thus we ſee how great the balance of trade is againſt the colony.

The revenues of the colony are derived from the following ſources; viz. land revenue ariſing from rents of the colonial farms belonging to the government, which are in number 1974; places for grazing cattle taken by the month, and ſalt-pans; duties on grain, wine, and ſpirits, levied at the barrier; transfer duty on ſale of immoveable eſtates; duty ariſing from the ſale of buildings on loan farms; public vendue duty; fees received in the ſecretary's office on regiſtering the transfer of property; cuſtoms; port fees; poſtage of letters; ſeizures, fines, and penalties; licences to retail wine, beer, and ſpirituous liquors; intereſt of the capital lent out through the loan-bank; and duty ariſing from ſtamped paper. The whole amount of this revenue in 1801 was 90,142l. 13s. 4d. This revenue is applied to the payment of ſalaries on the civil eſtabliſhment, the expences of the ſeveral departments, the repairs of government buildings, and the contingencies and extraordinaries of the colony; and during the government of lord Macartney, the revenue was more than adequate to the expenditure.

The members of the court of juſtice at the Cape are choſen out of the burghers of the town. The fiſcal, who is the public accuſer in criminal matters, and the ſecretary of the court, are the only perſons poſſeſſed of legal knowledge. The office of fiſcal, one of the moſt important in the colony, conſiſted under lord Macartney's eſtabliſhment, of the principal and a deputy, a clerk, two bailiffs, two jailors, eight conſtables, and nineteen Malays. The whole expence to government was under 10,000 rix-dollars; the court of juſtice and ſecretary's office amounted to about the ſame ſum; ſo that the adminiſtration of juſtice coſt the government about 4000l. ſterling a-year. The court of commiſſaries for trying petty ſuits, not exceeding 40l. and for matrimonial affairs, or granting licences, conſiſts of a preſident, vice-preſident, and four members, whoſe ſituations are honorary and biennial. The "Weeſkammer," or chamber for managing the effects of minors and orphans, is one of the original inſtitutions of the colony, and it is managed by a preſident and four members, a ſecretary and ſeveral clerks. For the ſupport of this inſtitution, all orphan property, paſſing through the chamber, ſuffers a reduction of 7½ per cent. upon the capital.

The eſtabliſhed religion of the colony is Calviniſm, or the reformed church. Other ſects are tolerated; the Lutherans have a church; a Methodiſt chapel has been lately built; the Moravians have a church; but the Malay Mahometans, being refuſed a church, perform their public ſervice in the ſtone quarries at the head of Cape-town. The clergy are ſuitably provided for, and generally reſpected; and they rank next to the preſident of the court of juſtice in town, and the landroſt in the country. Beſides their clerical duties, they have alſo the direction of the funds for the relief of the poor; which are raiſed by weekly donations at church, by legacies, and by the ſums which the church demands on the emancipation of ſlaves. The amount of the funds belonging to the reformed church in Cape Town, in 1798, was 22,168l. 8s. 8d. and the ſubſiſtence granted to the poor was 1112l. 17s. The funds of the Lutheran church were 14,829l. 13s. 2d. and the relief granted to the poor 194l. 9s. 2d.

The citadel or caſtle is a regular pentagon fort, with two ravelins and ſome other outworks, ſurrounded by a wet ditch: but it is ſo injudiciouſly ſituated, that though it commands the town and part of the anchorage, it is itſelf commanded by the ground riſing from it in a ſlope to the Devil's hill, which therefore renders it indefenſible. This ſlope is now occupied as high as the commencement of the perpendicular rocky ſide of the Devil's hill, by various redoubts, batteries, and block-houſes, commanding each other, and the advance ground to the caſtle, all of which were added by general ſir James Craig. He alſo made ſome other important additions to the fortifications of this place. Fort Knokke is connected with the citadel by a rampart drawn along the ſhore, called the *ſea lines*, defended by ſeveral batteries, mounted with heavy guns, and furniſhed with ovens for heating ſhot. Within theſe lines is a powder magazine and a long range of low buildings that were converted by the Engliſh into a general hoſpital, with lodgings for the inſpector, ſtore-keeper, and apothecary to the forces. On the weſt of Table Bay are three ſtrong batteries, viz. the Rogge-Bay battery, the Amſterdam battery, and the Chavonne battery, all the guns of which bear directly upon the anchorage. There is alſo a ſmall battery, called the *Mouille*, commanding the entrance of the bay. A little farther, on a ſmall ſandy cove, a work is thrown up with a few light guns and a heating furnace, for preventing a landing at this place, which is further impeded by three anchors fixed acroſs the inlet. At Camp's Bay, on the weſtern coaſt of the peninſula, there are alſo a few ſmall batteries, and a military poſt on the height above it, directly between the Table Mountain and the Lion's Head. An army landing here, and at Three Anchor Bay, might take the town and all the batteries in their rear; or, by a more important movement, might get poſſeſſion of the Lion's Rump, from whence, with a few howitzers, the town and citadel, and the ſtrong batteries on the weſt ſide of Table Bay, would be completely commanded. This hill has the very great advantage of not being commanded by any other point. Sir James Craig propoſed to erect a citadel on this eminence, with ſuitable appendages and accommodations, which would, in his opinion, be ably defended in time of war by 1200 men; and would render the town, the batteries, and the caſtle, untenable by an enemy, all of which might be totally deſtroyed from this height in twenty-four hours.

Beſides the caſtle and the forts, the public buildings of Cape Town are, a large and well conſtructed barrack for two thouſand men; a quadrangular building with an area in the centre, where the government ſlaves are lodged to the number of about four hundred; the reformed church, which is a ſpacious and neat ſtructure; the Lutheran church; the town-houſe; the court of juſtice; and a theatre. The Cape of Good Hope is ſituated in S. lat. 34° 29′. E. lon. 18° 23′ 15″. Cape Town is in S. lat. 33° 55′ 42″ E. lon. 18° 23′ 15″.

GOOD-MA'NNERS, *ſ.* Polite behaviour.—*Good-manners* is ſuch a part of good ſenſe, that they cannot be divided; but that which a fool calleth good-breeding is the moſt unmannerly thing in the world. *Marq. of Halif.*

GOOD' NOW, *interj.* In good time; *à la bonne heure.* A gentle exclamation of intreaty. *It is a low word:*

Good-now, ſit down, and tell me, he that knows,
Why this ſame watch? *Shakeſpeare.*

A ſoft exclamation of wonder.—*Good-now, good-now*, how your devotions jump with mine! *Dryden.*

GOOD'-WIFE, *ſ.* Miſtreſs of a houſe, but below a gentlewoman:

By this had chanticleer the village cocke
Bidden the *good-wife* for her maids to knocke. *W. Browne.*

It ſerves the maiden female crew,
The ladies and the *good wives* too. *Suckling.*

GOODE'NIA, *ſ.* [ſo named by Dr. Smith, preſident of the Linnæan Society, from the Rev. *Samuel Goodenough*, L.L.D. F.R.S. treaſurer of the Linnæan Society, author of Obſervations on the Britiſh Species of Carex, &c.] In botany, a genus of the claſs pentandria, order monogynia, natural order of campanulaceæ, *Juſſ.* The generic characters are—Calyx: perianthium five-leaved; leaflets equal, awl-ſhaped, erect, permanent. Corolla: one-petalled, ſuperior; tube cloven on the upper ſide from

from the top to the bottom; limb five-cleft; ſegments equal, obovate, directed forwards. Stamina: filaments five, ſhorter than the tube, and projecting through its fiſſure; antheræ linear, vertical, two-celled. Piſtillum: germ inferior, five-angled; ſtyle ſimple, longer than the ſtamens, and ſtanding out with them; ſtigma cup-ſhaped, ciliated. Pericarpium: capſule two-celled, two-valved, burſting at the top, and becoming revolute; the partition, which is parallel to them, remaining erect. Seeds: ſeveral in each cell, imbricated, lenticular.—*Eſſential Character.* Corolla longitudinally cloven on the upper ſide, expoſing the organs of fructification; border five-cleft, leaning one way; antheræ linear; ſtigma cup-ſhaped, ciliated; capſule two-celled, two-valved, with a parallel partition; ſeeds many, imbricated.

This genus ſhould be inſerted between Scævola and Cinchona in the Linnæan ſyſtem, and between Cyphia and Scævola in that of Juſſieu. It differs eſſentially from Scævola in its fruit; from Cyphia in its corolla; and from Lobelia in its ſtamens. Dr. Smith has given this new and moſt diſtinct genus the name of *Goodenia*, in honour of his worthy friend the Rev. Dr. Goodenough. In the conſtruction of this name he has followed the example of Tournefort, in forming *Gundelia* from Gundelſcheimer. Dr. Goodenough's name might however have been ſoftened into *Goodenovia*, without being either too long, or offending a delicate ear. Theſe plants are all natives of New South Wales, about Port Jackſon. See Linn. Tranſ. ii. 346–349.

Species. 1. Goodenia ovata, or ovate yellow goodenia: leaves ovate, toothletted-ſerrate, both they and the corollas ſmooth; fruit linear. Stem ſhrubby, erect, angular, branched, leafy. Leaves alternate, varying a little in breadth, acute, ſerrated with fine ſharp ſpreading unequal teeth, of a bright green, veiny, ſmooth on both ſides, paler beneath: flowers yellow, from three to five in a dichotomous panicle, ariſing ſolitary from each axil of the uppermoſt leaves, and above half as long as the correſponding leaf: germ long, ſlender, ſmooth: ſtyle ſmooth: ſtigma large, bent down towards the ſtamens, finely ciliated: capſule oblong, crowned with the calyx: ſeeds roughiſh, encircled with a groove. This plant is in the garden of the duke of Northumberland at Sion, and was preſented in flower, on the 4th of December 1792, to the Linnæan Society, by Mr. Thomas Hoy, one of the fellows.

2. Goodenia albida, or white-flowered goodenia: leaves obovate, toothed, both they and the corollas ſmooth; ſtyle and ſtem hairy. Gathered by John White, eſq. ſurgeon, at Port Jackſon.

3. Goodenia paniculata, or panicled yellow goodenia: leaves obovate-lanceolate, toothed, both they and the corollas hairy; ſtem almoſt naked, panicled. Gathered at the ſame place, by Mr. David Burton.

4. Goodenia bellidifolia, or daiſy leaved yellow goodenia: leaves obovate, toothletted, fleſhy; ſtem almoſt naked, ſpiked; corolla hirſute on the outſide; fruit four-valved. Found at the ſame place by John White, eſq.

5. Goodenia ſtricta, or rigid blue goodenia: leaves lanceolate, entire or toothed, fleſhy, ſmooth; corolla hirſute on the outſide; ſtigma contracted at the mouth. This grows naturally in marſhy ground at Port Jackſon, flowering there in October, and was found by the ſame gentleman.

6. Goodenia ramoſiſſima, or branching blue goodenia: leaves linear-lanceolate, ſomewhat toothed, both they and the ſtem hiſpid; ſtyle very hirſute at the top; corolla hairy on the outſide. Stem herbaceous, two or three feet high, much branched and ſtraggling, round, rough with ſhort ſtiff hairs, as are alſo the leaves. Flowers ſolitary, terminating the branches, and appearing in October. Found by John White, eſq. at Port Jackſon.

7. Goodenia heterophylla, or various-leaved goodenia: leaves entire, toothed or lobed, hairy; fruit roundiſh; corolla almoſt naked. 8. Goodenia hederacea, or trailing goodenia: leaves roundiſh, entire or five-lobed; corolla woolly on the outſide; ſtem proſtrate. Natives of the ſame place, and found by the ſame gentleman. We do not yet know the colour of their flowers.

9. Goodenia lævigata, or ſmooth goodenia: leaves ovate-lanceolate, toothed, ſmooth. Stems round, ſmooth, green below, purpliſh above. Leaves alternate, on foot-ſtalks gradually widening into them, ſomewhat ovate, deeply toothed, of a full bright green. Flowers axillary, forming a thin ſpike, ſeſſile, pale violet, having a peculiar, rather an unpleaſant ſmell. This was raiſed by Mr. Curtis in the ſummer of 1793, from ſeeds brought over in ſpecimens of earths from Botany Bay by captain Tench to Samuel Tolfrey, eſq. It flowers from July to October.

Propagation and Culture. Theſe plants muſt be raiſed from ſeeds brought from their native country. When once obtained, they may readily be increaſed from cuttings. They are not very tender, but may be preſerved in the dry ſtove, or a good glaſs caſe.

GOODLA'CK, *interj.* Implying wonder or admiration.

GOOD'LINESS, *ſ.* Beauty; grace; elegance.—She ſung this ſong with a voice no leſs beautiful to his ears, than her *goodlineſs* was full of harmony to his eyes. *Sidney.*

GOOD'LUCK BAY, a bay in the Straits of Magellan. Lat. 53. 26. S. lon. 74. 33. W. Greenwich.

GOOD'LY, *adj.* Beautiful; graceful; fine; ſplendid.—Rebekah took *goodly* raiment of her eldeſt ſon Eſau, and put them upon Jacob. *Gen.* xxvii. 15.—There was not among the children of Iſrael a *goodlier* perſon than he. 1 *Sam.* ix. 2.

How full of ornaments is all I view
In all its parts! and ſeems as beautiful as new:
O *goodly* order'd work! O power divine!
Of thee I am, and what I am, is thine! *Dryden.*

Bulky; ſwelling; affectedly turgid:

Round as a globe, and liquor'd every chink,
Goodly and great he falls behind his link. *Dryden.*

Happy; deſireable; gay.—We have many *goodly* days to ſee. *Shakeſpeare.*

GOOD'LY, *adv.* Excellently. *Obſolete:*

There Alma, like a virgin queen moſt bright,
Doth flouriſh in all beauty excellent;
And to her gueſts doth bounteous banquet dight,
Attemper'd *goodly* well for health and for delight. *Spenſ.*

GOOD'LYHOOD, *ſ.* Grace; goodneſs. *Obſolete:*

But mote thy *goodlihood* forgive it me,
To meet which of the gods I ſhall thee name. *Spenſer.*

GOOD'MAN, *ſ.* A ſlight appellation of civility: ſometimes ironical. A ruſtic term of compliment; gaffer.—Nay, hear you, *goodman* delver. *Shakeſpeare.*

But ſee the ſun-beams bright to labour warn,
And gild the thatch of *goodman* Hodge's barn. *Gay.*

Maſter.—If the *goodman* of the houſe [οἰκοδεσποτης] had known what hour the thief would come, he would have watched. *Luke*, xii. 39.

The *goodman* of this houſe was Dolon hight,
A man of ſubtill wit and wicked minde. *Spenſer.*

GOODNA'TURE, *ſ.* Complacency of mind; philanthropy. A very accurate diſtinction is made in Knight's "Principles of Taſte," between *goodnature*, and *goodhumour*; and, as theſe words are often indiſcriminately uſed, we ſhall ſubjoin the definitions: "Thoſe perſons, who are moſt prone to laughter, and moſt ready to enjoy every kind of ſocial pleaſantry or ridicule, without reflecting at whoſe expence it is indulged, are commonly called *goodnatured*; while thoſe, on the contrary, who ſhow no ſuch diſpoſition, but who chill with grave looks, or check with moral obſervations, the mirth, which a gay circle is deriving from a ludicrous diſplay of the follies and foibles

foibles of a perſon, whom they, perhaps, all reverence and eſteem, are as commonly ſtyled *moroſe, ſour, illnatured, fellows*. But in this caſe we confound two qualities, which are extremely different, *goodnature*, and *goodhumour*. *Goodnature* is that benevolent ſenſibility of mind which diſpoſes us to feel both the happineſs and miſery of others; and to endeavour to promote the one, and prevent or mitigate the other: but, as this is often quite impoſſible, and as ſpectacles of miſery are more frequent and obtruſive than thoſe of bliſs, the goodnatured man often finds his imagination ſo haunted with unpleaſant images, and his memory ſo loaded with diſmal recollections, that his whole mind becomes tinged with melancholy; which frequently ſhows itſelf in unſeaſonable gravity, and even auſterity of countenance and deportment; and in a gloomy roughneſs of behaviour; which is eaſily miſtaken for the ſour moroſity of the worſt ſpecies of malignant temper. *Goodhumour*, on the contrary, is that prompt ſuſceptibility of every kind of ſocial or feſtive gratification, which a mind void of ſuffering or ſorrow in itſelf, and incapable, through want of thought or ſenſibility, of feeling the ſufferings or ſorrows of others, ever enjoys. A certain degree of vanity, or light pride, is abſolutely neceſſary to feed and ſupport it; and, though it is never allied to dark envy or atrocious malignity, it is never entirely free from a certain ſhare of ſordid ſelfiſhneſs: for, as the perpetual ſmile of gaiety can only flow from the heart which is perpetually at eaſe, it can only flow from *that* which carries the ingredients of perpetual eaſe always within itſelf; and theſe are affections, which never diverge far from its own centre."

GOODNA'TURED, *adj.* Benevolently diſpoſed.—In all domeſtic relations he was *goodnatured*. *Cheſterfield*.

GOOD'NESS, *ſ.* Deſireable qualities either moral or phyſical; kindneſs; favour.—I take *goodneſs* in this ſenſe, 'the affecting of the weal of men,' which is that the Grecians call *philanthropia*. *Bacon*.—There is a general or natural *goodneſs* in creatures, and a more ſpecial and moral *goodneſs*. *Perkins*.—The *goodneſs* of every thing is meaſured by its end and uſe. *Tillotſon*.

GOODS, *ſ.* Moveables in a houſe. Perſonal or moveable eſtate.—This hinders nothing the proceedings of the civil courts, which reſpect the temporal puniſhment upon body and *goods*. *Leſley*.

That a writ be ſu'd againſt you,
To forfeit all your *goods*, lands, tenements. *Shakeſpeare*.

Wares; freight; merchandiſe:

Salee, that ſcorn'd all pow'r and laws of men,
Goods with their owners hurrying to their den. *Waller*.

"GOODS ill gotten ſeldom proſper."

The Latins ſay, *Mala lucra æqualia damnis*. The Greeks, Κατα κερδεα ιζ' ατησιν. The Italians, *Vien preſto conſumato l'ingiuſtament acquiſtato*. The French, *De mal eſt venu l'agneau, et à mal retourne le peau*. The Germans, *Nebel gewohnen, nebel geronnen*. A very ancient, and a very impreſſive proverb, calculated to inſtil into every mind the neceſſity as well as advantage of being honeſt.

GOOD'WIN (John), a learned Engliſh divine, of the Arminian ſect, born in 1593. His academical education he received at Queen's-college, in Cambridge; and after he was admitted into orders, was much admired for the erudition and elegance which diſtinguiſhed his pulpit compoſitions. In 1633 he was preſented to the vicarage of St. Stephen, Coleman-ſtreet, London; from which he was ejected in 1645, for nonconformity with the canons of the church. He afterwards became miniſter to a private congregation in Coleman-ſtreet pariſh, where he continued until his death in 1665, when about ſeventy-two years of age. He was the author of numerous works, which diſplay conſiderable learning; among which are, 1. Redemption Redeemed, 1651, folio. 2. The Divine Authority of the Scriptures, 1648, 4to. 3. *Imputatio Fidei*; or, A Treatiſe of Juſtification, 1642, 4to. 4. An Expoſition of the Ninth Chapter of the Epiſtle of Paul to the Romans, 1653, 4to. 5. Of being filled with the Spirit, 4to. 6. The Pagan's Debt and Dowry, 8vo. 7. A Catechiſm, or Principal Heads of the Chriſtian Religion; and, 8. A Treatiſe for Infant Baptiſm, 1655, 4to.

GOOD'WIN (Thomas), an eminent Engliſh nonconformiſt divine, born at Rolesby in Norfolk, in the year 1600. He was ſent at an early age to Chriſtchurch-college, Cambridge, where he applied with ſuch diligence to his ſtudies, as to attract much notice in the univerſity. In 1619 he removed to Catharine-hall, in the ſame univerſity, of which he became afterwards a fellow. It is uncertain when he entered into orders; but we find that he was choſen lecturer of Trinity church, in Cambridge, in 1628; and that he was preſented by the king to the vicarage of the ſame church in 1632. Becoming, however, diſſatisfied with the terms of conformity, he relinquiſhed his preferments, and quitted the univerſity in 1634. When afterwards the puritans were perſecuted by the epiſcopal conſiſtories, he was one of thoſe who in the year 1639 fled into Holland, to enjoy liberty of conſcience; where he became paſtor of an independent congregation at Arnheim. About the beginning of the long parliament he returned to England, and was choſen paſtor of a church in London, and alſo a member of the aſſembly of divines. He became a favourite with Cromwell, through whoſe influence he was in 1649 appointed preſident of Magdalen-college, Oxford. He attended Cromwell on his death-bed; on which occaſion he was overheard by Dr. Tillotſon to expreſs himſelf, boldly and enthuſiaſtically confident of the protector's recovery. Soon after the reſtoration he was diſmiſſed from his preſidentſhip, when he returned to London, and continued the exerciſe of his miniſtry till his death, in 1679, in the eightieth year of his age. He was the author of numerous ſermons, expoſitions, pious and controverſial treatiſes, &c. ſome of which were printed in his lifetime, and afterwards inſerted in the collection of his works publiſhed after his death, in five volumes folio, which continue to be much read and eſteemed by calviniſtic independents.

GOOD'WIN, or GOD'WIN, duke of Weſſex, and earl of Kent, in the reign of Edward the Confeſſor; for whoſe hiſtory and intriguing character, ſee the article ENGLAND, vol. vi. p. 555, 556.—To which it might be intereſting here to add the account given of this nobleman by the ancient hiſtorian Lambert: "There lived in the time of king Edward called the Confeſſour a noble man named Goodwine, whoſe daughter Edgithe the ſame king took unto wife; by reaſon whereof, not only this Goodwine himſelfe (being at the firſt but a couheard's ſonne, and afterwards advaunced to honour by king Canutus, whoſe ſiſter by fraude he obtained to wife) became of great power and authoritie within this realme; but his ſonnes (who being five in number) were, by the king's gyfte, advaunced to large livelyhoodes and honourable poſſeſſions—for Goodwine was earle of Kent, Suſſex, Hamſhire, Dorſetſhire, Devonſhire, and Cornwall. But as it is hard in great proſperitie to keepe due temperance, for *ſuperbia eſt vitium rebus ſolenne ſecundis*, ſo this man and his ſonnes, being puffed up with pride of the king's favour, their own power, pollicie, and poſſeſſions, contemned all other, and forgate themſelves; abuſing the ſimplicitie of the king by evil council, treading under foote the nobilitie by great diſdaine, and oppreſſing the common people by inſatiable rapine, extortion, and tirannie; ſo that, immediately and at once, they pulled upon their heads the heavie diſpleaſure of the prince, the immortale hatred of the noblemen, and the bitter execration and curſe of the common ſorte. And, amongſt other things, touching the judgements upon Goodwine himſelf, they feyned, that he was choked at Wincheſter with a morſel of bread, and that his land in Kent (now the Goodwine ſands) ſunk ſodainely into the

the ſea. Ealred, the abbot of Ryuauxe, who tooke paynes to pen the hyſtorie, ſaith, 'that while the king and Goodwine ſate at the table, accompanied with others of the nobilitie, it chaunced the cup-bearer as he brought wyne to the board to ſlip with the one foote, and yet, by good ſtrength of his other legge, to recover himſelf without falling; which thing the earle earneſtly marking, ſayde, pleaſantly, "that there one brother had well helped another." "Marry," quoth the king, "ſo might me mine, ne haddeſt thou been, earle Goodwine" —(caſting in his diſhe the murder of his brother Alfred, which was done to death at Elie by the counſell of Goodwine, as hereafter, in fitte place for it, ſhall appear). Thereat the earle was ſore moved; and, thinking it more than time to make his purgation, tooke a morſell of bread into his hand, and praying, with great and vehement obteſtation, that it might choke him if he, by any means, cauſed the ſlaughter or conſented thereto, he put the bread into his mouth, and was immediately ſtrangled therewithall.'

GOOD'WIN SANDS, a bank in the ſea, near the coaſt of Kent, ſaid to have been formerly part of the eſtate of earl Goodwin; till, by neglect of preſerving the dikes and walls, the whole was drowned by the ſea. They lie oppoſite the town of Deal, at the diſtance of about five miles, extending north-north-eaſt and ſouth-ſouth-weſt about four leagues. They were overflowed about the end of the reign of William Rufus, or the beginning of that of Henry I. as appears by the account given of them by William Lambard, in his "Perambulation of Kent," written in the year 1570, which is as follows: "Silveſter Giraldus, (in his Itinerarie of Wales,) and many others, doe write, that, about the end of the reigne of king William Rufus, or the beginning of Henrie the Firſt, there was a ſodaine and mightie inundation of the ſea, by the which a great part of Flaunders, and of the lowe countries there-about, was drenched and loſt, ſo that many of the inhabitants (being thereby expulſed from their ſeates) came over into England, and made ſuite to the ſame king Henrie, for ſome place of dwelling within his dominions. The king, pitying their calamitie, and ſeeing that they might bee profitable to his realme, by inſtructing his people in the art of clothing, wherein at that time they chiefly excelled, firſt placed them about Carliſle in the north countrie, and afterwards (upon cauſe) removed them to Roſſe and Hauerford in Wales. Now at the ſame time that this happened in Flaunders, the like harme was done in ſundrie places, bothe of England and Scotland alſo; as Hector Boethius, the Scottiſhe hyſtoriographer, moſt plainly writeth, affirming, that, amongſt others, this place, being ſome tyme of the poſſeſſion of the earle Goodwine, was then firſt violently overwhelmed with a light ſande, wherewith it not only remaineth covered ever ſince, but is become withall (*nanum ſurges et vorago*) a moſt dreadful gulfe, and ſhippe ſwalouer."—This large tract of land was defended from the ſea by a great wall, the maintaining of which in good and ſufficient repair to reſiſt the impetuoſity of the waves, was ſuch as to require the moſt conſtant and regular attention. Theſe ſands break off the force of the ſea on the eaſt and the ſouth and ſouth-weſt, ſo as to make the Downs a tolerable road; but when the wind blows very hard at ſouth-eaſt or at eaſt-by-north and eaſt-north-eaſt, ſhips are frequently driven from their anchors, and are either forced on theſe ſands, or obliged to run for Sandwich Bay or Ramſgate Pier.

The Goodwin ſands conſiſt of two parts, called the North and South ſands; of theſe, the latter half lies nearly from north-north-eaſt to ſouth-ſouth-weſt towards the South Foreland, and the northern half lies nearly north and ſouth, but rounds a little on the eaſt ſide, and is in moſt places ſteep, having indifferent good ſhoaling at the north end. This ſand, by ſtorms and ſtrong tides, partially alters every year; it is very broad, and a great part of it dries, but moſt to the north end. In coming in or going out of the Downs, a ſhip ſhould come no nearer to the Goodwin Sands than thirteen fathoms. Their extent is known by the diſtance from the North to the South Sand Head; and a ſhip will be abreaſt of the latter, when Upper Deal Mill and Warner Caſtle are in one, and abreaſt of the North Sand Head when the North Foreland bears at north-weſt-by-weſt. Ships that will work well may turn to twelve or fourteen fathoms all along the back of the Goodwin; and if the water ſhoals on the other tack, it may be depended on as the Falls.

A general obſervation has been made of all ſands which dry or become nearly ſo at the ebb, with reſpect to the currents and tides near them. The firſt part of the flood and the laſt part of the ebb will regularly ſet as the edge of the ſands lies; the ſecond part of the flood and ebb will ſet bodily over ſuch ſands to the lee-tide channels; and the laſt part of the flood and firſt part of the ebb, will ſet nearly as the regular tide does. But if the ſands curve, as ſoon as the ends are under water, the young flood and correſponding ſtate of the ebb will ſet over the different ends into the curve, and on the other ſide run as the ſands lie. It is obſervable, for example, that the firſt of the flood on the Goodwin Sand ſets ſtrong over the South Sand Head into the bight to the Bunt Head, and out again over the North Sand Head; that the middle of the flood ſets more over the ſand for the Gull Stream; and that the laſt of the flood ſets nearly regular for the Foreland. And as to the ebb, it ſets nearly regular for the South Foreland; the middle more for the Gulls; and the laſt over the North Sand Head for the Bunt, and out again over the South Sand Head. The depth of the channel alſo has been obſerved to be nearly as follows: that a little without the Flemiſh Banks there is from eighteen to twenty fathoms, and towards the Goodwin from twenty-ſix to thirty, but the nearer to the Goodwin the deeper, and when a ſhip is thwart of the Goodwin in from twenty-eight to twenty-nine fathoms, ſhe is not two gun-ſhot from it.

GOOD'Y, *ſ.* [corrupted from *good wife*.] A low term of civility uſed to mean perſons.

Plain *goody* would no longer down;
'Twas madam in her grogram gown. *Swift.*

GOOD'YSHIP, *ſ.* The quality of goody. *Ludicrous*:

The more ſhame for her *goodyſhip*.
To give ſo near a friend the ſlip. *Hudibras.*

GOOLDS, or GOLD, a word uſed by Spenſer for the corn-marygold, or CHRYSANTHEMUM ſegetum. See vol. iv. 568.

GOOLE, [*goulet*, Fr.] A breach in a ſea-bank or wall; or a paſſage worn by the flux and reflux of the ſea. 16 and 17 *Car.* II. *c.* 11.

GOOLL, a river of Hindooſtan, which runs into the Taptee, eight miles ſouth of Chuprah.

GOOM'TY, a river of Hindooſtan, which runs into the Ganges, fifteen miles north-north-eaſt of Benares.

GOOND'WANAH, a diſtrict of circar of Hindooſtan, in the northern part of the country of Berar, now more generally called Nagpour.

GOORACPOUR', a town of Hindooſtan, in the country of Oude: ſixty-five miles eaſt of Fyzabad. Lat. 26. 45. N. lon. 83. 35. E. Greenwich.

GOOSE, *ſ.* plural, *geeſe*; [ȝoȝ, Sax. *goes*, Dutch; *gawe*, Erſe, ſing. *gewey*, plural.] A large water-fowl. For its natural hiſtory, and various ſpecies, ſee the article ANAS, vol. i. p. 516.

Nor watchful dogs, nor the more wakeful *geeſe*,
Diſturb with nightly noiſe the ſacred peace. *Dryden.*

A tailor's ſmoothing iron.—Come in, tailor: here you may roaſt your *gooſe*. *Shakeſpeare.*

GOO'SE, a game with dice, uſually played by two perſons; but it will readily admit of many more. It

is

is of German invention, and is well calculated to make children ready at reckoning the produce of two given numbers. The table for playing at *gooſe* is uſually about the ſize of a ſheet almanac, and divided into ſixty-two ſmall compartments arranged in a ſpiral form, with a large open ſpace in the midſt marked with the ber ſixty-three; the ſmaller compartments have ſingly an appropriate number from one to ſixty-two incluſive, beginning at the outmoſt extremity of the ſpiral lines. It is played with two dice, and every player throws in his turn as he ſits at the table; he muſt have a counter, or ſome other mark which he can diſtinguiſh from the marks of his antagoniſts; and according to the amount of the two numbers thrown upon the dice he places his mark, that is to ſay: if he throws a four or a five, which amount to nine, he places his mark at nine upon the table, moving it the next throw as many numbers forward as the dice permit him, and ſo on until the game be completed; namely, when the number ſixty-three is made *exactly*; all above it the player reckons back and then throws again in his turn. It is called the game of the *gooſe*, becauſe at every fourth and fifth compartment in ſucceſſion a *gooſe* is depicted, and if the caſt thrown by the player falls upon a gooſe, he moves forward double the number of his throw.—There is likewiſe the game of *ſnake*, and the more modern game of *matrimony*, with others of a ſimilar kind formed upon the ſame plan as that of the gooſe; but none of them appear in the leaſt improved by the variations.

WINCHESTER GOOSE, a ſwelling or tumour in the groin; an old name for a venereal bubo, ſo called, becauſe the biſhop of Wincheſter had the licenſing of the ſtews and brothels in Southwark, in former times.

GOOSE CREE'K, a river of North America, which falls into Potowmac river, about a mile ſouth-eaſt of Thorpe, in Fairfax county, Virginia.

GOO'SE-FOOT, *ſ.* in botany. See CHENOPODIUM.

GOO'SE-GRASS, *ſ.* in botany. See GALIUM APARINE, and ASPERUGO.

GOOSE I'SLAND, a ſmall iſland in the Gulf of St. Laurence, near the coaſt of Labrador. Lat. 50. 52. N. lon. 52. 10. W. of Greenwich.

GOOSE LA'KE, a lake of North America. Lat. 52. 25. N. lon. 59. 10. W. Greenwich.

GOOSE-TONGUE *ſ.* in botany. See ACHILLEA.

GOO'SEBERRY, *ſ.* in botany. See RIBES.

GOO'SEBERRY ISLANDS, ſmall iſlands near the eaſt coaſt of the iſland of Newfoundland: eight leagues north-weſt of Cape Bonaviſta.

GOO'SEBERRY ROCKS, rocks near the coaſt of the ſtate of Maſſachuſetts: two miles north of Marblehead.

GOO'SECAP, *ſ.* A ſilly perſon.

GOO'TY, a town and fortreſs of Hindooſtan, and capital of a diſtrict of the ſame name, in the Myſore country: 138 miles weſt-north-weſt of Mellore, and 170 north of Seringapatam. Lat. 15. 15. N. lon. 77. 48. E. of Greenwich.

GOP'LO, a lake of Poland, in the palatinate of Brzeſc, ſixteen miles long, and four wide: twenty-four miles weſt of Brzeſc.

GROP'PINGEN, a town of Germany, in the circle of Swabia, and duchy of Wurtemberg, ſituated on the Fils, or Vils, in a fertile country. Here are conſiderable manufactures of woollen goods; and near it is a medicinal ſpring: twenty-two miles eaſt-ſouth-eaſt of Sturtgart, and twenty north-north-weſt of Ulm.

GOR, a town of Perſia, in the province of Farſiſtan: fifty-ſeven miles north-weſt of Schiras.

GORAGOT', a town of Hindooſtan, in the country of Bengal: ſixty miles eaſt of Maulgah, aud eighty north-north-eaſt of Moorſhedabab.

GOVAN'TO', a town of Aſiatic Turkey, in the province of Caramania: eighty miles ſouth-weſt of Satalia.

GORBA'RA, a town of the iſland of Corſica: eight miles north-eaſt of Calvi.

GORBA'TA, a town of Africa, in the kingdom of Tunis: twenty miles ſouth of Gaſſa.

GORBATOV', a town of Ruſſia, in the government of Nizegorod, on the Oka: twenty-eight miles weſt-ſouth-weſt of Niznei-Novgorod. Lat. 56. 5. N. lon. 61. E. Ferro.

GOR'BELLY, *ſ.* [from ɣoɲ, dung, and *belly*, according to *Skinner* and *Junius*. It may perhaps come from *gor*, Welſh, beyond, too much; or, as ſeems more likely, may be contracted from *gormand*, or *gorman's belly*, the belly of a glutton.] A big paunch; a ſwelling belly. A term of reproach for a fat man.

GOR'BELLIED, *adj.* Fat; bigbellied; having ſwelling paunches.—Hang ye, *gorbellied* knaves, are you undone? No, ye fat chuffs, I would your ſtore were here. *Shakeſpeare.*

GOR'CUM, a town of Holland, ſituated on the river Linge, at its union with the Wahal. It was anciently called *Gorichem*, which name is now given it in all public acts, Gorcum being only a corruption. It was built in 1230, by one of the lords of Arckel, of which country it is the capital; with a caſtle, which was deſtroyed by the citizens, in 1578, during the revolution. From the ſteeple of the principal church, may be ſeen twenty-two walled cities, beſides a great number of towns and villages; before the revolution it had one pariſh church, and three religious houſes. The city was governed by two burgomaſters, an officer called Droſſart or grand baily, and ſeven echevins, who are choſen by the common council, and changed every year. The comte de Lumay, after he had taken Gorcum for the States, in 1572, put to death nineteen prieſts and other religious people, with the moſt cruel torments, cutting off their noſes and their ears, and then hanging them in a row near the Brill; to the credit of the prince of Orange and the States, he was diſgraced; he died a few years after at Liege, from the bite of a mad dog. Twelve miles eaſt of Dort, and thirty ſouth of Amſterdam. Lat. 51. 51. N. lon. 22. 25. E. Ferro.

GORD, *ſ.* An inſtrument of gaming. *Warburton.*—Thy dry bones can reach at nothing now but *gords* and ninepins. *Beaumont and Fletcher.*—Let vultures gripe thy guts; for *gords* and Fulham holds. *Shakeſpeare.*

GORDELI'ZA, a town of Spain, in the province of Leon: twenty-two miles ſouth-ſouth-eaſt of Leon.

GOR'DES, a town of France, in the department of the Mouths of the Rhone, and chief place of a canton, in the diſtrict of Apt: five leagues and a half eaſt of Avignon, and three weſt of Apt.

GORDIÆ'I, in ancient geography, mountains in Armenia, where the Tigris riſes, ſuppoſed to be the Ararat of ſcripture.

GOR'DIAN, or GORDIA'NUS, I. II. and III. Roman emperors. See the article ROME.

GOR'DIAN, *adj.* [from the *Gordian* knot.] Intricate:

Cloſe the ſerpent fly
Inſinuating wove with *Gordian* twine
His braided train. *Milton.*

GOR'DIAN KNOT, in antiquity, a knot made in the harneſs of the chariot of Gordius king of Phrygia, ſo very intricate, that no one could untie it. See the article GORDIUS.

GORDIA'NUS, M. Antonius Africanus, father and ſon, diſtinguiſhed and illuſtrious Roman emperors; for an account of whom ſee the article ROME.

GOR'DIUM, a town of Phrygia. *Juſtin.*

GOR'DIUS, a Phrygian, who, though originally a peaſant, was raiſed to the throne, and proclaimed king. During a ſedition the Phrygians conſulted the oracle, and were told that all their troubles would ceaſe as ſoon as they choſe for their king, the firſt man they met going to the temple of Jupiter, mounted on a chariot or car. Gordius was the object of their choice, and he immediately conſecrated his chariot in the temple of Jupiter. The knot which tied the yoke to the

draught tree, was made in such an artful manner, that the ends of the cord could not be perceived. From this circumstance, a report was spread that the empire of Asia was promised by the oracle to him that could untie the Gordian knot. Alexander in his conquest of Asia, passed by Gordium; and as he wished to leave nothing undone, which might inspire his soldiers with courage and make his enemies believe that he was born to conquer Asia, he cut the knot with his sword; and from that circumstance asserted that the oracle was really fulfilled, and that his claims to universal empire were fully justified. *Justin.*

GOR'DIUS, *s.* [so named from the Gordian knot, because of its nimble and numerous contortions.] In helminthology, the HAIRWORM; a genus belonging to the order of intestina; the characters of which are: body round, filiform, equal, and smooth. Five species have been ascertained, which are as follow:

1. Gordius aquaticus: body pale, brown, with dark extremities. This inhabits stagnant waters, and is mostly from four to six inches long; it twists itself into numerous contortions and knots, and if incautiously handled will inflict a bite at the end of the fingers, and occasion the complaint called a whitlow. See a correct figure of this worm in the engraving, at fig. 6. A much larger variety of this species is found on the sea-shores, called *Gordius marinus.* Several of these have been taken up on the coast of Devonshire, and an account of them published in the 7th volume of the Linnæan Transactions in 1804, as follows: "They are of so prodigious a length, that it is impossible to fix any bounds; some of the fishermen say thirty yards, but perhaps as many feet is the utmost: those specimens which have come under our inspection did not appear to exceed twenty feet, and more commonly from eight to fourteen or fifteen. If the animal be wounded, or the body divided, small threads of milky appearance issue from the wound, and do not mix with the water without agitation. The expansion and contraction are so unlimited, that it is scarcely possible to ascertain the utmost length of this worm: one, which was esteemed to be about eight feet long, was put alive into spirits, and instantly contracted to about one foot, at the same time increasing double the bulk, which originally was about the diameter of a crow's quill. In the vast exertion of the muscles, the animal is generally divided at those parts which had been twined into knots. This worm is very difficult to preserve perfect without contraction; for, if suffered to die in its natural element, one part will decay, while the other is alive; and the addition of any thing offensive produces contraction; even fresh water.—This worm, under the name of *Gordius medinensis,* has been often confounded with the *dracunculus,* or worm that enters the cuticle, and lies between that and the muscles; but for which see the article FILARIA, vol. vii. p. 366, and the correspondent engraving.

2. Gordius argillaceus: body uniformly yellowish: found in clay at the bottom of stagnant waters, which it pierces through; and is hardly distinguishable from the preceding.

3. Gordius filum: body filiform, whitish, and hyaline: found in the bark of old wooden pipes which have been placed in the ground for the purpose of conveying streams of water; it is extremely slender, and a little tapering at one end.

4. Gordius lacteus: body uniformly white, and opake: found in stagnant waters: when touched it contracts itself in a moment, and afterwards expands.

5. Gordius arenarius: body fulvous, and obtuse. This inhabits the sandy bottom of Christian's Bay, in Norway.

GOR'DON (Alexander), a learned writer of the eighteenth century; a native of Scotland. He was successively secretary to the Society for the Encouragement of Learning, to the Egyptian Club, and to the Antiquary Society. At length he accompanied governor Glen to Carolina, where he occupied various posts in the province, and received a grant of land. He died in that country after publishing the following works: 1. *Itinerarium Septentrionale,* or a Journey through most Parts of Scotland, 1726, folio. 2. Additions and Corrections to the above; containing an Account of Roman Antiquities in Scotland, and ancient Monuments in the North of England, 1732, folio. 3. The Lives of Pope Alexander VI. and his Son Cæsar Borgia, 1729, folio. 4. A complete History of ancient Amphitheatres, translated from the Italian, 1730, 8vo. 5. An Essay towards explaining the hieroglyphical Figures on the Coffin of a Mummy, 1737, folio. 6. Twenty-five Plates of all the Egyptian Mummies in England, and other Egyptian Antiquities, 1739, folio.

GOR'DON (Andrew), professor of philosophy in the Scots monastery of the Benedictines at Erfurt, and correspondent of the Academy of Sciences at Paris, born near Aberdeen in Scotland, in 1712. In 1731 he undertook a tour through Austria, Italy, and France; and on his return in 1732, he entered into the order of the Benedictines in the Scots monastery, where he applied to philosophy, and got himself ordained a priest. In 1735 he went to Salzburg to study law, and at the same time attended the theological lectures, till he was invited to Erfurt, in 1737, to be professor of philosophy. His discoveries in electricity made his name well known, not only in Germany, but also in Holland, England, France, and Italy. He was invited to be superintendant of the Zaluski library, in Poland; but this offer he declined, and died in August 1751. Besides his occasional and controversial writings, he was author of the following works: 1. *Phenomena Electricitatis exposita; Erfurt,* 1744, 8vo. 2. *Philosophia utilis & jucunda; Stadt am Hof.* 1745, 3 vols. 8vo. 3. Impartial Account of the Origin of the present War in Great Britain; Strasburgh, 1745, 4to. 4. *Physicæ experimentalis Elementa; Erfurt,* 1751, 8vo. He is mentioned by Dr. Priestley as the first person who used a cylinder instead of a globe in the electrical apparatus.

GOR'DON (James), a Jesuit, born in 1553, and entered into that order when he was twenty one years old. He was the author of a Commentary upon the Bible, which he published at Paris in 1632, in 3 vols. folio, under the title of, *Biblia Sacra, cum Commentariis ad Sensum Literæ, & Explicatione Temporum, Locorum, Rerumque omnium quæ in Sacris Codicibus habent Obscuritatem: unâ cum Textu Biblico;* which Dupin pronounces it to be a very useful and judicious work. He was likewise the author of, 2. *Opus chronologicum, Annorum Seriem, Regnorum Mutationes & Rerum Ordo Orbe gestarum Narrationem a Mundi Exordio usque ad Annum Christi* 1617 *complectens;* 1617, folio. 3. A System of moral Theology; and other works in the Latin language.

GOR'DON (Thomas), a distinguished writer, born at Kirkudbright in Scotland. After receiving an academical education in his own country, he came to London, and maintained himself by teaching the learned languages. He also interested himself in the politics of the time, and was employed by the earl of Oxford in queen Anne's reign. When the Bangorian controversy took place, he wrote two pamphlets in defence of bishop Hoadley. He was afterwards connected with Mr. Trenchard in the publication of Cato's Letters, and The Independent Whig. Besides his political works, Gordon made himself known by translations of Tacitus in 1739, and of Sallust in 1743, with discourses relative to the subjects of each author prefixed. He died at the age of sixty-six.

GORDO'NA, a town of Italy, in the kingdom of Naples, and province of Molise: six miles south-west of Molise.

GORDO'NIA, *s.* [so named from Mr. *James Gordon,* an eminent nurseryman at Mile-end, near London.] LOBLOLLY BAY; in botany, a genus of the class monadelphia,

nadelphia, order polyandria; or claſs polyandria, order monogynia; natural order columniferæ, (malvaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium (double; outer four-leaved, deciduous; *Cavan.*) inner five-leaved; leaflets roundiſh, concave, (ciliate, *Withering*,) permanent. Corolla: petals five, obovate, concave, large, united at the baſe, (one of them ciliate, *W.*) Stamina: filaments numerous, filiform, coaleſcing at the baſe into an obtuſe body, (campanulate, with a five-cleft border, *W.*) anthers oval, upright. Piſtillum: germ ovate. Style ſhort, five-cornered; (cylindric, *W.*) ſtigmas five, ſharp, horizontal. (Stigma five-cornered, *W.*) Pericarpium: capſule ovate, ſharp, five-celled: cells bifid half-way, five-valved. Seeds: two, with a leafy wing on one ſide. (Seeds in two rows in each cell. *L'Herit.*)—*Eſſential Character.* Calyx, five-leaved; petals, five; united at the baſe by means of the nectary; filament, inſerted into the nectary; capſule, ſuperior, five-celled; ſeeds winged.

Theſe are ſhrubs with flowers ſolitary from the axils. In habit they differ ſomewhat from the Malvaceous tribe, and they have no ſtipules, but the corcle or heart of the ſeed is furniſhed with corrugated lobes. The filaments not being united at bottom, but only inſerted into the nectary, theſe ſhrubs do not properly belong to the claſs Monadelphia, but to that of Polyandria.

Species. 1. Gordonia laſianthus, or ſmooth loblolly bay: leaves leathery, ſmooth on both ſides, flowers peduncled. Cateſby deſcribes the loblolly bay as a tall and very ſtraight tree, with a regular pyramiddal head, and adds that the leaves are ſhaped like thoſe of the common bay, but are ſerrated. Swartz ſays it is a low tree, with a white, ſoft, brittle wood; the leaves ovate-lanceolate, flat, ſomewhat leathery, of a duſky green colour. According to Mr. Miller, the ſtem is five or ſix feet high, and branched; the leaves four inches long, and one inch and a half broad in the middle, ſlightly indented on their edges, and of a thick conſiſtence; the flowers axillary, on very long peduncles; the petals are yellow and thick; the ſtamens are joined at their baſe to the ſtyle, and form a ſhort column, but ſpread open at top, filling the mouth of the tube. Native of North America. Introduced about 1768, by Benjamin Bewick, eſq. It flowers in Auguſt and September. Dr. Dale ſent ſeeds of it to Mr. Miller from South Carolina, and he raiſed plants from them.

2. Gordonia pubeſcens, or pubeſcent loblolly bay: leaves pubeſcent beneath, flowers ſubſeſſile. Branches ſubpubeſcent. Leaves as in the foregoing, but with the lower ſurface very ſoftly tomentoſe. Flowers axillary, ſolitary, ſeſſile towards the tops of the branches. Native of South Carolina; flowers in September. It has been long in the open air in the garden at Trianon in France; but, like the reſt of the trees and ſhrubs from South Carolina, not very patient of cold. The flowers are white, but they come out ſo late, that the froſt deſtroys them before they expand.

3. Gordonia Franklini, or Franklin's Gordonia: leaves ſmooth, flowers ſeſſile, fruits globular. This beautiful tree-like ſhrub riſes with an erect trunk to the height of about twenty feet, with alternate branches. Leaves oblong, narrowed towards the baſe, ſerrate, alternate, ſeſſile or ſubſeſſile. Flowers towards the extremity of the branches, ſolitary, ſitting cloſe in the boſom of the leaves, often five inches in diameter when fully expanded; petals ſnow-white, the lower one hollow, formed like a cap or helmet, entirely including the other four, until the moment of expanſion; its exterior ſurface is covered with a ſhort ſilky hair; the borders of the petals are curled or plaited. Fruit, a large, round, dry, woody, pericarp, opening at each end oppoſitely by five alternate fiſſures, containing ten cells, each filled with dry woody cuneiform ſeeds. Capſules umbilicate, with the partitions in the middle of the valves. Seeds very many, lying over each other in two rows, in each cell, obſcurely cornered, ſomewhat like thoſe of the cypreſs, ſlightly edged at the corners. Native of South Carolina and Georgia. Not having yet flowered in Europe, it is doubtful whether this ſpecies belongs to the genus Gordonia or Stuartia. As far as can be judged from ſpecimens, it rather appertains to the latter. It has the habit and calyx of the former, but the inſertion of the ſtamens, and the manner of flowering, are the ſame as in Stuartia; the capſule alſo agrees rather with the latter, but the ſeeds are in two rows, edged however at the corners, not winged as in Gordonia. The flowers have the fragrance of a China orange. It was firſt obſerved by Mr. John Bartram on the Alatamaha river in Georgia, in the year 1760; and was brought into Pennſylvania fifteen years after, by his ſon William Bartram.

Propagation and Culture. The loblolly bay, growing naturally in water, is not kept alive in this country without difficulty. Mr. Miller raiſed ſeveral plants, which continued till winter, but not one of them ſurvived, though he placed ſome of them in the ſtove, and ſupplied them well with water.

GORE, *ſ.* [ȝoꝛe, Sax. *gór*, Welſh, ſanious matter.] Blood effuſed from the body:

Another's crimes the youth unhappy bore.
Glutting his father's eyes with guiltleſs *gore*. *Dryden.*

Blood clotted or congealed:

His horrid beard and knotted treſſes ſtood
Stiff with his *gore*, and all his wounds ran blood. *Denham.*

In heraldry; one of the abatements of honour, two diagonal lines croſſing one another. In old records; a narrow piece of land, a ſlip of ground. A ſlanting piece ſewed on to a garment in order to widen it.

To GORE, *v.a.* [ȝebeꝛian, Saxon.] To ſtab; to pierce.

No weaker lion's by a ſtronger ſlain;
Nor from his larger tuſks the foreſt boar
Commiſſion takes his brother ſwine to *gore*. *Tate.*

To pierce with a horn.—Some toſs'd, ſome *gor'd*, ſome trampling down he kill'd. *Dryden.*

He idly butting, feigns
His rival *gor'd* in every knotty trunk. *Thomſon's Spring.*

GORE's ISLAND, an iſland in the North Pacific Ocean. Lat. 60. 40. N. lon. 172. 30. W. Greenwich.

GOREE', or GOEREE, an iſland in the German Ocean, near the mouth of the Meuſe, about ten miles in circumference: two miles north of Schowen. Lat. 51. 49. N. lon. 20. 26. E. Ferro.

GOREE', a ſeaport town in the iſland of the ſame name, ſituated near the eaſt coaſt, on a canal which communicates with the Meuſe, formerly a place of conſiderable trade; but the harbour is now choaked up with ſand: ſix miles weſt of Helvoetſluys.

GOREE', a ſmall iſland in the Atlantic, near the coaſt of Africa, about two miles in circumference, within a cannon ſhot of the ſhore. Notwithſtanding its ſituation, the air is ſaid to be cool and temperate all the year round, and the inhabitants refreſhed by alternate breezes from the land and ſea. Beſides the multitude of ſurrounding rocks, that render it almoſt inacceſſible, except at two particlar bays, a late director, M. de St. Jean, has embelliſhed the fort with ſeveral new buildings, as well as fortified it by works, which render it a place of great ſtrength. By the diligence of this gentleman, ſeveral fine ſprings, ſo much wanted, have been diſcovered in the iſland: the gardens have been planted with excellent fruit trees: all kinds of vegetables have been raiſed in great abundance; and from a ſmall, barren, and deſpicable, iſland, he has made it one of the ſafeſt, pleaſanteſt, and moſt important, ſettlements on the coaſt of Africa. Goree was ceded to the Dutch, in 1617, by Biram king of Cape Verd, and they immediately ſecured it by a fort, built on a rock to the north-

weſt, to which they gave the name of Naſſau Fort; but, finding that this ſituation did not command the harbour, they erected another fortification, called Orange Fort, ſomewhat nearer the ſhore. This eſtabliſhment they kept till they were driven out by admiral Holmes, in 1663, who placed an Engliſh garriſon in it. Two years after, it was retaken by De Ruyter, when Mr. Abercromby, the governor, and garriſon, were forced to ſurrender priſoners of war. Upon this the Dutch augmented the fortifications, and the iſland enjoyed a perfect tranquillity till 1677, when a French ſquadron, commanded by the count d'Eſtrées, arrived off the harbour, on the 30th of October. Next day, Hapſar, the Dutch governor, was ſummoned to ſurrender, and on his refuſal, the count made preparations to bombard Orange Fort, which obliged the garriſon to evacuate it, and retire to Fort Naſſau, where they expected to capitulate upon honourable terms, though they were ſoon forced to ſurrender at diſcretion. The next year M. du Caſſe arrived at Goree with a forty-gun ſhip, and ſolemnly took poſſeſſion of the iſland in the name of the French Senegal company, and concluded a treaty with the king and negroes of the neighbouring country, on the ſame conditions the Dutch enjoyed while they poſſeſſed the iſland. As this meaſure, which he had taken voluntarily, was approved on his return by the court, he was ſent back the following year in quality of governor, with preſents to the negro kings; and the ſame year this conqueſt was ſecured to the company by the treaty of Nimmegen. No ſooner were the French in full poſſeſſion, than they ſet to work, in repairing and adding new works to both the forts, calling the lower fort Vermandois, and the higher St. Michael. Before the year 1681, ſeveral unſucceſsful attempts were made by the Dutch to recover a place of ſuch importance to trade; but all of them proved abortive. This famous negro ſettlement was taken by the Engliſh in 1758, by a ſquadron under the command of commodore Keppel; and it was for cruelties exerciſed in this garriſon, that governor Wall ſuffered death before Newgate, on the 28th of January, 1802. Lat. 14. 40. N. lon. 17. 30. W. Greenwich.

GO'REY. See NEWBOROUGH.

GO'REY MOUNTAINS, mountains of Ireland, in the county of Donegal: fourteen miles ſouth-weſt of Londonderry.

GOR'GA, a river of Italy, in the kingdom of Naples, which runs into the Liban, in the province of Calabria Citra.

GOR'GAST, a town of Germany, in the circle of Upper Saxony, and Middle Mark of Brandenburg: four miles weſt of Cuſtrin.

GORGE, *ſ.* [French.] The throat; the ſwallow.—How abhorred in my imagination it is: my *gorge* riſes at it. *Shakeſpeare.*

[In architecture.] The narroweſt part of the Tuſcan or Doric capitals, lying above the ſhaft of the pillar, between the aſtragal and the annulets.

[In fortification.] The entrance into a baſtion, or a ravelin, or other out-work. See FORTIFICATION.—A ſtrait or narrow paſſage between hills and mountains.

To GORGE, *v. n.* [*gorger*, Fr.] To fill up the throat; to glut; to ſatiate.—*Gorge* with my blood thy barbarous appetite. *Dryden.*

Nor would his ſlaughter'd army now have lain
On Afric's ſands, diſfigur'd with their wounds,
To *gorge* the wolves and vultures of Numidia. *Addiſon.*

To ſwallow: as, The fiſh has *gorged* the hook.

GOR'GE, a daughter of Œneus king of Calydon, by Althæa daughter of Theſtius. She married Andremon, by whom ſhe had Oxilus, who headed the Heraclidæ, when they made an attempt upon Peloponneſs. *Pauſanias.*—One of the Danaides.

GOR'GED, *adj.* Having a gorge or throat:

Look up a height, the ſhrill-*gorged* lark ſo far
Cannot be ſeen or heard. *Shakeſpeare.*

GOR'GEOUS, *adj.* [*gorgias*, old French. *Skinner.*] Fine; ſplendid; glittering in various colours; ſhowy; magnificent:

O, that deceit ſhould dwell
In ſuch a *gorgeous* palace! *Shakeſpeare.*

GOR'GEOUSLY, *adj.* Splendidly; magnificently; finely.—The duke, one ſolemn day *gorgeouſly* clad in a ſuit all over ſpread with diamonds, loſt one of them. *Wotton.*

GOR'GEOUSNESS, *ſ.* Splendour; magnificence; ſhow.

GOR'GET, *ſ.* The piece of armour that defends the throat:

About his neck a threefold *gorget*,
As rough as trebled leathern target. *Hudibras.*

GOR'GIAS. A man's name. 1 *Mac.*

GOR'GIAS, a celebrated ſophiſt and orator, ſurnamed *Leontinus*, becauſe born at Leontium in Sicily. He was ſent by his countrymen to ſolicit the aſſiſtance of the Athenians againſt the Syracuſans; and through the force of his eloquence was ſucceſsful in his embaſſy. His reputation was in conſequence prodigious. He was highly venerated in Leontium, his native city; and money was coined with his name upon it. In the latter part of his life he eſtabliſhed himſelf at Athens; and lived till he had attained the great age of one hundred and five years; and after his death, a golden ſtatue was erected in his honour at Delphi. Hermogenes has preſerved a fragment of his writing, from which we ſee ſomething of his ſtyle and manner. It is rather quaint and artificial; full of antitheſis and pointed expreſſion; and ſhews how far the Grecian ſubtilty had at that time carried the exerciſe and ſtudy of their language. He died in the year 400 before Chriſt.

GORGOGLIO'NE, a town of Italy, in the kingdom of Naples, and province of Baſilicata: fifteen miles eaſt of Venoſa.

GORGO'NA, a ſmall iſland in the Mediterranean, about ſixteen miles from the coaſt of Tuſcany; celebrated for the anchovy fiſhery on its coaſts. Lat. 43. 22. N. lon. 27. 41. E. Ferro.

GORGO'NA, an iſland in the Pacific Ocean, about ſix leagues from the coaſt of Peru: ten miles in circumference. Lat. 3. 6. N. lon. 77. 52. W. Greenwich.

GORGO'NES, in mythology, three celebrated ſiſters, daughters of Phorcys and Ceto, whoſe names were Stheno, Euryale, and Meduſa, all immortal except Meduſa. According to the mythologiſts, their hairs were intwined with ſerpents, their hands were of braſs, their body covered with impenetrable ſcales, and their teeth were as long as the tuſks of a wild boar, and they turned to ſtones all thoſe on whom they fixed their eyes. Meduſa alone had ſerpents in her hair, according to Ovid, and this proceeded from the reſentment of Minerva, in whoſe temple Meduſa had gratified the paſſion of Neptune, who was enamoured of the beautiful colour of her locks, which the goddeſs changed into ſerpents. Æſchylus ſays, that they had only one tooth and one eye between them, of which they had the uſe each in her turn; and accordingly it was at the time that they were exchanging the eye that Perſeus attacked them, and cut off Meduſa's head. According to ſome authors, Perſeus, when he went to the conqueſt of the Gorgons, was armed with an inſtrument like a ſcythe by Mercury, and provided with a looking-glaſs by Minerva, beſides winged ſhoes, and a helmet of Pluto, which rendered all objects clearly viſible and open to the view, while the perſon who wore it remained totally inviſible. With weapons like theſe, Perſeus obtained an eaſy victory; and after his conqueſt, returned his arms to the different deities, whoſe favours and aſ-

ſiſtance

J Pass sculp.t

1 Gorgonia Ceratophyta. 2. Its feeler magnified. 3. Gorgonia Nobilis. 4. A branch with its feelers magnified.

London. Published as the Act directs. March 21 1806 by J. Wilkes.

J.Pass sculp.t

1. Gorgonia Antipathes. 2. Gorgonia Muricatā.

London. Published as the Act directs. March 29 1806 by J. Wilkes.

ſiſtance he had ſo recently experienced. The head of Meduſa remained in his hands; and after he had finiſhed all his laborious expeditions he gave it to Minerva, who placed it on her ægis, with which ſhe turned into ſtones all ſuch as fixed their eyes upon it. It is ſaid, that after the conqueſt of the Gorgons, Perſeus took his flight in the air towards Æthiopia; and that the drops of blood which fell to the ground from Meduſa's head were changed into ſerpents, which have ever ſince infeſted the ſandy deſerts of Libya. The horſe Pegaſus alſo aroſe from the blood of Meduſa, as well as Chryſaor with his golden ſword. The reſidence of the Gorgons was beyond the ocean towards the weſt, according to Heſiod. Æſchylus makes them inhabit the eaſtern parts of Scythia; and Ovid, as the moſt received opinion, ſupports that they lived in the inland parts of Libya, near the lake of Triton, or the gardens of the Heſperides. Diodorus, and others, explain the fable of the Gorgons, by ſuppoſing that they were a warlike race of women near the Amazons, whom Perſeus, with the help of a large army, totally deſtroyed. *Heſiod.*

GORGO'NIA, a ſurname of Pallas, becauſe Perſeus, armed with her ſhield, had conquered the Gorgon, who had polluted her temple with Neptune.

GORGO'NIA, *ſ.* [Greek; ſo called, from the fable of the Gorgons.] In helmintology, a genus belonging to the order of zoophytæ; the generic characters of which are:—Animal growing in the form of a plant; ſtem coriaceous, corky, woody, horny, or bony, compoſed of glaſſy fibres, ſtriate, tapering, dilated at the baſe, covered with a vaſcular or cellular fleſh or bark, and becoming ſpongy and friable when dry; mouths or florets covering the ſurface of the ſtem, and polype-bearing. Forty-one ſpecies have been aſcertained, which are as follow:

1. Gorgonia ceratophyta: this gorgon grows with branched, divaricate, erect, ſubdiviſions, each marked with two furrows; the polypees or florets are white, placed in irregular rows; fleſh purple; bone black, and horny. It is found in the Mediterranean, Atlantic, and South American, Seas; on rocks and ledges, about a foot high. Its bright purple fleſh, and ſilvery polypees, make a moſt beautiful appearance. See a figure of this in the Gorgonia Plate I.

2. Gorgonia nobilis, the red coral; with ſpread irregular ſlightly-tapering branches; fleſh beautifully red, ſoft, ſlippery, and full of minute pores; bone ſtony, and irregularly ſtriate. It is found on coral rocks in the Mediterranean and Red Sea; is very valuable, and grows to about a foot in height; the pores or florets are irregularly placed, and a little prominent, conſiſting of eight valves, from which proceed the polypees, with eight tentacula. See a correct figure of this ſpecies in the ſame engraving.

3. Gorgonia lepadifera: dichotomous, with crowded imbricate reflected campanulate mouths or florets. Found on rocks in the Norway ſeas, near two feet high; fleſh pale, covered with minute whitiſh ſcales; florets covered with white imbricate ſcales, and have the appearance of ſmall bernacles; ſtem white, with a ſtony baſe and cartilaginous branches.

4. Gorgonia verticillaris: pinnate, branched, with alternate parallel ſubdiviſions covered with verticillate incurved florets. Found in the Mediterranean and North Seas; from two to three feet high: ſtem very brittle, white or yellowiſh, compoſed of layers of a ſhining pearly ſhelly ſubſtance; fleſh covered with white glaſſy ſcales; branches flexile.

5. Gorgonia placomus: branching both ways, with flexuous rarely anaſtomoſing branches covered with conic florets. Inhabits the European and Indian ſeas; two feet high: ſtem erect, woody, yellow, ſcarlet, reddiſh, or cinereous; branches flattiſh, bending irregularly towards each other and rarely uniting; florets ſurrounded at the top with ſmall ſpines.

6. Gorgonia mollis: coriaceous, dichotomous, with perpendicular tubular florets. Found on the rocks of the Mediterranean; nearly a foot and half high: brown-violet, with long ſlender branches and brown ſtem.

7. Gorgonia ſuccinea: round, amber-colour, dichotomous, rigid; the ſtem covered with tubercular gaping florets. This is very rare; about half a foot high, with a teſtaceous ſtem.

8. Gorgonia Americana: branched and ſubdivided; the ſubdiviſions nearly oppoſite, depreſſed with rows of ſuckers on each margin; fleſh yellowiſh, pale purple within; bone horny. Found on the rocks and ſhores in the Weſt Indies; purpliſh, or yellowiſh.

9. Gorgonia exſerta: round, with a few alternate branches; florets alternate, eight-valved; fleſh covered with minute white ſcales; bone browniſh, horny. Found in the Weſt-Indian ſeas; about two feet high; branches long, ſlender, white; polypees with eight tentacula, and exſerted.

10. Gorgonia patula: compreſſed, with flexuous ſubpinnate branches, crimſon; with two rows of florets each ſide, each ſurrounded with a whitiſh ring; bone browniſh, horny. Found on the rocks in various parts of the Mediterranean Sea.

11. Gorgonia juncea: with a very ſimple round ſtem tapering both ways; bone duſky, horny; fleſh orange-colour, with two furrows; florets longiſh. Found on the rocks and ſea-ſhores in the American iſlands; ſometimes adhering to ſtones; about three feet long, and very flexible when alive.

12. Gorgonia antipathes: ſhrubby, with erect alternate panicled branches; bone with flexuous ſtriæ. Found on the rocks in the Indian and Mediterranean ſeas; from two to three feet high; horny, deep gloſſy black, with a grey bark. This affords the moſt beautiful ſmooth black coral of the ſhops; and is repreſented in the Gorgonia Plate II. fig. 1. See alſo the article CORAL, and CORAL ROCKS, vol. v. p. 187–9.

13. Gorgonia muricata: round, with depreſſed, ſubdivided, branches; fleſh firm, whitiſh, covered at the ends with cylindrical ſpinous florets; bone two-edged, blackiſh. Found on rocks and ſtones about the ſhores of the American iſlands; from two to three feet high; coriaceous, horny, with a white medullary nerve. This is repreſented in the Gorgonia Plate II. fig. 2.

14. Gorgonia flammea: compreſſed, branched, and ſubdivided: bone flat, horny; fleſh ſcarlet, covered with minute florets. Found on the ſhores round the Cape of Good Hope; it is of a bright flame-colour.

15. Gorgonia umbraculum: fan-ſhaped, ſubreticulate, with numerous round, divergent, branches; fleſh reddiſh, covered with florets or polypees. It inhabits the Indian Ocean; ſtem ſhort, riſing from a broad baſe, ſending forth two or three thick branches, from which proceed many long ſlender ſmaller ones, all tending to the circumference, and united here and there by ſmaller ſide ones, forming a kind of net-work.

16. Gorgonia purpurea: ſubdichotomous, with divaricate ſlender branches; fleſh violet colour, covered with minute tubercles; round, ſmooth, blackiſh; the ends of the branches yellow. Found on the coaſts of South America; adhering to rocks and ſtones.

17. Gorgonia ſaſappo: dichotomous, round, with divaricate, ſlender, branches; fleſh red, with numerous hairy florets. Found in the Indian Ocean; a foot long; black, horny, and frequently found with bernacles adhering to it.

18. Gorgonia palma: flat, with numerous, very long, ſimple, diviſions; fleſh ſmooth, with ſcattered ſimple pores. This alſo inhabits the Indian Ocean; from two to ſix feet long; brown, horny, covered with a calcareous coat, and flexile.

19. Gorgonia radicata: very much branched, corky, with very minute ſcattered pores, and many-cleft at the baſe. Found on the rocky ſhores of the African ſeas;

ſubdichotomous, grey, of the ſubſtance and appearance of cork, with a branched trunk two inches high.

20. Gorgonia ſuberoſa: woody, very much branched, diffuſe, the branches compreſſed and grooved, and covered with ſubſtellate ſcattered pores. Inhabits the Indian and African ſeas; near three feet high; fleſh red, ſpongy; bone pale red, corky; branches long, round, erect.

21. Gorgonia coralloides: woody, erect, ſubdichotomous and variouſly ſhaped; fleſh roſy, tuberous, with ſtellate tuberculate florets. Found on the rocks in the Mediterranean Sea; near a foot long; pale grey, very tough, with yellow florets.

22. Gorgonia elongata: dichotomous, divaricate, with the fleſh red, and covered with papillous, ſcattered, ſubimbricate, pores, through which the polypees advance their tentacula or feelers. It is found on the rocks of the Atlantic Ocean; pale, brittle; four feet long; branches ſquare, with rows of florets at the angles.

23. Gorgonia ſcirpea: very ſimple, ſtraight, with a decompoſite leafy baſe, and ſoft tuberculate fleſh. This inhabits the Indian ſeas; brown, tapering towards the tip; the fleſh cinereous when dry.

24. Gorgonia ſetacea: ſimple, rigid, with a calcareous, white, ſubtuberculate, fleſh. Inhabits the rocks of the American Ocean; blackiſh.

25. Gorgonia viminalis: very long, depreſſed, branched, with erect ſubdiviſions; fleſh yellow; florets ſeated along each margin of the branches. Inhabits the Mediterranean and Atlantic; above a foot high; branches ſlender; florets or polypees white, with eight tentacula or claws; bone blackiſh, horny.

26. Gorgonia verrucoſa: bifarious, with round flexuous branches, and an orange or yellow calcareous bark, covered with white prominent florets, which are the mouths whereby the animal takes in its food. This inhabits the Mediterranean, Weſt Indian, and Britiſh, ſeas; and is found adhering to rocks and ſtones; ſometimes three feet high or more, and grows in a fan-ſhaped manner; when dry it is of a dirty-white or cinereous colour; bone of a ſubſtance between wood and horn. This is exhibited on the Gorgonia Plate III.

27. Gorgonia anceps: ſlightly branched, with compreſſed ſtem and branches, each with a row of florets along both the margins. Found on the American and Britiſh coaſts; nearly two feet high; fleſh calcareous; bone roundiſh, ſmall at the ends, of a horny leathery texture; when recent it is of a fine violet colour, but when dry yellowiſh or white.

28. Gorgonia craſſa: round, dichotomous, with long, thick, divaricate, erect, branches; fleſh thick, violet-colour, with ſmall, prominent, approximate, equidiſtant, pores; bone dark-brown, and horny. Found on the rocks and ſhores of the Weſt-Indian ſeas; florets with eight tentacula.

29. Gorgonia pinnata: compreſſed and pinnate, with very ſimple branches; fleſh red, with oblong pores. Inhabits the African and North ſeas; from one and a half to four feet high; horny, brown, and yellowiſh on the branches.

30. Gorgonia ſanguinolenta: flat, very much branched and ſubdivided, with yellow bark, and purple pores in double rows. Inhabits the Mediterranean and Atlantic ſeas; a foot high; trunk flat, branched; the branches pinnate, the ſmaller ones often ſubdivided and dichotomous; bone horny; fleſh ſmooth, with numerous minute tuberculate pores diſpoſed in a double row on the margins of the branches.

31. Gorgonia violacea: a little depreſſed, with pinnate branches; bark violet, nearly ſquare, with ſomewhat prominent pores. Found on rocks and ledges in the American ſeas; above a foot long, horny, and often with ſhells adhering to it.

32. Gorgonia ſetoſa: round, pinnate, with diffuſe ſubdiviſions and purpliſh bark. This inhabits the Mediterranean and American ſeas; very upright, nearly two feet high; the old bark often greyiſh or incruſted with a yellowiſh or white calcareous matter.

33. Gorgonia petechizans: ſubdichotomous, very much branched, with a yellow two-grooved bark, covered with red pores. This is a beautiful ſpecies, about two feet high; horny, black, with amber-coloured ramifications.

34. Gorgonia pectinata: round, with parallel, aſcending, ſimple, branches, inclining the ſame way; bark red, with gibbous, ſcattered, pores; bone white, hard, and brittle. This is found on rocks and ſtones on the ſhores of the Eaſt Indian ſeas; the branches all put out from one ſide.

35. Gorgonia abietina: branched and ſubdivided: bark yellow, with rows of purple florets on each ſide; bone horny, yellowiſh. Found on the rocks and ſhores of Africa; about a foot high, and often covered with ſmall bernacles; ſtem flat, with the older branches irregular; the younger ones pinnate.

36. Gorgonia calyculata: branched and ſubdivided, with erect, thick, ramifications, covered with truncate papillæ; fleſh cinereous without, and purpliſh within, furniſhed with large cup-ſhaped florets; bone dark brown, and horny.

37. Gorgonia briareus: with very thick branches, and dilated baſe; fleſh pale-grey without, and whitiſh within; bone compoſed of ſmall purple, glaſſy, needles, irregularly and cloſely diſpoſed longitudinally. Found on the ſhores of the Weſt-Indian iſlands; florets large, prominent, numerous, and irregularly diſpoſed.

38. Gorgonia ventalina: reticulate, with the branches compreſſed externally at the ſides; bark red. This inhabits the Indian Ocean; fleſh black or brown.

39. Gorgonia reticulum: branches reticulate, with very cloſe-ſet ramifications, and red tuberculate bark. This alſo inhabits the Indian Ocean; it is very ponderous, and grey when dead.

40. Gorgonia clathrus: branches reticulate and woody, with round ramifications, and ſmooth bark, covered with ſimple pores. This is only about two palms high; pale, with a thin reddiſh-grey bark.

41. Gorgonia flabellum: beautifully and moſt delicately reticulated, with the branches compreſſed on the inner ſide; bark participating of various ſhades of colours while in a living ſtate; bone blackiſh, horny, and ſlightly ſtriate on the larger branches. This inhabits moſt ſeas, and is often found ſeveral feet high, and expanded into a large fan-ſhaped ſurface; it is flexile, horny, and black; the older bark whitiſh or grey; pores irregularly placed, but generally in the form of a quincunx; trunk and branches pinnate, and by means of the ſmaller branches blending together, forms an elegant kind of net-work; polypees with eight claws.—From the great beauty and delicacy of this ſpecies, it has received the name of VENUS'S FAN; and is correctly figured in the Gorgonia Plate IV.

GORGO'NIAN, *adj.* As if proceeding from Gorgon:

The reſt his look
Bound with *Gorgonian* rigour not to move. *Milton.*

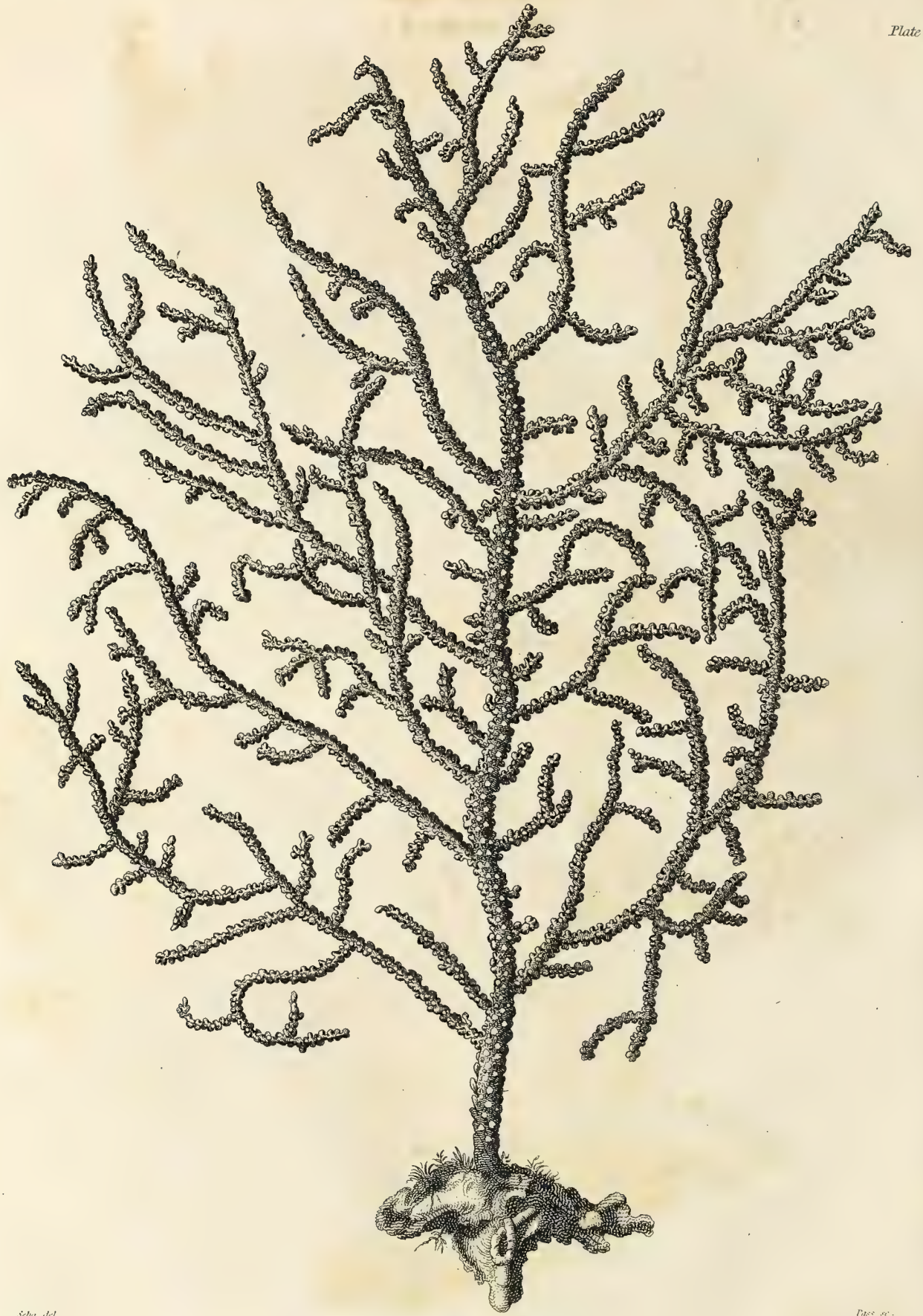
GORGOPH'ONE, a daughter of Perſeus and Andromeda, who married Perieres king of Meſſenia, by whom ſhe had Aphareus and Leucippus. After the death of Perieres, ſhe married Œbalus, who made her mother of Icarus and Tyndarus. She is the firſt whom the mythologiſts mention as having had a ſecond huſband. *Apollodorus.*

GORGOPH'ORA, a ſurname of Minerva, from her ægis, on which was the head of the gorgon Meduſa.

GOR'GORA, an iſland of Abyſſinia, in Lake Dembea, where father Pays built a palace, in which the emperor uſually reſides in the winter: fifteen miles north-weſt of Gondar.

GOR'GUE (La), a town of France, in the depart-

ment



Seba del.

Pass sc.

The Gorgonia Verrucosa.

London, Published as the Act directs, June 28. 1806, by J. Wilkes.

Gorgonia Flabellum, or Venus's Fan.

London, Published as the Act directs, May 3d 1806, by J. Wilkes.

ment of the North: four leagues and a quarter west of Lille, and two and a half south-west of Hazebrouck.

GOR'GUS, the son of Aristomenes the Messenian. He was married, when young, to a virgin, by his father, who had experienced the greatest kindnesses from her humanity, and had been enabled to conquer seven Cretans, who had attempted his life, &c. *Pausanias.*

GORG'WITZ, a town of Germany, in the circle of Upper Saxony, and county of Reus: one mile north-west of Tchleitz.

GORGY'THION, a son of Priam, killed by Teucer. *Homer.*

GOR'HAM, a kingdom of Africa, situated between lat. 10. and 15. N. and lon. 24. and 29. E. Greenwich.

GOR'HAM, a township of the American States, in Cumberland county, Maine, on the north-east side of Saco river, fifteen miles from Pepperelborough at the mouth of the river, and one hundred and thirty miles north-by-east of Boston. It was incorporated in 1764, and contained 2,244 inhabitants.

GO'RIO (Antony-Francis), a learned antiquary of the eighteenth century, born at Florence. He published the following works: 1. *Musæum Florentinum,* or a Description of the Cabinet of the Grand-duke, 11 vols. folio, *Florence,* 1731 to 1764, with a great number of plates. 2. *Musæum Etruscum,* 3 vols. folio, 1737 *& seq.* 3. *Musæum Cortonense,* folio, 1750. 4. Ancient Inscriptions in the Towns of Tuscany, 3 vols. folio, 1727 *& seq.*

GO'RION. See JOSEPH BEN GORION.

GO'RITZ, or GORZ, a county of Germany, in the circle of Austria, bounded to the north, east, and south, by the duchy of Carniola, and on the west by the Venetian States. This county has been invested in the house of Austria from the year 1436, and, with Gradisca, contributes yearly 41,502 florins to the maintenance of the army. The chief produce of the county consists in wine and fruit, with some corn and silk; the horses and oxen are few, but goats numerous. The language of the country is Sclavonian, and the religion Roman catholic. In 1751, it was erected into an archbishopric, which was suppressed in 1784. The town of Goritz is divided into Upper and Lower Town; the former is ancient, situated on a mountain, and defended by a castle; the latter is situated on a plain on the river Lisonzo. Besides the church, which was heretofore metropolitan, it has seven convents, nine chapels, and a college: twenty miles north-north-west of Trieste. Lat. 46. 11. N. lon. 31. 23. E. Ferro.

GO'RITZ, or GORITIA, a city of Germany, situated in the county of the same name, on the river Lisonzo: sixteen miles south-east of Friuli, and one hundred and seventy-six south-south-west of Vienna. It was taken by the French republicans in 1797, with abundance of military stores and clothing. Lat. 46. 12. N. lon. 31. 20. E. Ferro.

GOR'KAH, a country of Asia, between the country of Thibet and the province of Oude.

GOR'KAH, a town of Asia, in the north-east part of the country so called, and the capital of that country, on the borders of Napaul: thirty-five miles north-west of Catmandu, and two hundred north of Benares. Lat. 28. 25. N. lon. 84. 36. E. Greenwich.

GOR'KEM, *s.* A small kind of cucumber.—Take the *gorkems,* or smaller cucumbers, &c. *Evelyn.*

GORLÆ'US (Abraham), a celebrated medallist, born at Antwerp in 1549. Of his history nothing is known, but that he gave himself up entirely to the collecting of ancient medals, seals, rings, and other curious gems; and that he fixed his residence at Delft, where he died in 1609. His works are much valued by those addicted to similar studies. They are, 1. *Dactyliotheca, seu Annulorum Sigillorumque e Ferro, Ære, Argento, atque Auro, Promptuarium, Leyd.* 4to. 1600, several times reprinted. 2. *Thesaurus Numismatum familiarum Roman.* 1608, folio. 3. *Paralipomena Numismatum.* His large and valuable collection was sold to the prince of Wales.

GOR'LITZ, a town of Lusatia, situated on the river Neisse, the second in rank of Upper Lusatia, but the first for size, population, and riches. It contains three churches within the walls, and three without. The principal trade is brewing; with manufactures of woollen and linen cloth: fifty miles west of Dresden, and sixty-eight north of Prague.

GORLIT'ZEN AL'BEN, a mountain of Germany, in the duchy of Carinthia: six miles north of Willach.

GOR'MAND, *s.* [*gourmand,* Fr.] A greedy eater; a ravenous luxurious feeder.—Many are made *gormands* and gluttons by custom, that were not so by nature. *Locke.*

To GOR'MANDIZE, *v. n.* [from *gormand.*] To eat greedily; to feed ravenously:

Thou shalt not *gormandize,*
As thou hast done with me. *Shakespeare.*

GOR'MANDIZER, *s.* A voracious eater.

GOR'MAZ, or ST. ESTEVAN DE GORMAZ, a town of Spain, in Old Castile, on the Duero: two leagues below Borgo d'Osma.

GOR'MES, a town of Germany, in the archduchy of Austria: five miles east-north-east of Ehrnsprunn.

GOROCHOVE'TZ, a town of Russia, in the government of Vladimir, on the Kliazma: seventy-two miles east of Vladimir. Lat. 56. 10. N. lon. 60. 20. E. Ferro.

GORODITS'CHE, a town of Russia, in the government of Penza, thirty-two miles east-south-east of Penza. Lat. 53. 20. N. lon. 64. 20. E. Ferro.

GORODITS'CHE, a town of Russia, in the government of Kiev: 112 miles south-east of Kiev. Lat. 49. N. lon. 50. 40. E. Ferro.

GORODITS'CHE, a town of Russia, in the government of Tobolsk: twenty miles east-south-east of Eniseisk.

GOROD'NIA, a town of Russia, in the government of Tver, on the Volga: twenty miles east of Tver.

GORODNIT'ZSK, a town of Russia, in the government of Tchernigov, on the Snov: thirty-two miles north-north-east of Tchernigov.

GORODOK', a town of Russia, in the government of Poletsk: fifty-six miles east of Poletsk. Lat. 55. 36. N. lon. 47. 40. E. Ferro.

GO'RON, a town of France, in the department of the Mayenne, and chief place of a canton, in the district of Ernée: two leagues and three quarters north-east of Ernée, and three north-west of Mayenne.

GORONTA'LE, or GORONTA'NO, a town on the eastern coast of the island of Celebes.

GOR'NEY, or GUR'NEY, [of *Gournay,* a town in Normandy.] A surname.

GOR'RAN (Nicholas de), a learned French dominican monk in the thirteenth century, native of the province of Maine. He principally resided at Paris, where he taught theology for some time with great reputation. He was a celebrated preacher, and composed a vast number of works, among which were Commentaries upon almost the whole of the Bible. Excepting, however, A Commentary on the Four Evangelists, first published at Cologne in 1537, folio, and some Sermons, printed at Paris in 1509 and 1523, they still remain in manuscript. He died about the year 1295.

GORSE, *s.* [ʒopr, Sax.] Furze; a thick prickly shrub that bears yellow blossoms in winter. See ULEX.

GORS'KIUS (James), a learned Polish catholic divine, born in the province of Massovia. He was educated in the university of Cracow, where he distinguished himself by his proficiency in theology, the languages, and civil and canon law. He filled the chair of professor of law with great reputation, and is spoken of as one of the most illustrious ornaments of that seminary of learning. Besides his post of professor, he was presented

ferred to the archdeaconry of Gnesna; made canon, and archprieſt of Cracow; and vice-chancellor of the univerſity. He died in 1585. Among other works he publiſhed, 1. *Animadverſiones, ſeu Cruſius in Theologos Wittembergenſes, &c.* 2. *De Uſu legitimo Euchariſtiæ.* 3. *De Paſtore.* 4. *De Baptiſmo Prædeſtinatorum.* 5. *Victoria Regis Stephani.* 6. *Præſtantiſſimorum Polonorum Epiſtolæ, Lib. XXX. &c.*

GORT, a town of Ireland, in the county of Galway: ſixteen miles ſouth-ſouth-eaſt of Galway.

GOR'TER (John, M.D.), member of the academy, of ſciences at Peterſburgh, born in 1689, at Enkhuyſen in Weſt Frieſland. In the early part of his life he learned ſurgery, but afterwards applied to polite literature, and made ſuch rapid progreſs, that in the courſe of ſixteen months he was fit to enter on his academical ſtudies, which he did at Leyden in 1709. He diſputed ſeveral times, under the preſidency of Albinus, on phyſiological and pathological ſubjects; and in 1712, after defending a theſis *De Obſtructione*, obtained the degree of doctor of medicine. He then returned to his native place, where he practiſed as a phyſician, and on the death of Van Moor was invited, in 1725, to Harderwyk, to be public lecturer on medicine, and town phyſician. After remaining in this ſituation twenty-nine years, he was invited to Ruſſia, with his ſon David, to be one of the imperial phyſicians at Peterſburgh, to which he repaired in 1754; but he returned to Holland in 1758, and died in 1762. His principal works are, 1. *Tractatus de Perſpiratione inſenſibili Sanctoriana Batavia, Leyden*, 1725, 4to. *cum fig.* 2. *De Secretione Humorum e Sanguine, ex Solidorum Fabrica præcipue & Humorum Indole demonſtrata, ibid.* 1727, 4to. 3. *Compendium Medicinæ: Pars I. De Morbis generalibus, ibid.* 1731, 4to. *Pars II. Therapeuticam exhibens, ibid.* 1737, 4to. 4. *Morbi epidemici brevis Deſcriptio & Curatio, Harderwyk*, 1733, 4to. 5. *Materies Medica Compendio Medicinæ accommodata, exhibens Formulas, in Uſum ſtudioſorum conſcriptas, ibid.* 1733, 4to. 6. *Exercitationes Medicæ quatuor: I. de Motu vitali; II. de Somno & Vigilia; III. de Fame; IV. de Siti; Amſterdam*, 1737, 4to. 7. *Medicina Hippocraticæ, exponens Aphoriſmas Hippocratis, ibid.* 1739–1741, 4to. 8. *Medicina Dogmatica, tres Morbos particulares, Delirium, Vertiginem, et Tuſſim, aphoriſtice conſcriptos & Commentariis illuſtratos, pro Specimine exhibens, Harderwyk*, 1741, 4to. 9. *Chirurgia Repurgata, Leyden*, 1742, 4to. 10. *Praxis Medicæ Syſtema, Harderwyk*, 1750, 8vo. 11. *Formulæ Medicinales cum Indice Virium, ibid.* 1752, 8vo. 12. *Methodus dirigendi Studium Medicum, ibid.* 1753, 4to. 13. *Opuſcula Varia Medico-theoretica, Padua*, 1751, 4to. 14. *Opuſcula Medico-practica, ibid.* 1751, 4to.

GORTE'RIA, *ſ.* [ſo named in honour of *David de Gorter*, author of Flora Zutphanica & Ingrica.] In botany, a genus of the claſs ſyngeneſia, order polygamia fruſtranea, natural order of compoſitæ capitatæ, (corymbiferæ, *Juſſ.*) The generic characters are—Calyx: common one-leafed, imbricate with ſpiny ſcales, the inner ones gradually longer, ſtraight, briſtle-ſhaped, rigid. Corolla: compound radiate; corollets hermaphrodite, ſeveral in the diſk; female fewer in the ray; proper of the hermaphrodite funnel-form, five-cleft; of the female ligulate, lanceolate. Stamina: in the hermaphrodites, filaments five, ſhort; antheræ cylindric, tubular. Piſtillum: of the hermaphrodites, germ villoſe; ſtyle filiform, the length of the corollet; ſtigma bifid: of the females, germ obſolete, ſtyle none, ſtigma none. Pericarpium: calyx unchanged, deciduous. Seeds: in the hermaphrodites, ſolitary, roundiſh; down ſimple, woolly; in the females, none.—*Eſſential Character.* Calyx imbricate, with ſpiny ſcales; corolla of the ray ligulate; down woolly.

Species. 1. Gorteria perſonata, or annual gorteria: leaves lanceolate, entire and ſinuate, ſtem upright, flowers peduncled. Stems a ſpan high, little branched, roundiſh, hairy. Leaves alternate, narrow-lanceolate, ſeſſile, hiſpid, white-tomentoſe underneath; the larger ones uſually cut with two deep gaſhes on each ſide. Seeds woolly, but without down or feather. When the flower comes to maturity, the aperture of the calyx being very narrow, the ſeeds do not fall out, but the whole drops together. Hence, when one of them germinates, the radicle not only perforates the bottom of the calyx, but is ſo firmly united to it, that the young plant bears the maternal calyx, permanent above the root. There is no other inſtance of this economy, except in Neurada. Introduced in 1774, by Mr. Francis Maſſon. It flowers in July and Auguſt.

2. Gorteria rigens, or great-flowered gorteria: leaves lanceolate, pinnatifid; ſtem depreſſed; ſcapes one-flowered. This is a low ſpreading plant, with woody ſtalks ſix or eight inches long, trailing on the ground, having two or three ſide branches, each terminating in a cloſe head of leaves, which are narrow, green on their upper but ſilvery on their under ſurface, and cut into three or five ſegments at the end. The peduncles ariſe from theſe heads, are ſix inches long, naked, and ſupport one large orange-coloured flower: each floret in the ray has a dark mark towards the baſe, with white intermixed. It flowers in May and June. The green-houſe can ſcarcely boaſt a more ſhowy plant. The flowers, when expanded by the heat of the ſun, (and it is only when the ſun ſhines on them that they are fully expanded,) exhibit an unrivalled brilliancy of appearance. Mr. Miller cultivated it in 1755; he received it from Adrian van Royen, profeſſor of botany at Leyden, and diſtributed it to many curious perſons in England.

3. Gorteria echinata, or prickly gorteria: leaves oblong, ſinuate-gaſhed, with ſmall thorns; ſtems aſcending; receptacles chaffy. Stems a foot high, angular, red, commonly ſmooth, but ſometimes lanuginous here and there. Native of the Cape of Good Hope; flowers in July.

4. Gorteria ſquarroſa, or cobweb gorteria: leaves lanceolate, decurrent, adnate, ciliate-ſpinulous; flowers ſeſſile. It flowers from June to Auguſt.

5. Gorteria ſetoſa, or briſtly gorteria: leaves lanceolate, decurrent, adnate, ciliate-ſpinous; flowers terminating. Stem five feet high, upright, very much branched. Flowers yellow, the ray violet-coloured underneath. It differs from the foregoing, in the ſtem being neither villoſe nor proliferous; the leaves not imbricate downwards, but broader, ſhorter, with yellow briſtles ſtanding out on the edge; the flowers peduncled, not ſeſſile, and finally in the colour of the ray beneath. Native of the Cape, and of China.

6. Gorteria ciliaris, or ciliate gorteria: leaves imbricate, ciliate, in two rows; the outer cilias and the terminating ſpine reflex. The leaves are imbricate, and preſſed to the ſtalks, ſo as to cover them in an extraordinary manner. It flowers in May and June.

7. Gorteria fruticoſa, or ſhrubby gorteria: leaves lanceolate, entire, tooth-ſpinous, tomentoſe beneath; ſtem ſhrubby. Stem ſlender, three feet high, ſending out a few weak branches, which are tomentoſe and white. Leaves like thoſe of privet, alternate, ſharp, petioled, having ſix or ſeven ſerratures briſtly at the end. Flowers in Auguſt and September. This is entirely different from the G. fruticoſa of Bergius, (cap. 302.) which is the Atractylis oppoſitifolia of Linn. Syſt.

8. Gorteria herbacea, or herbaceous gorteria: ſtem-leaves claſping, ciliate, root-leaves unarmed, villoſe underneath. Stem ſcarcely a foot high, herbaceous, ſmooth, very little branched. Flowers terminating, ſeſſile; calyx like that of an artichoke, but ſcarcely bigger than a plum, imbricate, ſmooth at the edge, thorny at the end, ſtraight.

9. Gorteria hiſpida, or hairy gorteria: leaves oblong, ciliate-ſpinous, upright, ſmooth, calyxes entire, ending in a thorn. 10. Gorteria ſpinoſa, or thorny gorteria: leaves oblong, ſeſſile, tooth-ſpinous, ſpreading, ſmooth, calyxes ciliate-ſpinous; flowers upright. Both thoſe were found at the Cape by Thunberg.

11. Gorteria cernua, or drooping gorteria: leaves oblong, clafping, tooth-fpinous, fpreading, fmooth; calyxes ciliate-ferrate; flowers drooping. The bafe of the calyx is fingular, with ripe feeds, and refembles the fruit of Medicago. It flowers in May.

12. Gorteria uniflora, or one-flowered gorteria: leaves lanceolate, undivided, tomentofe underneath; ftems one-flowered, depreffed. Stems a fpan high, fimple, herbaceous, leafy on all fides. Has the appearance of G. rigens, and may perhaps be a variety of it.

13. Gorteria barbata, or bearded gorteria: leaves elliptic-lanceolate, tooth-awned; calyxes peduncled, ciliate-fetaceous. Stems diffufed, fimple, white-tomentofe. Leaves oppofite or alternate, feffile, acute, fmooth, marked with lines, awned at the end on both fides with four or five lateral teeth, white-tomentofe underneath.

Propagation and Culture. Moft of thefe plants may be increafed by cuttings, planted in a fhady border, during any of the fummer months; afterwards they may be treated like other plants from the Cape. For this fee ARCTOTIS, vol. ii. p. 130. The two annual forts muft be propagated by feeds. The feventh fort is increafed by planting the fmall heads at the end of the branches, in June and July: thefe muft be clofely covered with either bell or hand glaffes, and carefully fcreened from the fun. When they are well rooted, they fhould be put each into a fmall pot, and in winter placed in an airy glafs cafe fecure from damp. This may ferve as a direction for any other forts, and indeed for moft fhrubby plants, that will not take from cuttings in the ordinary way. See ATRACTYLIS and ROHRIA.

GORTI'NA, the name of a place mentioned 1 Macc. xv. 25.

GORTIN'IANS, a fect in New England, not much differing from our quakers, fo called from Samuel Gorten, who was baniſhed thence about the year 1646.

GORT'SCHITZ, a river of Germany, which runs into the Gurk, three miles fouth of Ebernſtein, in the duchy of Carinthia.

GOR'TYN, or GOR'TYS, in ancient geography, an inland town of Crete. It was on the inhabitants of this place, that Hannibal, to fave his money, practifed an artifice recorded in Cornelius Nepos.

GORTYN'IA, in ancient geography, a town of Arcadia, in Peloponnefus.

GO'RY, *adj.* Covered with congealed blood:

When two boars with rankling malice met,
Their *gory* fides the freſh wounds fiercely fret. *Spenſer.*

Why do'ſt thou ſhake thy *gory* locks at me?
Thou can'ſt not ſay I did it. *Macbeth.*

Bloody; murtherous; fatal. *Not in uſe:*

The obligation of our blood forbids
A *gory* emulation 'twixt us twain. *Shakeſpeare.*

GORZ, *ſ.* in botany. See ULEX.

GORZE, a town of France, in the department of the Mozelle, and chief place of a canton, in the diſtrict of Metz: two leagues and a half ſouth-weſt of Metz, and three north-north-weſt of Pont a Mouſſon. Lat. 49.3.N. lon. 23. 39. E. Ferro.

GORZE'GNO, a town of Italy, and capital of a marquiſate, in the duchy of Montferrat, on the Bormida: fifteen miles eaſt of Bene, and thirteen ſouth-eaſt of Alba.

GORZ'KE, a town of Germany, in the circle of Lower Saxony, and principality of Magdeburg: thirty-four miles eaſt of Magdeburg.

GOS, a river of Germany, which runs into the Malentheim, three miles north-weſt of Gmund, in Carinthia.

GOSCHGOSCHU'ENCK, a town of the American States, in the Delawares, ſituated on the banks of the Ohio. Its name ſignifies *the habitation of owls*, from the great number of thoſe birds which reſort there.

GOSCHU'TZ, a town of Sileſia, in the principality of Oels: two miles north of Feſtenburg, and ſeven weſt of Mittelwalde.

GOSE, a river of Germany, in the circle of Upper Saxony, which runs into the Ocker, near Goſlar.

GO'SELBACH, a river of Germany, in the circle of Upper Saxony, which runs into the Saale, near Merſeburg, in Thuringia.

GO'SELBERG, a mountain of Germany, in the duchy of Stiria: ten miles weſt of Landſperg.

GOSELI'NI (Julian), an Italian writer, born at Rome in 1525, of a family of Nizza della Paglia. He received his early education at the latter place, and at the age of fourteen returned to Rome, where he continued his ſtudies in the houſe of the cardinal de Santa Fiora. When ſeventeen years old, he was taken into the ſervice of Ferdinand Gonzaga, viceroy of Sicily. He accompanied that nobleman to his government of Milan in 1546, and became his ſecretary; in which office he was continued under three ſucceeding governors, till his death, in 1587. He obtained great reputation by his writings, of which the principal are, 1. The Life of Ferdinand Gonzaga, 1579. 2. Three Conſpiracies, viz. of the Pazzi and Salviati againſt the Medici; of Giovan-Luigi de' Fieſchi againſt the Republic of Genoa; and of ſome Placentines againſt their Duke Pietro-Luigi Farneſe. 3. *Rime*; or, A Collection of Poems; ſeveral times reprinted. 4. Diſcourſes. 5. Letters, &c. alſo ſome Latin Poems and Letters.

GOS'HAWK, *ſ.* [ȝor, gooſe, and hapoc, Sax. a hawk.] A hawk of a large kind. See FALCO, vol. vii. p. 186, and the correſpondent engraving.

Such dread his awful viſage on them caſt;
So ſeem poor doves at *goſhawks* fight aghaſt. *Fairfax.*

GO'SHEN (Land of), a moſt fertile diſtrict of Egypt, ſituated, according to Jablouſki and Michaelis, between Arabia Petræa, and the eaſtern bank of the Nile. It is derived from the Hebrew word *Geſhem*, a great rain, or copious ſpring; and is remarkable in Scripture as being the place aſſigned to the houſe of Jacob, during the famine that prevailed in Egypt and the countries adjacent; the particular circumſtances that led to their ſettlement here are ſufficiently known not to need any repetition; ſuffice it to ſay, they had dwelt here for the ſpace of four hundred and thirty years when they were delivered under Moſes. *Gen.* xlv. 10. xlvii. 1–6, 27. *Exod.* xii. 40, 41.—Alſo, a part of Paleſtine ſo called, *Joſh.* x. 41. and xi. 16.—Alſo, the name of a city of Paleſtine, belonging to the tribe of Judah; ſituated in the mountains of that province. *Joſh.* xv. 51.

GO'SHEN, a townſhip of the American States, in Hampſhire county, Maſſachuſetts, between Cummington and Conway, fourteen miles north of Northampton, and 112 weſt-by-north of Boſton. It was incorporated in 1781, and contained 681 inhabitants.

GO'SHEN, a townſhip of the American States, in Addiſon county, Vermont, adjoining to Saliſbury on the weſt, and twenty-one miles north-eaſt-by-eaſt of Mount Independence.

GO'SHEN, a townſhip of the American States, in Cheſter county, Pennſylvania.

GO'SHEN, a town of the American States, in Litchfield county, Connecticut, famous for the production of excellent cheeſe. It is ſeven miles north-by-north-weſt of Litchfield, and fifty northward of Newhaven.

GO'SHEN, a conſiderable town of the American States, in Orange county, New-York, about fifty-eight miles north of New-York city, twenty weſt-by-ſouth of New Windſor, and thirty weſt-by-ſouth of Fiſh-Kill. This town is pleaſantly ſituated; has an academy, court-houſe, and gaol; and contains, by the cenſus, 2,448 inhabitants; of whom 316 are electors.

GO'SHEN, a townſhip of the American States, in the diſtrict of Maine, eight miles from Buckſtown, on Penobſcot river.

GOSH'GOSHINK,

GOSH'GOSHINK, a Moravian ſettlement in Pennſylvania, ſituated on Alleghany river, about fifteen miles above Venango, or Fort Franklin.

GOSIL'IA, a river of Boſnia, which unites with the river Boretza.

GOS'LING, a town of Germany, in the archduchy of Auſtria: twelve miles ſouth-eaſt of Bavarian Waidhoven.

GOS'LING, *ſ.* [from *gooſe*.] A young gooſe; a gooſe not full grown.—Nature hath inſtructed even a brood of *goſlings* to ſtick together, while the kite is hovering over their heads. *Swift.*

GOS'PEL, *ſ.* [from the Saxon Goð-ꝑpell, which Lye renders by "*Dei Sermo, Dei Verbum*"—The Word of God. A more cloſe interpretation of the Saxon original is "Good Meſſage." The learned Junius in his Etymolog. Anglican. obſerves on the word Gospel, "The Angles retained this word, when the uſe of it was quite loſt among the higher and lower inhabitants of Germany. For the term *Evangelium* ſeemed preferable to Eccleſiaſtics, in their deſire of being reputed wiſe above the vulgar, from having recourſe to Roman and Greek expreſſions leſs known and familiar, in their daily homilies addreſſed to the people, and on other occaſions of expounding Scripture. This however was not neceſſary for them to do; ſince the word Goðꝑpell is moſt emphatical, and in compoſition genuinely Teutonic, expreſſes admirably the force and propriety of the Greek word ευαγγελιον. For it is from Goð, "good," and ꝑpell, a "hiſtory, narration, meſſage."]

Gospel then in its higheſt ſenſe means, "A Declaration of that Merciful and Gracious Diſpenſation, by which God will reſtore Man to his favour, through Christ."

In a more limited acceptation, the term is uſed to ſignify "A Book, in which that Declaration is made, and the Nativity, Miniſtry, Paſſion, and Reſurrection of Christ are related."

Many ſuch Books were written. The primitive Chriſtians were ſcrupulous to a degree of uncommon anxiety, not to admit for genuine, any but moſt authentic Goſpels. And it is owing to their preciſion and exactneſs in examining, that only Four Goſpels are allowed to be Canonical; i. e. of ſuch authority as to be our Rules and Guides in matters of Chriſtian Information. The Four are, the Goſpels of St. Matthew, St. Mark, St. Luke, and St. John. It ſhould ſtrengthen our confidence in theſe Four Goſpels, that numberleſs others have been rejected. The very circumſtance of ſelection in preference to others, by examiners equally able and ſerious to decide according to Truth, at once ſtamps them with credit, and recommends them to our reception as documents of indiſputable veracity.

It will equally gratify curioſity and confirm our remark on the ſelection made by the primitive Chriſtians, if we name the Goſpels rejected as ſpurious. Such were,

The Goſpel of St. Andrew.
The Goſpel of Thaddæus.
The Goſpel of St. Thomas.
The Goſpel of St. Barnabas.
The Goſpel of the Infancy of our Saviour.
The Goſpel of Apelles.
The Goſpel according to the Twelve Apoſtles.
The Goſpel of St. Bartholomew.
The Goſpel of Baſilides.
The Goſpel of Cerinthus.
The Goſpel according to the Egyptians.
The Goſpel according to the Hebrews.
The Goſpel of Marcion.
The Goſpel of the Nazarenes.
The Goſpel of St. Peter.
The Goſpel of Truth.

Fragments of theſe Goſpels are remaining. If any one will compare them with the Four Canonical Goſpels, he will immediately diſcern the difference between falſehood and truth. The Goſpels ſpurious are embelliſhed with fanciful conceits and afcititious ornaments: the Goſpels genuine affect nothing, but to relate facts in a plain manner, correſponding with conviction of truth, which needs no tinſel decoration.

The word *goſpel* is ſometimes uſed for any general doctrine.—The propagators of this political *goſpel* are in hopes, their abſtract principle would be overlooked. *Burke.*

GOS'PELLER, *ſ.* A name of the followers of Wickliffe, who firſt attempted a reformation from popery, given them by the papiſts in reproach, from their profeſſing to follow and preach only the goſpel:

Theſe *goſpellers* have had their golden days,
Have trodden down our holy Roman faith. *Rowe.*

GOSPI'NI, a town of the iſland of Sardinia: twenty-four miles ſouth of Oriſtagni.

GOS'PORT, a town of England, in the county of Hants, ſituated on the weſt ſide of the entrance into Portſmouth harbour. The town is large, and a place of great trade, eſpecially in time of war. Several forts are erected, and a platform of twenty cannon, level with the water, to defend the channel. Here are ſeveral docks for repairing merchant ſhips, and a little to the ſouth of the town is an hoſpital, called *Haſlar Hoſpital*, for the reception of ſick and wounded ſeamen in the ſervice of the navy. In time of peace, packets ſail from Goſport every week to Havre de Grace and other ports of France: one mile from Portſmouth, ſixteen ſouth-eaſt from Southampton, and ſeventy-nine ſouth-weſt from London. Lat. 50. 44. N. lon. 1. 9. W. Greenwich.

GOS'PORT, formerly called Appledore, a town of the American States, on Star Iſland, one of the iſles of Shoals, belonging to Rockingham county, New Hampſhire: twelve miles eaſt-ſouth-eaſt of Piſcataqua harbour.

GOSS, *ſ.* The ſame as Gorse:

They my lowings follow'd through
Tooth'd briars, ſharp furzes, pricking *goſs*, and thorns.
Shakeſpeare.

GOS'SAMER, *ſ.* [*goſſipium*, low Lat.] The down of plants; the long white filaments which fly in the air in calm ſunny weather, eſpecially about the time of autumn. *Hanmer.*

A lover may beſtride the *goſſamour*,
And yet not fall, ſo light is vanity. *Shakeſpeare.*

The filmy *goſſamer* now flits no more,
Nor halcyons baſk on the ſhort ſunny ſhore. *Dryden.*

According to M. Bechſtein, in the *Magazin für das Neueſte aus des Phyſik*, vol. vi. part i. p. 53, the goſſamer ariſes from nothing elſe than a certain kind of field-ſpiders, which are, however, ſo ſmall and active, that they almoſt always eſcape notice, unleſs the obſerver is endowed with great acuteneſs of ſight.

The goſſamer ſpider (*aranea obtextrix*) is as large as the head of a ſmall pin. On the fore-part of its longiſh head it has eight grey eyes placed in a circular form; the extremity of the body is ſhaped like an egg; the body itſelf is of a ſhining dark-brown colour; the feet are of a moderate length, and yelloviſh, and the whole animal is covered with inſulated hairs. Theſe inſects firſt appear in the beginning of October, in woods, gardens, and meadows, where their eggs may be hatched unhurt and unmoleſted, and thence ſpread themſelves over whole diſtricts; ſo that, during all the month of October, and till the middle of November, they may be found on the dry fields throughout all Europe; and as they produce a numerous progeny, extenſive tracts may ſometimes be ſeen ſwarming with them. The young, which have not attained to their full growth, are not larger than the point of a pin; they are black, with grey feet, and almoſt imperceptible to the naked eye. In the beginning

of

of October, when very few of them have been hatched, one obſerves only in the ſunſhine a few ſingle threads of their webs, which they extend from twig to twig, or from ſtraw to ſtraw; but about the middle of the month their threads become more perceptible; and towards the end, if people ſtand or place themſelves in ſuch a poſition that they can ſee the ſun-beams playing on the tender threads, they perceive hedges, meadows, cornfields, ſtubble land, and even whole diſtricts, covered with a fine white thick ſort of gauze. This ſpider belongs to that kind which do not weave webs, but only extend ſingle threads from one place to another, and which Linnæus, on that account, includes in a particular diviſion. The threads, owing to the ſmallneſs of the animal, are ſo delicate that a ſingle one cannot be diſtinguiſhed by the naked eye unleſs when the ſun ſhines upon it. A thread, to be viſible at other times, muſt be compoſed of at leaſt ſix threads twiſted together; and ſuch a thread, as the ſingle ones are exceedingly brittle and do not readily unite, may be again eaſily divided into its component threads.

During the ſerene calm days of the above months theſe animals carry on their occupation with great diligence, eſpecially after the morning fogs have diſappeared. Between the hours of twelve and two, however, is the period when their great induſtry excites moſt admiration. If people are poſſeſſed of good eye-ſight, or are furniſhed with a magnifying glaſs, they may find among the barley ſtubble ſuch a multitude of theſe ſpiders employed in extending their threads, that the fields appear as if covered with ſwarms of gnats, and they perform their labour ſo ſpeedily that they ſeem to fly from one ſtubble to another. Theſe tender threads, which are extended over whole fields, particularly in the laſt half of October, become twiſted together with the gentleſt breath of wind, and form perceptible threads, that, being broken looſe by a ſtronger wind, are united into thick threads, and even balls, that float through the atmoſphere. They are known then in Germany by the name of the *flying ſummer*, becauſe the ſummer ſeems as it were to fly away at the ſame time. The ſpiders alſo are then conveyed along in them; and it is not uncommon to find theſe animals entwiſted in ſuch threads which have been caught. Theſe webs, which conſiſt of threads cloſely joined together, ſerve the inſects as nets, in which they catch very ſmall gnats and aphides, the juices of which they ſuck for their nouriſhment. The goſſamer, therefore, is often found filled with the dried huſks of ſuch inſects.

GOSSE'INS, a town of Aſia, in Thibet, near the eaſt coaſt of the Dewah river. Lat. 30. 30. N. lon. 81. 24. E. Ferro.

GOSSILIE'RES, a town of the Netherlands, in the county of Namur: five miles from Charleroy.

GOS'SIP, *ſ.* [from ȝoð and ꝛÿb, Sax. relation, affinity.] One who anſwers for the child in baptiſm.—At the chriſtening of George duke of Clarence, who was born in the caſtle of Dublin, he made both the earl of Kildare and the earl of Ormond his *goſſips*. *Davies on Ireland.*—A tippling companion:

And ſometimes lurk I in a *goſſip's* bowl,
In very likeneſs of a roaſted crab,
And when ſhe drinks againſt her lips I bob. *Shakeſpeare.*

One who runs about tattling. The term is commonly applied to the good women who attend parturition:

'Tis ſung in every ſtreet,
The common chat of *goſſips* when they meet. *Dryden.*

To GOS'SIP, *v. n.* To chat; to prate; to be merry.—He gives himſelf up to an idle *goſſiping* converſation. *Law.*

His mother was a votreſs of my order,
And, in the ſpiced Indian air by night,
Full often hath ſhe *goſſipt* by my ſide. *Shakeſpeare.*

To be a pot companion:

Nor met with fortune, other than at feaſt,
Full warm of blood, of mirth of *goſſiping*. *Shakeſpeare.*

GOS'SIPING, *ſ.* Chatting; holding a goſſip's tale. A merry meeting of goſſips; a lying-in.

GOS'SIPRED, *ſ.* [*goſſipry*, from *goſſip*.] *Goſſipred*, or compaternity, by the canon law, is a ſpiritual affinity; and the juror, that was goſſip to either of the parties, might, in former times, have been challenged as not indifferent. *Davies.*

GOS'SIPRY, *ſ.* A company of goſſips; a ſpiritual affinity. *Scott.*

GOSS'LAR, a town of Germany, in the circle of Lower Saxony, on the river Goſe, which, at a ſmall diſtance from the town, runs into the Ocker. It is a free and imperial town, ſurrounded on one ſide by the biſhopric of Hildeſheim, and on the other by the principality of Wolfenbuttel. The houſes are generally old, except in a part of the town which was burned down in 1728, where the houſes have been rebuilt in a more modern ſtyle. The principal commerce of the town ariſes from the mines of iron and lead found in the Rammel mountain, near which it is ſituated; alſo in beer and proviſions. The town was founded in 922, by Henry the Fowler, who reſided and held ſeveral diets here, as did ſome of his ſucceſſors. Here are four pariſh churches, two chapters, and two Lutheran convents. The two chapters depend immediately upon the empire, the one is called the chapel of the emperor, the other the chapel of the empreſs. Goſlar occupies the ſeventh place at the diet on the Rheniſh bench, and the ſecond at the aſſemblies of the circle: thirty miles ſouth of Brunſwick. Lat. 51. 50. N. lon. 28. 3. E. Ferro.

GOSS'NITZ, a town of Germany, in the circle of Upper Saxony, and principality of Altenburg: three miles eaſt of Schmolln.

GOSS'WEINSTEIN, or GOSS'MANSTEIN, a town of Germany, in the circle of Franconia, and biſhopric of Bamberg: twenty-three miles north-north-eaſt of Nuremberg, and twenty eaſt-ſouth-eaſt of Bamberg. Lat. 49. 45. N. lon. 29. 5. E. Ferro.

GOSSYP'IUM, *ſ.* [Voſſius is of opinion that this is an Egyptian word; it is called ξυλον in Greek. See Pliny, l. 19. c. 1.] COTTON. In botany, a genus of the claſs monadelphia, order polyandria, natural order of columniferæ, (malvaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium double; outer one-leafed, trifid, flat, larger; inner one-leafed, bluntly emarginate in five rows, cup-form. Corolla: petals five, obcordate, flat, ſpreading, faſtened by their baſe to the tube of the ſtamens. Stamina: filaments numerous, uniting at the bottom into a tube, ſeparate at and below the tip, lax, inſerted into the corolla; antheræ kidney-form. Piſtillum: germ roundiſh; ſtyle columnar, the length of the ſtamens; ſtigmas three or four, thickiſh. Pericarpium: capſule roundiſh, acuminate, three or four-celled; partitions contrary. Seeds: very many, oval, involved in cotton.—*Eſſential Character.* Calyx double; outer trifid; capſule four celled; ſeeds wrapped in cotton.

Species. 1. Goſſypium herbaceum, or common cotton: leaves five-lobed without glands underneath; ſtem herbaceous. Root tapering, woody, with numerous fibres, annual. Seed-lobes two, kidney-form, terminating gradually in a long petiole with the figure of a halved funnel. Stem three feet high, upright, round, pubeſcent, as is the whole of the herb, at the bottom brown with ſlight chinks, at the top ſpotted with black; branches axillary, ſcarcely longer than the leaf at their origin. Leaves alternate, only half the length of the petiole, tomentoſe, odorous whilſt young. Germ ſuperior, ovate; capſule bluntly three-cornered, three-valved, three-celled; ſeeds ovate, about three in each cell, convex on one ſide, more flat on the other, immerſed in fine cotton. This is the common Levant cotton, which is cultivated alſo in ſeveral iſlands of the Archipelago;

and in Malta, Sicily, and the kingdom of Naples, as well as in moſt parts of Aſia. It is a native of the Eaſt Indies; and was cultivated here by Gerarde, as a garden plant, in 1594. "It groweth (ſays he) about Tripolis and Alepo in Syria, from whence the factor of a worſhipfull merchant in London, Maſter Nicholas Lete, did ſend unto his ſaid maſter divers pounds weight of the ſeed, whereof ſome were committed to the earth at the impreſſion hereof (1597): the ſucceſs we leave to the Lord. Notwithſtanding myſelf three years paſt did ſow of the ſeeds, which did grow very frankly, but periſhed before it came to perfection, by reaſon of the cold froſts that overtook it in the time of flowering." Few plants are more uſeful, ſince it furniſhes materials for clothing in the four quarters of the world, particularly to the Aſiatics. The ſeeds alſo are an article of food, and eſteemed wholeſome.

2. Goſſypium arboreum, or tree cotton: leaves palmate, with lanceolate lobes; ſtem ſhrubby. Stem eight feet high, the thickneſs of the human leg, with a rugged brown bark, and long, diffuſed, twiſted branches. Leaves three or five-lobed, without glands, ſmooth, ſcattered, petioled; the lobes ſhort. Flowers entirely yellow, terminating, ſolitary. Native of the Eaſt Indies, and the eaſtern coaſt of Africa.

3. Goſſypium hirſutum, or rough cotton: leaves five-lobed with one gland underneath, the twigs and petioles pubeſcent. This is planted, ſays Browne, in a few gardens in Jamaica, but is not much cultivated, for the cotton is not thought to be ſo good, and the ſeeds are ſo ſmall, that it is a difficult matter to ſeparate them from the cotton. It grows however more luxuriant than the common, and riſes generally from ſeven to nine feet in height, bearing a great number of ſeed-veſſels on all the branches.

Swartz mentions a variety, called *Cotonier de ſoie*, (Xylon Americanum præſtantiſſimum of Tournefort,) the cotton of which is better than any of the reſt.

4. Goſſypium religioſum, or ſpotted-bark cotton-tree: leaves three-lobed, acute, with one gland underneath; twigs ſpotted with black. This is a ſhrub, with the branches not hairy, but having ſmall black dots ſcattered over them, as the petioles alſo have. Leaves cordate, deeply three-lobed, in a very fertile ſoil five-lobed, as big as the palm of the hand, acuminate, with a ſingle gland under the midrib. The ſtamens are entirely monadelphous. According to Swartz, the ſtem is a fathom in height, biennial, roundiſh; branches ſpreading very much, angular, ſtriated. Upper leaves three-lobed, lower five-lobed; lobes ovate, entire, nerved, pubeſcent; with three glandular pores underneath on the midribs of the leaves. Petioles long, round, patulous, hirſute, with black atoms ſcattered over them. Flowers oppoſite to the petioles, large, fulvous, on dotted peduncles. Outer calyx ſubtriphyllous, pubeſcent, dotted; the ſegments large, deeply and unequally toothed; the inner is very ſhort, and five-lobed in waves. Capſule leathery, thickiſh, three-celled, three-valved; the partitions inſerted in the middle of the valves, which are wrinkled within, and the edges turn back after they open. There is no receptacle, but the ſeeds are fixed in a double row to the central angle of the cells. Seeds about ſix in each cell, ovate, tapering towards the umbilicus, convex on one ſide, angular on the other, and white. Merian deſcribes it thus: "This tree grows in a ſhort time at Surinam; inſomuch that in ſix months after ſown, it will become as large as an European quince. The Indians uſe the leaves for cooling and healing wounds; the tree bears rich ſulphur-coloured flowers, very large and beautiful. After the flowers drop, a head of ſeed follows, which, when it comes to maturity, burſts open, ſcatters the ſeeds, and diſcovers the white cotton; this cotton the Indians ſpin into thread, and make the hammocks in which they ſleep." Native of India, and the Society Iſles. Cultivated in Jamaica. Introduced here in 1777, by Daniel Charles Solander, L.L.D. It is alſo a native of China, where it conſtitutes the clothing of both ſexes throughout that vaſt empire and its neighbourhood. In China is chiefly cultivated that particular ſpecies or variety of the goſſypium that produces the cloth uſually called nankeens in Europe. The down enveloping the ſeed conſtitutes what, in the language of trade, is called cotton-wool, which is of a white colour in the common plant, but in that growing in the province of Kiung-nan, of which the city of Nankin is the capital, the down is of the yellow tinge which it preſerves when ſpun and woven into cloth. The colour, as well as the ſuperior quality of this ſubſtance, in Kiung-nan, was ſuppoſed to be owing to the particular nature of the ſoil; and it is aſſerted, that the ſeeds of the nankeen cotton degenerate in both particulars when tranſplanted to another province, however little different in its climate.

5. Goſſypium latifolium, or broad-leaved cotton: leaves acute, the loweſt undivided, the reſt three-lobed, with one gland underneath. Stem four or five feet high, perpendicular, round, ſtraighter at the baſe, the thickneſs of a ſwan's quill, above flexuoſe and thicker, ſomewhat angular, ſwelling at the origin of the branches, green, rugged, pubeſcent, branched. Leaves large, horizontal or oblique, cordate, broad, the lower undivided, the upper deeply three-lobed, with acuminate lobes, pubeſcent eſpecially on the veins.

6. Goſſypium Barbadenſe, or Barbadoes cotton-tree: leaves three lobed, quite entire, with three glands underneath. Stem from ſix to fifteen feet in height, ſuffruticoſe, biennial, ſmooth. This is the ſpecies which is ſo much cultivated in the Weſt Indies, and forms a conſiderable branch of their exports. An emulſion of the ſeeds is recommended in the bloody-flux; and an oil is obtained from them by expreſſion, which ſupplies the boiling-houſe lamps in ſome plantations. This and the third and fourth ſpecies are not eaſily diſtinguiſhed, for they vary in the ſize of the parts, the diviſion and pubeſcence of the leaves, the colour of the ſeeds and cotton, the adherence and tenacity of the latter, the number of glands at the back of the leaves, &c. ſo that it is difficult to ſay which are ſpecies, and which are varieties.

Propagation and Culture. All the ſpecies of goſſypium, or cotton, are very tender, and will not grow in the open air in England. The firſt and third will ripen their ſeeds here, if they be ſown early in the ſpring, upon a good hot-bed; and when the plants are come up, planted each into ſeparate pots, and plunged into the bark-bed to bring them forward: when they are too tall to remain under the frames, remove them into the tan-bed in the ſtove; and when the roots have filled the pots, remove them into larger. With this management the flowers will appear in July, and the ſeeds will be ripe towards the end of September.

Cotton is propagated in the Weſt Indies by the ſeed, which is ſet in rows, about five feet aſunder, at the end of September, or beginning of October, at firſt but ſlightly covered; but after it is grown up, the root is well moulded. The ſeed is ſubject to decay, when it is ſet too deep, eſpecially in wet weather. The ſoil ſhould not be ſtiff, nor ſhallow, as this plant has a tap-root. The ground is hoed frequently, and kept very clean about the young plants, until they riſe to a moderate height; otherwiſe they are apt to be deſtroyed by caterpillars. It grows from four to ſix feet high, and produces two crops annually; the firſt in eight months from the time of ſowing the ſeed; the ſecond, within four months after the firſt; and the produce of each plant is reckoned about one pound weight. The branches are pruned or trimmed after the firſt gathering; and if the growth is over-luxuriant, this ſhould be done ſooner. When great part of the pods are expanded, the

GOSSYPIUM.

M. Merion delt

J. Pass sculp.

Gossypium religiosum; or Cotton Tree.

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wool is picked, and afterwards cleared from the ſeeds by a machine called a gin, compoſed of two or three ſmooth wooden rollers of about one inch diameter, ranged horizontally, cloſe and parallel to each other, in a frame; at each extremity they are toothed or channelled longitudinally, correſponding one with the other; and the central roller, being moved with a treadel or foot-lath, reſembling that of a knife-grinder, makes the other two revolve in contrary directions. The cotton is laid, in ſmall quantities at a time, upon theſe rollers, whilſt they are in motion, and, readily paſſing between them, drops into a ſack, placed underneath to receive it, leaving the ſeeds, which are too large to paſs with it, behind. The cotton thus diſcharged from the ſeeds, is afterwards hand-picked, and cleanſed thoroughly from any little particles of the pods or other ſubſtances which may be adhering to it. It is then ſtowed in large bags, where it is well trod down, that it may lie cloſe and compact; and the better to anſwer this purpoſe, ſome water is every now and then ſprinkled upon the outſide of the bag; the marketable weight of which is uſually three hundred pounds. An acre may be expected to produce from two hundred and forty pounds to that quantity; or two hundred and ſeventy pounds on an average. See BOMBAX.

GOS'TADT, or JOTT'STADT, or JO'SEPHSTADT, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg: eight miles ſouth of Wolkenſtein.

GOS'TENHOF, a town of Germany, in the circle of Franconia, and territory of Nuremberg, ſituated near Nuremberg.

GOS'STING, a town of Germany, in the archduchy of Auſtria: two miles eaſt-north-eaſt of Ziſterſdorff.

GOS'TITZ, a town of Sileſia, in the principality of Neiſſe: two miles ſouth of Patſchkau.

GOSTY'NEN, a town of Poland, in the palatinate of Rawa; this town is remarkable for having been the priſon of Demetrius Suſki, czar of Muſcovy, who was confined to the day of his death in the citadel: thirty-ſix miles north of Rawa.

GOS'ZITZ, a town of Germany, in the circle of Upper Saxony, and circle of Neuſtadt: three miles weſt of Ziegenbruck.

GOT, *pret.* [from the verb *get.*] They began to reaſon about the means how the ſea *got* thither. *Woodward.*

Theſe regions and this realm my wars have *got*:
This mournful empire is the loſer's lot. *Dryden.*

GOT, *part. paſſ.* of *get.*—If he behaves himſelf ſo when he depends on us for his daily bread, can any man ſay what he will do when he is *got* above the world? *Arbuthnot.*

Thou wert from Ætna's burning entrails torn,
Got by fierce whirlwinds, and in thunder born. *Pope.*

GO'TER, *ſ.* A large ſwelling in the neck. See GOITRE.—One of our countrymen in travelling over the Alps was detained by a fever in one of thoſe villages, where every grown perſon has that ſort of ſwellings in the neck, which they call *goters*. *Spence's Crito.*

GOTH (Stephen), archbiſhop of Upſal in Sweden, in the ſixteenth century. He concurred in the meaſures adopted by king John, inſenſibly to reſtore popery in that country. For this purpoſe he gave his ſanction to a new liturgy, which, under the pretence of bringing the Lutheran church more near to the ſimplicity of the earlier ages of the goſpel, artfully aſſimilated the doctrines and ceremonies of worſhip to thoſe of Rome, with the omiſſion of ſome particular forms and expreſſions which would have too plainly diſcloſed the object in view. This liturgy was ordered to be uſed in all the churches; but it threw the kingdom into confuſion, and had nearly produced a civil war; ſo that the king was obliged to relinquiſh his ſcheme, and the liturgy was ſuppreſſed. It has now become an object of curioſity among collectors, and is entitled, *Liturgia Succeanæ Eccleſiæ, &c. cum Præfatione & Notis Laurentii Upſalienſis Epiſcopi*; 1576, 4to.

GO'THA, or SAXE-GOTHA, a principality of Germany, in the circle of Upper Saxony, bounded on the north by the electorate of Saxony, on the eaſt by the duchy of Weimar, on the ſouth by the county of Henneberg, and on the weſt by the principality of Eiſenach. The country abounds in grain and fruit; the ſouthern diviſion contains a part of the foreſt of Thuringia, and ſome mine works. The whole duchy contains twelve towns, and more than two hundred churches. The ſtate conſiſts of three claſſes, that is, of the counts, the nobility, and ſome towns, which are convoked by the prince. The dukes are deſcended from the grandſon of John William Erneſt the Pious, whoſe ſons formed ſeven different branches, ſome of which are extinct. Gotha was the principal. The others which yet remain are Saxe-Meinungen, Saxe-Hilburghauſen, and Saxe-Saalfeld. The Roman month is forty-eight florins twenty kruitzers, and tax to the imperial chamber ſixty-two rix-dollars ſixty-four kruitzers. The duke maintains a guard of 160 men, two regiments, each compoſed of 800 men, and a corps of artillery. The principal rivers are the Leine and the Neiſſe.

GO'THA, a city of Germany, and capital of the principality of the ſame name, ſeated on a riſing ground, near the Leine, from which, in 1369, the landgrave, Balthaſar, drew one branch near the town; but duke Erneſt improved this work, and conveyed it through all the ſtreets, by means of ſtone canals. Gotha is one of the beſt and handſomeſt towns in Thuringia. In 1715, in the town, and without the gates, were 1030 houſes paying ſcot and lot, and within its walls are nine hundred and ſix, excluſive of a great many others which ſtand on the ramparts. In it is alſo an hoſpital for the ſoldiery, with two ſchools for children deſcended from them, and the barracks, in the largeſt of which the cadets are inſtructed in the ſeveral branches of the military art. Here is likewiſe a foundery for cannon and bells, &c. with two churches, a good academy, a houſe of correction, an hoſpital for widows, and another for orphans. The inhabitants derive not their ſubſiſtence from the reſidence of the court, but carry on a conſiderable trade in woollen manufactures, as alſo in wood and beer; and, excluſive of the profits ariſing to them from agriculture, receive farther advantages from its being the thoroughfare from Leipzig to Upper Germany. Gotha ſuffered greatly by fire in the years 1207, 1545, 1632, 1646, and 1665; but the houſes deſtroyed in the laſt of theſe years have been all rebuilt of ſtone, and of the ſame height. On a hill above the town ſtands the ducal reſidence, called Friedenſtein, which was begun in 1643, by duke Erneſt the Pious, on the ſite of the caſtle of Grimmenſtein, which, in 1567, was totally razed by Auguſtus I. elector of Saxony, who, in conſequence of the ban iſſued againſt duke John Frederic II. had made himſelf maſter both of this place and the town. Friedenſtein has been fortified by permiſſion of Ferdinand III. In it is a well provided armoury, with a valuable library, a fine muſeum of natural curioſities, and one of the moſt valuable cabinets of medals in Europe: thirteen miles ſouth-weſt of Erfurt. Lat. 50. 46. N. lon. 28. 17. E. Ferro.

GO'THA, a river of Sweden, which runs from the Wenner Lake into the ſea, near Gothenburg. The navigation of this river, which connects the ſpacious lake Wenner with the ſea, is interrupted at Trolhätta, about fifteen miles from Gothenburg, by a ſucceſſion of frightful cataracts and rapids. Nothing on this ſide of the Atlantic can exceed the wild ſublimity of the ſcenery. A vaſt body of water, almoſt of the whole of the Gotha, pent into a narrow channel, precipitates itſelf with awful

ful crash from a height of upwards of sixty feet into a fathomless abyss; and, while yet boiling and foaming, it again dashes repeatedly from other ledges, and then rushes along with fury over a rocky bottom for almost three miles, till it spends its force and loses itself into a wide basin. In front of the spectator, rises perpendicularly to an altitude of three or four hundred feet, a rampart of granitic rock, which, bristling with its dark-some pines, frowns majestically over the awful scene. The other side presents a pleasing contrast, several saw-mills being perched among the cliffs, and turned by small detached torrents.

Gustavus Vasa conceived the magnificent plan of not only overcoming this vast obstruction by a canal, but likewise joining the Baltic with the North Sea, by connecting a chain of lakes, the Mälar, the Hjelmar, and the Wenner, which are not far distant; and which, with the river Gotha, would form a communication extending all the way from Stockholm to Gothenburg. Were this scheme realized, besides the obvious commercial advantages which it offers, the Swedes might avoid paying the Sound dues to Denmark: but the construction of a canal at Trollhätta, which was part of the plan, appeared of more immediate and practical utility. It was begun by Charles XII. whose passionate love of glory, had it been rightly directed, would have proved highly beneficial to his kingdom; and the attempt was at different times resumed in the succeeding reigns, and large sums of money were foolishly squandered without making any solid advancement. At last the undertaking was transferred to a company of merchants, deeply interested in its success, and who subscribed liberally on the prospect of a toll granted to them. Under their active management, the canal was recently prosecuted, and completed in little more than six years. It is certainly the grandest work of the kind that has been yet executed, and reflects the highest credit on the spirit and ingenuity of the Swedish nation. To form a just idea of the difficulties surmounted, we must not consider the length of the canal so much as its great width, the frequency of the locks, and the refractory nature of the materials in which the excavation is made. It is cut through a hill or continued rock of the hardest granite, by the force of gun-powder and the usual operations of mining; and the canal has nine locks, with their intermediate basins; of which the depth is about sixteen, and the breadth twenty-two feet. It can therefore admit of ships of very large burthen.

GO'THAM, a small town of the American States, in Maryland, about five miles north of Baltimore city.

GO'THAM, a village in Nottinghamshire.

"As wise as a man of GOTHAM."

This proverb passes for the periphrasis of a fool, as a hundred absurdities are feigned and fathered on the inhabitants of Gotham in Nottinghamshire.

GO'THARD, one of the alpine mountains of Switzerland; and from the top, where there is an hospital for monks, is one of the finest prospects in the world. It is eight miles from Aldorf.—A very great natural curiosity, which seems not generally known, has been lately observed upon the summit of this mountain: it is a rock, of considerable magnitude, so perfectly even, smooth, and polished, on one side, as to reflect the objects placed opposite to it, as perfectly as a looking-glass; whence, among the mountaineers, it is called the *mirror-rock*. No enquiry seems yet to have been set on foot with a view to account for this extraordinary phenomenon.

GO'THEBURG, or GOTHENBURG, a town of Sweden in the province of West Gothland, situated near the sea, at the conflux of the Moldal and the Gotha, on the side of which the old town is built; the other part, called the new town, is situated in a valley intersected by canals; the whole about three miles in circumference, and regularly fortified. The harbour is between two chains of rocks, about two furlongs wide. It was first built by Charles IX. in the island of Hisingen, in 1607; but, this town a few years after being burned down by Christian IV. king of Denmark, the inhabitants were removed, in the reign of Gustavus Adolphus, to the present spot. Charles IX. when he founded the former town, drew thither a great number of foreigners, by allowing them a free exercise of religion, and an exemption from duties on exports and imports for twenty years. These privileges were confirmed to the new town. Gothenburg is well built, and partakes of the taste of its first founders the Dutch, in being every where intersected by canals. Excepting the new quarter, and some buildings on the quay, all the houses are of wood; and though we generally form very poor ideas of such dwellings, these are very commodious, and warmer in winter than those which are built with stone. Their construction is very simple, being formed with square fir-trees placed one on the other, pinned together, and the interstices filled with moss; the outside is covered with planks painted red or white, and the inside with plaster. The country people thatch the roof with the bark of the birch-tree, over which they lay turf; while persons of property employ tile or slate; and these modes are prevalent throughout all Sweden and Norway. Such houses appear to be more convenient for the common people than those of stone, brick, or earth; because they are more expeditiously built, are more easily kept in repair, and can be removed from place to place without much difficulty.

Gothenburg contains about fifteen thousand inhabitants, and is reckoned the second city of the kingdom. It enjoys a very large share of trade. Its situation is peculiarly romantic, on the side of the river, at some distance from its mouth, and encircled by an amphitheatre of towering and diversified rocks. The inhabitants vie with those of the capital in every species of luxury. They are hospitable and friendly to strangers, and the ladies are celebrated for their amiable manners and elegant accomplishments. A foundling-hospital has been erected at Gothenburg on a very liberal plan, and every care is taken to provide for the poor and the fatherless.

The commerce of Gothenburg is carried on by many respectable merchants from different countries. Many Scotch houses are established here, and are very flourishing. The manufactures of the country are few, but excellent of their kind: sugar, for instance, is better refined in Sweden than any where else, but it is dear. Near the coast is a glass-house, the manufacture of which is very beautiful:—but the merchants of Gothenburg, and throughout Sweden, are principally engaged in the exportation of metals, chiefly iron; which is a very productive commerce. Herrings visit the coast towards the month of November, in such shoals that boats pass through them with difficulty; and if an oar be put into the sea, it will stand as upright among them as if it were stuck in the sand. This trade is considered so important, that every precaution is taken to prevent the fish from being frightened from the coast; and as soon as they appear, it is expressly forbidden to fire any cannon, even for the usual salutes. In a good year, 600,000 barrels of salted herrings are sold, and 30,000 barrels of oil. Nearly all the articles of importation, which are considerable, come from England, and sell very well. Indeed, the communication between the two countries is such, that most people of condition in Gothenburg have even their shoes from London, or from some town of Great Britain. The stuffs and leather which are brought thence are not only of a superior quality, but cheaper than the manufactures of the country. These circumstances may in some manner account for the reluctance of Sweden to break the bonds of amity with Great Britain, even amid the worst threats of the slayer Napoleon, and they are flattering testimonies in favour of our British manufactures and commer-

cial exertions. Forty miles ſouth of Uddevalla. Lat. 57. 42. N. lon. 29. 19. E. Ferro.

GO'THIA, an iſland in the Baltic, ſo called from the ancient Goths.

GOTH'IC, *adj.* [from *Goth.*] Spoken by the Goths. —They are to be found with little variation in the other collateral languages deſcended from the *Gothic*. *Tyrwhitt*. Uncivilized.—Ah! ruſtic ruder than *Gothic*. *Congreve*.

GOTHIC ARCHITECTURE. That ſtyle of building which diſtinguiſhes our cathedrals, and many other ancient fabrics.—See ARCHITECTURE, vol. ii. p. 78–86.

GOTH'ICISM, *ſ.* [from *Gothic.*] Gothic architecture.—I am glad you enter into the ſpirit of Strawberry-caſtle, it has a purity and propriety of *Gothiciſm* in it. *Gray's Letters*.—The ſtate of barbarians.—Night, *Gothiciſm*, confuſion, and abſolute chaos, are come again. *Shenſtone*.

GOTH'LAND, a country of Sweden, bounded on the north by Sweden Proper, on the eaſt and ſouth by the Baltic, and on the weſt by the Sound, the German Ocean, and Norway. This country was inhabited by a nation which had its origin from the Getæ, or Tartars of the Crimea; and was united to Sweden by Suercher. It is a pleaſant and fertile country, conſiſting of good arable and paſture land; with lakes and rivers, which abound in fiſh; it has alſo foreſts and mines. It contains forty-eight towns, and is divided into Eaſt Gothland, Weſt Gothland, and South Gothland.

GOTH'LAND (Eaſt), is bounded on the north by the provinces of Nericia and Sudermanland, on the eaſt by the Baltic, on the ſouth by Smaland, and on the weſt by the Wetter Lake, which ſeparates it from Weſt Gothland, about eighty miles in length, and ſeventy in breadth. This country was formerly governed by its particular kings and laws. It produces wheat, rye, barley, oats, peaſe, &c. in ſuch plenty as to ſupply the neighbouring provinces with theſe ſorts of grain. It has alſo many fine orchards, rich meadows and paſtures, lakes, and rivers, abounding with a variety of fiſh, extenſive foreſts, ſome of which are of oak and birch; profitable iron-mines and founderies, quarries of ſtone and marble; ſlatting-mills, and other machines for the improvement of manufacture. The occupations of the inhabitants are agriculture, grazing, hunting, and fiſhing; and in ſome places they are employed in the mines. The principal towns are Nordkioping, Soderkioping, Linkioping, and Wadſtena.

GOTH'LAND (South), is divided into three provinces, Schonen, Haland, and Blekingen, which from time immemorial, have undergone many viciſſitudes and changes. Sometimes they were ſubject to the crown of Denmark, at other times they were recovered by the Swedes; but at length king Charles Guſtavus annexed them for ever to the Swediſh dominions, by the treaty of Roſchild, in 1658.

GOTH'LAND (Weſt), is bounded on the north by Warmeland, on the eaſt by Nericia, the Wetter Lake, and Smaland, on the ſouth by Smaland and Haland, and on the weſt by the Scaggerac; about 115 miles in length, and fifteen in breadth. It was formerly an independent kingdom, governed by its own laws. The ſoil produces corn, vegetables, and fruit, with excellent paſtures, ſo that the inhabitants ſend cheeſe and butter to other provinces. The rivers, lakes, and ſea-coaſt, abound with fiſh. Iron-works, alum-works, and paper-mills, are erected in ſeveral places. The principal occupations of the inhabitants are agriculture, grazing, and fiſhing. The principal towns are Gotheburg, Wenneſburg, Lidkoping, and Falkioping.

GOTH'LAND, or GOTT'LAND, an iſland of Sweden, in the Baltic ſea, about ſeventy miles in length, and twenty-five in its greateſt breadth, formerly an independent kingdom, but now ſubject to the ſupreme court of juſtice at Stockholm. From its convenient ſituation it has juſtly acquired the name of *the Eye of the Baltic*. The ſoil is fertile, and there are fine woods of oaks and pines, good paſtures, and profitable fiſheries round the iſland; large quarries of ſtone, particularly the famous Gottland ſtone, and a ſoft grey ſandy ſtone, which are exported to Stockholm and other places. Here are alſo found ſome curious ſpecies of ſtone coral, cornelians, agates, and beautiful petrifactions. In former times here were alſo fine marble quarries. Very good lime-ſtone, tar, deal-boards, beams, and an excellent breed of ſheep, are exported from this iſland. Gottland is not infeſted with bears or wolves, but is ſufficiently ſtocked with deer, foxes, and hares; the inhabitants ſubſiſt by agriculture, grazing, fiſhing, working in the quarries, burning lime, and by ſeveral ſorts of mechanic trades, and navigation. The Gottland peaſants ſell none of their commodities to the inhabitants of the towns; but when a peaſant comes to a market-town, the burgher to whom he applies finds him in all neceſſaries, and gives him money to enable him to pay his taxes. On the other hand, the peaſant delivers up to the burgher all the produce of his induſtry, without ſaying a word about the price; and thus both parties act according to the dictates of natural juſtice and equity. In 1361, Waldemar king of Denmark ravaged this iſland, and laid it waſte, but it ſtill remained ſubject to the crown of Sweden. Albert king of Sweden, after an expenſive war, was obliged to mortgage it to the knights of the croſs, in Pruſſia, who, in conſideration of a ſum of money, delivered it up, in 1403, to queen Margaret, though with ſome reluctance. King Erick, of Pomerania, after he was dethroned, withdrew to this iſland, where he remained for three years: and when Charles VIII. was preparing to drive him from Gottland, and make a conqueſt of it, in 1449, Erick made an offer of it to Chriſtian I. king of Denmark. It remained in the poſſeſſion of the Danes till the year 1645, when, by the treaty of Bromſebro, it was reſtored to Sweden. Wiſby is the capital. Lat. 56. 54. to 57. 56. N. lon. 18. 6. to 19. 6. E. Greenwich.

GOTHS, or GU'TÆ, one of the moſt celebrated northern nations of antiquity, called alſo by different writers *Gothones*, *Gutones*, *Gythones*, and *Guttones*. Their origin is deduced from the peninſula of Scandinavia or Sweden; and the peopling of the Cherſoneſus, of the iſlands of the Baltic ſea, and the adjacent places on the continent, is attributed by the northern writers to this famous race of warriors. Many veſtiges indeed ſtill atteſt the ancient reſidence of the Goths in the countries beyond the Baltic. From the time of the geographer Ptolemy, the ſouthern part of Sweden ſeems to have continued in the poſſeſſion of the leſs enterpriſing remnant of that nation, and a large territory, after their name, is even at preſent divided into Eaſt and Weſt Gothland. During the middle ages, whilſt Chriſtianity was advancing with a ſlow progreſs into the north, the Goths and the Swedes compoſed two diſtinct and ſometimes hoſtile members of the ſame community. The latter of theſe two names has however prevailed, without extinguiſhing the former. The Swedes alſo have in every age claimed the kindred glory of the Goths. In a moment of diſcontent againſt the court of Rome, Charles XII. inſinuated, according to Voltaire, that his victorious troops were not degenerated from their brave anceſtors, who had ſubdued the miſtreſs of the world; and when the Auſtrians deſired the aid of the court of Rome againſt Guſtavus Adolphus, they always repreſented that conqueror as the lineal ſucceſſor of Alaric.—See Harte's Hiſtory of Guſtavus, vol. ii. p. 123.

Till the end of the eleventh century, an ancient temple ſubſiſted at Upſal, the moſt conſiderable town of the Swedes and Goths. It was enriched with the gold which the Scandinavians had acquired in their piratical adventures, and ſanctified by repreſentations of their three principal deities, the god of war, the goddeſs of generation, and the god of thunder. In the general feſtival that was ſolemnized every ninth year, nine animals of every ſpecies, without excepting even the human,

were ſacrificed, and their bleeding bodies ſuſpended in the ſacred grove adjacent to the temple. The only traces that now ſubſiſt of this barbaric ſuperſtition are contained in the Edda, a ſyſtem of mythology compiled in Iceland about the thirteenth century, and ſtudied by the learned of Denmark and Sweden, as the moſt valuable remains of their ancient traditions.

Though ſo many ſucceſſive generations of Goths might be capable of preſerving a faint tradition of their Scandinavian origin, we are not to expect, from ſuch unlettered barbarians, any diſtinct account of the time and circumſtances of their emigration. To croſs the Baltic from their ancient ſeat, was an eaſy and natural attempt. The inhabitants of Sweden were maſters of a ſufficient number of large veſſels, with oars, and the diſtance is little more than one hundred miles from Carlſcroon to the neareſt ports of Pomerania and Pruſſia: and here we begin to trace ſomewhat of hiſtoric ground. At leaſt as early as the Chriſtian æra, and as late as the age of the Antonines, the Goths, according to Tacitus, were eſtabliſhed towards the mouth of the Viſtula, and in that fertile province where the commercial cities of Thorn, Elbing, Konigſberg, and Dantzic, were long afterwards founded. Weſtward of the Goths, the numerous tribes of the Vandals were ſpread along the banks of the Oder, and the ſea-coaſt of Pomerania and Mecklenburgh. A ſtriking reſemblance of manners, complexion, religion, and language, ſeemed to indicate that the Vandals and the Goths were originally one great people. The latter appear to have been ſubdivided into Oſtrogoths, Viſigoths, and Gepidæ. The Oſtro and Viſi, the eaſtern and weſtern Goths, (ſays Jornandes, c. 17,) obtained thoſe denominations from their original ſeats in Scandinavia. In all their future marches and ſettlements they preſerved, with their names, the ſame relative ſituation. When they firſt departed from Sweden, the infant colony was contained in three veſſels. The third being a heavy ſailor lagged behind, and the crew, which afterwards ſwelled into a nation, received from that circumſtance the appellation of *Gepidæ* or Loiterers. The diſtinction among the Vandals was more ſtrongly marked by the independent names of Heruli, Burgundians, Lombards, and a variety of other petty ſtates, many of which, in a future age, expanded themſelves into powerful monarchies.

In the age of the Antonines, the Goths were ſtill ſeated in Pruſſia. About the reign of Alexander Severus, the Roman province of Dacia had already experienced their proximity by deſtructive inroads. In this interval, therefore, of about ſeventy years, we muſt place the ſecond migration of the Goths from the Baltic to the Euxine; but the cauſe that produced it lies concealed among the various motives which actuate the conduct of unſettled barbarians. Either a peſtilence or a famine, a victory or a defeat, an oracle of the gods or the eloquence of a daring leader, were ſufficient to impel the Gothic arms on the milder climates of the ſouth. Beſides the influence of a martial religion, the numbers and ſpirit of the Goths were equal to the moſt dangerous enterpriſes. The uſe of round bucklers and ſhort ſwords rendered them formidable in a cloſe engagement; the manly obedience which they yielded to hereditary kings, gave union and ſtability to their councils; and the renowned Amala, the hero of that age, and the tenth anceſtor of Theodoric, king of Italy, enforced, by the aſcendant of perſonal merit, the prerogative of his birth, which he claimed to derive from the *Anſes*, or demigods of the Gothic nation.

The fame of a great enterpriſe excited the braveſt warriors from all the Vandalic ſtates of Germany, many of whom are ſeen a few years afterwards combating under the common ſtandard of the Goths. The firſt motions of the emigrants carried them to the banks of the Prypec, a river conceived by the ancients to be the ſouthern branch of the Boryſthenes. The windings of that great ſtream through the plains of Poland and Ruſſia, gave a direction to their line of march, and a conſtant ſupply of freſh water and paſturage to their numerous herds of cattle. They followed the unknown courſe of the river, confident in their valour, and careleſs of whatever power might oppoſe their progreſs. The Baſtarnæ and the Venedi were the firſt who preſented themſelves; and the flower of their youth, either from choice or compulſion, increaſed by their numbers the Gothic army. The Baſtarnæ dwelt on the northern ſide of the Carpathian mountains; the immenſe tract of land that ſeparated the Baſtarnæ from the ſavages of Finland, was poſſeſſed, or rather waſted, by the Venedi. There is ſome reaſon to believe that the firſt of theſe nations, which diſtinguiſhed itſelf in the Macedonian war, and was afterwards divided into the formidable tribes of the Peucini, the Borani, the Carpi, &c. derived its origin from the Germans. With better authority, a Sarmatian extraction may be aſſigned to the Venedi, who rendered themſelves ſo famous in the middle ages. Jornandes has ſhewn, that the Venedi, the Slavi, and the Antes, were the three great tribes of the ſame people. But the confuſion of blood and manners on that doubtful frontier, often perplexed the moſt accurate obſervers. As the Goths advanced near the Euxine ſea, they encountered a purer race of Sarmatians, the Jazyges, the Alani, and the Roxolani; and they were probably the firſt Germans who ſaw the mouths of the Boryſthenes, and of the Tanais. If we enquire into the characteriſtic marks of the people of Germany and of Sarmatia, we ſhall diſcover that thoſe two great portions of human kind were principally diſtinguiſhed by fixed huts or moveable tents, by a cloſe dreſs, or flowing garments, by the marriage of one or of ſeveral wives, by a military force, conſiſting, for the moſt part, either of infantry or cavalry; and above all by the uſe of the Teutonic, or of the Sclavonian, language; the laſt of which has been diffuſed by conqueſt, from the confines of Italy to the neighbourhood of Japan.

The Goths were now in poſſeſſion of the Ukraine, a country of conſiderable extent and uncommon fertility, interſected with navigable rivers, which from either ſide diſcharge themſelves into the Boryſthenes; and interſperſed with large and lofty foreſts of oak. The plenty of game and fiſh, the innumerable bee-hives depoſited in the hollows of old trees, and in the cavities of rocks, and forming, even in that rude age, a valuable branch of commerce, the ſize of the cattle, the temperature of the air, the aptneſs of the ſoil for every ſpecies of grain, and the luxuriancy of the vegetation, all diſplayed the liberality of nature, and tempted the induſtry of man. But the Goths withſtood all theſe temptations, and ſtill adhered to a life of idleneſs, of poverty, and of rapine.

The Scythian hords, which, towards the eaſt, bordered on the new ſettlements of the Goths, preſented no temptation to their arms, except the doubtful chance of an unprofitable victory. But the proſpect of the Roman territories was far more alluring; and the fields of Dacia were covered with rich harveſts, ſown by the hands of an induſtrious, and expoſed to be gathered by thoſe of a warlike, people. It is probable, that the conqueſts of Trajan, maintained by his ſucceſſors, leſs for any real advantage than for ideal dignity, had contributed to weaken the empire on that ſide. The new and unſettled province of Dacia was neither ſtrong enough to reſiſt, nor rich enough to ſatiate, the rapaciouſneſs of the barbarians. As long as the remote banks of the Nieſter were conſidered as the boundary of the Roman power, the fortifications of the Lower Danube were more careleſsly guarded, and the inhabitants of Mæſia lived in ſupine ſecurity, fondly conceiving themſelves at an inacceſſible diſtance from any barbarian invaders. The irruptions of the Goths, however, under the reign of Philip, convinced them of their miſ-

take. The king, or leader, of that fierce nation, traverſed with contempt the province of Dacia, and paſſed both the Nieſter and the Danube, without encountering any oppoſition capable of retarding his progreſs. The relaxed diſcipline of the Roman troops, betrayed the moſt important poſts, where they were ſtationed, and the fear of deſerved puniſhment induced great numbers of them to inliſt under the Gothic ſtandard. The various multitude of barbarians appeared, at length, under the walls of Marcianopolis, a city built by Trajan in honour of his ſiſter, and at that time the capital of the ſecond Mæſia. The inhabitants conſented to ranſom their lives and property, by the payment of a large ſum of money, and the invaders retreated back into their deſerts, animated, rather than ſatisfied, with the firſt ſucceſs of their arms againſt an opulent but feeble country. Intelligence was ſoon tranſmitted to the emperor Decius, that Cniva, king of the Goths, had paſſed the Danube a ſecond time, with more conſiderable forces; that his numerous detachments ſcattered devaſtation over the province of Mæſia, whilſt the main body of the army, conſiſting of ſeventy thouſand Germans and Sarmatians, a force equal to the moſt daring atchievements, required the preſence of the Roman monarch, and the exertion of all his military power.

The Goths were found by Decius, A. D. 250, engaged before Nicopolis, on the Jatrus, one of the many monuments of Trajan's victories. On his approach they raiſed the ſiege, but with a deſign only of marching away to a conqueſt of greater importance, the ſiege of Philippopolis, a city of Thrace, founded by Philip king of Macedon, near the foot of mount Hæmus. Decius followed them through a difficult country, and by forced marches; but when he imagined himſelf at a conſiderable diſtance from the rear of the Goths, Cniva turned ſhort with rapid fury on his purſuers. The camp of the Romans was ſurpriſed and pillaged, and, for the firſt time, their emperor fled in diſorder before a troop of half-armed barbarians. After a long reſiſtance, Philippopolis, deſtitute of ſuccours, was taken by ſtorm. A hundred thouſand perſons are reported to have been maſſacred in the ſack of that city. Many priſoners of conſequence became a valuable acceſſion to the ſpoil; and Priſcus, a brother of Philip, bluſhed not to aſſume the purple under the protection of the barbarians. The time, however, conſumed in that tedious ſiege, enabled Decius to revive the courage, reſtore the diſcipline, and recruit the numbers, of his troops. He intercepted ſeveral parties of Carpi, and other Germans, who were haſtening to ſhare the victory of their countrymen, intruſted the paſſes of the mountains to officers of approved valour and fidelity, repaired and ſtrengthened the fortifications of the Danube, and exerted his utmoſt vigilance to oppoſe either the progreſs or the retreat of the Goths. Encouraged by the return of fortune, he anxiouſly waited for an opportunity to retrieve, by a great and deciſive blow, his own glory, and that of the Roman arms.

The Goths were now, on every ſide, ſurrounded and purſued by the Roman arms. The flower of their troops had periſhed in the long ſiege of Philippopolis, and the exhauſted country could no longer afford ſubſiſtence for the remaining multitude of licentious barbarians. Reduced to this extremity, the Goths would gladly have purchaſed, by the ſurrender of all their booty and priſoners, the permiſſion of an undiſturbed retreat. But the emperor, confident of victory, and reſolving, by the chaſtiſement of theſe invaders, to ſtrike terror into the nations of the North, refuſed to liſten to any terms of accommodation. The high-ſpirited barbarians rather preferred death to ſlavery. An obſcure town of Mæſia, called Forum Terebronii, was the ſcene of the battle. The Gothic army was drawn up in three lines; and the front of the third line was covered by a deep moraſs. In the beginning of the action, the ſon of Decius, a youth of the faireſt hopes, was ſlain by an arrow in the ſight of his afflicted father; who, ſummoning all his fortitude, admoniſhed the diſmayed troops, that the loſs of a ſingle ſoldier was of little importance to the republic. The conflict was terrible; it was the combat of deſpair againſt grief and rage. The firſt line of the Goths at length gave way in diſorder; the ſecond, advancing to ſuſtain it, ſhared its fate; and the third only remained entire, prepared to diſpute the paſſage of the moraſs, which was imprudently attempted through the inconſiderateneſs of the enemy. Here the fortune of the day turned, and all things became adverſe to the Romans: the place deep with ooze, ſinking under thoſe who ſtood, ſlippery to ſuch as advanced; their armour heavy, the waters deep; nor could they wield, in that ſituation, their weighty javelins. The Goths, on the contrary, were enured to encounters in the bogs; their perſons tall, and their ſpears long, they could wound at a diſtance. In this moraſs the Roman army, after an ineffectual ſtruggle, was irrecoverably loſt; nor could the body of the unfortunate Decius ever be found.

The imperial dignity was conferred on Hoſtilianus, the only ſurviving ſon of Decius, and the ſame rank was granted to Gallus, whoſe ability ſeemed equal to the great truſt of guardian to the young prince and the diſtreſſed empire. The firſt care was now to deliver the Illyrian provinces from the ravages of the victorious Goths. He conſented, in the year 252, to leave in their hands the rich fruits of their invaſion, an immenſe booty, and, what was more diſgraceful, a great number of priſoners of the higheſt quality. He ſupplied their camp with every conveniency that could aſſuage their angry ſpirits, or facilitate their departure; and he even promiſed to pay them annually a large ſum of gold, on condition they ſhould never afterwards infeſt the Roman territories by their incurſions.

The great ſtream of Gothic hoſtilities was now, for a time, diverted into a different channel. The Goths, in their new ſettlement of the Ukraine, ſoon became maſters of the northern coaſt of the Euxine: to the ſouth of that inland ſea, were ſituated the ſoft and wealthy provinces of Aſia Minor, which poſſeſſed all that could attract, and nothing that could reſiſt, a barbarian conqueror. The banks of the Boryſthenes are only ſixty miles diſtant from the entrance of the peninſula of Crim Tartary, known to the ancients under the name of Cherſoneſus Taurica. This little kingdom of Boſphorus, whoſe capital was ſituated on the Straits through which the Mæotis communicates itſelf to the Euxine, was compoſed of degenerate Greeks. Domeſtic factions and fears, or the private intereſt of individuals, were ſoon the means of admitting the Goths into the heart of Boſphorus. With the acquiſition of a ſuperfluous waſte of fertile ſoil, the conquerors obtained the command of a naval force, ſufficient to tranſport their armies to the coaſt of Aſia. The ſhips uſed in the navigation of the Euxine were of a very ſingular conſtruction. They were ſlight flat-bottomed barks framed of timber only, without the leaſt mixture of iron, and occaſionally covered with a ſhelving roof, on the appearance of a tempeſt. In theſe floating houſes, the Goths careleſsly truſted themſelves to the mercy of an unknown ſea, under the conduct of ſailors preſſed into the ſervice, and whoſe ſkill and fidelity were equally ſuſpicious. But the hopes of plunder had baniſhed every idea of danger, and a natural fearleſſneſs of temper ſupplied in their minds the more rational confidence which is the juſt reſult of knowledge and experience. Warriors of ſuch a daring ſpirit muſt have often murmured againſt the cowardice of their guides, who required the ſtrongeſt aſſurances of a ſettled calm before they would venture to embark; and would ſcarcely ever be tempted to loſe ſight of the land. The fleet of the Goths, leaving the coaſt of Circaſſia on the left hand,

hand, firſt appeared before Pityus, the utmoſt limits of the Roman provinces; a city provided with a convenient port, and fortified with a ſtrong wall. Here they met with a reſiſtance more obſtinate than they had reaſon to expect. They were repulſed; and their diſappointment ſeemed to diminiſh the terror of the Gothic name. As long as Succeſſianus, an officer of ſuperior merit, defended that frontier, all their efforts were ineffectual; but as ſoon as he was removed, they reſumed the attack of Pityus; and, by the deſtruction of that city, obliterated the memory of their former diſgrace.

Circling round the eaſtern extremity of the Euxine ſea, the navigation from Pityus to Trebizond is about three hundred miles. The courſe of the Goths carried them in ſight of the country of Colchis, ſo famous by the expedition of the Argonauts; and they even attempted, though without ſucceſs, to pillage a rich temple at the mouth of the river Phaſis. Trebizond, celebrated in the retreat of Xenophon as an ancient colony of Greeks, derived its wealth from the munificence of the emperor Adrian, who had conſtructed an artificial port on a coaſt left deſtitute by nature of ſecure harbours. The city was large and populous; a double enclofure of walls ſeemed to defy the fury of the Goths, and the uſual garriſon had been ſtrengthened by a reinforcement of ten thouſand men. But there are not any advantages capable of ſupplying the abſence of diſcipline and vigilance. The numerous garriſon of Trebizond, diſſolved in riot and luxury, diſdained to guard their impregnable fortifications. The Goths ſoon diſcovered the ſupine negligence of the beſieged, erected a lofty pile of faſcines, aſcended the walls in the ſilence of the night, and entered the defenceleſs city ſword in hand. A general maſſacre of the people enſued, whilſt the affrighted ſoldiers eſcaped through the oppoſite gates of the town. The moſt holy temples, and the moſt ſplendid edifices, were involved in one common deſtruction. The booty that fell into the hands of the Goths was immenſe: the wealth of the adjacent countries had been depoſited in Trebizond, as in a ſecure place of refuge. The number of captives was incredible, as the victorious barbarians now ranged without oppoſition through the extenſive province of Pontus. The rich ſpoils of Trebizond filled a great fleet of ſhips that had been found in the port. The robuſt youth of the ſea-coaſt were chained to the oar; and the Goths, ſatisfied with the ſucceſs of their firſt naval expedition, returned in triumph to their new eſtabliſhments in the kingdom of Boſphorus.

The ſecond expedition of the Goths was undertaken with greater powers of men and ſhips; but they ſteered a different courſe, and, diſdaining the exhauſted provinces of Pontus, followed the weſtern coaſt of the Euxine, paſſed before the wide mouths of the Boryſthenes, the Nieſter, and the Danube, and increaſing their fleet by the capture of a great number of fiſhing barks, they approached the narrow ſtrait through which the Euxine ſea pours its waters into the Mediterranean, and divides the continents of Europe and Aſia. The garriſon of Chalcedon was encamped near the temple of Jupiter Urius, on a promontory that commanded the entrance of the ſtrait; and ſo inconſiderable were the dreaded invaſions of the barbarians, that this body of troops ſurpaſſed in number the Gothic army. But it was in numbers alone that they ſurpaſſed it. They deſerted with precipitation their advantageous poſt, and abandoned the town of Chalcedon, moſt plentifully ſtored with arms and money, to the diſcretion of the conquerors. Whilſt the Gothic chiefs heſitated whether they ſhould prefer the ſea or land, Europe or Aſia, for the ſcene of their hoſtilities, a perfidious fugitive pointed out Nicomedia, once the capital of the kings of Bithynia, as a rich and eaſy conqueſt. He guided the march, which was only ſixty miles from the camp of Chalcedon, directed the reſiſtleſs attack, and partook of the booty; for the Goths had learned ſufficient policy to reward the traitor whom they deteſted. Nice, Pruſa, Apæmæa, Cius, cities that had ſometimes rivalled the ſplendour of Nicomedia, were involved in the ſame calamity, which, in a few weeks, raged without controul through the whole province of Bithynia. Three hundred years of peace, enjoyed by the luxuriant inhabitants of Aſia, had aboliſhed the exerciſe of arms, and removed the apprehenſion of danger. The ancient walls were ſuffered to moulder away, and the revenue of the moſt opulent cities was reſerved for the conſtruction of baths, temples, and theatres.

From the ſack of Pruſa, the Goths advanced within eighteen miles of Cyzicus, which they had devoted to deſtruction; but the ruin of that city was delayed by a fortunate accident. The ſeaſon was rainy, and the lake Apolloniates, the reſervoir of all the ſprings of Mount Olympus, roſe to an unuſual height. The little river of Rhyndacus, which iſſues from the lake, ſwelled into a broad and rapid ſtream, and ſtopped the progreſs of the Goths. Their retreat to the maritime city of Heraclea, where the fleet had probably been ſtationed, was attended by a long train of waggons, laden with the ſpoils of Bithynia, and was marked by the flames of Nice and Nicomedia, which they wantonly burnt. Some obſcure hints are mentioned of a doubtful combat that ſecured their retreat. But even a complete victory would have been of little moment, as the approach of the autumnal equinox ſummoned them to haſten their return. To navigate the Euxine before the month of May, or after that of September, would have been eſteemed the higheſt inſtance of raſhneſs and folly.

When we are informed that the third fleet equipped by the Goths in the ports of Boſphorus, conſiſted of five hundred ſail of ſhips, our imagination naturally computes and multiplies the formidable armament; but, as we are aſſured by the judicious Strabo, that the piratical veſſels uſed by the barbarians of Pontus and the Leſſer Scythia were not capable of containing more than twenty-five or thirty men, we may ſafely affirm, that fifteen thouſand warriors, at the moſt, embarked in this great expedition. Impatient of the limits of the Euxine, they ſteered their courſe from the Cimmerian to the Thracian Boſphorus. When they had almoſt gained the middle of the Straits, they were ſuddenly driven back to the entrance of them; till a favourable wind ſpringing up the next day, carried them in a few hours into the lake of the Propontis. Their landing on the iſland of Cyzicus, was now attended with the ruin of that ancient and noble city. From thence iſſuing again through the narrow paſſage of the Helleſpont, they purſued their winding navigation amidſt the numerous iſlands ſcattered over the Archipelago, or the Ægean Sea. The aſſiſtance of captives and deſerters muſt have been very neceſſary to pilot their veſſels, and to direct their various incurſions, as well on the coaſt of Greece as on that of Aſia. At length the Gothic fleet anchored in the port of Piræus, five miles diſtant from Athens, which had attempted to make ſome preparations for a vigorous defence. Cleodamus, one of the engineers employed by the emperor's orders to fortify the maritime cities againſt the Goths, had already begun to repair the ancient walls, fallen to decay ſince the time of Sylla. The efforts of his ſkill were ineffectual, and the barbarians became maſters of this native ſeat of the muſes and the arts. But while the conquerors abandoned themſelves to the licence of plunder and intemperance, their fleet, that lay with a ſlender guard in the harbour of Piræus, was unexpectedly attacked by the brave Dexippus, who, flying with the engineer Cleodamus from the ſack of Athens, collected a haſty band of volunteers, peaſants as well as ſoldiers, and in ſome degree avenged the calamities of his country.

But this exploit, whatever luſtre it might ſhed on the declining age of Athens, ſerved rather to irritate than

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to ſubdue the undaunted ſpirit of the Goths. A general conflagration blazed out at the ſame time in every diſtrict of Greece. Thebes and Argos, Corinth and Sparta, which had formerly waged ſuch memorable wars againſt each other, were now unable to bring an army into the field, or even to defend their ruined fortifications. The rage of war, both by land and by ſea, ſpread from the eaſtern point of Sunium to the weſtern coaſt of Epirus. The Goths had already advanced within ſight of Italy, when the approach of ſuch imminent danger awakened Gallienus from his unaccountable lethargy. The emperor appeared in arms; and his preſence ſeems to have checked the ardour, and to have divided the ſtrength, of the enemy. Great numbers of the Goths, diſguſted with the perils and hardſhips of a tedious voyage, broke into Mæſia, with a deſign of forcing their way over the Danube to their ſettlements in the Ukraine. The wild attempt would have proved inevitable deſtruction, if the diſcord of the Roman generals had not opened to the barbarians the means of an eſcape. The ſmall remainder of this deſtroying hoſt returned on-board their veſſels; and meaſuring back their way through the Helleſpont and the Boſphorus, ravaged in their paſſage even the ſhores of Troy. As ſoon as they found themſelves in ſafety within the baſon of the Euxine, they landed at Anchialus in Thrace, near the foot of Mount Hæmus: and, after all their toils, indulged themſelves in the uſe of thoſe ſalutary baths. What remained of the voyage was a ſhort and eaſy navigation. Such was the various fate of this third and and greateſt of their naval enterpriſes. It may ſeem difficult to conceive, how the original body of fifteen thouſand warriors could ſuſtain the loſſes and diviſions of ſo bold an adventure. But as their numbers were gradually waſted by the ſword, by ſhipwrecks, and by the influence of a warm climate, they were perpetually renewed by troops of banditti and deſerters, who flocked to the ſtandard of plunder, and by a crowd of fugitive ſlaves, often of German or Sarmatian extraction, who eagerly ſeized the opportunity of freedom and revenge. In theſe expeditions, the Gothic nation claimed a ſuperior ſhare of honour and danger; but the tribes that fought and the Gothic banners are ſometimes diſtinguiſhed and ſometimes confounded in the imperfect hiſtories of that age; and as the barbarian fleets ſeemed to iſſue from the mouth of the Tanais, the vague but familiar appellation of Scythians was frequently beſtowed on the mixed multitude.

We muſt not forget that the temple of Diana at Epheſus, that ſacred and exalted ſtructure, after having riſen with increaſing ſplendour from ſeven repeated misfortunes, was finally burnt by the Goths in their third naval invaſion. And we are told that in the ſack of Athens the Goths had collected all the libraries, and were on the point of ſetting fire to this funeral pile of Grecian learning, had not one of their chiefs, of more refined policy than his brethren, diſſuaded them from the deſign; by the grave obſervation, that as long as the Greeks were addicted to the ſtudy of books, they would never apply themſelves to the exerciſe of arms. This ſagacious counſellor reaſoned like an ignorant barbarian; for in the moſt polite and powerful nations, the age of knowledge and ſcience has generally been the age of military virtue and renown.

Perſiſting ſtill in their rooted animoſity with the Romans, the ferocious tribes of Germany and Sarmatia who fought under the Gothic ſtandard, collected an armament in 269, more formidable than any which had yet iſſued from the ſtrong holds of the Euxine, or the iſlands of the Baltic. On the banks of the Nieſter they conſtructed a fleet of two thouſand, or even of ſix thouſand, veſſels; numbers which, however incredible they may ſeem, would have been inſufficient to tranſport their army of three hundred and twenty thouſand men; which, however, the Auguſtan hiſtory, and Zonaras, have held in diſpute. But whatever might be the real ſtrength of the Goths, the vigour and ſucceſs of the expedition were not adequate to the greatneſs of the preparations. In their paſſage through the Boſphorus, the unſkilful pilots were overpowered by the violence of the current; and while the multitude of their ſhips were crowded in a narrow channel, many were daſhed againſt each other, or againſt the ſhore. The barbarians made ſeveral deſcents on the coaſts both of Europe and Aſia; but the open country had been already plundered, and they were repulſed with ſhame and loſs from the fortified cities which they aſſaulted. A ſpirit of diſcouragement and diviſion aroſe in the fleet, and ſome of their chiefs ſailed away towards the iſlands of Crete and Cyprus; but the main body purſuing a more ſteady courſe, anchored at length near the foot of mount Athos, and aſſaulted the city of Theſſalonica, the wealthy capital of the Macedonian provinces. Their attacks, in which they diſplayed a fierce but artleſs bravery, were ſoon repreſſed by the haſty approach of Claudius, who repaired to a ſcene of action that called for the preſence of a warlike prince, at the head of the legions of the Roman empire. Impatient for battle, the Goths immediately broke up their camp, relinquiſhed the ſiege of Theſſalonica, left their navy at the foot of mount Athos, traverſed the hills of Macedonia, and preſſed forwards to engage the army of Italy. Meanwhile Claudius, conſcious of his danger, but ſtill deriving a well-grounded hope from the reſources of his own mind, prepared to cut ſhort the progreſs of theſe undiſciplined barbarians.

The event ſurpaſſed his own expectations and thoſe of the world. By the moſt ſignal of victories he delivered the empire from this hoſt of invaders, and was on this account diſtinguiſhed by poſterity under the appellation of the Gothic Claudius. The deciſive battle was fought near Naiſſus, a city of Dardania. The Romans at firſt gave way, oppreſſed by numbers, and diſmayed by misfortunes. Their ruin was inevitable, had not the abilities of their emperor prepared a ſeaſonable relief. A large detachment riſing out of the ſecret and difficult paſſes of the mountains, which, by his order, they had occupied, ſuddenly aſſailed the rear of the Goths. The favourable inſtant was improved by the activity of Claudius. He revived the drooping courage of his troops, reſtored their ranks, and preſſed the barbarians on every ſide. Fifty thouſand men are reported to have been ſlain in the battle of Naiſſus. Several large bodies of the Goths, covering their retreat with a moveable fortification of waggons, retired, or rather eſcaped, from the field of ſlaughter. The war had been diffuſed over the provinces of Mæſia, Thrace, and Macedonia, and its operations drawn out into a variety of marches, ſurpriſes, and tumultuary engagements, as well by ſea as by land. The immenſe booty which had been collected by the Goths, conſiſted for the greater part of cattle and ſlaves. A ſelect body of the Gothic youth was on this occaſion incorporated among the imperial troops; the remainder was ſold into ſervitude; and ſo conſiderable was the number of female captives, that every ſoldier obtained to his ſhare two or three women. A circumſtance from which it has been concluded, that the invaders entertained ſome deſigns of a ſettlement as well as of plunder; ſince even in a naval expedition they were accompanied by their families. The loſs of their fleet, which had been either taken or ſunk, prevented the retreat of the Goths; and a vaſt circle of Roman poſts, diſtributed with ſkill, and gradually cloſing towards a common centre, forced the barbarians into the moſt inacceſſible parts of mount Hæmus, where they took refuge, but on a very ſcanty ſubſiſtence. During the courſe of a rigorous winter, in which they were beſieged by the emperor's troops, famine and peſtilence, deſertion and the ſword, continually diminiſhed the fugitive multitude. On the return of ſpring,

nothing appeared in arms except a deſperate band, the only remnant of that formidable hoſt which had embarked at the mouth of the Nieſter.

On the death of Claudius, in 270, and the recal of the Roman troops from mount Hæmus, and the banks of the Danube, theſe barbarians appear to have been excited to new enterpriſes. The Gothic and Vandalic tribes at once abandoned their ſettlements of the Ukraine, traverſed the rivers, and ſwelled with new multitudes the deſtroying hoſt of their countrymen. Their depredations were directed to the Roman frontier, which was laid waſte with terrible deſtruction. Their united numbers were at length encountered by Aurelian, and the bloody and doubtful conflict ended only with the approach of night. Exhauſted and depreſſed by the calamities they had reciprocally endured and inflicted during a twenty year's war, the Goths and the Romans now conſented to a laſting and beneficial treaty. It was ſolicited on the ſide of the barbarians, and cheerfully ratified by the Roman legions, to whoſe ſuffrage the prudence of Aurelian referred the deciſion of that important queſtion. The Gothic nation engaged in conſequence to ſupply the armies of Rome with a body of two thouſand auxiliaries, conſiſting entirely of cavalry; and Aurelian ſtipulated in return an undiſturbed retreat to the Goths, with a regular market as far as the Danube, provided by the emperor's care, but at their own expence. The treaty was obſerved with ſuch religious fidelity, that when a party of five hundred men ſtraggled from the Gothic camp in queſt of plunder, the general of the barbarians commanded that the guilty leader ſhould be apprehended and ſhot to death with darts, as a ſacrifice to the ſanctity of their engagements. It is, however, not unlikely that the precaution of Aurelian, who had exacted as hoſtages the ſons and daughters of the Gothic chiefs, contributed ſomething to this pacific temper. The youths he trained in the exerciſe of arms, and near his own perſon: to the ladies he gave a liberal Roman education, and by beſtowing them in marriage on ſome of his principal officers, gradually introduced between the two nations the bonds of amity and friendſhip. But the moſt important condition of the peace was, that Aurelian ſhould withdraw the Roman forces from Dacia, and relinquiſh that great province to the Goths and Vandals. His manly judgment convinced him of the ſolid advantages, and taught him to deſpiſe the ſeeming diſgrace, of thus contracting the frontiers of the empire. This colony, which had ſo long been a Roman province, readily acknowledged the authority of the Gothic tribe, and claimed the fancied honour of a Scandinavian origin. At the ſame time the accidental reſemblance of the name of Gæta, infuſed among the credulous Goths a belief that, in a remote age, their own anceſtors, ſeated in the Dacian provinces, had received the inſtructions of Zamolxis, and checked the arms of Seſoſtris and Darius.

From this period to the year 322, theſe northern hives, exhauſted for a time and weakened, appear to have ſheathed the ſword, and reſpected their treaty. But the ſtrength of that warlike nation was now reſtored by a peace of near fifty years; a new generation had ariſen, who no longer remembered the misfortunes of ancient days: the Sarmatians of the lake Mœotis followed the Gothic ſtandard either as ſubjects or as allies, and their united forces burſt forth like a torrent upon the devoted countries of Illyricum. Campona, Margus, and Bononia, appear to have been the ſcenes of ſeveral memorable ſieges and battles; and though Conſtantine encountered a very obſtinate reſiſtance, he prevailed at length in the conteſt, and the Goths were compelled to purchaſe an ignominious retreat, by reſtoring the booty and priſoners which they had taken. Nor was this advantage ſufficient to ſatisfy the indignation of the emperor. At the head of his legions he paſſed the Danube, penetrated into the ſtrongeſt receſſes of Dacia, and not till he had inflicted a ſevere revenge condeſcended to give peace to the ſuppliant Goths.

Among barbaric tribes, the ſharing of the ſpoil, and the recriminations after a defeat, equally ſtir up diſſenſions between them. Thus it happened with the Sarmatians and Goths: the latter, by wearing the longer ſword, were diſpoſed to carve largely for themſelves, without admitting a breath of reſtriction from their weaker allies. Hence the Vandal princes were ſtimulated by envy and revenge, when they beheld the Gothic kings aſpiring to extend their dominion from the Euxine to the frontiers of Germany; and the waters of the Maros, a river which falls into the Teyſs, were literally ſtained with the blood of the contending barbarians. After experiencing the ſuperior ſtrength and numbers of their adverſaries, the Sarmatians implored the protection of the Roman monarch, who beheld with pleaſure the diſcord of theſe rapacious nations, but who was juſtly alarmed by this new progreſs of the Gothic arms. As ſoon as Conſtantine had declared himſelf in favour of the weaker party, the haughty Araric king of the Goths, inſtead of waiting the attack of the Romans, boldly paſſed the Danube, and ſpread terror and devaſtation through the province of Mæſia. To oppoſe the inroad of this deſtroying hoſt, the aged emperor, A. D. 332, again took the field; but on this occaſion his fortune betrayed the glory which he had acquired in ſo many former actions. He had the mortification of ſeeing his troops fly before an inconſiderable detachment of the Goths, who purſued them to the edge of their fortified camp, and obliged him to conſult his ſafety by a precipitate and ignominious retreat. The event of a ſecond and more ſucceſsful action retrieved the honour of the Roman name; and the force of diſcipline prevailed, after an obſtinate conteſt, over the efforts of irregular valour. The broken army of the Goths abandoned the field of battle, fled from the waſted province, and, flying before the victors, quickly repaſſed the Danube.

The emperor improved this advantage by his negociations with the warlike people of Cherſoneſus. The Cherſonites were animated againſt the Goths, by the memory of the wars, which, in the preceding century, they had maintained with unequal forces againſt thoſe invaders of their country. Obedient to the requiſition of Conſtantine, they prepared a conſiderable army, of which the principal ſtrength conſiſted in croſs-bows and military chariots. The Goths, now vanquiſhed on every ſide, were driven into the mountains, where, in the courſe of a ſevere campaign, above an hundred thouſand were computed to have periſhed by cold and hunger. Peace was at length granted; the eldeſt ſon of Araric was accepted as an hoſtage; and Conſtantine once more endeavoured to convince theſe chiefs, by a liberal diſtribution of honours and rewards, how far the friendſhip of the Romans was preferable to their enmity.

The Goths now for a ſucceſſion of years cultivated a firm attachment to the imperial houſe of Conſtantine, of whoſe liberality they had received ſo many ſignal proofs. But, in the year 366, their contempt for two new and obſcure princes, who had been raiſed to the imperial throne by a popular election, opened to the aſpiring Goths a field of new enterpriſes; and, while they agitated the deſign of marching their confederate forces under the national ſtandard, they were reſolved to embrace the party of Procopius. The treaty might ſtipulate no more than ten thouſand auxiliaries; but the deſign was ſo zealouſly adopted by the chiefs of the Viſigoths, that the army which paſſed the Danube is ſaid to have amounted to thirty thouſand men. They marched with the confidence that their valour would decide the fate of the Roman empire; and the provinces of Thrace groaned under the weight of theſe barbarians,

barbarians, who displayed the insolence of masters, and the licentiousness of enemies. But the intemperance which gratified their appetites, retarded their progress; and before the Goths could receive any certain intelligence of the defeat and death of Procopius, they found, by the hostile state of the country, that the civil and military powers were resumed by his successful rival. A chain of posts and fortifications, skilfully disposed by the generals of Valens, resisted their march, prevented their retreat, and intercepted their subsistence. The fierceness of the Goths was tamed by hunger: they threw down their arms, and for the sake of food submitted to chains. The numerous captives were distributed in all the cities of the east; and the provincials, who became familiarized with their savage appearance, ventured, by degrees, to measure their own strength with these formidable adversaries, whose name had so long been the object of their terror. The king of Scythia was grieved and exasperated by this national calamity. His ambassadors loudly complained, at the court of Valens, of the infraction of the ancient and solemn alliance, which had so long subsisted between the Romans and the Goths. They alleged, that they had fulfilled the duty of allies, by assisting the kinsman and successor of the emperor Julian; they required the immediate restitution of the captives; and they urged a very singular claim, that the Gothic generals, marching in arms, were entitled to the sacred character and privileges of ambassadors. The peremptory refusal of these demands, was the immediate signal for a new war: the aged monarch of the Goths resigned to Athanaric the conduct of the war. A bridge of boats was established upon the Danube; and the presence of Valens animated the Roman troops. The operations of the campaign were in favour of the Romans; but they found it impossible to drive the Visigoths from their strong posts in the mountains: and the devastation of the plains obliged the victors to repass the Danube on the approach of winter. The incessant rains, which swelled the waters of the river, produced a suspension of arms, and confined the emperor Valens, during the whole course of the ensuing summer, to his camp of Marcianapolis. The third year of the war became still more favourable to the Romans, and more pernicious to the Goths; who, by the desolation of the country, were threatened with the horrors of famine. Athanaric was therefore compelled to risk a battle, which he lost; and the pursuit was rendered more bloody by the precaution of the Roman generals, who had promised a large reward for the head of every Goth that was brought into the imperial camp. This signal overthrow procured, as usual, a temporary peace. Valens returned in triumph to Constantinople; and the Goths remained in a state of tranquillity about six years; till they were violently impelled against the Roman empire, by a new horde of Scythians or Huns, who appeared to issue from the frozen regions of the north.

The great Hermanric, whose Gothic empire was extended from the Baltic to the Euxine, began to enjoy, in the full maturity of age and reputation, the fruit of his victories, when he was alarmed, in the year 375, by this formidable host of unknown enemies. The numbers, the strength, the rapid motions, and the implacable cruelty, of the Huns, were soon felt and dreaded by the astonished Goths; who beheld their fields and villages consumed with flames, and deluged with indiscriminate slaughter. Hermanric prepared to exert the united forces of the Gothic state against them; but he soon discovered that his vassal tribes, provoked by oppression, and instigated by the hope of plunder, were much more inclined to second, than to repel, the invasion of the Huns. One of the chiefs of the Roxolani had formerly deserted the standard of Hermanric, and the cruel Goth condemned the innocent wife of the traitor to be torn asunder by horses. The brothers of that unfortunate woman seized the present moment of revenge. The aged king of the Goths languished under the wound which he received from their daggers; and the conduct of the war was distracted by a spirit of jealousy and discord. His death, which has been imputed to his own despair, left the reins of government in the hands of Withimer, who, with the aid of some Scythian mercenaries, maintained the contest against the Huns, till he was defeated and slain in a decisive battle. The Ostrogoths submitted to their fate; and the royal race of the Amali are henceforward found among the subjects of Attila. But the person of Witheric, the infant king, was saved by the diligence of Alatheus and Saphrax; two generals of approved fidelity; who, by cautious marches, conducted the poor remains of the Ostrogoths towards the Niester. On the banks of that river the prudent Athanaric, more attentive to his own than to the general safety, had fixed the camp of the Visigoths, with a resolution of opposing the victorious barbarians by mere defensive operations. The speed of the Huns was checked by the weight of spoils, and the incumbrance of captives; but their military skill deceived, and almost destroyed, the army of Athanaric. While this distinguished judge of the Visigoths defended the banks of the Niester, he was encompassed and attacked by a numerous detachment of cavalry, who, by the light of the moon, had passed the river in a fordable place; and, it was not without the utmost efforts of courage and conduct, that he was able to effect his retreat towards the hilly country. The undaunted Athanaric had already formed a judicious plan of defensive war; and the strong lines which he was preparing to construct between the mountains, the Pruth, and the Danube, would have secured the extensive and fertile territory that now bears the name of Wallachia, from the destructive inroads of the Huns. But the hopes and measures of the judge of the Visigoths were soon disappointed, by the trembling impatience of his dismayed countrymen; who were persuaded by their fears, that the interposition of the Danube was the only barrier that could save them from the rapid pursuit of the barbarians of Scythia. Under the command of Fritigern and Alavivus, the body of the nation advanced to the banks of that river, and implored the protection of the Roman emperor of the east; while Athanaric retired, with a band of faithful followers, into the mountainous country of Caucaland, which appears to have been almost concealed by the impenetrable forests of Transylvania.

In 376, an embassy was dispatched to the emperor Valens, to inform him that the North was agitated by a furious tempest; that the irruption of the Huns, a monstrous race of savages, had subverted the power of the Goths; and that the suppliant multitudes of that warlike nation, whose pride was now humbled in the dust, covered a space of many miles along the banks of the Danube. With pathetic lamentations they deplored their past misfortunes, and their present danger; acknowledged, that their only hope of safety was in the clemency of the Roman government; and most solemnly protested, that if the gracious liberality of the emperor would permit them to cultivate the waste lands of Thrace, they should ever hold themselves bound by the strongest obligations to obey the laws, and to guard the limits, of the republic. The prayers of the Goths were granted, and their service was accepted by the imperial court: and orders were dispatched to the civil and military governors of the Thracian diocese, to make preparations for the passage and subsistence of this distressed people, till a sufficient territory could be allotted for their future residence. The liberality of the emperor was accompanied, however, with two rigorous conditions, which prudence, perhaps, might justify, but which distress alone could extort from the indignant Goths. Before they passed the Danube, they were required to deliver up their arms; and it was insisted that

their children ſhould be taken from them, and diſperſed through the provinces of Aſia, where they might be civilized by the arts of education, and ſerve as hoſtages to ſecure the fidelity of their parents.

A probable teſtimony has fixed the number of theſe diſcomfited Gothic warriors at two hundred thouſand men; and if we may venture to add the juſt proportion of women, of children, and of ſlaves, the whole maſs of people which compoſed this formidable emigration, muſt have amounted to near a million of perſons of both ſexes, and of all ages. The children of the Goths, thoſe at leaſt of a diſtinguiſhed rank, were ſeparated from the multitude. They were conducted, without delay, to the diſtant ſeats aſſigned for their reſidence and education; and as the numerous train of hoſtages or captives paſſed through the cities, their ſplendid apparel, and their robuſt and martial figure, excited the ſurpriſe and curioſity of the provincials. But the ſtipulation, the moſt offenſive to the Goths, and the moſt important to the Romans, was eluded. The barbarians, who conſidered their arms as the enſigns of honour, and the pledges of ſafety, were diſpoſed to offer a price, which the avarice of the imperial officers was eaſily tempted to accept. Thus the Goths, with arms in their hands, were permitted to enter the boats; and when their ſtrength was collected on the other ſide of the river, the immenſe camp which was ſpread over the plains and hills of the Lower Mæſia, aſſumed a threatening and even hoſtile aſpect. The leaders of the Oſtrogoths, Alatheus and Saphrax, the guardians of their infant king, appeared ſoon afterwards on the northern banks of the Danube; and immediately diſpatched their ambaſſadors to Valens, to ſolicit, with the ſame profeſſions of allegiance and gratitude, the ſame favour which had been granted to the ſuppliant Viſigoths. But the abſolute refuſal of Valens ſuſpended their progreſs, and diſcovered the ſuſpicions and the fears of the imperial council. At this important criſis, the military government of Thrace was exerciſed by Lupicinus and Maximus, in whoſe venal minds the ſlighteſt hope of private emolument outweighed every conſideration of public advantage; and whoſe guilt was only alleviated by their incapacity of diſcerning the pernicious effects of their criminal adminiſtration. Inſtead of obeying the orders of their ſovereign, and ſatisfying the natural wants of the Goths, they levied an oppreſſive tax upon them. The vileſt food was ſold at an extravagant price; and, in the room of wholeſome proviſions, the markets were filled with the fleſh of dogs, and of unclean animals, who had died of diſeaſe. To obtain the acquiſition of a pound of bread, the Goths reſigned the poſſeſſion of a ſerviceable ſlave; and a ſmall quantity of meat was greedily purchaſed with ten pounds of precious metal. A ſpirit of diſcontent inſenſibly aroſe in the camp of the barbarians, who pleaded the merit of their dutiful behaviour; and loudly complained of the inhoſpitable treatment which they received from their new allies. The clamours of the multitude announced the firſt ſymptoms of reſiſtance, and alarmed the guilty minds of Lupicinus and Maximus. Theſe crafty miniſters, who ſubſtituted the cunning of temporary expedients to the ſalutary counſels of general policy, attempted to remove the Goths from their dangerous ſtation on the frontiers of the empire; and to diſperſe them in ſeparate quarters of cantonment, through the interior provinces. As they were conſcious how ill they had deſerved the reſpect of the barbarians, they diligently collected a military force, while they imprudently diſarmed the ſhips and the fortifications which conſtituted the defence of the Danube. The fatal overſight was obſerved and improved by Alatheus and Saphrax, who anxiouſly watched the favourable moment of eſcaping from the purſuit of the Huns. By the help of ſuch rafts and veſſels as could be haſtily procured, the leaders of the Oſtrogoths tranſported, without oppoſition, their king and their army; and boldly fixed their hoſtile camp on the territories of the empire.

Under the name of judges, Alavivus and Fritigern were ſtill the leaders of the Viſigoths; and the authority which they derived from their birth, was ratified by the will of the nation. In a ſeaſon of tranquillity, their power might be equal, as well as their rank; but, as ſoon as their countrymen were exaſperated by hunger and oppreſſion, the ſuperior abilities of Fritigern aſſumed the military command, which he was well qualified to exerciſe for the public welfare. Senſible of the benefits which would reſult from an union of all the Gothic powers under the ſame ſtandard, he ſecretly cultivated the friendſhip of the Oſtrogoths; and while he profeſſed an implicit obedience to the orders of the Roman generals, he proceeded by ſlow marches towards Marcianopolis, the capital of the Lower Mæſia, about ſeventy miles from the banks of the Danube. On that fatal ſpot, the flames of diſcord ſuddenly burſt forth into a dreadful conflagration. Lupicinus had invited the Gothic chiefs to a ſplendid entertainment; and their martial train remained under arms at the entrance of the palace. But the gates of the city were ſtrictly guarded; and the barbarians were ſternly excluded from the uſe of a plentiful market, to which they aſſerted their equal claim, as ſubjects and allies. Their ſolicitations were rejected with deriſion; and as their patience became exhauſted, the townſmen, the ſoldiers, and the Goths, were ſoon involved in a conflict of paſſionate altercation and angry reproaches. A blow was involuntarily given; a ſword was haſtily drawn; and the firſt blood that was ſpilt in this accidental quarrel, became the ſignal of a long and deſtructive war. In the midſt of noiſe and intemperance, Lupicinus was informed that many of his ſoldiers were ſlain, and deſpoiled of their arms; and as he was highly inflamed by wine, he iſſued a raſh command, that their death ſhould be revenged by the maſſacre of the guards of Fritigern and Alavivus. The clamorous ſhouts and dying groans appriſed Fritigern of his extreme danger: and, as he poſſeſſed the calm and intrepid ſpirit of a hero, he ſaw that he was loſt if he allowed a moment of deliberation to the man who had ſo deeply injured him. "A trifling diſpute, (ſaid the Gothic leader, with a firm tone,) appears to have ariſen between the two nations; but it may be productive of the moſt dangerous conſequences, unleſs the tumult is immediately pacified by the aſſurance of our ſafety, and the authority of our preſence." At theſe words, Fritigern and his companions drew their ſwords, opened their paſſage through the crowd which filled the ſtreets of Marcianopolis, and, mounting their horſes, haſtily vaniſhed from the eyes of the aſtoniſhed Romans. The generals of the Goths were ſaluted by the joyful acclamations of their camp: war was inſtantly reſolved on, and the reſolution was executed without delay: the banners of the Gothic nation were diſplayed according to the cuſtom of their anceſtors; and the air reſounded with the harſh muſic of the barbarian trumpet. The weak and guilty Lupicinus, who ſtill deſpiſed theſe formidable people, marched againſt the Goths, at the head of ſuch a military force as could be collected on this ſudden emergency. The barbarians expected his approach about nine miles from Marcianopolis; and on this occaſion the valour of the Goths was ſo ably directed by the genius of Fritigern, that they broke, by a cloſe and vigorous attack, the ranks of the Roman legions. Lupicinus left his arms and ſtandards, his tribunes and his braveſt ſoldiers, on the field of battle; and ſaved himſelf by an ignominious flight. That memorable day put an end to the diſtreſs of the barbarians; from that day they renounced the precarious condition of ſtrangers and exiles, aſſumed the character of citizens and maſters, claimed an abſolute dominion over the poſſeſſors

of

of land, and held, as in their own right, thoſe provinces of the empire which are bounded by the Danube. See *Jornandes de Rebus Geticus*, c. 26. p. 648. edit. Grot.

The report of the Gothic victory was ſoon diffuſed over the adjacent country; and while it filled the minds of the Romans with aſtoniſhment, their own haſty imprudence contributed to increaſe the forces of Fritigern, and the calamities of the province. Some time before the great emigration, a numerous body of Goths, under the command of Suerid and Colias, had been received into the ſervice of the empire; and they were encamped under the walls of Adrianople: but the miniſters of Valens were anxious to remove them beyond the Helleſpont, that they might have no communication with their countrymen. The reſpectful ſubmiſſion with which they yielded to the order of their march, might be conſidered as a proof of their fidelity; but their moderate requeſt of a ſufficient allowance of proviſions, and of a delay of only two days to prepare for their march, incenſed the governor of Adrianople, who refuſed this indulgence; and arming againſt them the inhabitants of a populous city, he urged, with hoſtile threats, their inſtant departure. The barbarians ſtood ſilent and amazed, till they were exaſperated by the inſulting clamours and miſſile weapons of the populace: but when their patience was exhauſted, they cruſhed the undiſciplined multitude, and determined to unite themſelves with the nation of the Viſigoths. The troops of Colias and Suerid, therefore, immediately fought the army of Fritigern, ranged themſelves under his ſtandard, and ſignaliſed their ardour in the ſiege of Adrianople. But the reſiſtance of the garriſon informed the barbarians, that, in the attack of regular fortifications, the efforts of courage unaſſiſted by ſcience, are ſeldom effectual. Their general ſoon acknowledged his error, raiſed the ſiege, declared that "he was at peace with ſtone walls;" and revenged his diſappointment on the adjacent country. In the courſe of theſe depredations, a great number of the children of the Goths, who had been ſold into captivity, were reſtored to the embraces of their parents; but theſe tender interviews, which ſhould have cheriſhed in their minds ſome ſentiments of humanity, tended only to ſtimulate their native fierceneſs by the deſire of revenge. They liſtened with eager attention to the complaints of their captive children, who had ſuffered the moſt cruel indignities from the luſtful or angry paſſions of their maſters; and the ſame cruelties, the ſame indignities, were retaliated on the ſons and daughters of the Romans.

Under theſe afflicting circumſtances, A. D. 377, Valens declared his intention of marching from Conſtantinople, to cruſh this dangerous rebellion; and, as he was not ignorant of the difficulties of the enterpriſe, he ſolicited the aſſiſtance of his nephew, the emperor Gratian, who commanded the forces of the weſtern empire. The veteran legions were haſtily recalled from the defence of Armenia, and the conduct of the Gothic war, during the abſence of Valens, was entruſted to his generals Trajan and Profuturus, who indulged in a falſe opinion of their own abilities. On their arrival in Thrace, they were joined by Richomer and the auxiliaries of the Weſt. In a council of war, it was reſolved to ſeek and to encounter the barbarians, who lay encamped in the ſpacious plain of the Salices or willows, near the moſt ſouthern of the ſix mouths of the Danube. Their camp was ſurrounded by their uſual fortification of waggons; and the barbarians, ſecure within the circle of their incloſure, enjoyed the fruits of their rapacity, and the ſpoils of the province. In the midſt of riotous intemperance, however, the watchful Fritigern obſerved the motions, and penetrated the deſigns, of the Romans. He perceived that the numbers of the enemy were hourly increaſing; and, as he underſtood their intention of attacking his rear whenever the ſcarcity of forage ſhould oblige him to remove his camp, he recalled to their ſtandard his predatory detachments, which covered and pillaged the adjacent country. As ſoon as they deſcried the flaming beacons of alarm, they obeyed, with incredible ſpeed, the ſignal of their leader; the camp was filled with the martial crowd; their impatient clamours demanded the battle; and their tumultuous zeal was animated by the ſpirit of their chiefs. The evening was already far advanced; and the two armies prepared themſelves for the approaching combat, which was deferred only till the dawn of day. While the trumpets ſounded to arms, the undaunted courage of the Goths was ſtimulated by the mutual obligation of a ſolemn oath; and as they advanced to battle, the rude ſongs, which celebrated the glory of their forefathers, mingled with their fierce and diſſonant outcries, drowned in ſilence the Roman ſhout. Some attempt at military ſkill was diſplayed by Fritigern to gain the advantage of a commanding eminence; but the bloody conflict, which began and ended with the light, was maintained on every ſide by the perſonal and obſtinate efforts of ſtrength, valour, and agility. The brave legions of Armenia ſupported their fame in arms; but they were oppreſſed by the irreſiſtible weight of the hoſtile multitude: the left wing of the Romans was thrown into diſorder, and the field was ſtrewed with their mangled carcaſſes. This partial defeat was balanced, however, by partial ſucceſs; and when the two armies, at a late hour of the evening, retreated to their reſpective camps, neither of them could claim the honour of the victory. The real loſs was more ſeverely felt by the Romans, in proportion to the ſmallneſs of their numbers; but the Goths were ſo deeply confounded and diſmayed by this vigorous reſiſtance, that they remained ſeven days within the circle of their fortifications. Such funeral rites as the circumſtances of time and place would admit, were piouſly diſcharged to ſome officers of diſtinguiſhed rank; but the indiſcriminate vulgar were left unburied on the plain, their fleſh devoured by beaſts and birds of prey, and for ſeveral years afterwards the white and naked bones which covered the wide extent of the plain, preſented to the eye of travellers a dreadful monument of the battle of Salices.

The progreſs of the Goths was ſomewhat checked by the ſlaughter of that bloody day; and the imperial generals adopted a plan of deſtroying the barbarians by the wants and preſſure of their own multitudes. They prepared to confine the Viſigoths in the narrow tract of land lying between the Danube, the deſert of Scythia, and the mountains of Hæmus, till their ſtrength and ſpirit ſhould be inſenſibly waſted by the inevitable operation of famine. The deſign was proſecuted with ſome ſucceſs; but the alarming intelligence that new ſwarms of barbarians had paſſed the Danube, either to ſupport the cauſe, or to imitate the example, of Fritigern, obliged the Romans to relinquiſh the inveſtiture of the Gothic camp. The indignant Viſigoths, no longer awed by an enemy, ſatiated their hunger by the devaſtation of the whole country extending from the banks of the Danube to the ſtraits of the Helleſpont. The ſagacious Fritigern ſaw, and wiſely prepared for, the events that were to enſue from the return of the Romans with an increaſed force. He cemented a ſtrict alliance with the great body of his countrymen under Alatheus and Saphrax, who were the guardians of their infant king: the long animoſity of rival tribes was ſuſpended for the good of the common intereſt; the independent part of the nation was aſſociated under one ſtandard; and the chiefs of the Oſtrogoths yielded the chief command to the ſuperior genius of the general of the Viſigoths. But the moſt powerful auxiliaries of the Goths, upon this occaſion, were drawn from the camp of thoſe very enemies who had expelled them from their native country. The looſe ſubordination, and extenſive poſſeſſions, of the Huns and the Alani, delayed the con-

queſts, and diſtracted the councils, of that victorious people. Several of the hords were therefore allured by the liberal promiſes of Fritigern; and the rapid cavalry of Scythia added weight and energy to the ſteady and ſtrenuous efforts of the Gothic infantry.

On the 9th of Auguſt 378, a day moſt inauſpicious to the Romans, the emperor Valens, leaving under a ſtrong guard his baggage and military treaſure, marched from Adrianople to attack the Goths, who were encamped about twelve miles from that city. By ſome miſtake of the orders, or ignorance of the ground, the right column of cavalry arrived in ſight of the enemy, whilſt the left was ſtill at a conſiderable diſtance, and out of view: the infantry were compelled, in the ſultry heat of ſummer, to precipitate their pace; and the line of battle was formed with tedious confuſion, and irregular delay. The Gothic cavalry had been detached to forage in the adjacent country; and the crafty Fritigern played off the artifice of a ſuppliant for peace. He diſpatched meſſengers, made propoſals, offered hoſtages, and waſted the hours, till the Romans, expoſed without ſhelter to the burning rays of the ſun, were exhauſted by thirſt, hunger, and unuſual fatigue. The emperor was deluded to ſend an ambaſſador to the Gothic camp; and the zealous Richomer, who alone had courage to accept the dangerous commiſſion, was proceeding on his way, when he was ſuddenly recalled by the ſhouts of battle. The haſty attack was made by Bacurius the Iberian, who commanded a legion of archers; and as they advanced with raſhneſs, they retreated with ſudden diſgrace. In the ſame moment, the fleet ſquadrons of Alatheus and Saphrax, whoſe return had been anxiouſly expected by the general of the Goths, deſcended like a whirlwind from the hills, ſwept acroſs the plain, and added new terrors to the tumultuous but irreſiſtible charge of the barbarian hoſt. The event of the battle of Adrianople, ſo fatal to Valens and to the empire, may be deſcribed in a few words:—the Roman cavalry fled; the infantry was abandoned, ſurrounded, and cut in pieces. The moſt ſkilful evolutions, the firmeſt courage, are rarely able to extricate a body of foot, encompaſſed, on an open plain, by ſuperior numbers of horſe: but the troops of Valens, oppreſſed by the weight of the enemy and their own fears, were crowded into a narrow ſpace, where it was impoſſible for them to extend their ranks, or even to uſe, with effect, their ſwords and javelins. In the midſt of tumult, of ſlaughter, and diſmay, the emperor, deſerted by his guards, and wounded with an arrow, ſought protection among the Lancearii and the Mattiarii, who ſtill maintained their ground with ſome appearance of order and firmneſs. His faithful generals, Trajan and Victor, who perceived his danger, loudly exclaimed, that all was loſt, unleſs the perſon of the emperor could be ſaved. Some troops, animated by their exhortation, advanced to his relief: they found only a bloody ſpot, covered with broken arms and mangled bodies, without being able to diſcover their unfortunate prince, either among the living, or the dead. Their ſearch could not indeed be ſucceſsful; for by the care of ſome of his attendants, Valens was removed from the field of battle to a neighbouring cottage, where they attempted to dreſs his wound, and to provide for his ſafety. But this humble retreat was inſtantly ſurrounded by the enemy, who, receiving a diſcharge of arrows from the roof, in revenge ſet fire to a pile of faggots, and conſumed the cottage with the Roman emperor and his train. Valens periſhed in the flames; and a youth, who dropt from the window, alone eſcaped, to atteſt the melancholy tale, and to inform the Goths of the ineſtimable prize which they had loſt in the ranſom of the emperor, by their own inconſiderate raſhneſs. See Ammianus, xxxi. 12, 13.

The pride of the Goths was elated by this memorable victory, in which it is recorded that forty thouſand Romans fell: but their avarice was diſappointed by the mortifying diſcovery, that the imperial ſpoils had been ſecured within the walls of Adrianople. They haſtened to poſſeſs this claim of their valour; but they were encountered by the remains of the vanquiſhed army, with an intrepid reſolution, which was the effect of deſpair, and the only hope of their ſafety. The walls of the city, and the ramparts of the Roman camp, were lined with military engines, that threw ſtones of an enormous weight; and aſtoniſhed the ignorant barbarians by the noiſe and velocity, more than by the real effects, of the diſcharge. The ſoldiers, the citizens, the provincials, the domeſtics of the palace, were equally united in the danger, and in the defence: the furious aſſault of the Goths was repulſed; and they indignantly raiſed the ſiege of Adrianople, in purſuit of a grander enterpriſe. The tide of the Gothic inundation rolled inſtantly from the walls of Adrianople to the ſuburbs of Conſtantinople. The barbarians were ſurpriſed with the ſplendid appearance of the capital city of the Eaſt, the height and extent of the walls, the myriads of wealthy and affrighted citizens who crowded the ramparts, and the various proſpect of the ſea and land. While they gazed with hopeleſs deſire on the inacceſſible beauties of Conſtantinople, a ſally was made from one of the gates by a party of Saracens, who had been engaged in the ſervice of Valens. The cavalry of the Goths was forced to yield to the admirable ſwiftneſs and ſpirit of the Arabian horſes; their riders were ſkilled in the evolutions of irregular war; and the northern barbarians were aſtoniſhed and diſmayed by the ſuperior ferocity of the barbarians of the ſouth. A Gothic ſoldier was ſlain by the dagger of an Arab; and the hairy naked ſavage, applying his lips to the wound, expreſſed a horrid delight while he ſucked the blood of his vanquiſhed enemy. The army of the Goths, laden with the ſpoils of the wealthy ſuburbs, ſlowly moved from the Boſphorus to the mountains which form the weſtern boundary of Thrace. The important paſs of Succi was betrayed by the fear or miſconduct of Maurus; and the barbarians, who no longer had any reſiſtance to apprehend from the ſcattered and vanquiſhed troops of the eaſt, ſpread themſelves over the face of a fertile and beautiful country, as far as the confines of Italy and the Adriatic Sea. St. Jerome has deſcribed in mournful language the dreadful calamities inflicted by the Goths, the Huns, and Vandals, on his native country of Pannonia; and the wide extent of their ravages, from the walls of Conſtantinople to the foot of the Julian Alps; the rapes, the maſſacres, the conflagrations; and, above all, the profanation of the churches, that were turned into ſtables, and the contemptuous treatment of the relics of holy martyrs. He affirms, "that, in thoſe deſert countries, nothing was left except the ſky and the earth; that, after the deſtruction of the cities, and the extirpation of the human race, the land was overgrown with foreſts and inextricable brambles; and that the univerſal deſolation, announced by the prophet Zephaniah, was accompliſhed, in the ſcarcity of the beaſts, the birds, and even of the fiſh!"—Tom. vii. p. 250. ad 1 cap. Sophonias; and tom. i. p. 26.

Whatever might have been the true meaſure of the calamities of Europe, there was reaſon to fear that the ſame calamities would ſoon extend to the peaceful countries of Aſia. The ſons of the Goths had been diſtributed through the cities of the eaſt; and the arts of education were employed to poliſh and ſubdue the native fierceneſs of their temper. In the ſpace of about twelve years, their numbers had continually increaſed; and the children, who in the firſt emigration were ſent over the Helleſpont, had attained, with rapid growth, the ſtrength and ſpirit of perfect manhood. It was impoſſible to conceal from their knowledge the events of the Gothic war; and as thoſe daring youths had not

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ſtudied the language of diſſimulation, they betrayed their wiſh, their deſire, perhaps their intention, to emulate the great example of their fathers. The danger of the times ſeemed to juſtify the jealous ſuſpicions of the provincials; and theſe ſuſpicions were admitted as unqueſtionable evidence, that the Goths of Aſia had formed a ſecret and dangerous conſpiracy againſt the public ſafety. The death of Valens had left the eaſt without a ſovereign; and Julius, who filled the important ſtation of maſter-general of the troops, with a high reputation of diligence and ability, thought it his duty to conſult the ſenate of Conſtantinople; which he conſidered, during the vacancy of the throne, as the repreſentative council of the nation. As ſoon as he had obtained the diſcretionary power of acting as he ſhould judge moſt expedient for the good of the republic, he aſſembled the principal officers; and privately concerted meaſures for the execution of his bloody deſign. An order was promulgated, that, on a ſtated day, the Gothic youth ſhould aſſemble in the capital cities of their reſpective provinces; and as a report was induſtriouſly circulated, that they were ſummoned to receive a liberal gift of lands and money, the pleaſing hope allayed the fury of their reſentment, and perhaps ſuſpended the motions of the conſpiracy. On the appointed day, the unarmed crowd of the Gothic youth was carefully collected in the ſquare, or forum: the ſtreets and avenues were occupied by the Roman troops; and the roofs of the houſes were covered with archers and ſlingers. At the ſame hour, in all the cities of the eaſt, the ſignal was given of indiſcriminate ſlaughter; and the provinces of Aſia were delivered, by the cruel prudence of Julius, from a domeſtic enemy, who, in a few months, might have carried fire and ſword from the Helleſpont to the Euphrates. The urgent conſideration of the public ſafety may undoubtedly authoriſe the violation of every poſitive law. How far that, or any other conſideration, may operate, to diſſolve the natural obligations of humanity and juſtice, is a doctrine of which every good man will deſire to remain ignorant.

The glory of delivering the Roman provinces from theſe deſperate marauders, was reſerved to dignify the military fame of Theodoſius. The prudence of that diſtinguiſhed emperor was ſeconded by fortune; and he never failed to ſeize, and to improve, every favourable circumſtance of advantage. As long as the ſuperior genius of Fritigern preſerved the union and directed the motions of the barbarians, their power was not to be eaſily broken or overcome. But the death of that hero, the predeceſſor of the renowned Alaric, relieved the unwieldy multitude from the yoke of diſcipline and prudence. The barbarians, who had been reſtrained by his authority, now abandoned themſelves to the utmoſt licentiouſneſs. Their miſchievous diſpoſition was ſhewn in the deſtruction of every object, which they wanted ſtrength to remove, or taſte to enjoy; and they often conſumed, with improvident rage, the harveſts, or the granaries, which ſoon afterwards became neceſſary for their own ſubſiſtence. A ſpirit of diſcord aroſe among the different tribes and nations, which had been united only by the bands of an accidental alliance. The troops of the Huns and the Alani would upbraid the unnatural flight of the Goths from their native country; who in their turn would not be diſpoſed to uſe with moderation the improvement of their fortune: the ancient jealouſy of the Oſtrogoths and the Viſigoths could not long be ſuſpended; and the haughty chiefs ſtill remembered the inſults and injuries, which they had reciprocally offered, or ſuſtained, while the nation was ſeated in the countries beyond the Danube. The progreſs of mutual recriminations ſoon abated their ardour for war, and ſowed among them the ſeeds of fatal diſſenſion. The officers of Theodoſius were inſtructed to purchaſe with gifts and promiſes, the retreat, or ſervice, of the diſaffected party. The acquiſition of Modar, a prince of the royal blood of the Amali, gave a bold and faithful champion to the cauſe of Rome. The illuſtrious deſerter ſoon obtained an important command; ſurpriſed an army of his countrymen, who were immerſed in wine and ſleep; and after a cruel ſlaughter of the aſtoniſhed Goths, returned with an immenſe ſpoil, and four thouſand waggons, to the imperial camp. In the hands of a ſkilful politician, the moſt different means may be ſucceſsfully applied to the ſame ends: and the peace of the empire, which had been forwarded by the diviſions, was now to be accompliſhed by the re-union, of the Gothic nation. Athanaric, who had been a patient ſpectator of theſe extraordinary events, was at length driven, by the chance of arms, from the dark receſſes of the woods of Caucaland. He no longer heſitated to paſs the Danube; and a very conſiderable part of the ſubjects of Fritigern, who already felt the inconveniencies of anarchy, were eaſily perſuaded to acknowledge for their king a Gothic judge, whoſe birth they reſpected, and whoſe abilities they had frequently experienced. But age had chilled the daring ſpirit of Athanaric; and, inſtead of leading his people to the field of battle and victory, he wiſely liſtened to the propoſals of an honourable and advantageous treaty. In January 381, Theodoſius, who was acquainted with the merit and power of his new ally, condeſcended to entertain him in the imperial city of Conſtantinople, with the confidence of a friend, and the magnificence of a monarch. The Gothic prince obſerved, with ſingular attention, the variety of objects which attracted his notice, and at laſt broke out into a ſincere and paſſionate exclamation of wonder: "I now behold, (ſaid he,) what I never could believe, the glories of this ſtupendous capital!" As he caſt his eyes around, he viewed, and admired, the commanding ſituation of the city, the ſtrength and beauty of the walls and public edifices, the capacious harbour crowded with innumerable veſſels, the perpetual concourſe of diſtant nations, and the arms and diſcipline of the troops. "Indeed, (continued Athanaric,) the emperor of the Romans is a god upon earth; and the preſumptuous man, who dares to lift his hand againſt him, is guilty of his own blood." The Gothic king did not long enjoy this ſplendid reception; and as temperance was not the virtue of his nation, it may juſtly be ſuſpected, that his mortal diſeaſe was contracted amidſt the pleaſures of the imperial banquets. But the policy of Theodoſius derived more benefit from the death, than he could have expected from the moſt faithful ſervices, of his ally. The funeral of Athanaric was performed with ſolemn rites in the capital of the eaſt; a ſtately monument was erected to his memory; and his whole army, won by the liberal courteſy of Theodoſius, enliſted under the ſtandard of the Roman empire. The ſubmiſſion of ſo great a body of the Viſigoths was productive of the moſt ſalutary conſequences; and the mixed influence of force, of reaſon, and of corruption, became every day more powerful, and more extenſive. Each independent chieftain haſtened to obtain a ſeparate treaty, from the apprehenſion that an obſtinate delay might expoſe *him*, alone and unprotected, to the revenge, or juſtice, of the conqueror. The general, or rather the final, capitulation of the Goths, may be dated four years, one month, and twenty-five days, after the defeat and death of the emperor Valens.

The provinces of the Danube had been already relieved from the oppreſſive weight of the Oſtrogoths, by the voluntary retreat of Alatheus and Saphrax; whoſe reſtleſs ſpirit had prompted them to ſeek new ſcenes of rapine and plunder in the weſt. The Oſtrogoths were joined by ſeveral of the German tribes, and overran the provinces of Gaul; they concluded, and ſoon violated, a treaty with the emperor Gratian; they advanced into the unknown countries of the north; and, after an interval of more than four years, returned, with

with an accumulated force, to the banks of the Lower Danube. The Roman general who commanded the military and naval powers of the Thracian frontier, ſoon perceived that his ſuperiority would be diſadvantageous to the public ſervice; and that the barbarians, awed by the preſence of his fleet and legions, would probably defer the paſſage of the river till the approaching winter. The dexterity of the ſpies, whom he ſent into the Gothic camp, allured the barbarians into a fatal ſnare. They were perſuaded, that, by a bold attempt, they might ſurpriſe, in the ſilence and darkneſs of the night, the ſleeping army of the Romans; and the whole multitude, according to Zoſimus, lib. iv. p. 253, was haſtily embarked in a fleet of three thouſand canoes. The braveſt of the Oſtrogoths led the van; the main body conſiſted of the remainder of their ſubjects and ſoldiers; and the women and children ſecurely followed in the rear. One of the nights without a moon had been ſelected for the execution of this deſign; and they had almoſt reached the ſouthern bank of the Danube, in the firm confidence that they ſhould find an eaſy landing, and an unguarded camp. But the progreſs of the barbarians was ſuddenly ſtopped by an unexpected obſtacle; a triple line of veſſels, ſtrongly connected with each other, and which formed an impenetrable chain of two miles and a half along the river. While they ſtruggled to force their way in the unequal conflict, their right flank was overwhelmed by the irreſiſtible attack of a fleet of gallies, which were urged down the ſtream by the united impulſe of oars and of the tide. The weight and velocity of thoſe ſhips of war broke and ſunk the feeble canoes of the barbarians: their valour was ineffectual; and Alatheus, the general of the Oſtrogoths, periſhed, with his braveſt troops, either by the ſword of the Romans, or in the waves of the Danube. The laſt diviſion of this unfortunate fleet might regain the oppoſite ſhore: but the diſtreſs and diſorder of the multitude rendered them alike incapable either of action or counſel; and they ſoon implored the clemency of the victorious enemy.

The original treaty which fixed the ſettlement of the Goths, was now, in 383, renewed by Theodoſius. A numerous colony of the Viſigoths was to be ſeated in Thrace; the remains of the Oſtrogoths were planted in Phrygia and Lydia; their immediate wants were ſupplied by a diſtribution of corn and cattle; and their future induſtry was encouraged by an exemption from tribute, during a certain term of years. The barbarians required, and obtained, the ſole poſſeſſion of the villages and diſtricts aſſigned for their reſidence; they cheriſhed and propagated their native manners and language; aſſerted the freedom of domeſtic government; and acknowledged the ſovereignty of the emperor, without ſubmitting to the inferior juriſdiction of the magiſtrates of Rome. The hereditary chiefs of the tribes and families were permitted to command their followers in peace and war; but the royal dignity was aboliſhed; and the generals of the Goths were appointed and removed at the pleaſure of the emperor. An army of forty thouſand Goths was maintained for the perpetual ſervice of the empire of the eaſt; and Theodoſius had the addreſs to perſuade his allies, that the conditions of peace which had been extorted from him by prudence and neceſſity, were the voluntary expreſſions of his ſincere friendſhip for the Gothic nation. The barbarians ſtill wore a ſavage and hoſtile aſpect; but the experience of paſt times might encourage the hope, that they would acquire the habits of induſtry and obedience; that their manners would be poliſhed by time, education, and the influence of Chriſtianity; and that their poſterity would inſenſibly blend with the great body of the Roman people.

Notwithſtanding theſe ſanguine hopes and expectations, it was apparent to every diſcerning eye, that the Goths would not long remain the friends and allies of the Roman empire. Theodoſius died in the month of January 395; and before the end of the winter of the ſame year, the Gothic nation was in arms. The barbarian auxiliaries erected their independent ſtandard; and boldly avowed the hoſtile deſigns which they had long cheriſhed in their ferocious minds. Their countrymen, who had been bound by the conditions of the laſt treaty to a life of tranquillity and labour, deſerted their farms at the firſt ſound of the trumpet; and eagerly reſumed the weapons which they had reluctantly laid aſide. The barriers of the Danube were thrown open; the ſavage warriors of Scythia iſſued from their foreſts; and the uncommon ſeverity of the winter allowed the poet to remark, "that they rolled their ponderous waggons over the broad and icy back of the indignant river." The unhappy natives of the provinces to the ſouth of the Danube, ſubmitted to the calamities, which, in the courſe of twenty years, were almoſt grown familiar to their imagination; and the various troops of barbarians, who gloried in the Gothic name, were irregularly ſpread from the woody ſhores of Dalmatia to the walls of Conſtantinople. The interruption, or at leaſt the diminution, of the ſubſidy, which the Goths had received from the liberality of Theodoſius, was made the ſpecious pretence of their revolt; the affront was embittered by their contempt for the unwarlike ſons of Theodoſius; and their reſentment was inflamed by the weakneſs, or treachery, of the miniſter of Arcadius. The Goths, inſtead of being impelled by the headſtrong paſſions of diſcordant chiefs, were now directed by the bold and artful genius of Alaric. That renowned leader was deſcended from the noble race of the Balti, which yielded only to the royal dignity of the Amali: he had vainly ſolicited the command of the Roman armies; and the imperial court provoked him to demonſtrate the folly of their refuſal, by the importance of their loſs. Whatever hopes might be entertained of the conqueſt of Conſtantinople, the judicious general ſoon abandoned ſuch an impracticable enterpriſe. In the midſt of a divided court, and a diſcontented people, the emperor Arcadius was terrified by the aſpect of the Gothic arms: but the want of wiſdom and valour was ſupplied by the ſtrength of the city; and the fortifications, both of the ſea and land, might ſecurely brave the impotent and random darts of the barbarians. Alaric diſdained to trample any longer on the proſtrate and ruined countries of Thrace and Dacia, and he reſolved to ſeek a plentiful harveſt of fame and riches in a province which had hitherto eſcaped the ravages of war. Alaric, in 396, traverſed, without reſiſtance, the plains of Macedonia and Theſſaly, as far as the foot of Mount Oeta, a ſteep and woody range of hills, almoſt impervious to his cavalry. They ſtretched from eaſt to weſt, to the edge of the ſea-ſhore; and left between the precipice and the Malian Gulf, an interval of three hundred feet, which, in ſome places, was contracted to a road capable of admitting only a ſingle carriage. In this narrow paſs of Thermopylæ, where Leonidas and the three hundred Spartans had glorioufly devoted their lives, the Goths might have been ſtopped, or deſtroyed, by a ſkilful general; and perhaps, the view of that ſacred ſpot might have kindled ſome ſparks of military ardour in the breaſts of the degenerate Greeks. The troops which had been poſted to defend the ſtraits of Thermopylæ, retired, as they were directed, without attempting to diſturb the ſecure and rapid paſſage of Alaric; and the fertile fields of Phocis, and Bœotia, were inſtantly covered by a deluge of barbarians; who maſſacred the males of an age to bear arms, and drove away the beautiful females as captives, with the ſpoil and cattle of the flaming villages. The travellers, who viſited Greece ſeveral years afterwards, could eaſily diſcover the deep and bloody traces of the march of the Goths; and Thebes was leſs indebted for her preſervation to the ſtrength of her ſeven gates, than to the

the eager haſte of Alaric, who advanced to occupy the city of Athens, and the important harbour of the Piræus. The ſame impatience urged him to prevent the delay and danger of a ſiege, by the offer of a capitulation; and as ſoon as the Athenians heard the voice of the Gothic herald, they were eaſily perſuaded to deliver the greateſt part of their wealth, as the ranſom of their city and its inhabitants. The treaty was ratified by ſolemn oaths, and obſerved with mutual fidelity. The Gothic prince, with a ſelect train, was admitted within the walls; he indulged himſelf in the refreſhment of the bath, accepted a ſplendid banquet which was provided by the magiſtrate, and affected to ſhew that he was not ignorant of the manners of civiliſed nations. But the whole territory of Attica, from the promontory of Sunium to the town of Megara, was blaſted by his baneful preſence; and, if we may uſe the compariſon of a contemporary philoſopher, Athens itſelf reſembled the bleeding and empty ſkin of a ſlaughtered victim. The diſtance between Megara and Corinth could not much exceed thirty miles; but ſuch was the deep and rugged nature of the roads, that it might eaſily have been made impaſſable for the march of an enemy. The thick and gloomy woods of mount Cithæron covered the inland country; the Scironian rocks approached the water's edge, and hung over the narrow and winding path, which was confined above ſix miles along the ſea-ſhore. The paſſage of thoſe rocks was terminated by the iſthmus of Corinth; and a ſmall body of firm and intrepid ſoldiers might have ſucceſsfully defended a temporary intrenchment of five or ſix miles from the Ionian to the Ægean ſea. The confidence of the cities of Peloponneſus in their natural rampart, had tempted them to neglect the care of their antique walls; and the avarice of the Roman governors had betrayed the unhappy province. Corinth, Argos, Sparta, yielded without reſiſtance to the arms of the Goths; and the moſt fortunate of the inhabitants were ſaved, by death, from beholding the ſlavery of their families and the conflagration of their cities. The vaſes and ſtatues were diſtributed among the barbarians, with more regard to the value of the material, than to the elegance of the workmanſhip; the female captives ſubmitted to the laws of war; the enjoyment of beauty was the reward of valour; and the Greeks could not reaſonably complain of an abuſe, which was juſtified by the example of the heroic times. The deſcendants of that extraordinary people, who had conſidered valour and diſcipline as the walls of Sparta, no longer remembered the generous reply of their anceſtors to an invader more formidable than Alaric. "If thou art a god, thou wilt not hurt thoſe who have never injured thee: if thou art a man, advance; and thou wilt find men equal to thyſelf."

From Thermopylæ to Sparta, the leader of the Goths purſued his victorious march without encountering any mortal antagoniſt; when he received information of the approach of the renowned Stilicho. A numerous fleet was equipped in the ports of Italy; and the troops, after a ſhort and proſperous navigation over the Ionian ſea, were ſafely diſembarked on the iſthmus of Corinth, A.D. 397. The woody and mountainous country of Arcadia, the fabulous reſidence of Pan and the Dryads, now became the ſcene of a long and doubtful conflict between two generals not unworthy of each other. The ſkill and perſeverance of the Romans at length prevailed; and the Goths, after ſuſtaining a conſiderable loſs from diſeaſe and deſertion, gradually retreated to the lofty mountain of Pholoe, near the ſources of the Peneus, and on the frontiers of Elis. The camp of the barbarians was immediately beſieged: the waters of the river were diverted into another channel; and while they laboured under the inſupportable preſſure of thirſt and hunger, a ſtrong line of circumvallation was formed to prevent their eſcape. After theſe precautions, Stilicho, too confident of victory, retired to enjoy his triumph in the theatrical games and laſcivious dances of the Greeks; his ſoldiers, deſerting their ſtandards, ſpread themſelves over the country of their allies, which they ſtripped of all that had been ſaved from the rapacious hands of the Goths. Alaric appears to have ſeized the favourable moment to execute one of thoſe hardy enterpriſes, in which the abilities of a general are diſplayed with more genuine luſtre, than in the precarious tumult of a day of battle. To extricate himſelf from the priſon of Peloponneſus, it was neceſſary that he ſhould pierce the intrenchments which ſurrounded his camp; that he ſhould perform a difficult and dangerous march of thirty miles, as far as the Gulf of Corinth; and that he ſhould tranſport his troops, his captives, and his ſpoil, over an arm of the ſea, which, in the narrow interval between Rhium and the oppoſite ſhore, is at leaſt half a mile in breadth. The operations of Alaric muſt have been ſecret, prudent, and rapid; for the Roman general was confounded and aſtoniſhed by the intelligence that the Goths, who had eluded his efforts, were in full poſſeſſion of the important province of Epirus. This unpardonable neglect of diſcipline, allowed Alaric ſufficient time to conclude the treaty, which he ſecretly negociated, with the miniſters of Conſtantinople; while the apprehenſion of a civil war compelled Stilicho to retire, at the haughty mandate of his rivals, from the dominions of Arcadius.

By the treaty which Alaric made with the emperor Arcadius, he was declared maſter-general of the Eaſtern Illyricum, A.D. 398. The Gothic conqueror was to be received as a lawful magiſtrate, in all the cities which he had ſo lately beſieged. The fathers whoſe ſons he had maſſacred, the huſbands whoſe wives he had violated, were to be ſubject to his authority: and the ſucceſs of his rebellion encouraged the ambition of every leader of the foreign mercenaries. The uſe to which Alaric applied his new command, diſtinguiſhes the firm and judicious character of his policy. He iſſued his orders to the four magazines and manufactures of offenſive and defenſive arms, Margus, Ratiaria, Naiſſus, and Theſſalonica, to provide his troops with an extraordinary ſupply of ſhields, helmets, ſwords, and ſpears; the devoted provincials were compelled to forge the inſtruments of their own deſtruction; and the barbarians removed the only defect which had ſometimes diſappointed the efforts of their courage. The high birth of Alaric, the glory of his paſt exploits, and the confidence in his future deſigns, inſenſibly united the whole body of the Gothic nation under his victorious ſtandard; and with the unanimous conſent of the barbarian chieftains, the maſter-general of Illyricum was elevated, according to ancient cuſtom, on a ſhield, and ſolemnly proclaimed king of the Viſigoths. Armed with this double power, ſeated on the verge of the two empires, he alternately ſold his deceitful promiſes to the courts of Arcadius and Honorius; till he declared and executed his reſolution of invading the dominions of the Weſt. The provinces of Europe which belonged to the Eaſtern emperor, were already exhauſted; thoſe of Aſia were inacceſſible; and the ſtrength of Conſtantinople had reſiſted his attack. But he was tempted by the fame, the beauty, the wealth, of Italy, which he had twice viſited; and he ſecretly aſpired to plant the Gothic ſtandard on the walls of Rome, and to enrich his army with the accumulated ſpoils of three hundred triumphs.

Early in the year 403, Alaric aſſembled his mighty hoſt; and the march of the barbarian army filled Italy with conſternation and diſmay. The emperor Honorius, educated in pride and luxury, did not ſuſpect that there exiſted on the earth any power preſumptuous enough to invade the repoſe of the ſucceſſor of Auguſtus. The arts of flattery concealed the impending danger, till Alaric approached the palace of Milan. And when the ſound of war had awakened the young emperor, inſtead of flying to arms, he eagerly liſtened to thoſe timid counſellors, who propoſed to convey his ſacred perſon

to ſome ſecure and diſtant ſtation in the provinces of Gaul. Stilicho alone had courage and authority to reſiſt this diſgraceful meaſure, which would have abandoned Rome and Italy to the barbarians; but as the troops of the palace had been detached to the Rhætian frontier, and as the ſource of new levies was ſlow and precarious, the general of the Weſt could only promiſe, that, if the court of Milan would maintain their ground during his abſence, he would ſoon return with an army equal to the encounter of the Gothic king. Without loſing a moment, Stilicho embarked on the Larian lake, aſcended the mountains of ice and ſnow amidſt the ſeverity of an alpine winter, and ſuddenly repreſſed, by his unexpected preſence, the enemy, who had diſturbed the tranquillity of Rhætia. The cohorts, who were delivered from the neighbouring foe, diligently repaired to the imperial ſtandard; and Stilicho iſſued his orders to the moſt remote troops of the Weſt, to advance, by rapid marches, to the defence of Honorius and of Italy. The bridge and paſſage of the Adda were now poſſeſſed by a ſtrong detachment of the Gothic army; and as Alaric approached the ſuburbs of Milan, he enjoyed the proud ſatisfaction of ſeeing the emperor of the Romans fly before him. Honorius, accompanied by his ſtateſmen and eunuchs, haſtily retreated towards the Alps, with a deſign of ſecuring his perſon in the city of Arles, which had often been the royal reſidence of his predeceſſors. But Honorius had ſcarcely paſſed the Po, before he was overtaken by the Gothic cavalry. The urgency of the danger compelled the emperor to ſeek a temporary ſhelter within the fortification of Aſta, a town of Liguria, ſituate on the banks of the Tanarus. The ſiege of an obſcure place, which contained ſo rich a prize, and ſeemed incapable of a long reſiſtance, was inſtantly formed, and indefatigably preſſed, by the king of the Goths; and juſt as the barbarians had propoſed the indignity of a capitulation, the imperial captive was relieved by the haſty approach of the hero whom he had ſo long expected. At the head of a choſen and intrepid band, Stilicho ſwam the ſtream of the Adda, to gain the time which he muſt have loſt in the attack of the bridge; the paſſage of the Po was an enterpriſe of much leſs hazard and difficulty; and the ſucceſsful action, in which he cut his way through the Gothic camp under the walls of Aſta, revived the hopes and vindicated the drooping honour of Rome. Inſtead of graſping the fruit of his victory, the barbarian was gradually inveſted, on every ſide, by the troops of the Weſt, who ſucceſſively iſſued through all the paſſes of the Alps; his quarters were ſtraitened; his convoys cut off; and the vigilance of the Romans prepared to form a chain of fortifications, and to beſiege the lines of the beſiegers. A military council was aſſembled of the chiefs of the Gothic nation, who recommended the prudent meaſure of a ſeaſonable retreat. In this debate Alaric diſplayed the true ſpirit of a warrior; after he had reminded his countrymen of their atchievements and of their deſigns, he concluded an animating ſpeech by the ſolemn and poſitive aſſurance, that he was reſolved to find in Italy either a kingdom or a grave.

The camp of the Goths, which Alaric had pitched in the neighbourhood of Pollentia, was thrown into confuſion by the ſudden and impetuous charge of the imperial cavalry; but, in a few moments, the undaunted genius of their leader gave them an order of battle; and as ſoon as they had recovered from their aſtoniſhment, they reſiſted the attack of the Romans, and the battle raged with tenfold fury. In the evening of the bloody day, the Goths retreated from the field of battle; the intrenchments of their camp were forced, and the ſcene of rapine and ſlaughter atoned in ſome meaſure for the calamities which they had inflicted on the ſubjects of the empire. The magnificent ſpoils of Corinth and Argos enriched the veterans of the Weſt; the captive wife of Alaric was reduced to implore the mercy of the conqueror; and many thouſand priſoners, releaſed from Gothic chains, diſperſed through the provinces of Italy the praiſes of their deliverer. The triumph of Stilicho was compared to that of Marius; who, in the ſame part of Italy, had encountered and diſcomfited another army of northern barbarians.

Alaric, in the midſt of this ſignal overthrow, poſſeſſed the invincible temper of mind which riſes ſuperior to misfortune, and derives new reſources from adverſity. After the total defeat of his infantry, he withdrew from the field of battle with the greateſt part of his cavalry entire and unbroken. Without waſting a moment to lament the irreparable loſs of ſo many brave companions, he left his victorious enemy in quiet poſſeſſion of their ſpoils, and boldly reſolved to break through the unguarded paſſes of the Apennines, to ſpread deſolation over the fruitful face of Tuſcany, and to conquer or die before the gates of Rome. The capital was ſaved by the active and inceſſant diligence of Stilicho: but he dreaded the ſavage deſpair of his enemy; and, inſtead of committing the fate of the republic to the chance of another battle, he propoſed to purchaſe the abſence of the barbarians. The ſpirit of Alaric would have rejected ſuch terms, the permiſſion of a retreat, and the offer of a penſion, with contempt and indignation; but he exerciſed a limited and precarious authority over the independent chieftains, who had only raiſed him for their own ſervice above the rank of his equals; they were ſtill leſs diſpoſed to follow an unſucceſsful general, and many of them were tempted to conſult their intereſt by a private negociation with the miniſter of Honorius. The king ſubmitted to the voice of his chiefs, ratified the treaty with the empire of the Weſt, and repaſſed the Po, with the remains of the unſubdued army which he had led into Italy. But the Roman forces, jealous of his deſigns, ſtill hung upon his rear; and Stilicho, who maintained a ſecret correſpondence with ſome of the barbarian chiefs, was punctually appriſed of the deſigns that were formed in the camp and council of Alaric. The king of the Goths, ambitious to ſignalize his retreat by ſome ſplendid atchievement, had reſolved to occupy the important city of Verona, which commands the principal paſſage of the Rhætian Alps; and, directing his march through the territories of thoſe German tribes whoſe alliance would reſtore his exhauſted ſtrength, he propoſed to invade, on the ſide of the Rhine, the wealthy and unſuſpecting provinces of Gaul. Ignorant of the treaſon which had betrayed this bold enterpriſe, he advanced towards the paſſes of the mountains, already poſſeſſed by the imperial troops; where he was expoſed, almoſt at the ſame inſtant, to a general attack in the front, on his flanks, and in the rear. In this bloody action, at a ſmall diſtance from the walls of Verona, the loſs of the Goths was not leſs heavy than that which they had ſuſtained in the defeat of Pollentia; yet the undaunted Alaric ſecured the remains of his army on the adjacent rocks; and prepared himſelf, with unſubdued reſolution, to maintain a ſiege againſt the ſuperior numbers of the enemy, who inveſted him on all ſides. But he could not oppoſe the inevitable progreſs of hunger and diſeaſe; nor was it poſſible for him to check the continual deſertion of his impatient and capricious barbarians. In this extremity he ſtill found reſources in his own ſubtilty, or in the moderation of his adverſary; and the retreat of the Gothic king was conſidered as the deliverance of Italy. Yet the people of Rome, incapable of forming any rational judgment of the buſineſs of peace and war, preſumed to arraign the policy of Stilicho, who ſo often vanquiſhed, ſo often ſurrounded, and ſo often diſmiſſed, this implacable enemy of the republic.

In the courſe of this unfortunate expedition, the king of the Goths muſt indeed have ſuſtained a conſiderable loſs; and his haraſſed forces required an interval of repoſe to recruit their numbers, and revive their confi-

dence.

dence. Adverſity had exerciſed, and diſplayed, the genius of Alaric; and the fame of his valour invited to the Gothic ſtandard the braveſt of the barbarian warriors; who, from the Euxine to the Rhine, were agitated by the deſire of rapine and conqueſt. He had acquired the admiration and friendſhip of Stilicho; and through his means concluded with Honorius, who now kept his court at Ravenna, a treaty of peace and alliance, by which he was declared maſter-general of the Roman armies throughout the præfecture of Illyricum: and a civil war being expected between the eaſtern and weſtern empires, Stilicho prepared to lead to the gates of Conſtantinople the united armies of the Romans and of the Goths. But this declaration was rather an object of policy; and his principal care was to employ the forces of Alaric at a diſtance from Italy. This deſign could not long eſcape the penetration of the Gothic king, who continued to hold a doubtful, and perhaps a treacherous, correſpondence with the rival courts. In the mean time envy and reproach followed rapidly the footſteps of the able and judicious Stilicho, who was baſely murdered through the corrupt policy and miſtaken zeal of his ungrateful countrymen.

From his camp, on the confines of Italy, Alaric attentively obſerved the revolutions of the imperial palace, and watched the progreſs of faction and diſcontent in the boſom of the Roman empire. In the midſt of its difficulties and contentions, the Gothic king demanded the payment of four thouſand pounds of gold, which had been formerly granted by the Roman ſenate, either to reward his ſervices, or to appeaſe his fury. His decent firmneſs was ſupported by an artful moderation, which contributed to the ſucceſs of his deſigns. He refuſed to truſt the faith of the Romans, unleſs Ætius and Jaſon, the ſons of two great officers of ſtate, were ſent as hoſtages to his camp: but he offered to deliver, in exchange, ſeveral of the nobleſt youths of the Gothic nation. The modeſty of Alaric was interpreted, by the miniſters of Ravenna, as a ſure token of his weakneſs and fear. They diſdained either to negociate a treaty, or to aſſemble an army; and with a raſh confidence, derived only from their ignorance of the extreme danger, irretrievably waſted the moments which ſhould have prepared them for war. Alaric, with bold and rapid marches, paſſed the Alps and the Po; haſtily pillaged the cities of Aquileia, Altinum, Concordia, and Cremona, which yielded to his arms; increaſed his forces by the acceſſion of thirty thouſand auxiliaries; and, without meeting a ſingle enemy in the field, advanced as far as the edge of the moraſs which protected the impregnable reſidence of the emperor of the weſt. Inſtead however of attempting the ſiege of Ravenna, the leader of the Goths proceeded to Rimini, ſtretched his ravages along the ſea-coaſts of the Adriatic, and meditated the conqueſt of the ancient miſtreſs of the world. His troops, animated by the hopes of ſpoil, followed the courſe of the Flaminian way, occupied the unguarded paſſes of the Apennines, deſcended into the rich plains of Umbria; and Alaric at length pitched his camp under the walls of Rome, A.D. 408.

By a ſkilful diſpoſition of his numerous forces, who impatiently watched the moment of an aſſault, Alaric encompaſſed the walls, commanded the twelve principal gates, intercepted all communication with the adjacent country, and vigilantly guarded the navigation of the Tyber, from which the Romans derived their ſupply of proviſions. The firſt emotions of the nobles, and of the people, were thoſe of ſurpriſe and indignation, that a vile barbarian ſhould dare to inſult the capital of the world: but their pride was ſoon humbled by misfortune; and their unmanly rage, inſtead of being directed againſt an enemy in arms, was meanly exerciſed on a defenceleſs and innocent victim. Within their walls was Serena, the widow of Stilicho; and they liſtened with credulous paſſion to a tale of calumny, which accuſed her of maintaining a ſecret and criminal correſpondence with the Gothic invader. Actuated by the ſame popular frenzy, the ſenate, without requiring any evidence of her guilt, pronounced the ſentence of her death. Serena was ignominiouſly ſtrangled; and the infatuated multitude were aſtoniſhed to find, that this cruel act of injuſtice did not immediately produce the retreat of the barbarians, and the deliverance of the city: inſtead of which they were deſervedly puniſhed with the diſtreſs of ſcarcity, and the calamities of famine. Many thouſands of the wretched inhabitants of Rome expired in their houſes, or in the ſtreets, for want of food; and as the public ſepulchres without the walls were in the power of the enemy, the ſtench, which aroſe from ſo many putrid and unburied carcaſes, infected the air; and the miſeries of famine were ſucceeded and aggravated by the contagion of a peſtilential diſeaſe.

The laſt reſource of the Romans was to be found in the clemency or moderation of the king of the Goths. The ſenate, who in this emergency aſſumed the powers of the government, appointed two ambaſſadors to negociate with the enemy. This truſt was delegated to Baſilius, a ſenator of Spaniſh extraction; and to John, the firſt tribune of the notaries, who was peculiarly qualified by his dexterity in buſineſs, as well as by his former intimacy with the Gothic prince. When they were introduced into his preſence, they declared that the Romans were reſolved to maintain their dignity, either in peace or war; and that, if Alaric refuſed them a fair and honourable capitulation, he might ſound his trumpets, and prepare to give battle to an innumerable people, exerciſed in arms, and animated by deſpair. "The thicker the hay, the eaſier it is mowed," was the conciſe reply of the barbarian. He then condeſcended to fix the ranſom, which he would accept as the price of his retreat from the walls of Rome: all the gold and ſilver in the city, whether it were the property of the ſtate, or of individuals; all the rich and precious moveables; and all the ſlaves who could prove their title to the name of *barbarians*. "If ſuch, O king, are your demands, (ſaid the aſtoniſhed negociators,) what do you intend to leave us?" "Your lives;" replied the haughty conqueror: they trembled, and retired. Yet before they retired, a ſhort ſuſpenſion of arms was granted, which allowed ſome time for a more temperate deciſion. The ſtern features of Alaric were inſenſibly relaxed; he abated much of the rigour of his terms; and at length conſented to raiſe the ſiege, on the immediate payment of five thouſand pounds of gold, of thirty thouſand pounds of ſilver, of four thouſand robes of ſilk, of three thouſand pieces of fine ſcarlet cloth, and of three thouſand pounds weight of pepper. As ſoon as the Romans had ſatisfied the rapacious demands of Alaric, A.D. 409, they were reſtored, in ſome meaſure, to the enjoyment of peace and ſuſtenance. A more regular diſcipline than could have been expected, was maintained in the camp of Alaric; and the wiſe barbarian juſtified his regard for the faith of treaties, by the ſeverity with which he chaſtiſed a party of licentious Goths, who had inſulted ſome Roman citizens on the road to Oſtia. His army, enriched by the contributions of the capital, ſlowly advanced into the fair and fruitful province of Tuſcany, where he propoſed to eſtabliſh his winter-quarters; and the Gothic ſtandard became the refuge of forty thouſand barbarian ſlaves, who had broke their chains, and aſpired, under the command of their deliverer, to revenge the injuries, and the diſgrace, of their former ſervitude. About the ſame time, he received a reinforcement of Goths and Huns, who had cut their way through ſuperior numbers of the imperial troops; and Alaric now found himſelf at the head of an hundred thouſand fighting men.

Alaric was conſcious, perhaps, of ſome ſecret weakneſs, ſome internal defect; or perhaps the moderation which he diſplayed, was intended only to deceive and

diſarm the credulity of the miniſters of Honorius. The king of the Goths repeatedly declared, that it was his deſire to be conſidered as the friend of peace, and of the Romans. Three ſenators, at his requeſt, were ſent ambaſſadors to the court of Ravenna, to ſolicit the exchange of hoſtages, and the concluſion of the treaty; and the propoſals, which he more clearly expreſſed during the courſe of the negociations, could only inſpire a doubt of his ſincerity, as they might ſeem inadequate to the ſtate of his fortune. The barbarian ſtill aſpired to the rank of maſter-general of the armies of the weſt; he ſtipulated an annual ſubſidy of corn and money; and he choſe the provinces of Dalmatia, Noricum, and Venetia, for the ſeat of his new kingdom, which would have commanded the important communication between Italy and the Danube. If theſe terms ſhould be rejected, Alaric ſhewed a diſpoſition to relinquiſh his pecuniary demands, and even to content himſelf with the poſſeſſion of Noricum; an exhauſted and impoveriſhed country, perpetually expoſed to the inroads of the barbarians of Germany. But the hopes of peace were diſappointed by the obſtinacy, or intereſted views, of the miniſter Olympius. Without liſtening to the ſalutary remonſtrances of the ſenate, he diſmiſſed their ambaſſadors under the conduct of a military eſcort, too numerous for a retinue of honour, and too feeble for an army of defence. Six thouſand Dalmatians, the flower of the imperial legions, were ordered to march from Ravenna to Rome, through an open country, which was occupied by the formidable myriads of the barbarians. Theſe brave legionaries, encompaſſed and betrayed, fell a ſacrifice to miniſterial folly; their general, Valens, with an hundred ſoldiers, eſcaped from the field of battle; and one of the ambaſſadors, who could no longer claim the protection of the law of nations, was obliged to purchaſe his freedom with a ranſom of thirty thouſand pieces of gold. Yet Alaric, inſtead of reſenting this act of hoſtility, in vain renewed his propoſals of peace.

While the emperor and his court enjoyed the ſecurity of the marſhes and fortifications of Ravenna, they ſtill abandoned Rome to the reſentment of Alaric. Yet ſuch was the moderation which he affected to preſerve, that, as he moved with his army along the Flaminian way, he ſucceſſively diſpatched the biſhops of the towns of Italy to reiterate his offers of peace, and to conjure the emperor, that he would ſave the city and its inhabitants from the hoſtile fire, and the ſword of the barbarians. Theſe impending calamities were however averted, not indeed by the wiſdom of Honorius, but by the prudence or humanity of the Gothic king; who employed a milder, though not leſs effectual, method of conqueſt. Inſtead of aſſaulting the capital, he directed his efforts againſt the commanding port of Oſtia, one of the moſt ſtupendous works of Roman magnificence. As ſoon as Alaric was in poſſeſſion of that important place, he ſummoned the city to ſurrender at diſcretion; and his demands were enforced by the poſitive declaration, that a refuſal, or even a delay, ſhould be inſtantly followed by the deſtruction of the magazines, on which the life of the Roman people depended. The terror of famine ſubdued the pride of the ſenate; they ſubmitted, and liſtened, without reluctance, to the propoſal of placing a new emperor on the throne of Honorius; and the ſuffrage of the Gothic conqueror beſtowed the purple on Attalus, præfect of the city. But the oſtentatious folly and caprice of this mock emperor, rendered his reign as ridiculous as it was fleeting and temporary. The reſentment of the Gothic king was exaſperated againſt him by his weakneſs and folly: and in a large plain near Rimini, in the preſence of an innumerable multitude of Romans and barbarians, the wretched Attalus was publicly deſpoiled of the diadem and purple; and thoſe enſigns of royalty were now ſent by Alaric, as the pledge of peace and friendſhip, to the ſon of Theodoſius, within the ſtrong hold of Ravenna. The officers who returned to their duty, were reinſtated in their former employments, and Alaric advanced within three miles of Ravenna, to preſs the treaty for peace. But his indignation was kindled by the report, that a rival chieftain, Sarus, the hereditary foe of the houſe of Balti, had been received into the palace; and at the head of three hundred followers, that fearleſs barbarian ſallied from the gates of Ravenna, ſurpriſed and cut in pieces a conſiderable body of Goths, re-entered the city in triumph; and then inſulted his adverſary by the voice of a herald, who publicly declared that the guilt of Alaric had for ever excluded him from the friendſhip and alliance of Honorius. The folly of the court of Ravenna was expiated, a third time, by the fall of Rome. The angry king of the Goths, who no longer diſſembled his appetite for plunder, now meditated a deſperate revenge. He appeared in arms under the walls of Rome; and the trembling ſenate, without any hopes of relief, prepared, by a deſperate reſiſtance, to delay the ruin of their country. But they were unable to guard againſt the ſecret conſpiracy of their ſlaves and domeſtics; who, either from birth or intereſt, were attached to the cauſe of the enemy. At the hour of midnight, the Salarian gate was ſilently opened, and the inhabitants were awakened by the tremendous ſound of the Gothic trumpets. Eleven hundred and ſixty-three years after the foundation of Rome, the imperial city, which had ſubdued and civiliſed ſo conſiderable a part of mankind, was delivered to the licentious fury of the Goths, on the 24th of Auguſt 410.

The proclamation of Alaric, when he forced his entrance into the vanquiſhed city, diſcovered ſome regard for the laws of humanity and religion, which, however, were not ſo pioufly imitated by Genſeric at the head of his Vandals, when, in 455, he became, in the hands of Providence, a ſimilar ſcourge to this proud capital of the weſtern world. Alaric encouraged his troops boldly to ſeize the rewards of valour, and to enrich themſelves with the ſpoils of a wealthy and effeminate people: but he exhorted them to ſpare the lives of the unreſiſting citizens, and to reſpect the churches of the apoſtles St. Peter and St. Paul, as holy and inviolable ſanctuaries. The Goths had received, under the indefatigable zeal of their biſhop Ulphilas, the light and truth of the Goſpel, in the year 360, which evidently influenced their conduct on this memorable occaſion. Amidſt the horrors of a nocturnal tumult, ſeveral of the Chriſtian Goths diſplayed the fervour of their recent converſion; and ſome inſtances of their uncommon piety and moderation are related with zeal by the eccleſiaſtical writers. While the barbarians roamed through the city in queſt of prey, the humble dwelling of an aged virgin, who had devoted her life to the ſervice of the altar, was forced open by one of the powerful Goths. He immediately demanded, though in civil language, all the gold and ſilver in her poſſeſſion; and was aſtoniſhed at the readineſs with which ſhe conducted him to a ſplendid hoard of maſſy plate, of the richeſt materials, and the moſt curious workmanſhip. The barbarian viewed with wonder and delight this valuable acquiſition, till he was interrupted by a ſerious admonition, addreſſed to him in the following words: "Theſe," ſaid ſhe, "are the conſecrated veſſels belonging to St. Peter; if you preſume to touch them, the ſacrilegious deed will remain on your conſcience. For my part, I dare not keep what I am unable to defend." The Gothic captain, ſtruck with reverential awe, diſpatched a meſſenger to inform the king of the treaſure which he had diſcovered; and received a peremptory order from Alaric, that all the conſecrated plate and ornaments ſhould be tranſported, without damage or delay, to the church of the apoſtle. From the extremity of the Quirinal hill to the diſtant quarter of the Vatican, a numerous detachment of Goths, marching in order of battle through the principal ſtreets, protected, with glittering arms, the long train of their devout companions, who bore aloft, on their heads, the ſacred veſſels

of

J. Chapman sculp.

ALARIC THE GOTHIC CHIEF.

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of gold and ſilver; and the martial ſhouts of the barbarians were mingled with the ſound of religious pſalmody. From all the adjacent houſes, a crowd of Chriſtians haſtened to join this edifying proceſſion; and a multitude of fugitives, without diſtinction of age, or rank, or even of ſect, had the good fortune to eſcape to the ſecure ſanctuary of the Vatican. The learned work, concerning the City of God, was profeſſedly compoſed by St. Auguſtin, to juſtify the ways of Providence in the deſtruction of the Roman greatneſs. He celebrates, with peculiar ſatisfaction, this memorable triumph of Chriſt; and inſults his adverſaries, by challenging them to produce ſome ſimilar example, of a town taken by ſtorm, in which the fabulous gods of antiquity had been able to protect either themſelves or their votaries. *Auguſtin, de Civitat. Dei, l.* 1. *c.* 1–6.

After the ſack of Rome, on the ſixth day, the victorious Goths prepared to complete the blow they had thus partially given. At the head of an army, encumbered with weighty ſpoils, their intrepid leader advanced along the Appian way into the ſouthern provinces of Italy, deſtroying whatever dared to oppoſe his paſſage, and enriching himſelf with the plunder of the unreſiſting country, which now became ſubject to the Goths.

Whether fame, or conqueſt, or riches, were the object of Alaric, he purſued that object with an indefatigable ardour, which could neither be quelled by adverſity, nor ſatiated by ſucceſs. No ſooner had he gained the extremeſt land of Italy, than he was attracted by the neighbouring proſpect of a fertile and peaceful iſland. Yet even the poſſeſſion of Sicily he conſidered only as an intermediate ſtep to the important expedition, which he already meditated againſt the continent of Africa. The ſtreights of Rhegium and Meſſina are twelve miles in length, and, in the narroweſt paſſage, about one mile and a half broad; and the fabulous monſters of the deep, the rocks of Scylla, and the whirlpool of Charybdis, could terrify none but timid and unſkilful mariners. Yet as ſoon as the firſt diviſion of the Goths had embarked, a ſudden tempeſt aroſe, which ſunk, or ſcattered, many of the tranſports; their courage was blunted by the terrors of a new element; and their further deſign was defeated by the ſudden death of Alaric, A.D. 410, and which, after a ſhort illneſs, here terminated the career of his conqueſts and glory. The ferocious character of the barbarians was ſingularly diſplayed in the funeral of a hero, whoſe valour and fortune they celebrated with mournful applauſe. By the labour of a captive multitude they forcibly diverted the courſe of the Buſentinus, a ſmall river that waſhes the Conſentia. The royal ſepulchre, adorned with the ſpoils and trophies of Rome, was conſtructed in the centre of the vacant bed; the waters were then reſtored to their natural channel; and the ſpot where the remains of Alaric had been depoſited, was for ever concealed by the inhuman maſſacre of the priſoners who had been employed to execute the work. *Jornandes, de Reb. Get. c.* 30, *p.* 654.

All perſonal animoſities among the barbarians were ſuſpended by the ſtrong neceſſity of their affairs; and Adolphus, the brother-in-law of the deceaſed monarch, was unanimouſly elected to the throne. With pacific views, the ſucceſſor of Alaric ſuſpended the operations of war; and ſeriouſly negociated with the imperial court a treaty of friendſhip and alliance. It was the intereſt of the miniſters of Honorius, who were now releaſed from the dread of Alaric himſelf, to embrace the preſent propoſals for delivering Italy from the intolerable weight of the Gothic war; and Honorius now readily accepted their ſervices againſt the tyrants and barbarians who were infeſting the provinces beyond the Alps. Adolphus, aſſuming the character of a Roman general, directed his march from the extremity of Campania to the ſouthern provinces of Gaul. His troops, either by force or agreement, immediately occupied the cities of Narbonne, Thouloufe, and Bourdeaux; and though they were repulſed by count Boniface from the walls of Marſeilles, they ſoon extended their quarters from the Mediterranean to the Ocean. The oppreſſed provincials exclaimed, that they were cruelly raviſhed by their pretended allies; yet ſome ſpecious colours were not wanting to palliate, or juſtify, the violence of the Goths. The cities of Gaul, which they attacked, might perhaps be conſidered as in a ſtate of rebellion againſt the government of Honorius: the articles of the treaty, or the ſecret inſtructions of the court, might ſometimes be alleged in favour of the ſeeming uſurpations of Adolphus; and the guilt of any irregular act of hoſtility, might be imputed, with an appearance of truth, to the ungovernable ſpirit of a barbarian hoſt, impatient of peace or diſcipline.

The profeſſions of Adolphus were probably ſincere, and his attachment to the cauſe of the republic was ſecured by the aſcendant which a Roman princeſs had acquired over the heart and underſtanding of the barbarian king. Placidia, the daughter of the great Theodoſius, and of Galla, his ſecond wife, was about twenty years of age when Rome was firſt inveſted by the arms of Alaric. The victorious barbarians detained her, either as a hoſtage or a captive; and while ſhe was expoſed to the diſgrace of following round Italy the motions of a Gothic camp, ſhe made a deep impreſſion on the mind of Adolphus; and the Gothic king aſpired to call himſelf the brother of the emperor. The miniſters of Honorius rejected with diſdain the propoſal of an alliance, ſo injurious to every ſentiment of Roman pride; and repeatedly urged the reſtitution of Placidia, as an indiſpenſable condition of the treaty of peace. But the daughter of Theodoſius ſubmitted, without reluctance, to the deſires of the conqueror, a young and valiant prince, who yielded to Alaric in ſoftneſs of ſtature, but who excelled in the more attractive qualities of grace and beauty. The marriage of Adolphus and Placidia was conſummated before the Goths retired from Italy; and the day of their nuptials was celebrated in the Gothic camp with a magnificent diſplay of feſtivity. The nuptial gift, which, according to the cuſtom of his nation, was offered to Placidia, conſiſted of the rare and magnificent ſpoils of her own country.

This important event inſenſibly paved the way to a better underſtanding between Adolphus and Honorius; and the king of the Goths, in the year 414, readily accepted the propoſal of turning his victorious arms againſt the barbarians of Spain. With rapid movements he preſſed his march towards the Pyrenees; paſſed the mountains, and ſurpriſed, in the name of the emperor, the city of Barcelona. The fondneſs of Adolphus for his Roman bride was not abated by time or poſſeſſion; and the birth of a ſon, ſurnamed, from his illuſtrious grandſire, *Theodoſius*, appeared to fix him for ever in the intereſt of the republic. The loſs of that infant, whoſe remains were depoſited in a ſilver coffin in one of the churches near Barcelona, afflicted his parents; but the grief of the Gothic king was ſuſpended by the labours of the field; and the courſe of his victories was ſoon interrupted by domeſtic treaſon. He had imprudently received into his ſervice one of the followers of Sarus, a barbarian of a daring ſpirit, whoſe ſecret deſire of revenging the death of his patron inſtigated his ſavage hand to aſſaſſinate Adolphus in the palace of Barcelona, in the month of Auguſt 415. The laws of the ſucceſſion were inſtantly violated by a tumultuous faction; and a ſtranger to the royal race, Singeric, the brother of Sarus himſelf, was ſeated on the Gothic throne. The firſt act of his reign was the inhuman murder of the ſix children of Adolphus, the iſſue of a former marriage, whom he tore, without pity, from the feeble arms of a venerable biſhop. The unfortunate Placidia, inſtead of the reſpectful compaſſion which ſhe might have excited in

the moſt ſavage breaſts, was treated with cruel and wanton inſult. The daughter of the emperor Theodoſius, confounded among a crowd of vulgar captives, was compelled to march on foot above twelve miles, before the horſe of a barbarian, the aſſaſſin of her huſband, whom Placidia moſt tenderly loved, and whoſe fate, with her own, ſhe had now moſt bitterly to deplore.

But Placidia contrived the means of a deſperate retaliation on the head of the guilty tyrant: he was aſſaſſinated on the ſeventh day of his uſurpation; and the choice of the nation beſtowed the Gothic ſceptre on Wallia, whoſe warlike and ambitious temper appeared beſt ſuited to the martial diſpoſition of the barbarians. He marched in arms from Barcelona to the ſhores of the Atlantic, which the ancients revered as the boundary of the world. But when he reached the ſouthern promontory of Spain, and, from the rock now covered by the fortreſs of Gibraltar, contemplated the neighbouring and fertile coaſt of Africa, Wallia reſumed the deſigns of conqueſt, which had been broken by the death of Alaric: but the winds and waves again diſappointed the enterpriſe of the Goths; and the minds of a ſuperſtitious people were deeply affected by the repeated diſaſters of ſtorms and ſhipwrecks. In this diſpoſition, the ſucceſſor of Adolphus no longer refuſed to liſten to a Roman ambaſſador, whoſe propoſals were enforced by the dreaded approach of a numerous army under the conduct of Conſtantius. In 418, a ſolemn treaty was ſtipulated, and Placidia was honourably reſtored to her brother; ſix hundred thouſand meaſures of wheat were delivered to the hungry Goths; and Wallia engaged to draw his ſword in the ſervice of the empire. A bloody war was inſtantly excited among the barbarians of Spain; and the contending princes are ſaid to have addreſſed their letters, their ambaſſadors, and their hoſtages, to the throne of the weſtern emperor, exhorting him to remain a tranquil ſpectator of their conteſt; the events of which muſt be favourable to the Romans, by the mutual ſlaughter of their common enemies. The Spaniſh war was obſtinately ſupported during three campaigns with deſperate valour, and the martial atchievements of Wallia diffuſed through the empire the ſuperior renown of the Gothic hero. He exterminated the Silingi, who had deſolated the province of Bœtica. He ſlew, in battle, the king of the Alani; and the remains of thoſe Scythian wanderers, who eſcaped from the field, inſtead of chooſing a new leader, ſought a refuge under the ſtandard of the Vandals, with whom they were ever afterwards confounded. The Vandals themſelves, and the Suevi, yielded to the ſuperiority of the invincible Goths.

The triumph and victories of Wallia were now to be rewarded by a rich and fertile eſtabliſhment. His victorious Goths, forty-three years after they had paſſed the Danube, were fixed, according to the faith of treaties, in the poſſeſſion of the ſecond Aquitain, a maritime province between the Garonne and the Loire, under the civil and eccleſiaſtical juriſdiction of Bourdeaux. That metropolis, advantageouſly ſituated for the trade of the ocean, was built in a regular and elegant form; and its numerous inhabitants were diſtinguiſhed among the Gauls by their wealth, their learning, and the politeneſs of their manners. The adjacent province, which has been compared to the garden of Eden, is bleſſed with a fruitful ſoil, and a temperate climate: the face of the country diſplayed the arts and the rewards of induſtry; and the Goths, after their martial toils, were deſtined luxurioufly to exhauſt the rich vineyards of Aquitain. The Gothic limits were enlarged by the additional gift of ſome neighbouring dioceſes; and the ſucceſſors of Alaric fixed their royal reſidence at Thouloufe, which included five populous quarters within the ſpacious circuit of its walls. About the ſame time, and in the laſt years of the reign of Honorius, the Goths, the Burgundians, and the Franks, obtained unitedly a permanent ſeat and dominion in the provinces of Gaul.

The kingdom thus eſtabliſhed by the Viſigoths in the ſouthern provinces of Gaul, gradually acquired ſtrength and maturity. After the death of Wallia, the Gothic ſceptre devolved to Theodoric, the ſon of the great Alaric; and his proſperous reign of more than thirty years over a turbulent people, may be allowed to prove, that his prudence was ſupported by uncommon vigour both of mind and body. Impatient of his narrow limits, Theodoric aſpired to the poſſeſſion of Arles, the wealthy ſeat of government and commerce; but the city was ſaved by the timely approach of the conſul or patrician Ætius; and the Gothic king, who had raiſed the ſiege with ſome loſs and diſgrace, was perſuaded, for an adequate ſubſidy, to divert the martial valour of his ſubjects in a Spaniſh war. Yet Theodoric watched, and eagerly ſeized, the favourable moment of renewing his hoſtile attempts. The Goths, in 435, beſieged Narbonne; while the Belgic provinces were invaded by the Burgundians; and the public ſafety was threatened on every ſide by the apparent union of the enemies of Rome. On every ſide the activity of Ætius oppoſed a firm and ſucceſsful reſiſtance. Twenty thouſand Burgundians were ſlain in battle; and the remains of the nation humbly accepted a dependent ſeat in the mountains of Savoy. The walls of Narbonne had been ſhaken by the battering engines, and the inhabitants had endured the laſt extremities of famine, when count Litorius, approaching in ſilence, and directing each horſeman to carry behind him two ſacks of flour, cut his way through the intrenchments of the beſiegers. The ſiege was immediately raiſed; and the more deciſive victory, which is aſcribed to the perſonal conduct of Ætius, was marked with the blood of eight thouſand Goths. But in the abſence of the patrician, who was haſtily ſummoned to Italy, count Litorius ſucceeded to the command; and his preſumption ſoon diſcovered, that far different talents were wanting to direct the operations of an important war. At the head of an army of Huns, he raſhly advanced to the gates of Thouloufe, full of contempt for an enemy whom he had juſter reaſon to fear. The predictions of the augurs had inſpired Litorius with the confidence, that he ſhould enter the Gothic capital in triumph; and the truſt which he repoſed in his pagan allies, encouraged him to reject the conditions of peace which were propoſed by the biſhops in the name of Theodoric. The king of the Goths exhibited in his diſtreſs the edifying contraſt of Chriſtian piety and moderation; nor did he lay aſide his ſackcloth and aſhes till he was prepared to arm for the combat. His ſoldiers, animated with martial and religious enthuſiaſm, aſſaulted the camp of Litorius. The conflict was obſtinate; the ſlaughter was mutual. The Roman general, after a total defeat, which could be imputed only to his unſkilful raſhneſs, was actually led through the ſtreets of Thouloufe in hoſtile triumph; and the miſery which he experienced, in a long and ignominious captivity, excited at length the compaſſion of the barbarians themſelves. Such a loſs, in a country whoſe ſpirit and finances were long ſince exhauſted, could not eaſily be repaired; and the Goths, aſſuming, in their turn, the ſentiments of ambition and revenge, would have planted their victorious ſtandards on the banks of the Rhone, if the preſence of Ætius had not reſtored new ſtrength and diſcipline to the Romans. The two armies expected the ſignal of a deciſive action; but the generals, who were conſcious of each other's force, and doubtful of their own ſuperiority, prudently ſheathed their ſwords in the field of battle; and their reconciliation became permanent and ſincere. Theodoric appears to have deſerved the regard of his ſubjects, the confidence of his allies, and the eſteem of mankind. His throne was ſurrounded by ſix valiant ſons, who were educated in the exerciſes

exercises of the barbarian camp, and in those of the Gallic schools: from the study of the Roman jurisprudence, they acquired the theory of law and of justice; and the refined and exalted sentiments of Virgil contributed to soften the asperity of their native manners. The two daughters of the Gothic king were given in marriage to the eldest sons of the kings of the Suevi and of the Vandals, who reigned in Spain and Africa; but these illustrious alliances were pregnant with mischief and discord. The queen of the Suevi bewailed the death of an husband, inhumanly massacred by her own brother. The queen of the Vandals was the victim of a jealous tyrant, whom she was taught to call her father. The cruel Genseric suspected, that his son's wife had conspired to poison him; the supposed crime was punished by the amputation of her nose and ears; and the unhappy daughter of Theodoric was ignominiously returned to the court of Thoulouse in that deformed and mutilated condition. This horrid act, which would seem incredible to a civilized age, drew tears from every spectator; but Theodoric was urged, by the feelings of a parent and a king, to revenge such irreparable injuries. The imperial ministers, who always cherished the discord of the barbarians, would have supplied the Goths with arms, and ships, and treasures, for the African war; and the cruelty of Genseric might have been fatal to himself, if the artful Vandal had not armed in his cause the formidable power of the Huns. His rich gifts and pressing solicitations inflamed the ambition of Attila; and the intended co-operation of Ætius and Theodoric was prevented by the unexpected invasion of Gaul.

Attila, at the head of a numerous body of the Huns, had penetrated into the heart of Gaul, and spread the horrors of desolation wherever he came. Ætius was the sole guardian of the public safety; and he represented to Theodoric, that an ambitious conqueror, who aspired to the dominion of the earth, could be resisted only by the firm and unanimous alliance of the powers whom he laboured to oppress. The lively eloquence of the senator Avitus, also inflamed the Gothic warriors, by the description of the injuries which their ancestors had suffered from the rapacity of the Huns; and whose implacable fury still pursued them from the Danube to the foot of the Pyrenees. He strenuously urged, that it was the duty of every Christian to save, from sacrilegious violation, the churches of God, and the relics of the saints: that it was the interest of every barbarian, who had acquired a settlement in Gaul, to defend the fields and vineyards, which were cultivated for his use, against the desolation of the Scythian shepherds. Theodoric yielded to the evidence of truth; adopted the measure at once the most prudent and the most honourable; and declared, that as the faithful ally of Ætius and the Romans, he was ready to expose his life and kingdom for the common safety of Gaul. The Visigoths, who, at that time, were in the mature vigour of their fame and power, obeyed with alacrity the signal of war; prepared their arms and horses, and assembled under the standard of their aged king, who was resolved, with his two eldest sons, Torismond and Theodoric, to command in person his numerous and valiant people. The example of the Goths determined several tribes that seemed to fluctuate between the Huns and the Romans. The indefatigable diligence of Ætius gradually collected the troops of Gaul and Germany, who had formerly acknowledged themselves the subjects, or soldiers, of the republic, but who now claimed the rewards of voluntary service, and the rank of independent allies; the Læti, the Armoricans, the Breones, the Saxons, the Burgundians, the Sarmatians, or Alani, the Ripuarians, and the Franks who followed Merovæus as their lawful prince. Such was the various army, which, under the conduct of Ætius and Theodoric, advanced, by rapid marches, to relieve Orleans, and to give battle to the innumerable host of Attila.

On their approach, the king of the Huns immediately raised the siege, and sounded a retreat. The valour of Attila was always guided by his prudence; and as he foresaw the fatal consequences of a defeat in the heart of Gaul, he repassed the Seine, and expected the enemy in the plains of Châlons, whose smooth and level surface was adapted to the operations of his Scythian cavalry. This spacious plain was distinguished by some inequalities of ground; and the importance of an height, which commanded the camp of Attila, was understood, and disputed by the two generals. The young and valiant Torismond first occupied the summit; the Goths rushed with irresistible weight on the Huns, who laboured to ascend from the opposite side; and the possession of this advantageous post inspired both the troops and their leaders with a fair assurance of victory. The unusual despondency which now seemed to prevail among the Huns, engaged Attila to use every expedient to animate their courage. "I myself," said the king of the Huns, "will throw the first javelin, and the wretch who refuses to imitate the example of his sovereign, is devoted to inevitable death." The spirit of the troops was rekindled by the voice and example of their intrepid leader; and Attila, yielding to their impatience, immediately formed his order of battle. At the head of his faithful Huns, he occupied, in person, the centre of the line. The nations subject to his controul, the Rugians, the Heruli, the Thuringians, the Franks, the Burgundians, were extended, on either hand, over the ample space of the Catalaunian fields; the right wing was commanded by Ardaric, king of the Gepidæ; and the three valiant brothers, who reigned over the Ostrogoths, were posted on the left to oppose the kindred tribes of the Visigoths. The disposition of the allies was regulated by a different principle. Sangiban, the faithless king of the Alani, was placed in the centre; where his motions might be strictly watched, and his treachery might be instantly punished. Ætius assumed the command of the left, and Theodoric of the right, wing; while Torismond still continued to occupy the heights which stretched on the flank. The nations from the Volga to the Atlantic were assembled on the plains of Châlons; but many of these nations had been divided by faction, or conquest, or emigration; and the appearance of similar arms and ensigns, which threatened each other, presented the image of a civil war.

The discipline and tactics of the Greeks and Romans, formed an interesting part of their national manners; but the battle of Châlons can only excite our curiosity by the magnitude of the object. Cassiodorius, who had conversed with many Gothic warriors who served in that memorable engagement, describes it to be "a conflict fierce, various, obstinate, and bloody; such as could not be paralleled either in the present or in past ages." The number of the slain amounted to one hundred and sixty-two thousand, or, according to another account, three hundred thousand persons. After the mutual and repeated discharge of missile weapons, in which the archers of Scythia might signalize their superior dexterity, the cavalry and infantry of the two armies were furiously mingled in closer combat. The Huns, who fought under the eyes of their king, pierced through the centre of the allies, separated their wings from each other, and, wheeling with a rapid effort to the left, directed their whole force against the Visigoths. As Theodoric rode along the ranks to animate his troops, he received a mortal stroke from the javelin of Andages, a noble Ostrogoth, and immediately fell from his horse. The wounded king was oppressed in the general disorder, and trampled under the feet of his own cavalry. Attila already exulted in the confidence of victory, when the valiant Torismond descended from the hills, and turned the fate of the day. The Visigoths, who had been thrown into confusion by the flight, or defection, of the Alani, gradually restored their order of battle;

when the Huns were vanquiſhed, and Attila was compelled to retreat. He had expoſed his perſon with the raſhneſs of a private ſoldier; but his intrepid troops of the centre had puſhed forwards beyond the reſt of the line; their attack was but faintly ſupported; their flanks were unguarded; and the troops of Attila were ſaved by the approach of the night from a total defeat. They retired within the circle of waggons that fortified their camp; and the diſmounted ſquadrons prepared themſelves for a defence, to which neither their arms nor their temper were adapted. The event was doubtful: but the king of the Huns had ſecured a dreadful reſource. The ſaddles and rich furniture of the cavalry were collected by his order into a funeral pile; and the magnanimous barbarian had reſolved, if his intrenchments ſhould be forced, to ruſh headlong into the flames, to deprive his enemies of the glory which they might have acquired by the death or captivity of Attila.

But his enemies had paſſed the night in equal anxiety and perturbation. The inconſiderate courage of Toriſmond was tempted to urge the purſuit till he unexpectedly found himſelf, with a few followers, in the midſt of the Scythian waggons. In the confuſion of a nocturnal combat, he was thrown from his horſe; and the Gothic prince muſt have periſhed like his father, if his youthful ſtrength, and the intrepid zeal of his companions, had not reſcued him from this dangerous ſituation. In the ſame manner, but on the left of the line, Ætius was ſeparated from his allies, ignorant of their victory, and anxious for their fate; and it was his fortune to encounter and eſcape the hoſtile troops that were ſcattered over the plains of Châlons: and he at length reached the camp of the Goths, which he could only fortify with a ſlight rampart of ſhields, till the dawn of day. The imperial general was then ſatisfied of the defeat of Attila, who ſtill remained inactive within his intrenchments; and when he contemplated the bloody ſcene, he obſerved, with ſecret ſatisfaction, that the loſs had principally fallen on the barbarians. The body of Theodoric, pierced with wounds, was diſcovered under a heap of the ſlain: his ſubjects bewailed the death of their king and father; and his funeral rites were performed in the face of a vanquiſhed enemy. The Goths, claſhing their arms, elevated on a buckler his eldeſt ſon Toriſmond, to whom they juſtly aſcribed the glory of their ſucceſs; and the new king accepted the obligation of revenge, as a ſacred portion of his paternal inheritance. Yet the Goths themſelves were aſtoniſhed by the fierce and undaunted aſpect of their formidable antagoniſt; and their hiſtorian has compared Attila to a lion encompaſſed in his den, and threatening his hunters with redoubled fury. All his inſtruments of martial muſic inceſſantly ſounded a loud and animating ſtrain of defiance; and the foremoſt troops who advanced to the aſſault, were checked, or deſtroyed, by ſhowers of arrows from every ſide of the intrenchments. It was determined in a general council of war, to beſiege the king of the Huns in his camp, to intercept his proviſions, and to reduce him to the alternative of a diſgraceful treaty, or an unequal combat. But the impatience of the barbarians ſoon diſdained theſe cautious and dilatory meaſures: and the mature policy of Ætius was apprehenſive, that, after the extirpation of the Huns, the republic would be oppreſſed by the pride and power of the Gothic nation. The patrician exerted the ſuperior aſcendant of authority and reaſon, to calm the paſſions, which the ſon of Theodoric conſidered as a duty; repreſented, with ſeeming affection, and real truth, the dangers of abſence and delay; and perſuaded Toriſmond to diſappoint, by his ſpeedy return, the ambitious deſigns of his brothers, who might occupy the throne and treaſures of Thouloufe. After the departure of the Goths, and the ſeparation of the allied army, Attila was ſurpriſed at the vaſt ſilence that reigned over the plains of Châlons; and the ſuſpicion of ſome hoſtile ſtratagem detained him ſeveral days within the circle of his waggons, before he ventured upon his retreat beyond the Rhine. Toriſmond, with more active vigilance, haſtened to aſſemble his court at Thouloufe, where he fell a victim to the ambitious meaſures he was preparing to put in force.

Theodoric II. is ſaid to have acquired the Gothic ſceptre in the year 453, by the murder of his brother Toriſmond; and he juſtified this atrocious deed by the deſign which his predeceſſor had formed of violating his alliance with the empire. Theodoric, after this foul deed, formed a cloſe alliance with the emperor Avitus; and offered his perſon and his forces, as a faithful ſoldier of the republic. The exploits of Theodoric II. ſoon convinced the world, that he had not degenerated from the warlike virtues of his anceſtors. After the eſtabliſhment of the Goths in Aquitain, and the paſſage of the Vandals into Africa, the Suevi, who had fixed their kingdom in Gallicia, aſpired to the conqueſt of Spain, and threatened to extinguiſh the feeble remains of the Roman dominion. The provincials of Carthagena and Tarragona, afflicted by an hoſtile invaſion, repreſented their injuries and their apprehenſions. Count Fronto was diſpatched, in the name of the emperor Avitus, with advantageous offers of peace and alliance; and Theodoric interpoſed his mediation, to declare, that, unleſs his brother-in-law, the king of the Suevi, immediately retired, he ſhould be obliged to arm in the cauſe of juſtice and of Rome. "Tell him," replied the haughty Rechiarius, "that I deſpiſe his friendſhip and his arms; but that I ſhall ſoon try whether he will dare to expect my arrival under the walls of Thouloufe." Such a challenge urged Theodoric to prevent the bold deſigns of his enemy: he paſſed the Pyrenees at the head of the Viſigoths: the Franks and Burgundians ſerved under his ſtandard; and though he profeſſed himſelf to be the general of Avitus, he privately ſtipulated for himſelf and his ſucceſſors, the abſolute poſſeſſion of his Spaniſh conqueſts. The two armies encountered each other on the banks of the river Urbicus, about twelve miles from Aſtorga; and the deciſive victory of the Goths appeared for a while to have extirpated the name and kingdom of the Suevi. From the field of battle Theodoric advanced to Braga, their metropolis, which ſtill retained the veſtiges of its ancient commerce and dignity. His entrance was not polluted with blood, and the Goths reſpected the chaſtity of their female captives, more eſpecially of the conſecrated virgins. The unfortunate king of the Suevi had eſcaped to one of the ports of the ocean; but the obſtinacy of the winds oppoſed his flight; he was delivered to his implacable rival; and Rechiarius, who neither deſired nor expected mercy, received, with manly conſtancy, the death which he would probably have inflicted. After this bloody ſacrifice to policy or reſentment, Theodoric carried his victorious arms as far as Merida, the principal town of Luſitania, without meeting any reſiſtance; but he was ſtopped in the full career of ſucceſs, and recalled from Spain, before he could provide for the ſecurity of his conqueſts. In his retreat towards the Pyrenees, he revenged his diſappointment on the country through which he paſſed, and in the ſack of Pollentia and Aſtorga, he ſhewed himſelf a faithleſs ally, as well as a cruel enemy. Whilſt the king of the Viſigoths fought and vanquiſhed in the name of Avitus, the reign of Avitus had expired. He was depoſed on the 16th of October 456.

After the depoſition and death of Avitus, the deſign of extinguiſhing the Roman empire in Spain and Gaul, was conceived, and almoſt completed, by Euric, who, in turn, aſſaſſinated his brother Theodoric II. and diſplayed, with a more ſavage temper, ſuperior abilities, both in peace and war. He paſſed the Pyrenees at the head of a numerous army, ſubdued the cities of Saragoſſa and Pampeluna, vanquiſhed in battle the martial nobles of the Tarragoneſe province, carried his victo-

rious

EURIC, KING OF THE VISIGOTHS.

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rious arms into the heart of Luſitania, and permitted the Suevi to hold the kingdom of Gallicia under the Gothic monarchy of Spain. The efforts of Euric were not leſs vigorous or leſs ſucceſsful in Gaul; and throughout the country that extends from the Pyrenees to the Rhône and the Loire, Berry and Auvergne were the only cities which refuſed to acknowledge him as their maſter. In the defence of Clermont, the inhabitants of Auvergne ſuſtained, with inflexible reſolution, the miſeries of war, peſtilence, and famine; and the Viſigoths, relinquiſhing the fruitleſs ſiege, ſuſpended the hopes of that important conqueſt. The youth of the province were animated by the heroic valour of Ecdicius, the ſon of the emperor Avitus, who made a deſperate ſally with only eighteen horſemen, boldly attacked the Gothic army, and, after maintaining a flying ſkirmiſh, retired ſafe and victorious within the walls of Clermont.

The fortune and proweſs of Odoacer, who, from an humble adventurer among the Huns, had riſen to the ſupreme power of extinguiſhing the Roman empire in the weſt, now induced him to ſolicit the friendſhip of the moſt powerful barbarians. He had no ſooner aſſumed the novel title of *king* of Italy, A.D. 476, than he offered to Euric, king of the Viſigoths, all the Roman conqueſts beyond the Alps, as far as the Rhine and the Ocean: and the ſenate confirmed this liberal gift with ſome oſtentation to a prince, who had been the firſt of his nation that was capable of framing a municipal code, or of reducing to writing the imperfect annals of his country. The lawful pretenſions of Euric were perhaps juſtified by ambition and ſucceſs; and the Gothic nation might aſpire, under his command, to the monarchy of Spain and Gaul. Arles and Marſeilles ſurrendered to his arms: he oppreſſed the freedom of Auvergne; Sidonius waited before the gates of the palace among a crowd of ambaſſadors and ſuppliants; and their various buſineſs at the court of Bordeaux atteſted the power, and the renown, of the king of the Viſigoths. The Heruli of the diſtant ocean implored his protection; and the Saxons reſpected the maritime provinces of a prince, who was deſtitute of any naval force. The tall Burgundians ſubmitted to his authority; nor did he reſtore the captive Franks, till he had impoſed on that fierce nation the terms of an unequal peace. The Vandals of Africa cultivated his friendſhip; and the Oſtrogoths of Pannonia were ſupported by his powerful aid againſt the oppreſſion of the neighbouring Huns. The North was agitated, or appeaſed, by the nod of Euric; and the new king of Italy was not ſecure without an alliance with the ſovereign of the Goths. Thus we ſee the fortune of nations often depends on accident; and France may aſcribe her greatneſs to the premature death of Euric, in 485, at a time when his ſon Alaric was an helpleſs infant, and his adverſary Clovis an ambitious and valiant youth.

While Childeric, the father of Clovis, lived an exile in Germany, he was hoſpitably entertained by the queen, as well as by the king of the Thuringians. After his reſtoration, Baſina eſcaped from her huſband's bed to the arms of her lover; openly declaring, that if ſhe had known a man wiſer, ſtronger, or more beautiful, than Childeric, that man ſhould have been the object of her preference. Clovis was the offspring of this ſingular union; and, when he was no more than fifteen years of age, he ſucceeded, by his father's death, to the command of the Salian tribe. The narrow limits of his kingdom were confined to the iſland of the Batavians, with the ancient dioceſes of Tournay and Arras; and at the baptiſm of Clovis, the number of his warriors could not exceed five thouſand. The kindred tribes of the Franks, who had ſeated themſelves along the Belgic rivers, the Scheld, the Meuſe, the Moſelle, and the Rhine, were governed by their independent kings, of the Merovingian race; the equals, the allies, and ſometimes the enemies, of the Salic prince. But the Germans, who in peace obeyed the hereditary juriſdiction of their chiefs, were always free to follow the ſtandard of a popular and victorious general; and the ſuperior merit of Clovis attracted the reſpect of the national confederacy. When he firſt took the field, he had neither gold and ſilver in his coffers, nor wine and corn in his magazines: but he imitated the example of Cæſar, who, in the ſame country, had acquired wealth by the ſword, and purchaſed ſoldiers with the fruits of conqueſt. After each ſucceſsful battle or expedition, the ſpoils were accumulated in one common maſs; every warrior received his proportionable ſhare, and the royal prerogative ſubmitted to the equal regulations of military law. The untamed ſpirit of the barbarians was taught to acknowledge the advantages of regular diſcipline. At the annual review of the month of March, their arms were diligently inſpected; and when they traverſed a peaceful territory, they were prohibited from touching a blade of graſs. The juſtice of Clovis was inexorable; and his careleſs or diſobedient ſoldiers were puniſhed with inſtant death. It would be ſuperfluous to praiſe the valour of a Frank: but the valour of Clovis was directed by cool and conſummate prudence. In all his tranſactions with mankind, he calculated the weight of intereſt, of paſſion, and of opinion; and his meaſures were ſometimes adapted to the ſanguinary manners of the Germans, and ſometimes moderated by the milder genius of Rome, and Chriſtianity. He was ſometimes intercepted in the career of victory; but he accompliſhed, in a reign of thirty years, the eſtabliſhment of the French monarchy in Gaul.—See the article FRANCE, vol. vii. p. 650.

The firſt exploit of Clovis was the defeat of Syagrius, the ſon of Ægidius; and the public quarrel might, on this occaſion, be inflamed by private reſentment. The glory of the father ſtill inſulted the Merovingian race; the power of the ſon might excite the jealous ambition of the king of the Franks. Syagrius inherited, as a patrimonial eſtate, the city and dioceſe of Soiſſons: and after the diſſolution of the weſtern empire, he might reign with the title of king of the Romans. In this ſituation Syagrius received, and boldly accepted, the hoſtile defiance of Clovis; who challenged his rival, in the true ſpirit of chivalry, to appoint the day, and the field, of battle. In the time of Cæſar, Soiſſons would have poured forth a body of fifty thouſand horſe; but the courage and numbers of the Gallic youth were long before exhauſted; and the looſe bands of volunteers who marched under the ſtandard of Syagrius, were incapable of contending with the national valour of the Franks. It would be ungenerous, without ſome more accurate knowledge of his ſtrength and reſources, to condemn the rapid flight of Syagrius, who eſcaped, after the loſs of a battle, to the diſtant court of Thouloufe. The feeble minority of Alaric could not aſſiſt, or protect, an unfortunate fugitive; the Goths were intimidated by the menaces of Clovis; and the Roman king, after a ſhort confinement, was delivered into the hands of the executioner. The Belgic cities ſurrendered to the king of the Franks; and his dominions were enlarged towards the eaſt by the dioceſe of Tongres, which Clovis ſubdued in the tenth year of his reign, A.D. 496.

The riſing fortune of Clovis, and his conduct towards the unfortunate Syagrius, inſulted the fading honour of the Goths. They viewed his rapid progreſs with jealouſy and terror; and the youthful fame of Alaric was oppreſſed by the more potent genius of his rival. Some diſputes aroſe on the edge of their contiguous dominions; and after the delays of fruitleſs negociation, a perſonal interview of the two kings was propoſed and accepted. This conference of Clovis and Alaric was held in a ſmall iſland of the Loire, near Amboiſe. They embraced, familiarly converſed, and feaſted together; and ſeparated with the warmeſt profeſſions of peace, and brotherly love. But their apparent confidence con-

cealed a dark ſuſpicion of hoſtile and treacherous deſigns; and their mutual complaints ſolicited, eluded, and diſclaimed, a final arbitration. Clovis declared the neceſſity of a Gothic war; and Alaric called inſtantly for the ſuccour of his ſubjects and allies. The people of Aquitain and Burgundy received the firſt reproaches of the Gothic king, who juſtly accuſed them of preferring the dominion of the Franks. To reſiſt theſe foreign and domeſtic enemies, Alaric collected his troops, far more numerous than the military powers of Clovis. The Viſigoths reſumed the exerciſe of arms, which they had neglected in a long and luxurious peace: a ſelect band of valiant and robuſt ſlaves attended their maſters to the field; and the cities of Gaul were compelled to furniſh their reluctant aid. Theodoric, king of the Oſtrogoths, who had overturned the empire of Odoacer, and now reigned in Italy, laboured to maintain the tranquillity of Gaul; and he aſſumed, or affected for that purpoſe, the impartial character of a mediator. But the ſagacious monarch dreaded the riſing empire of Clovis, and he was firmly engaged to ſupport the national and religious cauſe of the Goths.

Clovis, with a conſiderable army, was on his march from Paris, when, at the diſtance of forty miles from Poitiers, their progreſs was intercepted by an extraordinary ſwell of the river Vienne; and the oppoſite banks were covered by the encampment of the Viſigoths. Delay muſt be always dangerous to barbarians, who conſume the country through which they march; and had Clovis poſſeſſed leiſure and materials, it might have been impracticable to conſtruct a bridge, or to force a paſſage, in the face of a ſuperior enemy. But by the information of ſome peaſants a ford was diſcovered. The counſels of the Viſigoths were irreſolute and diſtracted. A crowd of impatient warriors, preſumptuous in their ſtrength, and diſdaining to fly before the Franks, excited Alaric to aſſert in arms the name and blood of the conqueror of Rome. The advice of the graver chieftains preſſed him to elude the firſt ardour of the enemy; and to expect, in the ſouthern provinces of Gaul, the veteran and victorious Oſtrogoths, whom the king of Italy had already ſent to his aſſiſtance. The deciſive moments were waſted in idle deliberation; the Goths too haſtily abandoned an advantageous poſt; and the opportunity of a ſecure retreat was loſt by their ſlow and diſorderly motions. After Clovis had paſſed the ford, he advanced with bold and haſty ſteps to prevent the eſcape of the enemy. At the third hour of the day, about ten miles beyond Poitiers, Clovis overtook, and inſtantly attacked, the Gothic army; whoſe defeat was already prepared by terror and confuſion. Yet they rallied in their extreme diſtreſs, and the martial youths, who had clamorouſly demanded the battle, refuſed to ſurvive the ignominy of flight. The two kings encountered each other in ſingle combat. Alaric fell by the hand of his rival, A.D. 507; and the victorious Frank was ſaved by the goodneſs of his cuiraſs, and the vigour of his horſe, from the ſpears of two deſperate Goths, who furiouſly rode againſt him to revenge the death of their ſovereign.

Such is the empire of Fortune, if we may diſguiſe our ignorance under that appellation. A bloody and complete victory has ſometimes yielded no more than the poſſeſſion of the field; and the loſs of ten thouſand men has ſometimes been ſufficient to deſtroy, in a ſingle day, the work of ages. The battle of Poitiers was followed by the conqueſt of the whole Gothic empire in Gaul. Alaric had left behind him an infant ſon, a baſtard competitor, factious nobles, and a diſloyal people; and the remaining forces of the Goths were oppreſſed by the general conſternation, or oppoſed to each other in civil diſcord. The victorious king of the Franks proceeded without delay to Angoulême, which became an eaſy conqueſt. At Bordeaux, which ſubmitted without reſiſtance, Clovis eſtabliſhed his winter-quarters; and his prudent economy tranſported from Thouloufe the royal treaſures, which were depoſited in the capital of the monarchy. The conqueror penetrated as far as the confines of Spain; fixed in Aquitain a colony of Franks; and delegated to his lieutenants the taſk of extirpating the nation of the Viſigoths. But the Viſigoths were ſtill defended by the powerful monarch of Italy. While the balance was equal, Theodoric delayed the march of the Oſtrogoths; but their ſtrenuous efforts reſiſted for a time the ambition of Clovis; and the army of the Franks, and their Burgundian allies, was compelled to raiſe the ſiege of Arles, with the loſs, as it is ſaid, of thirty thouſand men. Theſe viciſſitudes inclined the fierce ſpirit of Clovis to acquieſce in an advantageous treaty of peace. The Viſigoths were now ſuffered to retain the poſſeſſion of Septimania, a narrow tract of ſea-coaſt from the Rhone to the Pyrenees; but the noble province of Aquitain, from thoſe mountains to the Loire, was indiſſolubly united to the kingdom of France.

After the ſucceſs of the Gothic war, Clovis accepted the honours of the Roman conſulſhip, A.D. 510. The emperor Anaſtaſius beſtowed on that powerful rival of Theodoric, the title and enſigns of this ancient dignity; yet, from ſome unknown cauſe, the name of Clovis has never been inſcribed in the Faſti either of the eaſt or weſt. On the ſolemn day, the monarch of Gaul, placing a diadem on his head, was inveſted in the church of St. Martin with a purple tunic and mantle. From thence he proceeded on horſeback to the cathedral of Tours; and, as he paſſed through the ſtreets, profuſely ſcattered a donative of gold and ſilver to the joyful multitude, who inceſſantly repeated their acclamations of Conſul and Auguſtus. The actual, or legal, authority of Clovis, could not receive any new acceſſions from the conſular dignity. It was merely a name, a ſhadow, an empty pageant; and if the conqueror had been inſtructed to claim the ancient prerogatives of that high office, they muſt have expired with the period of its annual duration: yet has this title, in modern times, been reſumed in France, as a mock-emblem of this ancient pageantry of their firſt Chriſtian king.

The Oſtrogoths of Italy, unable to defend their diſtant acquiſitions, reſigned to the Franks the cities of Arles and Marſeilles. This tranſaction was confirmed by the imperial authority; and Juſtinian, yielding to the Franks the ſovereignty of the countries beyond the Alps, abſolved the provincials from their allegiance, and eſtabliſhed the infant throne of the Merovingians. From that era, they enjoyed the right of celebrating at Arles, the games of the Circus; and by a ſingular privilege, which was denied even to the Perſian monarch, the gold coin, impreſſed with their name and image, obtained a legal currency in the empire. See *le Blanc Traite Hiſtorique des Monnoyes de France*, p. 37–43.

The Viſigoths, deprived by Clovis of their Gallic poſſeſſions, found an aſylum in the yet-ſecure provinces of Spain. From the monarchy of the Goths, which ſoon involved the Suevic kingdom of Galicia, the modern Spaniards derive ſome of their national character. The Goths of Spain were long ſeparated from the reſt of mankind, by the lofty ridge of the Pyrenæan mountains: their manners and inſtitutions, as far as they relate to the rude manners of the bulk of their nation, have been already explained. After their converſion from idolatry or hereſy, the Viſigoths were diſpoſed to ſubmit to the laws of a more civiliſed policy. On their aſſembling in Spain, ſixteen national councils were ſucceſſively eſtabliſhed and convened. The ſix metropolitans, Toledo, Seville, Merida, Braga, Tarragona, and Narbonne, preſided according to their reſpective ſeniority; the aſſembly was compoſed of their ſuffragan biſhops, who appeared in perſon, or by their proxies; and a place was aſſigned to the moſt holy or opulent of the Spaniſh abbots. During the firſt three days of the convocation, as long as they agitated the eccleſiaſtical queſtions

queſtions of doctrine and diſcipline, the laity was excluded from their debates; which were conducted, however, with decent ſolemnity. But, on the morning of the fourth day, the doors were thrown open for the entrance of the great officers of the palace, the dukes and counts of the provinces, the judges of the cities, and the Gothic nobles: and their decrees were ratified by the conſent of the people. The ſame rules were obſerved in the provincial aſſemblies, the annual ſynods which were empowered to hear complaints, and to redreſs grievances; and a legal government was ſupported by the prevailing influence of the Spaniſh clergy. The biſhops, for a time, laboured to exalt the mitre above the crown. Yet the national councils of Toledo, in which the free ſpirit of the barbarians was tempered and guided by epiſcopal policy, have eſtabliſhed ſome prudent laws for the common benefit of the king and people. The vacancy of the throne was uſually ſupplied by the choice of the biſhops and palatines; and, after the failure of the line of Alaric, the regal dignity was ſtill limited to the pure and noble blood of the Goths. The clergy, who anointed their lawful prince, always recommended the duty of allegiance: and the ſpiritual cenſures were denounced againſt every ſubject who ſhould reſiſt his authority, conſpire againſt his life, or violate, by an indecent union, the chaſtity even of his widow. But the monarch himſelf, when he aſcended the throne, was bound by a reciprocal oath to God and his people, that he would faithfully execute his important truſt. The faults of his adminiſtration were ſubject to the controul of a powerful ariſtocracy; and the biſhops and palatines were guarded by a fundamental privilege, that they ſhould not be degraded, impriſoned, tortured, nor puniſhed with death, exile, or confiſcation, unleſs by the free and public judgment of their peers.

One of theſe legiſlative councils of Toledo, examined and ratified the code of laws which had been framed by the riſing genius of Euric. As long as the Goths were ſatisfied with the rude cuſtoms of their anceſtors, they indulged their ſubjects in the enjoyment of the Roman law. Their gradual improvement in arts, in policy, and at length in religion, encouraged them to imitate, and to ſuperſede, theſe foreign inſtitutions; and to compoſe a code of civil and criminal juriſprudence, for the uſe of a great and united people. The ſame obligations, and the ſame privileges, were communicated to the nations of the Spaniſh monarchy: the conquerors, inſenſibly renouncing the Teutonic idiom, ſubmitted to the reſtraints of equity, and exalted their people to the participation of freedom; and the merit of this impartial policy was enhanced by the ſituation of Spain under the reign of the Viſigoths. Thus this diviſion of the Gothic nation, ſtill maintaining its juriſdiction over Septimania on the other ſide of the Pyrenees, finally fixed its empire in Spain, over which the Goths continued the ſupreme rulers until that country was conquered by the Saracens or Arabs in the year 713; for particulars of which ſee the article SPAIN.

The other grand diviſion of the Gothic nation, denominated Oſtrogoths, had, as noticed above, eſtabliſhed themſelves in Italy, under the ſovereignty of Theodoric, the fourteenth in lineal deſcent of the royal line of the *Amali*, or demi-gods, who lived about the time of Domitian. He was born in the neighbourhood of Vienna in 455, two years after the death of Attila. A ſignal victory had reſtored the independence of the Oſtrogoths; and the three brothers, Walamir, Theodemir, and Widimir, who ruled that warlike nation with united counſels, had ſeparately pitched their habitations in the fertile though deſolated province of Pannonia. The Huns ſtill threatened them with deſtruction; but their haſty attack was repelled by the ſingle forces of Walamir, and the news of his victory reached the diſtant camp of his brother, in the ſame auſpicious moment that the favourite concubine of Theodemir was delivered of Theodoric. In the eighth year of his age, Theodoric was reluctantly yielded by his father to the public intereſt, as the pledge of an alliance which Leo, emperor of the Eaſt, had conſented to purchaſe by an annual ſubſidy of three hundred pounds of gold. The royal hoſtage was educated at Conſtantinople with care and tenderneſs. His body was formed to all the exerciſes of war; his mind to the habits of liberal converſation; he frequented the ſchools of the moſt ſkilful maſters; but he diſdained or neglected the arts of Greece; and ſo ignorant did he always remain of the firſt elements of ſcience, that a rude mark was contrived to repreſent the ſignature of the king of Italy. As ſoon as he had attained the age of eighteen, he was reſtored to the boſom of the Oſtrogoths, whom the emperor aſpired to gain by liberality and confidence. Walamir had fallen in battle; the youngeſt of the brothers, Widimir, had led away into Italy and Gaul a colony of barbarians; and the whole nation acknowledged for their king Theodemir, the father of Theodoric. His warlike ſubjects admired the ſtrength and ſtature of their young prince; and he ſoon convinced them that he had not degenerated from the valour of his anceſtors. At the head of ſix thouſand volunteers he ſecretly left the camp in queſt of adventures, deſcended the Danube as far as Singidunum or Belgrade, and ſoon returned to his father with the ſpoils of a Sarmatian king whom he had vanquiſhed and ſlain. Such triumphs, however, were productive only of fame; and the invincible Oſtrogoths were reduced to extreme diſtreſs by the want of clothing and food. They unanimouſly reſolved to deſert their Pannonian encampments, and boldly to advance into the warm and wealthy neighbourhood of the Byzantine court, which already maintained in pride and luxury ſo many bands of confederate Goths. After proving by ſome acts of hoſtility that they could be dangerous, or at leaſt troubleſome enemies, the Oſtrogoths ſold at a high price their reconciliation and fidelity, accepted a donative of lands and money, and were entruſted with the defence of the lower Danube, under the command of Theodoric, who ſucceeded after his father's death to the hereditary throne of the Amali.

While Zeno reigned as emperor of the Eaſt, he beſtowed on the king of the Oſtrogoths the rank of patrician and conſul, and gave him the command of the Palatine troops. As long as Theodoric condeſcended to ſerve, he ſupported with courage and fidelity the cauſe of his benefactor: but on the firſt ſhyneſs or jealouſy of the emperor, he became a deadly foe, who ſpread the flames of war from the gates of Conſtantinople to the ſhores of the Adriatic Sea; many flouriſhing cities were reduced to aſhes, and the agriculture of Thrace was almoſt extirpated by the wanton cruelty of the Goths, who deprived their captive peaſants of the right hand that guided the plough. See Malchus Excerpt. Leg. p. 95. On ſuch occaſions, Theodoric ſuſtained the loud reproach of diſloyalty, of ingratitude, and of inſatiate avarice; which could only be defended by the hard neceſſity of his ſituation. He reigned, not as the monarch, but as the miniſter, of a ferocious people, whoſe ſpirit was unbroken by ſlavery, and impatient of real or imaginary inſult. Their poverty was incurable: ſince the moſt liberal donatives were ſoon diſſipated in waſteful luxury, and the moſt fertile eſtates became barren in their hands; they deſpiſed, though they envied, the laborious provincials; and when their ſubſiſtence had failed, the Oſtrogoths embraced the familiar reſources of war and rapine. It had been the wiſh of Theodoric, (ſuch at leaſt was his declaration,) to lead a peaceable and obedient life on the confines of Scythia, till the Byzantine court, by ſplendid and fallacious promiſes, ſeduced him to attack a confederate tribe of Goths, who had been engaged in the party of Baſiliſcus. See the article ROME. He marched from his ſtation in Mæſia, on the ſolemn aſſurance that before he reached Adrianople, he

he ſhould meet a plentiful convoy of proviſions, and a reinforcement of eight thouſand horſe and thirty thouſand foot, while the legions of Aſia were encamped at Heraclea to ſecond his operations. Theſe meaſures were diſappointed by mutual jealouſy. As he advanced into Thrace, the ſon of Theodemir found an inhoſpitable ſolitude, and his Gothic followers, with a heavy train of horſes, of mules, and of waggons, were betrayed by their guides among the rocks and precipices of Mount Sondis, where he was aſſaulted by the arms and invectives of the ſon of Triarius. From a neighbouring height, his artful rival harangued the camp of the Walamirs, and branded their leader with the opprobrious names of child, of madman, of perjured traitor, the enemy of his nation. "Are you ignorant," exclaimed the ſon of Triarius, "that it is the conſtant policy of the Romans to deſtroy the Goths by each other's ſwords? Are you inſenſible that the victor in this unnatural conteſt will be expoſed, and juſtly expoſed, to their implacable revenge? Where are thoſe warriors, my kinſmen and thy own, whoſe widows now lament that their lives were ſacrificed to thy raſh ambition? Where is the wealth which thy ſoldiers poſſeſſed when they were firſt allured from their native homes to inliſt under thy ſtandard? Each of them was then maſter of three or four horſes; they now follow thee on foot like ſlaves, through the deſerts of Thrace; thoſe men who were tempted by the hope of meaſuring gold with a buſhel, thoſe brave men who are as free and as noble as thyſelf." A language ſo well ſuited to the temper of the Goths, excited clamour and diſcontent; and the ſon of Theodemir, apprehenſive of being left alone, was compelled to embrace his brethren, and to imitate the example of Roman perfidy.

In every ſtate of his fortune, the prudence and firmneſs of Theodoric were equally conſpicuous; whether he threatened Conſtantinople at the head of the confederate Goths, or retreated with a faithful band to the mountains and ſea-coaſt of Epirus. At length the accidental death of the ſon of Triarius deſtroyed the balance which the Romans had been ſo anxious to preſerve, the whole nation acknowledged the ſupremacy of the Amali, and the Byzantine court ſubſcribed an ignominious and oppreſſive treaty. The ſenate had already declared, that it was neceſſary to chuſe a party among the Goths, ſince the public was unequal to the ſupport of their united forces; a ſubſidy of two thouſand pounds of gold, with the ample pay of thirteen thouſand men, were required for the leaſt conſiderable of their armies; and the Iſaurians, who guarded not the empire but the emperor, enjoyed, beſides the privilege of rapine, an annual penſion of five thouſand pounds. The ſagacious mind of Theodoric ſoon perceived that he was odious to the Romans, and ſuſpected by the barbarians; he underſtood the popular murmur, that his ſubjects were expoſed in their frozen huts to intolerable hardſhips, while their king was diſſolved in the luxury of Greece, and he prevented the painful alternative of encountering the Goths, as the champion, or of leading them to the field as the enemy, of Zeno. Embracing an enterpriſe worthy of his courage and ambition, Theodoric addreſſed the emperor in the following words: "Although your ſervant is maintained in affluence by your liberality, graciouſly liſten to the wiſhes of my heart! Italy, the inheritance of your predeceſſors, and Rome itſelf, the head and miſtreſs of the world, now fluctuate under the violence and oppreſſion of Odoacer the mercenary. Direct me, with my national troops, to march againſt the tyrant. If I fall, you will be relieved from an expenſive and troubleſome friend: if, with the divine permiſſion, I ſucceed, I ſhall govern in your name, and to your glory, the Roman ſenate, and the part of the republic delivered from ſlavery by my victorious arms." The propoſal of Theodoric was accepted; but the forms of the commiſſion appear to have been expreſſed with a prudent ambiguity; and it was left doubtful, whether the conqueror of Italy ſhould reign as the lieutenant, the vaſſal, or the ally, of the emperor of the Eaſt.

The reputation both of the leader and of the war diffuſed an univerſal ardour; the Walamirs were multiplied by the Gothic ſwarms already engaged in the ſervice, or ſeated in the provinces, of the empire; and each bold barbarian, who had heard of the wealth and beauty of Italy, was impatient to ſeek through the moſt perilous adventures, the poſſeſſion of ſuch enchanting objects. The march of Theodoric muſt be conſidered as the emigration of an entire people; the wives and children of the Goths, their aged parents, and moſt valuable effects, were carefully tranſported; and ſome idea may be formed of the heavy baggage that now followed the camp, by the loſs of two thouſand waggons, which had been ſuſtained in a ſingle action in the war of Epirus. For their ſubſiſtence, the Goths depended on the magazines of corn which was ground in portable mills by the hands of their women; on the milk and fleſh of their flocks and herds; on the caſual produce of the chaſe, and upon the contributions which they might impoſe on all who ſhould preſume to diſpute the paſſage, or to refuſe their friendly intercourſe. Notwithſtanding theſe precautions, they were expoſed to the danger, and almoſt to the diſtreſs, of famine, in a march of ſeven hundred miles, which had been undertaken in the depth of a rigorous winter. Since the fall of the Roman power, Dacia and Pannonia no longer exhibited the rich proſpect of populous cities, well-cultivated fields, and convenient highways: the reign of barbariſm and deſolation was reſtored, and the tribes of Bulgarians, Gepidæ, and Sarmatians, who had occupied the vacant province, were prompted by their native fierceneſs, or the ſolicitations of Odoacer, to reſiſt the progreſs of his formidable enemy. In many obſcure though bloody battles, Theodoric fought and vanquiſhed; till at length, ſurmounting every obſtacle by ſkilful conduct and perſevering courage, he deſcended from the Julian Alps, and diſplayed his invincible banners on the confines of Italy.

Odoacer, a rival not unworthy of his arms, had already occupied the advantageous and well-known poſt of the river Sontius, near the ruins of Aquileia, at the head of a powerful hoſt, whoſe independent chiefs diſdained the duties of ſubordination and the prudence of delays. No ſooner had Theodoric granted a ſhort repoſe and refreſhment to his wearied cavalry, than he boldly attacked the fortifications of the enemy; the Oſtrogoths ſhewed more ardour to acquire, than the mercenaries to defend, the lands of Italy; and the reward of the firſt victory was the poſſeſſion of the Venetian province as far as the walls of Verona. In the neighbourhood of that city, on the ſteep banks of the Adige, he was oppoſed by a new army, reinforced in its numbers, and not impaired in its courage: the conteſt was more obſtinate, but the event was more deciſive; Odoacer fled to Ravenna, Theodoric advanced to Milan, and the vanquiſhed troops ſaluted their conqueror with loud acclamations of reſpect and fidelity. But their want either of conſtancy or of faith, ſoon expoſed the victor to the moſt imminent danger; his vanguard, with ſeveral Gothic counts, which had been imprudently entruſted to a deſerter, was betrayed and deſtroyed near Faenza, by his double treachery. Odoacer again appeared maſter of the field; and the invader, ſtrongly entrenched in his camp of Pavia, was reduced to ſolicit the aid of the Viſigoths of Gaul. This diviſion of the Goths had been tampered with by the ſagacious Odoacer, probably without ſucceſs: but the dark and imperfect materials do not afford us a more ample narrative of the conſequent diſtreſs of Italy, nor of the fierce conflict, which was finally decided by the abilities, experience, and valour, of Theodoric. Immediately before the battle of Verona, he viſited the tent of his mother and ſiſter,

ter, and requeſted, that on a day, the moſt illuſtrious of his life, they would adorn him with the rich garments which they had worked with their own hands. "Our glory," ſaid he, "is mutual and inſeparable. You are known to the world as the mother of Theodoric; and it becomes me to prove, that I am the genuine offspring of thoſe heroes from whom I claim my deſcent." The wife or concubine of Theodemir was inſpired with the ſpirit of the German matrons, who eſteemed their ſons' honour far above their ſafety: and it is aſſerted by Segonius, tom. i. p. 580, that in a deſperate action, when Theodoric himſelf was hurried along by the torrent of a flying crowd, ſhe boldly met them at the entrance of the camp, and, by her ſtern reproaches, drove them back on the ſwords of the enemy.

From the Alps to the extremity of Calabria, Theodoric reigned by the right of conqueſt: the Vandal ambaſſadors ſurrendered the iſland of Sicily as a lawful appendage of his kingdom; and he was accepted as the deliverer of Rome by the ſenate and people, who had ſhut their gates againſt the flying uſurper. Ravenna alone, ſecure in her fortifications, ſuſtained a ſiege of almoſt three years; and the daring ſallies of Odoacer frequently carried ſlaughter and diſmay into the Gothic camp. At length, deſtitute of proviſions and hopeleſs of relief, that unfortunate monarch yielded to the groans of his ſubjects and the clamours of his ſoldiers. A treaty of peace was negotiated by the biſhop of Ravenna; the Oſtrogoths were admitted into the city, and the hoſtile kings conſented, under the ſanction of an oath, to rule with equal and undivided authority the provinces of Italy. The event of ſuch an agreement may be eaſily foreſeen. After ſome days had been devoted to the ſemblance of joy and friendſhip, Odoacer, in the midſt of a ſolemn banquet, was ſtabbed by the command of his rival, on the 3d of March 493. Secret and effectual orders had been previouſly diſpatched; the faithleſs and rapacious mercenaries, at the ſame moment, and without reſiſtance, were univerſally maſſacred; and the royalty of Theodoric was proclaimed by the Goths, with the reluctant and ambiguous conſent of the emperor of the Eaſt.

The firſt act of the reign of Theodoric, was the partition of the lands of Italy, of which he aſſigned the third part to his ſoldiers; a grant which has been arraigned as the ſole injuſtice of his life. Yet even this act has been juſtified by the example of Odoacer, the rights of conqueſt, the true intereſt of the Italians, and the ſacred duty of ſubſiſting a whole people, who, on the faith of his promiſes, had tranſported themſelves into a diſtant land. Under the reign of Theodoric, and in the prolific climate of Italy, the Goths ſoon multiplied to a formidable hoſt of two hundred thouſand men, and the whole amount of their families may be computed by the ordinary addition of women and children. Their invaſion of property was diſguiſed by the name of *hoſpitality*; theſe unwelcome gueſts were irregularly diſperſed over the face of Italy, and the lot of each barbarian was adequate to his birth and office, the number of his followers, and the ruſtic wealth which he poſſeſſed in ſlaves and cattle. The diſtinctions of noble and plebeian were acknowledged; but the lands of every freeman were exempt from taxes, and he enjoyed the ineſtimable privilege of being ſubject only to the laws of his country. Faſhion, and even convenience, ſoon perſuaded the conquerors to aſſume the more elegant dreſs of the natives, but they ſtill perſiſted in the uſe of their mother-tongue; and their contempt for the Latin ſchools was applauded by Theodoric himſelf, who gratified their prejudices by declaring, that the child who had trembled at a rod would never dare to look upon a ſword. Diſtreſs might ſometimes provoke the indigent Roman to aſſume the ferocious manners which were inſenſibly relinquiſhed by the victorious barbarian: but theſe mutual converſions were not encouraged by the policy of a monarch who ſtudied the ſeparation of the Italians and Goths; reſerving the former for the arts of peace, and the latter for the ſervice of war. To accompliſh this deſign, he was anxious to protect his induſtrious ſubjects, as well as to moderate the violence without enervating the valour of his ſoldiers, who were maintained for the public defence. They held their lands and benefices as a military ſtipend: at the ſound of the trumpet, they were prepared to march under the conduct of their provincial officers; and the whole extent of Italy was diſtributed into the ſeveral quarters of a well-regulated camp. The ſervice of the palace and of the frontiers was performed by choice or by rotation; and each extraordinary fatigue was recompenſed by an increaſe of pay and occaſional donatives. Theodoric had convinced his brave companions, that empire muſt be acquired and defended by the ſame arts. After his example, they ſtrove to excel in the uſe, not only of the lance and ſword, the inſtruments of their victories, but of the miſſile weapons, which they were too much inclined to neglect; and the lively image of war was diſplayed in the daily exerciſe and annual reviews of the Gothic cavalry. A firm though gentle diſcipline impoſed the habits of modeſty, obedience, and temperance; and the Goths were at length inſtructed to ſpare the people, to reverence the laws, to underſtand the duties of civil ſociety, and to diſclaim the barbarous licenſe of judicial combat and private revenge.

Among the barbarians of the Weſt, the victory of Theodoric had ſpread a general alarm. But as ſoon as it appeared that he was ſatisfied with conqueſt and deſirous of peace, terror was changed into reſpect, and they ſubmitted to a powerful mediation, which was uniformly employed for the beſt purpoſes of reconciling their quarrels and civilizing their manners. The ambaſſadors who reſorted to Ravenna from the moſt diſtant countries of Europe, admired his wiſdom, magnificence, and courteſy. His domeſtic alliances, a wife, two daughters, a ſiſter, and a niece, united the family of Theodoric with the kings of the Franks, the Burgundians, the Viſigoths, the Vandals, and the Thuringians; and contributed to maintain the harmony, or at leaſt the balance, of the great republic of the Weſt.

It is difficult in the dark foreſts of Germany and Poland to purſue the emigrations of the Heruli, a fierce people who diſdained the uſe of armour, and who condemned their widows and aged parents not to ſurvive the loſs of their huſbands, or the decay of their ſtrength. The king of theſe ſavage warriors ſolicited the friendſhip of Theodoric, and was elevated to the rank of his ſon, according to the barbaric rites of a military adoption. From the ſhores of the Baltic, the Æſtians or Livonians laid their offerings of native amber at the feet of a prince, whoſe fame had excited them to undertake an unknown and dangerous journey of fifteen hundred miles. With the country from whence the Gothic nation derived their origin, he maintained a frequent and friendly correſpondence; the Italians were clothed in the rich ſables of Sweden; and one of its ſovereigns, after a voluntary abdication, found an hoſpitable retreat in the palace of Ravenna.

The life of Theodoric repreſents the rare and meritorious example of a barbarian, who ſheathed his ſword in the pride of victory and the vigour of his age. A reign of thirty-three years was conſecrated to the duties of civil government; and the hoſtilities in which he was ſometimes involved, were ſpeedily terminated by the conduct of his lieutenants, the diſcipline of his troops, the arms of his allies, and even by the terror of his name. He reduced, under a ſtrong and regular government, the countries of Rhætia, Noricum, Dalmatia, and Pannonia, from the ſource of the Danube and the territory of the Bavarians, to the petty kingdom erected by the Gepidæ on the ruins of Sirmium. His prudence could not ſafely entruſt the bulwark of Italy to ſuch turbu-

lent neighbours; and his juſtice might claim the lands which they oppreſſed, either as a part of his kingdom, or as the inheritance of his father. The greatneſs of a ſervant, who was called perfidious becauſe he was ſucceſsful, awakened the jealouſy of the emperor Anaſtaſius; and a war was kindled on the Dacian frontier, by the protection which the Gothic king, in the viciſſitude of human affairs, had granted to one of the deſcendants of Attila. Sabinian, an illuſtrious general, advanced at the head of ten thouſand Romans; and the proviſions and arms, which filled a long train of waggons, were diſtributed to the fierceſt of the Bulgarian tribes. But, in the fields of Margus, the eaſtern powers were defeated by the inferior forces of the Goths and Huns; the flower and even the hope of the Roman armies was irretrievably deſtroyed; and ſuch was the temperance with which Theodoric had inſpired his victorious troops, that as their leader had not given the ſignal of pillage, the rich ſpoils of the enemy lay untouched at their feet. Exaſperated by this diſgrace, the Byzantine court diſpatched two hundred ſhips and eight thouſand men to plunder the ſea-coaſt of Calabria and Apulia; they aſſaulted the ancient city of Tarentum, interrupted the trade and agriculture of the country, and ſailed back to the Helleſpont, proud of their victory over a people whom they ſtill preſumed to conſider as their *Roman* brethren. Their retreat was haſtened by the prudent activity of Theodoric; Italy was covered by a fleet of a thouſand veſſels, which he conſtructed with incredible diſpatch; and his firm moderation was ſoon rewarded by a ſolid and honourable peace. He maintained with a powerful hand the balance of the Weſt, till it was at length overthrown by the genius of Clovis; and although unable to give effectual aſſiſtance to his kinſman the king of the Viſigoths, he ſaved the remains of his family and people, and checked the Franks in the midſt of their inſidious career. Under this reſpectable character, the king of Italy reſtored the prætorian præfecture of the Gauls, reformed ſome abuſes in the civil government of Spain, and accepted the annual tribute and apparent ſubmiſſion of its military governor, who wiſely refuſed to truſt his perſon in the palace of Ravenna. The Gothic ſovereignty of Italy was eſtabliſhed from Sicily to the Danube, from Sirmium or Belgrade to the Atlantic Ocean; and the Greeks themſelves have acknowledged that Theodoric reigned over the faireſt portion of the weſtern empire.

In the ſeventh year of his reign, Theodoric viſited the ancient capital of the weſtern world; the ſenate and people advanced in ſolemn proceſſion to ſalute a ſecond Trajan, a new Valentinian; and he nobly ſupported that character by the aſſurance of a juſt and legal government, in a diſcourſe which he was not afraid to pronounce in public, and to inſcribe on a tablet of braſs. During a reſidence of ſix months in Rome, the fame, the perſon, and the courteous demeanour, of the Gothic king, excited the admiration of the people; and he contemplated, with equal curioſity and ſurpriſe, the monuments that remained of their ancient greatneſs. He imprinted the footſteps of a conqueror on the Capitoline hill, and frankly confeſſed that each day he viewed with freſh wonder the forum of Trajan and his lofty column. The theatre of Pompey appeared, even in its decay, as a huge mountain artificially hollowed and poliſhed, and adorned by human induſtry; and he vaguely computed, that a river of gold muſt have been drained to erect the coloſſal amphitheatre of Titus. The Gothic kings, injuriouſly accuſed of the ruin of antiquity, were anxious to preſerve the monuments of the nation whom they had ſubdued. The royal edicts were framed to prevent the abuſes, the neglect, or the depredations, of the citizens themſelves; and to a profeſſed architect, the annual ſum of two hundred pounds of gold, twenty-five thouſand tiles, and the receipt of cuſtoms from the Lucrine port, were aſſigned for the ordinary repairs of the walls and public edifices. A ſimilar care was extended to the ſtatues of metal or marble of men or animals. The ſpirit of the horſes, which have given a modern name to the Quirinal, was applauded by the barbarians; the brazen elephants of the *Via ſacra* were diligently reſtored; the famous heifer of Myron deceived the cattle, as they were driven through the forum of peace; and an officer was created to protect thoſe works of art, which Theodoric conſidered as the nobleſt ornament of his kingdom.

After the example of the laſt emperors, Theodoric preferred the reſidence of Ravenna, where he cultivated an orchard with his own hands. As often as the peace of his kingdom was threatened by the barbarians, he removed his court to Verona on the northern frontier; and the image of his palace, ſtill extant on a coin, repreſents the oldeſt and moſt authentic model of Gothic architecture. Theſe two capitals, as well as Pavia, Spoleto, Naples, and the reſt of the Italian cities, acquired under his reign the uſeful or ſplendid decorations of churches, aqueducts, baths, porticoes, and palaces. But the happineſs of the ſubject was more truly conſpicuous in the buſy ſcene of labour and luxury, in the rapid increaſe and enjoyment of national wealth. Agriculture revived under the bleſſings of peace, and the number of huſbandmen was multiplied by the redemption of captives. Whenever the ſeaſons were leſs propitious, the precautions of forming magazines of corn, of fixing the price, and prohibiting the exportation, atteſted at leaſt the benevolence of the ſtate; but ſuch was the extraordinary plenty which an induſtrious people produced from a grateful ſoil, that a gallon of wine was then ſold in Italy for leſs than three farthings, and a quarter of wheat at about five ſhillings and ſixpence. A country poſſeſſed of ſo many objects of commerce, ſoon attracted the merchants of the world, whoſe beneficial traffic was encouraged and protected by the liberal ſpirit of Theodoric. The free intercourſe of the provinces by land and water was reſtored and extended; the city gates were never ſhut either by day or by night; and the common ſaying, that a purſe of gold might be ſafely left in the fields, was expreſſive of the conſcious ſecurity of the inhabitants of Italy.

It muſt be with a mingled ſhare of ſurpriſe and pleaſure, that the reader will contemplate the many private virtues and public acts of impartial juſtice, manifeſted to the admiring world during ſo long a reign of a Gothic barbarian. Yet the fair proſpect was overcaſt with the blackeſt clouds; and the declining age of Theodoric was ſtained with the guilt of ſacrificing innocent blood. In the exultations of victory, he had been tempted to deprive the whole party of Odoacer of the civil and even the natural rights of ſociety; a tax unſeaſonably impoſed after the calamities of war, would have cruſhed the riſing agriculture of Liguria; a rigid pre-emption of corn, which was intended for the public relief, muſt have aggravated the diſtreſs of Campania. Theſe dangerous projects were defeated by the virtue and eloquence of Boethius, who, in the preſence of Theodoric, ſucceſsfully pleaded the cauſe of the people. But towards the cloſe of the reign of Theodoric, a diſaffection to his perſon and government was intended or ſuſpected. The ſenator Albinus was accuſed, and convicted of *hoping*, as it was ſaid, the liberty of Rome. "If Albinus be criminal," exclaimed the orator, "the ſenate, and myſelf are all guilty of the ſame crime. If we are innocent, Albinus is equally entitled to the protection of the laws." The advocate of Albinus was at once involved in the danger of his client; their ſignature, which they denied as a forgery, was affixed to the original addreſs, inviting the emperor Juſtin to deliver Italy from the Goths; and three witneſſes, perhaps of infamous reputation, atteſted the treaſonable deſigns of the Roman patrician. Yet his innocence muſt be preſumed, ſince he was deprived by Theodoric of the means of juſtification, and rigorouſly exiled and confined in the tower of Pavia, while

THEODORIC, KING OF THE OSTROGOTHS.

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while the ſenate, at the diſtance of five hundred miles, pronounced a ſentence of confiſcation and death againſt this moſt illuſtrious of its members. The unhappy ſufferer alleviated the horrors of impriſonment by compoſing his admired work on the "Conſolations of Philoſophy;" a celeſtial guide, which poured into his wounds her celeſtial balm; till ſuſpenſe, the worſt of evils, was at length determined by the miniſters of death, who executed, and perhaps exceeded, the inhuman mandate of Theodoric. A cord was faſtened round the head of Boethius, and forcibly tightened, till his eyes almoſt ſtarted fromtheir ſockets; while his executioners refined upon the torture by beating him with clubs till he expired, A. D. 525. In the laſt hours of Boethius, he derived ſome comfort from the ſafety of his two ſons, of his wife, and of his father-in-law, the venerable Symmachus. But the grief of Symmachus was indiſcreet; it almoſt implied that he might dare to revenge the death of an injured friend. He was dragged in chains from Rome to the palace of Ravenna; and the ſuſpicions of Theodoric could only be appeaſed by the blood of this innocent and aged ſenator.

After a life of philanthropy and glory, Theodoric was to deſcend with ſhame and infamy into the grave: his mind was humbled by the contraſt of the paſt, and juſtly alarmed by the terrors of futurity. Anguiſh and remorſe will find their way into the moſt obdurate heart, and ſting the moſt depraved conſcience. The images of theſe innocent ſufferers ſtood conſtantly before the eyes of Theodoric, till unable any longer to ſuſtain the weight of his own guilt, he retired to his chamber, and, as he lay trembling with cold, under a weight of bed-clothes, he expreſſed in broken murmurs to his phyſician Elpidius, his deep repentance for the murders of Boethius and Symmachus. His malady increaſed, and after three days he expired in the palace of Ravenna, A. D. 526, in the thirty-third year of his reign, and the thirty-ſeventh from his firſt invaſion of Italy. Conſcious of his approaching end, he divided his treaſures and provinces between his two grandſons, and fixed the Rhone as their common boundary. Amalaric was reſtored to the throne of Spain; while Italy, with all the conqueſts of the Oſtrogoths, was bequeathed to Athalaric, whoſe age did not exceed ten years, but who was cheriſhed as the laſt male offspring of the line of Amali, by the marriage of his mother Amalaſontha with a royal prince of the ſame blood. In the preſence of the dying monarch, the Gothic chiefs and Italian magiſtrates mutually engaged their faith and loyalty to the young prince, and to his guardian mother; and they received in the ſame awful moment, his laſt ſalutary advice to maintain the laws, to love the ſenate and people of Rome, and to cultivate with decent reverence the friendſhip of the emperor. The monument of Theodoric was erected by his daughter Amalaſontha, in a conſpicuous ſituation, which commanded the city of Ravenna, the harbour, and the adjacent coaſt. A chapel of a circular form, thirty feet in diameter, is crowned by a dome of one entire piece of granite: from the centre of the dome, four columns aroſe, which ſupported, in a vaſe of porphyry, the remains of the Gothic king, ſurrounded by the brazen ſtatues of the twelve apoſtles.

Amalaſontha, the regent and queen of Italy, united in her perſon the two moſt illuſtrious families of the barbarians. Her mother, the ſiſter of Clovis, was deſcended from the long-haired kings of the Merovingian race; and the regal ſucceſſion of the Amali was illuſtrated in the eleventh generation by her father Theodoric. The ſex of his daughter excluded her from the Gothic throne; but his vigilant tenderneſs for his family and his people diſcovered the laſt heir of the royal line, whoſe anceſtors had taken refuge in Spain; and the fortunate Eutharic was ſuddenly exalted to the rank of a conſul and a prince. He enjoyed only a ſhort time the charms of Amalaſontha, and the hopes of the ſucceſſion; and his widow, after the death of her huſband and father, became the only guardian of her ſon Athalaric, and the kingdom of Italy. At the age of about twenty-eight years, the endowments of her mind and perſon had attained their perfect maturity. Her beauty was animated by manly ſenſe, activity, and reſolution. Education and experience had cultivated her talents; her philoſophic ſtudies were exempt from vanity; and, though ſhe expreſſed herſelf with equal elegance in the Greek, the Latin, and the Gothic, tongue, the daughter of Theodoric maintained in her counſels a diſcreet and impenetrable ſilence. By a faithful imitation of the virtues, ſhe revived the proſperity, of his reign: while ſhe ſtrove, with pious care, to expiate the faults, and to obliterate the darker memory, of his declining age. The children of Boethius and Symmachus were reſtored to their paternal inheritance: her extreme lenity never conſented to inflict any corporal or pecuniary penalties on her Roman ſubjects; and ſhe generouſly deſpiſed the clamours of the Goths, who, at the end of forty years, ſtill conſidered the people of Italy as their ſlaves or their enemies. Her ſalutary meaſures were directed by the wiſdom, and celebrated by the eloquence, of Caſſiodorius; ſhe ſolicited and deſerved the friendſhip of the emperor; and the kingdoms of Europe reſpected, both in peace and war, the majeſty of the Gothic throne. But the future happineſs of the queen and of Italy depended on the education of her ſon; who was deſtined, by his birth, to ſupport the different and almoſt incompatible characters of the chief of a barbarian camp, and the firſt magiſtrate of a civilized nation. From the age of ten years, Athalaric was educated with the utmoſt care and diligence; and three venerable Goths were choſen to inſtil the principles of honour and virtue into the mind of their young king. But the untractable youth betrayed the moſt ſullen and vicious diſpoſition; and as he advanced towards manhood, he became abandoned to wine, to women, and to the miſchievous deſigns of his favourites. Thus the king of Italy, at the age of ſixteen, was conſumed by premature intemperance, and left the throne deſtitute of legal authority. Inſtead of ſubmitting to the laws of her country, the daughter of Theodoric conceived the impracticable deſign of ſharing, with one of her couſins, the regal title, and of reſerving in her own hands the ſupreme power. He received the propoſal with reſpect and gratitude; and the eloquent Caſſiodorius announced to the ſenate and the emperor, that Amalaſontha and Theodatus had aſcended the throne of Italy. His birth, (for his mother was the ſiſter of Theodoric,) might be conſidered as an imperfect title; and the choice of Amalaſontha was more ſtrongly directed by her contempt of his avarice and puſillanimity, which had deprived him of the eſteem of the barbarians. But Theodatus was exaſperated by the contempt which he experienced: diabolical revenge lurked in his boſom: and he cauſed the queen of Italy to be impriſoned in a ſmall iſland of the lake of Bolſena, where, after ſhort confinement, ſhe was ſtrangled in the bath by his order, A. D. 535.

Although Theodatus deſcended from a race of heroes, he was ignorant of the art, and averſe to the dangers, of war. The feeble monarch reſigned to Juſtinian the poſſeſſion of Sicily; and was actually treating with that emperor to reſign to him, for a penſion, the whole of his dominions; when, in the interval, two Roman generals, who had entered the province of Dalmatia, were defeated and ſlain by the Gothic troops. The march of Beliſarius was inſtantly directed to the reduction of Italy, and here commenced, A. D. 537, the ſecond Italian Gothic War.

Beliſarius, after he had ſecured Sicily, advanced with his fleet and army to the city of Naples, which he ſtormed and took, while Theodatus ſecured his perſon within the walls of Rome. His cavalry, indeed, advanced forty miles on the Appian way, and encamped in the Pomptine marſhes; but the principal forces of the Goths were

diſperſed in Dalmatia, Venetia, and Gaul. In this inactive ſtate they were ſuffered to remain, until the puſillanimous character of Theodatus emboldened his army to declare him unworthy of his race, his nation, and his throne; and their general Vitiges, whoſe valour had been ſignalized in the Illyrian war, was raiſed with unanimous applauſe on the bucklers of his companions. On the firſt rumour, the abdicated monarch fled from his country; but he was purſued by a Goth whom he had injured, who overtook Theodatus on the Flaminian way, and, regardleſs of his bitter cries and entreaties for his life, ſlaughtered him as he lay proſtrate on the ground, A. D. 536. Though the choice of the Goths had made Vitiges their king, yet he was impatient to return to Ravenna, where he might ſeize the reluctant hand of the daughter of Amalaſontha, in order to found ſome claim of hereditary right. A national council was immediately held, and the new monarch reconciled the impatient ſpirit of the barbarians to a meaſure of diſgrace, which the miſconduct of his predeceſſor had rendered indiſpenſable. The Goths conſented to retreat from the preſence of a victorious enemy; to delay till the next ſpring the operations of offenſive war; to ſummon their ſcattered forces; to relinquiſh their diſtant poſſeſſions, and to truſt even Rome itſelf to the faith of its inhabitants. Leuderis, an aged Gothic warrior, was left in the capital with four thouſand ſoldiers; but who betrayed his truſt to the Romans. Beliſarius, after completing his conqueſt of Naples and Cumæ, advanced haſtily to Rome; and the city, after ſixty years ſervitude, was delivered from the yoke of the barbarians, A. D. 536.

The deſigns of Vitiges were in the mean time executed with diligence and effect. From their ruſtic habitations, from their diſtant garriſons, the Goths aſſembled at Ravenna for the defence of their country; and ſuch were their numbers, that after an army had been detached for the relief of Dalmatia, one hundred and fifty thouſand fighting men marched under the royal ſtandard. According to the degrees of rank or merit, the Gothic king diſtributed arms and horſes, rich gifts, and liberal promiſes. He raiſed the ſieges of Peruſia and Spoleto, and arrived within two miles of Rome, at the foot of the Milvian bridge, in the month of March, 537. At the head of one thouſand horſe, Beliſarius ſallied from the Flaminian gate to mark the ground of an advantageous poſition, and to ſurvey the camp of the barbarians; but while he believed them on the other ſide of the Tyber, he was ſuddenly encompaſſed and aſſaulted by their innumerable ſquadrons. The fate of Italy depended on his life; and the deſerters pointed to the conſpicuous bay horſe which he rode on that memorable day. "Aim at the bay horſe," was the univerſal cry. Every bow was bent, and every javelin directed, againſt that devoted object, and the command was obeyed by thouſands who were ignorant of its real motive. The bolder barbarians advanced to the cloſer combat of ſwords and ſpears; and the praiſe of hiſtory has graced the fall of Viſandus, the Gothic ſtandard-bearer, who maintained his foremoſt ſtation till he was pierced with thirteen wounds, perhaps by the hand of Beliſarius himſelf. The Roman general, ſtrong, active, and invincible, on every ſide diſcharged his mortal ſtrokes: his faithful guards imitated his valour, and defended his perſon; and the Goths, after the loſs of a thouſand men, fled before the arms of the hero. They were raſhly purſued to their camp; and the Romans, oppreſſed by multitudes, in their turn made a precipitate retreat to the gates of the city: the gates were ſhut againſt their own troops; and the public terror was increaſed by the report that Beliſarius was ſlain. The Flaminian gate was at length thrown open; but not till Beliſarius had performed prodigies of valour, and defended himſelf from a hoſt of enemies.

The whole army of the Goths now paſſed the Tyber, and formed the regular ſiege of the city, which continued above a year. The prudence of Beliſarius made every male inhabitant a ſoldier. His troops were relieved by the zeal and diligence of the people, who watched while they ſlept, and laboured while they repoſed. With a veteran band of only five thouſand men, he undertook to defend a circle of twelve miles, againſt an army of one hundred and fifty thouſand barbarians. Yet this formidable hoſt of the Goths was inſufficient to embrace the circumference of the city: of the fourteen gates, ſeven only were inveſted; and Vitiges divided his troops into ſix camps, each of which was fortified with a ditch and rampart. On the Tuſcan ſide of the river, a ſeventh encampment was formed in the field or circus of the Vatican, for the purpoſe of commanding the Milvian bridge and the courſe of the Tyber; but they approached with devout circumſpection the contiguous church of St. Peter; which it was their anxious care to preſerve from ſacrilegious inſult.

From the moment that Beliſarius had determined to ſuſtain a ſiege, his firſt care was to provide againſt the danger of famine. An extraordinary ſupply of corn was imported from Sicily: the harveſts of Campania and Tuſcany were forcibly ſwept for the uſe of the city: and the rights of private property were infringed by the ſtrong plea of the public ſafety. It might eaſily be foreſeen that the enemy would intercept the aqueducts; and the ceſſation of the water-mills was the firſt inconvenience, which was ſpeedily removed by mooring large veſſels, and fixing mill-ſtones in the current of the river. The ſtream was ſoon embarraſſed by the trunks of trees, and polluted with dead carcaſes; yet ſo effectual were the precautions of the Roman general, that the waters of the Tyber ſtill continued to give motion to the mills, and drink to the inhabitants. Anxious to relieve himſelf from an uſeleſs and devouring multitude, Beliſarius iſſued peremptory orders for the inſtant departure of the women, the children, and ſlaves; required his ſoldiers to diſmiſs their male and female attendants, and regulated their allowance, that one moiety ſhould be given in proviſions, and the other in money. Yet in the latter months of the ſiege, the people was expoſed to the miſeries of ſcarcity, unwholeſome food, and contagious diſorders. Beliſarius ſaw with poignant grief their ſufferings; but he rejected with diſdain the idea of flight or capitulation; repreſſed their clamorous impatience for battle; amuſed them with the proſpect of ſpeedy relief; and ſecured himſelf and the city from the effects of deſpair and treachery. Succours for the deliverance of the city at this doubtful criſis fortunately arrived. A fleet of three thouſand Iſaurians caſt anchor in the bay of Naples, and afterwards at Oſtia. Above two thouſand horſe landed at Tarentum; and, after the junction of five hundred ſoldiers of Campania, and a train of waggons laden with wine and flour, they directed their march from Capua to the neighbourhood of Rome. The forces that arrived by land and ſea, were united at the mouth of the Tyber. The Goths, alarmed with doubts and fears, ſet on foot a negotiation with Beliſarius, and the ambaſſadors of Vitiges declared that, for the ſake of peace, they were diſpoſed to renounce for ever the poſſeſſion of Sicily. "The emperor is not leſs generous," replied his lieutenant, with a contemptuous ſmile; "in return for a gift which you no longer poſſeſs, he preſents you with an ancient province of his empire; he reſigns to the Goths the ſovereignty of the Britiſh iſland." Beliſarius rejected with equal firmneſs the offer of a tribute; but he allowed the Gothic ambaſſadors to appeal to Juſtinian himſelf; and conſented to a truce of three months, for the purpoſe of obtaining a peace; but, as was ſuſpected, the negotiation proved abortive.

The whole nation of the Oſtrogoths had been aſſembled for the attack, and was almoſt entirely conſumed in the ſiege, of Rome. If any credit be due to the hiſtorians

hiſtorian of the time, one-third at leaſt of their enormous hoſt was deſtroyed, in frequent and bloody combats under the walls of the city; and the evils of famine and peſtilence were aggravated by their own licentiouſneſs, and the unfriendly diſpoſition of the country. While Vitiges ſtruggled with his fortune; while he heſitated between ſhame and ruin; his retreat was haſtened by domeſtic alarms. The king of the Goths was informed by trembling meſſengers, that the devaſtations of war were ſpread from the Apennine to the Adriatic; that the rich ſpoils and captives of Picenum were ſeized by the Roman general John, ſurnamed the Sanguinary, who had inſulted his capital, and ſeduced the fidelity of his wife, the daughter of Amalaſontha. Yet, before he retired, Vitiges made a laſt effort, either to ſtorm or to ſurpriſe the city. A ſecret paſſage was diſcovered in one of the aqueducts; two citizens of the Vatican were tempted by bribes to intoxicate the guards of the Aurelian gate; an attack was meditated on the walls beyond the Tyber; and the barbarians advanced, with torches and ſcaling-ladders, to the aſſault of the Pincian gate. But every attempt was defeated by the intrepid vigilance of Beliſarius; and the Goths, alike deſtitute of hope and ſubſiſtence, clamorouſly urged their departure. One year and nine days after the commencement of the ſiege, an army, ſo lately ſtrong and triumphant, burnt their tents, and tumultuouſly repaſſed the Milvian bridge, A. D. 538.

The retreating army of Vitiges was nevertheleſs ſo numerous, that he deſtined ten thouſand men for the defence of the cities which he was moſt ſolicitous to preſerve, and detached his nephew Uraias, with an adequate force, to ſecure Milan. At the head of his principal army, he beſieged Rimini, only thirty-three miles diſtant from the Gothic capital. A feeble rampart, and a ſhallow ditch, were maintained by the ſkill and valour of John the Sanguinary, who ſhared the danger and fatigue of the meaneſt ſoldier, and emulated the military ſkill even of Beliſarius. The battering engines of the barbarians were rendered uſeleſs; their attacks were repulſed; and the tedious blockade, which reduced the garriſon to the laſt extremity of hunger, afforded time for the march of the Roman forces. A fleet which had ſurpriſed Ancona, ſailed along the coaſt of the Adriatic to the relief of the beſieged city. The eunuch Narſes landed in Picenum with two thouſand Heruli and five thouſand of the braveſt troops of the empire; while ten thouſand veterans, under the command of Beliſarius himſelf, marched from Rome to their ſupport. Overwhelmed with deſpair, the Goths abandoned the ſiege of Rimini, their tents, their ſtandards, and their leaders; and Vitiges never halted till he found ſhelter within the walls of Ravenna.

To theſe walls, and to ſome fortreſſes deſtitute of any mutual ſupport, the Gothic monarchy was now reduced; and the laſt effort of Beliſarius was to cruſh this monarchy, by marching to beſiege the place. The multitudes which yet adhered to the ſtandard of Vitiges, far ſurpaſſed the number of the Roman troops; but neither prayers, nor defiance, nor the extreme danger of his moſt faithful ſubjects, could tempt the Gothic king to march out in defence of the fortifications of Ravenna. Theſe fortifications were, indeed, impregnable to the aſſaults of art or violence; and when Beliſarius inveſted the capital, he was ſoon convinced that famine only could tame the ſtubborn ſpirit of Vitiges, who had contrived to ſet on foot a ſecret treaty with Juſtinian. The ſea, the land, and the channels of the Po, were guarded by the vigilance of the Roman general; and he even deſcended to the practice of poiſoning the waters, and ſecretly firing the granaries of the beſieged city. While he preſſed the blockade, he was ſurpriſed by the arrival of two ambaſſadors from Conſtantinople, with a treaty of peace, which Juſtinian had ſigned, without deigning to conſult the author of his victories. By this precarious agreement, Italy and the Gothic treaſure were divided, and the provinces beyond the Po were left with the regal title to the ſucceſſors of Theodoric. The ambaſſadors were eager to accompliſh their commiſſion; the captive Vitiges accepted with tranſport the unexpected offer of a crown; honour was leſs prevalent among the Goths, than the want and appetite of food; and the Roman chiefs, who murmured at the continuance of the war, profeſſed a joyful ſubmiſſion to the commands of the emperor. But Beliſarius himſelf rejected the treaty of partition, and declared his reſolution of leading Vitiges in chains to the feet of Juſtinian. The Goths, aſtoniſhed and diſmayed, now offered to ſurrender the city, their riches, and all their ſpoils to Beliſarius, and elect him their king, provided they might retain their liberty as his ſubjects and vaſſals. The policy of Beliſarius perſuaded them that he was diſpoſed to comply with their wiſhes, without engaging an oath or a promiſe for the performance of a treaty which he ſecretly abhorred. The day of the ſurrender was ſtipulated; a fleet, laden with proviſions, ſailed as a welcome gueſt into the harbour; the gates were opened to the fancied king of Italy; and Beliſarius triumphantly marched through the ſtreets of the impregnable Ravenna, A. D. 539. The Romans were aſtoniſhed by their ſucceſs; the multitude of tall and robuſt barbarians were confounded by their own cowardice and puſillanimity; and the maſculine females, ſpitting in the faces of their ſons and huſbands, bitterly reproached them for betraying their dominion and freedom to theſe pygmies of the ſouth, contemptible in their numbers, diminutive in their ſtature. Before the Goths could recover from the firſt ſurpriſe, and claim the accompliſhment of their hopes, the victor eſtabliſhed his power in Ravenna, beyond the danger of repentance and revolt. Vitiges was placed under a guard in his palace; the flower of the Gothic youth was ſelected for the army of the emperor; the remainder of the people was diſmiſſed to their habitations in the ſouthern provinces; and a colony of Italians was ordered to repleniſh the depopulated city. But the reward of Beliſarius was ſuch as too often falls to the lot of the virtuous and the brave: he was received at Conſtantinople with cold ingratitude; the deleterious fang of envy had poiſoned the mind of Juſtinian; and he was diſgraced, diſhonoured, and ſuperſeded in his command.

The degradation and recal of Beliſarius revived the fainting courage of the Goths, who reſpected his genius, and admired his virtue. They had loſt their king, their capital, their treaſures, the provinces from Sicily to the Alps, and the military force of two hundred thouſand barbarians, magnificently equipped with horſes and arms. Yet all was not loſt, as long as Pavia was defended by one thouſand Goths, inſpired by the love of freedom, and the memory of their paſt greatneſs. The ſupreme command was unanimouſly offered to the brave Uraias; and it was in his eyes alone that the diſgrace of his uncle Vitiges could appear as a reaſon of excluſion. His voice turned the election in favour of Hildibald, whoſe perſonal merit was recommended by the hope that his kinſman, the king of the Viſigoths in Spain, would ſupport the common intereſt of the Gothic nation. The ſucceſs of his arms in Liguria and Venetia ſeemed to juſtify their choice; but he ſoon declared to the world, that he was incapable of forgiving or commanding his benefactor. The conſort of Hildibald was deeply mortified by the beauty of the wife of Uraias; and the death of that virtuous patriot excited the indignation of the people. A bold aſſaſſin executed their ſentence, by ſtriking off the head of Hildibald in the midſt of a banquet. The Rugians, a foreign tribe, aſſumed the privilege of election; and Totila, the nephew of the late king, was tempted, by revenge, to deliver himſelf and the garriſon of Trevigo into the hands of the Romans. But the gallant and accompliſhed

youth was eaſily perſuaded to prefer the Gothic throne before the ſervice of Juſtinian; and as ſoon as the palace of Pavia had been purified from the Rugian uſurper, he reviewed the national force of five thouſand ſoldiers, and boldly undertook the reſtoration of the kingdom of Italy.

The ſucceſſors of Beliſarius, eleven generals of equal rank, had neglected to cruſh the feeble remains of the diſunited Goths, till they were rouſed to action by the progreſs of Totila, and the reproaches of Juſtinian. The gates of Verona were ſecretly opened to Artabazus, at the head of one hundred Perſians in the ſervice of the emperor. The Goths fled from the city. At the diſtance of ſixty furlongs the Roman generals halted to ſhare the ſpoil. While they diſputed, the enemy diſcovered the real number of the victors: the Perſians were inſtantly overpowered, and it was by leaping from the wall that Artabazus preſerved a life which he loſt in a few days by the lance of a barbarian, who had defied him to ſingle combat. Twenty thouſand Romans encountered the forces of Totila, near Faenza, and on the hills of Mugello, in the Florentine territory. The ardour of the Romans was ſoon diſſipated. On the firſt attack they abandoned their enſigns, threw down their arms, and diſperſed on all ſides. The new king of the Goths purſued with rapid ſteps the advantages of his victory. He paſſed the Po, traverſed the Apennines, ſuſpended the important conqueſt of Ravenna, Florence, and Rome, and marched through the heart of Italy, to form the blockade of Naples. The Roman chiefs, immured in their fortified cities, and accuſing each other of the common diſgrace, did not preſume to diſturb his enterpriſe. After the reduction of Naples and Cumæ, the provinces of Lucania, Apulia, and Calabria, ſubmitted to the king of the Goths. Totila led his army to the gates of Rome, pitched his camp at Tivoli, within twenty miles of the capital, and exhorted the ſenate and people to conſider and compare the tyranny of the Greeks with the generous freedom of the Gothic reign. To the huſbandmen of Italy the Gothic king iſſued a welcome proclamation, enjoining them to purſue their induſtrious labours, and to reſt aſſured, that, on the payment of the ordinary taxes, they ſhould be defended by his valour and diſcipline from the injuries of war. The ſtrong towns he ſucceſſively attacked; and as ſoon as they had yielded to his arms, he demoliſhed the fortifications; to ſave the people from the calamities of a future ſiege, to deprive the Romans of defence, and to decide the tedious quarrel of the two nations, by an equal conflict in the field of battle. The Roman captives and deſerters were tempted to enliſt in the ſervice of the courteous adverſary; the ſlaves were attracted by the faithful promiſe, that they ſhould never be delivered to their maſters; and from the thouſand warriors of Pavia, a new people, under the ſame appellation of Goths, was inſenſibly formed in the camp of Totila. The wives of the ſenators, who had been taken in war, were reſtored, without a ranſom, to their huſbands; and the violation of female chaſtity was inexorably chaſtiſed with death. The virtues of Totila, whether they proceeded from policy, religious principle, or the inſtinct of humanity, were extremely advantageous to his cauſe: he often harangued his troops; and it was his conſtant theme, that national vice and ruin are inſeparably connected; that victory is the fruit of moral as well as military virtue; and that the prince, and even the people, are reſponſible for the crimes which they neglect to puniſh.

The return of Beliſarius, to ſave the country which he had ſubdued, was preſſed with equal vehemence by his friends, and his ungrateful enemies; and the Gothic war was again impoſed on the injured hero. He accepted the command; and his firſt public oration was addreſſed to the Goths and Romans, in the name of the emperor, "who had ſuſpended for a while the conqueſt of Perſia, and liſtened to the prayers of his Italian ſubjects." But not a man was tempted to deſert the ſtandard of the Gothic king. After reducing the towns of inferior note in the midland provinces of Italy, Totila proceeded, not to aſſault, but to encompaſs and ſtarve, the ancient capital. Rome was guarded by the valour, and afflicted by the avarice, of Beſſas, a veteran chief of Gothic extraction, who filled, with a garriſon of three thouſand ſoldiers, the ſpacious circle of her venerable walls. From the diſtreſs of the people he extracted a profitable trade, and ſecretly rejoiced in the continuance of the ſiege, until the whole garriſon were reduced to feed on dead horſes, dogs, cats, and mice, and eagerly to ſnatch the graſs and nettles which grew among the ruins of the city. A crowd of ſpectres, pale and emaciated, ſurrounded the palace of the governor, urging for ſubſiſtence, or an order for their immediate execution. Beſſas artfully ſoothed the diſcontent, and revived the hopes, of the deſponding Romans, by the vague reports of the fleets and armies which were haſtening to their relief from the extremities of the Eaſt. They derived more rational comfort, however, from the aſſurance that Beliſarius had landed at the port; and, without numbering his forces, they firmly relied on the humanity, the courage, and the ſkill, of their great deliverer.

The foreſight of Totila had raiſed obſtacles worthy of ſuch an antagoniſt. Ninety furlongs below the city, in the narroweſt part of the river, he joined the two banks by ſtrong and ſolid timbers in the form of a bridge; on which he erected two lofty towers, manned by the braveſt of his Goths, and ſtored with miſſile weapons and engines of offence. The approach of the bridge and towers was covered by a ſtrong and maſſy chain of iron; and the chain, at either end, on the oppoſite ſides of the Tyber, was defended by a numerous detachment of archers. But the enterpriſe of forcing theſe barriers, and relieving the capital, diſplays a ſhining example of the boldneſs and conduct of Beliſarius. His cavalry advanced from the port along the public road, to awe the motions, and diſtract the attention, of the enemy. His infantry and proviſions were diſtributed in two hundred large boats; and each boat was ſhielded by a high rampart of thick planks, pierced with many ſmall holes for the diſcharge of miſſile weapons. In the front, two large veſſels were linked together to ſuſtain a floating caſtle, which commanded the towers of the bridge, and contained a magazine of fire, ſulphur, and bitumen. The whole fleet, which the general led in perſon, was moſt laboriouſly moved againſt the current of the river. The chain yielded to the weight, and the enemies who guarded the banks were either ſlain or ſcattered. As ſoon as they touched the principal barrier, the fire-ſhip was inſtantly grappled to the bridge; one of the towers with two hundred Goths, was conſumed by the flames; the aſſailants ſhouted victory; and Rome had been ſaved, if the wiſdom of Beliſarius had not been defeated by the miſconduct of his officers. He had previouſly ſent orders to Beſſas to ſecond his operations by a ſally from the town; and he had directed his lieutenant, by a peremptory command, not to quit the ſtation of the port. But avarice rendered Beſſas immoveable; while the youthful ardour of the lieutenant delivered him into the hands of a ſuperior enemy. The fatal rumour of his defeat was haſtily carried to Beliſarius: he pauſed, and reluctantly ſounded a retreat, to ſave his wife, his treaſures, and the only harbour which he poſſeſſed on the Tuſcan coaſt. The vexation of his mind produced an ardent and almoſt mortal fever; and Rome was left without protection to the indignation of Totila.

Famine had relaxed the ſtrength and diſcipline of the garriſon of Rome. They could derive no effectual ſervice from a dying people; and the inhuman avarice of the merchant at length abſorbed the vigilance of the governor. Four Iſaurian centinels, while their compa-

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nions ſlept, and their officers were abſent, deſcended by a rope from the wall, and ſecretly propoſed to the Gothic king to introduce his troops into the city. The offer was entertained with coldneſs and ſuſpicion; they returned in ſafety; they twice repeated their viſit; the place was twice examined; the conſpiracy was known and diſregarded; and no ſooner had Totila conſented to the attempt, than they unbarred the Aſinarian gate, and gave admittance to the Goths, on the 17th of December 546. Till the dawn of day they halted in order of battle, apprehenſive of treachery or ambuſh; but the troops of Beſſas, with their leader, had already eſcaped; and when the king was preſſed to diſturb their retreat, he prudently replied, that "no fight could be more grateful than that of a flying enemy." The patricians, who were poſſeſſed of horſes, accompanied the governor; their brethren, among whom were Olybrius, Oreſtes, and Maximus, took refuge in the church of St. Peter: but the aſſertion, that only five hundred perſons remained in the capital, inſpires ſome doubt of the fidelity of the hiſtorian. As ſoon as day-light had manifeſted the entire victory of the Goths, their monarch iſſued orders to ſpare the lives of the Romans; and the chaſtity of the maids and matrons was preſerved inviolate from the paſſions of the hungry ſoldiers. But they were rewarded by the freedom of pillage, after the moſt precious ſpoils had been reſerved for the royal treaſury. The next day Totila pronounced two orations, to congratulate and admoniſh his victorious Goths, and to reproach the ſenate, as the vileſt of ſlaves, with their perjury, folly, and ingratitude; ſternly declaring, that their eſtates and honours were juſtly forfeited to the companions of his arms. Againſt the city which had ſo long delayed the courſe of his victories, he appeared inexorable: one-third of the walls, in different parts, were demoliſhed by his command; fire and engines were prepared to conſume or ſubvert the moſt ſtately works of antiquity: and the world was aſtoniſhed by the fatal decree, that Rome ſhould be changed into a paſture for cattle. The firm and temperate remonſtrance of Beliſarius ſuſpended the execution; he warned the barbarian not to ſully his fame by the deſtruction of thoſe monuments which were the glory of the dead, and the delight of the living; and Totila was perſuaded by the advice of an enemy, to preſerve Rome as the ornament of his kingdom, or the faireſt pledge of peace and reconciliation. When he had ſignified to the ambaſſadors of Beliſarius his intention of ſparing the city, he ſtationed an army at the diſtance of one hundred and twenty furlongs, to obſerve the motions of the Roman general. With the remainder of his forces, he marched into Lucania and Apulia, and occupied, on the ſummit of mount Garganus, one of the camps of Hannibal. The ſenators were dragged in his train, and afterwards confined in the fortreſſes of Campania: the citizens, with their wives and children, were diſperſed in exile; and during forty days Rome was abandoned to deſolation and ſolitude.

The loſs of Rome was retrieved by an action, to which many would apply the name of raſhneſs. After the departure of Totila, the Roman general ſallied from the port at the head of a thouſand horſe, cut in pieces the enemy who oppoſed his progreſs, and entered Rome in February 547, at the head of his invincible troops. Reſolved to maintain a ſtation ſo conſpicuous in the eyes of mankind, he ſummoned his army to the ſtandard which he erected on the capitol: the old inhabitants were recalled by the love of their country; and the keys of Rome were ſent a ſecond time to the emperor Juſtinian. The walls, as far as they had been demoliſhed by the Goths, were haſtily repaired with diſſimilar materials; the ditch was reſtored; and iron ſpikes were driven into the highways, to annoy the feet of the horſes. At the expiration of twenty-five days, Totila returned by haſty marches from Apulia, to avenge the injury and diſgrace. Beliſarius expected his approach. The Goths were thrice repulſed in three general aſſaults; they loſt the flower of their troops; the royal ſtandard had nearly fallen into the hands of the enemy, and the fame of Totila began to ſink, as it had riſen, with the fortune of his arms. Whatever ſkill and courage could atchieve, had been performed by the Roman general; who was now ordered to purſue the enemy into the province of Lucania. In this warfare, the hero, invincible againſt the power of the barbarians, was vanquiſhed by the delay, the diſobedience, and the cowardice, of his own officers. He repoſed in his winter-quarters of Crotona, in the full aſſurance that the two paſſes of the Lucanian hills were guarded by his cavalry. They were betrayed by treachery or weakneſs; and the rapid march of the Goths ſcarcely allowed time for the eſcape of Beliſarius to the coaſt of Sicily. At length a fleet and army were aſſembled for the recovery of Roſſano, where the nobles of Lucania had taken refuge. In the firſt attempt, the Roman forces were diſſipated by a ſtorm. In the ſecond they approached the ſhore; but they ſaw the hills covered with archers, the landing-place defended by invulnerable lines of ſpears, and the king of the Goths impatient for battle. Beliſarius retired with a ſigh, and continued to languiſh till he obtained permiſſion for his return.

On the departure of Beliſarius, Peruſia was beſieged; and few cities were impregnable to the Gothic arms. Ravenna, Ancona, and Crotona, ſtill reſiſted the barbarians; and when Totila aſked in marriage one of the daughters of the king of France, he was ſtung by the reproach that the king of Italy was unworthy of his title till it was acknowledged by the Roman people. Three thouſand of his braveſt ſoldiers had been left to defend the capital. On the ſuſpicion of a monopoly, they maſſacred the governor, and announced to Juſtinian, by a deputation of the clergy, that unleſs their offence was pardoned, and their arrears were ſatisfied, they would inſtantly accept the offers of Totila. But the officer who ſucceeded to the command deſerved their eſteem and confidence; and the Goths, inſtead of finding an eaſy conqueſt, had to encounter a vigorous reſiſtance from the ſoldiers and people, who patiently endured the loſs of the port, and of all maritime ſupplies. The ſiege of Rome would perhaps have been raiſed, if the liberality of Totila to the Iſaurians had not encouraged ſome of their venal countrymen to copy the example of treaſon. In a dark night, while the Gothic trumpets ſounded on another ſide, they ſilently opened the gate of St. Paul: the barbarians retook the city, A. D. 549; and the flying garriſon was intercepted before they could reach the harbour of Centumcellæ. A ſoldier trained in the ſchool of Beliſarius, Paul of Cilicia, retired with four hundred men to the mole of Adrian. They repelled the Goths; but they felt the approach of famine; and their averſion to the taſte of horſe-fleſh confirmed their reſolution to riſk the event of a deſperate ſally. But their ſpirit inſenſibly ſtooped to the offers of capitulation: they retrieved their arrears of pay, and preſerved their arms and horſes, by enliſting in the ſervice of Totila; their chiefs, who pleaded an attachment to their wives and children in the Eaſt, were diſmiſſed with honour; and above four hundred enemies, who had taken refuge in the ſanctuaries, were ſaved by the clemency of the victor. He no longer entertained a wiſh of deſtroying the edifices of Rome, which he now reſpected as the ſeat of the Gothic kingdom: the ſenate and people were reſtored to their country; the means of ſubſiſtence were liberally provided; and Totila, in the robe of peace, exhibited the equeſtrian games of the circus. Whilſt he amuſed the eyes of the multitude, four hundred veſſels were prepared for the embarkation of his troops. The cities of Rhegium and Tarentum were reduced: he paſſed into Sicily, the object of his implacable reſentment; and the

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iſland was ſtripped of its gold and ſilver, of the fruits of the earth, and of an infinite number of horſes, ſheep, and oxen. Sardinia and Corſica obeyed the fortune of Italy; and the ſea-coaſt of Greece was viſited by a fleet of three hundred gallies. The Goths were landed in Corcyra and the ancient continent of Epirus; they advanced as far as Nicopolis, the trophy of Auguſtus, and Dodona. But in every ſtep of his victories, the wiſe barbarian repeated to Juſtinian his deſire of peace, and offered to employ the Gothic arms in the ſervice of the empire.

Juſtinian was deaf to peace, and firmly bent on the deliverance of Italy. Beliſarius now repoſed in the ſhade of his laurels; but the command of the principal army was reſerved for Germanus, the emperor's nephew, whoſe rank and merit had been long depreſſed by the jealouſy of the court. His valour had formerly triumphed over the Sclavonians of the Danube, and the rebels of Africa: the firſt report of his promotion revived the hopes of the Italians; and he was privately aſſured, that a crowd of Roman deſerters would abandon, on his approach, the ſtandard of Totila. His ſecond marriage with Malaſontha, the grand-daughter of the great Theodoric, endeared Germanus to the Goths themſelves; and they marched with reluctance againſt the father of a royal infant, the laſt offſpring of the line of Amali. A ſplendid allowance was aſſigned by the emperor; and he ſurpaſſed, in the promptitude and ſucceſs of his levies, the expectation of mankind. He was permitted to ſelect ſome ſquadrons of Thracian cavalry: the veterans, as well as the youth, of Conſtantinople and Europe, engaged their voluntary ſervice; and as far as the heart of Germany, his fame and liberality attracted the aid of the barbarians. The Romans advanced to Sardica; an army of Sclavonians fled before their march; but within two days of their final departure, the deſigns of Germanus were terminated by his ſudden death, A. D. 551. Yet the impulſe which he had given to the war, ſtill continued to act with energy and effect. The maritime towns, Ancona, Crotona, Centumcellæ, reſiſted the aſſaults of Totila. Sicily was reduced by the zeal of Artaban, and the Gothic navy was defeated near the coaſt of the Adriatic. The two fleets were almoſt equal, forty-ſeven to fifty gallies: the victory was decided by the knowledge and dexterity of the Greeks; but the ſhips were ſo cloſely grappled, that only twelve of the Goths eſcaped from this unfortunate conflict. They affected to depreciate an element in which they were unſkilled; but their own experience confirmed the truth of a maxim, "THAT THE MASTER OF THE SEA WILL ALWAYS ACQUIRE THE DOMINION OF THE LAND."

After the loſs of Germanus, the nations were made to ſmile by the ſtrange intelligence, that the command of the Roman armies was given to an eunuch. But the eunuch Narſes is ranked among the few who have reſcued that unhappy name from the contempt of mankind. A mean diminutive body in this caſe concealed the ſoul of a ſtateſman and a warrior. His youth had been employed in the management of the houſehold, and the ſervice of female luxury; but while his hands were buſy, he ſecretly exerciſed the faculties of a vigorous and diſcerning mind. A ſtranger to the ſchools and the camp, he ſtudied in the palace to diſſemble, to flatter, and to perſuade; and as ſoon he approached the perſon of the emperor, Juſtinian liſtened with ſurpriſe and pleaſure to the manly counſels of his chamberlain and private treaſurer. The talents of Narſes were tried and improved in frequent embaſſies; he led an army into Italy, acquired a practical knowledge of the war and the country, and preſumed to ſtrive with the genius of Beliſarius. Twelve years after his return, the eunuch was choſen to atchieve the conqueſt which had been left imperfect by all the Roman generals. Inſtead of being dazzled by vanity or emulation, he ſeriouſly declared, that unleſs he were armed with an adequate force, he would never conſent to riſk his own glory, and that of his ſovereign. Juſtinian granted to the favourite, what he might have denied to the hero: the Gothic war was rekindled from its aſhes, and the preparations were not unworthy of the Roman empire. The key of the public treaſure was put into his hand, to collect magazines, to levy ſoldiers, to purchaſe arms and horſes, to diſcharge the arrears of pay, and to tempt the fidelity, of the fugitives and deſerters. The troops of Germanus were ſtill in arms; they halted at Salona in the expectation of a new leader; and legions of ſubjects and allies were created by the well-known liberality of the eunuch Narſes. The king of the Lombards ſatisfied the obligations of a treaty, by landing two thouſand two hundred of his braveſt warriors, who were followed by three thouſand of their martial attendants. Three thouſand Heruli fought on horſeback under Philemuth, their native chief; and the noble Aratus, who adopted the manners and diſcipline of Rome, conducted a band of veterans of the ſame nation. Dagiſtheus was releaſed from priſon to command the Huns; and Kobad, the grandſon and nephew of the great king, was conſpicuous by the regal tiara at the head of the Perſians, who had devoted themſelves to the fortunes of their prince. Abſolute in the exerciſe of his authority, Narſes led this numerous army from Philippopolis to Salona, from whence he coaſted the eaſtern ſide of the Adriatic as far as the confines of Italy. But his progreſs was checked. The Eaſt could not ſupply veſſels capable of tranſporting ſuch multitudes of men and horſes. The Franks, who, in the general confuſion, had uſurped the greater part of the Venetian provinces, refuſed a paſſage to the friends of the Lombards. The ſtation of Verona was occupied by Teias, with the flower of the Gothic forces; and that ſkilful commander had overſpread the adjacent country with the fall of woods, and the inundation of waters. In this perplexity, an officer of experience propoſed a meaſure, that the Roman army ſhould cautiouſly advance along the ſea-ſhore, while the fleet preceded their march, and ſucceſſively caſt a bridge of boats over the mouths of the Timavus, the Brenta, the Adige, and the Po, which fall into the Adriatic to the north of Ravenna. Nine days he repoſed in the city, collected the fragments of the Italian army, and marched towards Rimini, to meet the defiance of the Goths.

The prudence of Narſes impelled him to ſpeedy and deciſive action. His powers were the laſt effort of the ſtate: the coſt of each day accumulated the enormous account; and the nations, untrained to diſcipline or fatigue, might be raſhly provoked to turn their arms againſt each other, or againſt their benefactor. The ſame conſiderations might have tempered the ardour of Totila. But he ſuſpected the rapid progreſs of treaſon, and reſolved to riſk the Gothic kingdom on the chance of a day, in which the valiant would be animated by inſtant danger, and the diſaffected might be awed by mutual ignorance. In his march from Ravenna, the Roman general chaſtiſed the garriſon of Rimini, traverſed in a direct line the hills of Urbino, and re-entered the Flaminian way nine miles beyond the perforated rock. The Goths were aſſembled in the neighbourhood of Rome, they advanced without delay to ſeek a ſuperior enemy, and the two armies approached each other at the diſtance of one hundred furlongs, between Tagina and the ſepulchres of the Gauls. The haughty meſſage of Narſes was an offer, not of peace, but of pardon. The anſwer of the Gothic king declared his reſolution, to die or conquer. "What day," ſaid the meſſenger, "will you fix for the combat?" "The eighth day," replied Totila: but early the next morning he attempted to ſurpriſe a foe, ſuſpicious of deceit, and prepared for battle. Ten thouſand Heruli and Lombards, of approved valour, were placed in the centre. Each of the

wings was compoſed of eight thouſand Romans; the right was guarded by the cavalry of the Huns, the leftwas covered by fifteen hundred choſen horſe, deſtined, according to the emergencies of action, to ſuſtain the retreat of their friends, or to encompaſs the flank of the enemy. From his ſtation at the head of the right wing, the eunuch rode along the line, expreſſing by his voice and countenance the aſſurance of victory; exciting the ſoldiers of the emperor to puniſh the guilt and madneſs of a band of robbers; and expoſing to their view, gold chains, collars, and bracelets, the rewards of military virtue. From the event of a ſingle combat, they drew an omen of ſucceſs; and they beheld with pleaſure the courage of fifty archers, who maintained a ſmall eminence againſt three ſucceſſive attacks of the Gothic cavalry. At the diſtance only of two bow-ſhots, the armies ſpent the morning in awful ſuſpence. Narſes awaited the charge; and it was delayed by Totila till he had received his laſt ſuccours of two thouſand Goths. While he conſumed the hours in fruitleſs treaty, the king exhibited in a narrow ſpace the ſtrength and agility of a warrior. His armour was enchaſed with gold; his purple banner floated with the wind: he caſt his lance into the air; caught it with the right hand; ſhifted it to the left; threw himſelf backwards; recovered his ſeat; and managed a fiery ſteed in all the paces and evolutions of the equeſtrian ſchool. As ſoon as the ſuccours had arrived, he retired to his tent, aſſumed the dreſs and arms of a private ſoldier, and gave the ſignal of battle. The firſt line of cavalry advanced with more courage than diſcretion, and left behind them the infantry of the ſecond line. They were ſoon engaged between the horns of a creſcent, into which the adverſe wings had been inſenſibly curved, and were ſaluted from either ſide by the vollies of four thouſand archers. Their ardour, and even their diſtreſs, drove them forwards to a cloſe and unequal conflict, in which they could only uſe their lances againſt an enemy equally ſkilled in all the inſtruments of war. A generous emulation inſpired the Romans and their barbarian allies; and Narſes, who calmly viewed and directed their efforts, doubted to whom he ſhould adjudge the prize of ſuperior bravery. The Gothic cavalry was aſtoniſhed and diſordered, preſſed and broken; and the line of infantry, inſtead of preſenting their ſpears, or opening their intervals, were trampled under the feet of the flying horſe. Six thouſand of the Goths were ſlaughtered, without mercy, in the field of Tagina. Their prince, with five attendants, was overtaken by Aſbad, of the race of the Gepidæ; "Spare the king of Italy," cried a diſtant loyal voice; but Aſbad ſtruck his lance through the body of Totila. The blow was inſtantly revenged by his faithful Goths; they tranſported their dying monarch ſeven miles beyond the ſcene of his diſgrace; and his laſt moments were not embittered by the preſence of an enemy. Compaſſion afforded him the ſhelter of an obſcure tomb; but the Romans would not be ſatisfied of their victory, till they beheld the corpſe of the Gothic king. His hat, enriched with gems, and his bloody robe, were preſented to Juſtinian by the meſſengers of triumph.

The victorious eunuch purſued his march through Tuſcany, accepted the ſubmiſſion of the Goths, and encompaſſed the walls of Rome with the remainder of his formidable hoſt. Round the wide circumference, Narſes aſſigned to himſelf, and to each of his lieutenants, a real or a feigned attack, while he ſilently marked the place of the moſt unguarded entrance. Neither the fortifications of Adrian's mole, nor of the port, could long delay the progreſs of the conqueror; and Juſtinian once more received the keys of Rome, which, under his reign, had been five times taken and recovered. But the deliverance of Rome was the laſt calamity of the Roman people. The barbarian allies of Narſes too frequently confounded the privileges of peace and war: they ſpared none, neither regarded the chaſtity of matrons or virgins. The deſpair of the flying Goths had recourſe to ſanguinary revenge: and three hundred youths of the nobleſt families, who had been ſent as hoſtages beyond the Po, were inhumanly ſlain by the ſucceſſor of Totila.

The Gothic war was yet alive. The braveſt of the nation retired beyond the Po; and Teias was unanimouſly choſen to ſucceed and revenge their departed hero. The new king ſent ambaſſadors to implore, or rather to purchaſe, the aid of the Franks, and nobly laviſhed for the public ſafety, the riches which had been depoſited in the coffers of Pavia. The reſidue of the royal treaſure was guarded by his brother Aligern at Cumæ; but the ſtrong caſtle which Totila had fortified, was cloſely beſieged by the arms of Narſes. From the Alps to the foot of mount Veſuvius, the Gothic king, by rapid and ſecret marches, advanced to the relief of his brother, eluded the vigilance of the Roman chiefs, and pitched his camp on the banks of the Sarnus, which flows from Nuceria into the bay of Naples. The river ſeparated the two armies; ſixty days were conſumed in diſtant and fruitleſs combat; and Teias maintained this important poſt, till he was deſerted by his fleet, and the hope of ſubſiſtence. The Goths now embraced a generous reſolution; to diſmiſs their horſes, and die in arms, in the poſſeſſion of their freedom. The king marched at their head, bearing in his right hand, a lance, and a buckler in his left: with the one he ſtruck dead the foremoſt of the aſſailants; with the other he received the weapons which every hand was ambitious to aim againſt his life. After a combat of many hours, his left arm was fatigued by the weight of twelve javelins which hung from his ſhield. Without moving from his ground, or ſuſpending his blows, the hero called aloud on his attendants for a freſh buckler, but in the moment, while his ſide was uncovered, it was pierced by a mortal dart. He fell: and his head, exalted on a ſpear, proclaimed to the nations, that the Gothic kingdom was no more. But the example of his death ſerved only to animate the companions who had ſworn to periſh with their leader. They fought till darkneſs deſcended on the earth. They repoſed on their arms. The combat was renewed with the return of day-light, and maintained with unabated vigour till the evening of the ſecond day. The repoſe of a ſecond night, the want of water, and the loſs of their braveſt champions, determined the ſurviving Goths to accept the capitulation which the prudence of Narſes was inclined to propoſe. They embraced the alternative of reſiding in Italy as the ſubjects and ſoldiers of Juſtinian, or departing with a portion of their private wealth, in ſearch of ſome independent country. Yet the oath of fidelity or exile was ſpurned by one thouſand Goths, who broke away before the treaty was ſigned, and boldly effected their retreat to the walls of Pavia. The ſpirit of Aligern prompted him to imitate, rather than to bewail, his brother: a ſtrong and dexterous archer, he tranſpierced with a ſingle arrow the armour and breaſt of his antagoniſt; and his military conduct defended Cumæ above a year againſt the forces of the Romans. Their induſtry had ſcooped the Sibyll's cave into a prodigious mine; combuſtible materials were introduced to conſume the temporary props: the wall and the gate of Cumæ ſunk into the cavern, but the ruins formed a deep and inacceſſible precipice. On the fragment of a rock, Aligern the Goth ſtood alone and unſhaken, till he calmly ſurveyed the hopeleſs condition of his country, and judged it more honourable to be the friend of Narſes, than the ſlave of the Franks. After the death of Teias, the Roman general ſeparated his troops to reduce the cities of Italy; Lucca ſuſtained a long and vigorous ſiege; and ſuch was the humanity or the prudence of Narſes, that the repeated perfidy of the inhabitants could not provoke him to exact the forfeit lives of their hoſtages. Theſe hoſ-

tages were dismissed in safety; and their grateful zeal at length subdued the obduracy of their countrymen.

After a reign of sixty years, the throne of the western Gothic kings was filled by the exarchs of Ravenna, the representatives of the emperor of the Romans. Their jurisdiction was soon reduced to the limits of a narrow province: but Narses himself, the first and most powerful of the exarchs, administered above fifteen years the jurisprudence of the kingdom of Italy. The Gothic empire being thus extinguished in Italy, A. D. 554, the remnant of the Goths evacuated the country, or mingled with the people. Those who renounced the slavery of the Romans, retired either to Gothland or Bavaria; incorporated themselves among their kindred Goths in Spain; or, uniting in colonies, formed predatory settlements in different countries of Europe.—See the article ROME.

Although this race of northern adventurers has been stigmatized with every epithet that can possibly degrade the exalted character of man; yet in their warfare they have frequently evinced greater humanity and virtue, more elevated sentiments of morality and justice, and a higher regard for the discipline and preservation of the Christian church, than almost any of those more civilized nations with whom they have contended. But a most extraordinary and indisputable proof of their zeal for the propagation of the gospel, as well as of their taste for the extension of the arts on a grand scale, is the remains of their architecture; which, even at the commencement of the nineteenth century, in a survey of our cathedrals and ancient castles, fail not to inspire the mind of the beholder with reverential and religious awe; and with a high sense of the resources of that people, who possessed the information and the means by which such venerable and majestic fabrics were called into existence. See the article GOTHIC ARCHITECTURE, vol. ii. p. 78–93.

GOTHS, *s. pl.* Any nation deficient in general knowledge.—What do you think of the late extraordinary event in Spain? Could you have ever imagined, that those ignorant *Goths* would have dared to banish the Jesuits? *Chesterfield.*

GO-TOU', a town of China, in the province of Setchuen: forty-eight miles north-west of Oumong.

GOT'ZEL, a town of Germany, in the circle of Lower Bavaria: thirty-six miles east of Ratisbon, and twelve north of Deckendorf.

GOT'TELSBRUNN, a town of Germany, in the archduchy of Austria: three miles north of Brugg.

GOT'TEN, *part. pass.* of *get.*—Wisdom cannot be *gotten* for gold. *Job*, xxviii. 15.—Few of them, when they are *gotten* into an office, apply their thoughts to the execution of it. *Temple.*

GOT'TERN, a town of Germany, in the circle of Upper Saxony, and country of Thuringia: four miles north-west of Langen Salza.

GOT'TESBERG, a town of Silesia, in the principality of Schweidnitz. Near it is a mine of gold, and another of coals; the former is not worked. Great quantities of worsted stockings are knit in this town, which contains two churches: nine miles south-south-west of Freyburg, and twelve south-west of Schweidnitz.

GOT'TI (Vincent Louis), a learned Italian cardinal, born at Bologna in 1664. At sixteen years of age he embraced the ecclesiastical life, among the monks of the dominican order; and when he had completed his philosophical course at Bologna, he was sent to study theology at Salamanca in Spain. Upon his return to Italy in 1688, he was appointed professor of philosophy in the university of Bologna; and recommended himself by his talents and virtues to the posts of prior and provincial of his order. In 1728 pope Benedict XIII. raised him to the dignity of the purple; and three years afterwards appointed him member of the congregation for examining bishops. He died at Rome in 1742, in the seventy-ninth year of his age. He displayed considerable erudition and abilities in different theological and controversial works, which are much valued by the Catholics, particularly in Italy. The principal of them are, 1. *De Vera Christi Ecclesia*, 1719, in 3 vols. intended to refute the writings of James Piceninus, a Swiss calvinist minister, in defence of the reformed churches. 2. *Theologia Scholastico-dogmatica, juxta Mentem divi Thomæ Aquinatis, &c.* in 6 vols. 4to. 3. *Colloquia Theologico-polemica, in tres Classes distributa, &c.* 1727, 4to. 4. *De Eligenda inter Dissidentes Christianos Sententia*, 1734, written in answer to a piece with the same title by the famous John le Clerc; and a very diffuse work in defence of the truth of the Christian religion against atheists, idolaters, Mahometans, Jews, &c. published at Rome between the years 1735 and 1740, in twelve volumes.

GOTTIG'NIES (Giles-Francis), a Flemish Jesuit, and able mathematician, born at Brussels in 1630. He entered into the order in 1653, at Mechlin, whence he was sent to pursue his theological studies at Rome, where he spent the residue of his life, employed in teaching the mathematics, and writing different works in that science. He died in 1689, when about fifty-nine years of age. His works are, 1. *Astronomicæ Epistolæ duæ; altera &c. ad excel. Joan. Dominic. Cassinum, Bonon. Archigym. Astron. altera excel. Cassini responsiva, circa Eclipses in Jove, a Mediceis Planetis effectæ*, 1665. 2. *Lettera di Eustachio Divini, con altra Lettera del P. Egid. Francisco de Gottignies, interno alle machie nuovamente Scoperte nel Pianeta di Giove*, 1666, 8vo. 3. *Elementa Geometriæ planæ*, 1669, 12mo. 4. *Figuræ Cometarum qui apparuerunt Annis* 1664, 1665, 1668, *Tabulis Æri incisis expressæ, cum brevissimis Annotationibus.* 5. *Logistica, sive Scientia circa quamlibet Quantitatem demonstrative discurrendi, cui Mathematicum nullum Problema insolubile, nullum Theorema indemonstrabile*, 1674, 4to. 6. *Arithmetica Introductio ad Logisticam universæ Mathesi servientem*, 1676, 4to. 7. *Idea Logistæ speculativè & practicè declarata*, 1677, 4to. 8. *Epistolæ Mathematicæ*, 1678, 4to. 9. *Clavis Logisticæ*, 1679, 4to. 10. *Logistica Universalis, sive Mathesis Gottigniana*, 1687, folio.

GOT'TINGEN, or GOETTINGEN, a city of Germany, in the circle of Lower Saxony, and principality of Calenberg, and principal town of a quarter, or district, to which it gives name, situated in an agreeable, spacious, and fertile, valley, on a canal or branch of the river Leine, which passes through, and divides it into the New Town and Marsch. It contains about one thousand houses and eight thousand souls; the streets are large and convenient, and paved on each side. Here are five parish churches, and one for Calvinists. The Roman Catholics celebrate their service in a private manner. The principal ornament and advantage of Gottingen is its university, founded in 1734, by George II. king of England, and consecrated on the 17th of September 1737, which university, by the inexpressible attention and care of its first curator, baron Munchausen, has acquired a very distinguished reputation. Belonging to it is a large splendid church, with a peculiar pastor, and to it likewise belong a new and stately structure of stone, the ground-floor of which serves as a hall for public lectures, and that above is the library, with a council chamber, and other apartments. This library, to which considerable additions are annually made, if considered with regard to the number, goodness, and value, of its books, is one of the most capital libraries in Europe. It is called the *Bulowcan*, having received its origin from a collection of about ten thousand volumes, bequeathed by the baron Bulow for the public use, and by his heirs given to the university. A royal society for the encouragement of sciences and literature, founded in 1751, and a royal German society, also form part of the university. It has likewise a fine observatory, erected on a tower on the rampart, with a physic garden, and near it a handsome anatomical theatre of ingenious construction, a school for teaching parturition,

turition, &c. The territory belonging to the town is very conſiderable: twenty-two miles north-eaſt of Caſſel, and fifty-one eaſt-ſouth-eaſt of Paderborn. Lat. 51. 24. N. lon. 27. 19. E. Ferro.

GOTT'LEUVE, a town of Germany, in the circle of Upper Saxony, and marggraviate of Meiſſen: ſix miles ſouth-weſt of Konigſtein, and eight ſouth of Pirnau.

GOTTLIE'BEN, a town of Swiſſerland, near the lake of Conſtance, where John Huſs was confined, by order of the council, in the year 1415: one league from Conſtance.

GOTT'LSTORF, a town of Germany, in the archduchy of Auſtria: five miles ſouth-eaſt of Altenmarkt.

GOT'TO, a negro kingdom, ſituated in the interior of Africa, on the banks of the Niger, ſaid to be of great extent. It was formerly divided into a number of petty ſtates, which were governed by their own chiefs; but their private quarrels invited invaſion from the neighbouring kingdoms, ſo that many of the inhabitants of Gotto had been plundered, and ſome driven away as ſlaves. At length a politic chief, of the name of Mooſſee, had addreſs enough to make them unite in hoſtilities againſt the adjoining kingdom of Bamburra; and on this occaſion he was unanimouſly choſen general; the different chiefs conſenting for a time to act under his command. Mooſſee immediately diſpatched a fleet of canoes, loaded with proviſions, from the banks of the lake Dibbie up the Niger towards Jenné, and with the whole of his army puſhed forwards into Bamburra. He arrived on the bank of the Niger oppoſite to Jenné, before the town's-people had the ſmalleſt intimation of his approach; his fleet of canoes joined him the ſame day, and having landed the proviſions, he embarked part of his army, and in the night took Jenné by ſtorm. This event ſo terrified the king of Bamburra, that he ſent meſſengers to ſue for peace, and in order to obtain it, conſented to deliver to Mooſſee a certain number of ſlaves every year; and return every thing that had been taken from the inhabitants of Gotto. Mooſſee, thus triumphant, returned to Gotto, where he was declared king, and the capital of the country is called by his name. *Park.*

GOT'TORP, a caſtle or palace of Denmark, belonging to the prince of Heſſe-Caſſel, adjoining to SLESWICK, which ſee.

GOTT'SCHED (John Chriſtopher), profeſſor of logic, metaphyſics, and poetry, at Leipſic, born in 1700, at Koningſberg in Pruſſia, where his father was a clergyman. He ſtudied in that city, devoted himſelf to theology and poetry, and in 1723 took the degree of maſter of arts, after which he proceeded to Leipſic, and obtained great applauſe by his lectures on the belles-lettres. He was elected, in 1726, ſenior of the poetical ſociety, which was ſoon after transformed into that called the German Society. In 1730 he was appointed extraordinary profeſſor of philoſophy; in 1734 profeſſor of logic and metaphyſics, and at length decemvir of the academy and member of various learned bodies. Good taſte, about this period, began to be revived alſo in Swiſſerland under Bodmer and Breitinger; but as theſe writers purſued a different path, Gottſched was ſoon involved with the latter in ſome literary diſputes, which were carried on, for many years, with great aſperity on both ſides. He died on the 12th of December 1766. His dramatic productions, though not maſter-pieces, laid the firſt grounds for the formation of the German theatre. His principal works are, 1. Eſſay towards a Critical Hiſtory of Poetry for the Germans, Leipſic, 1730, 8vo. 2. The Death of Cato, a tragedy, *ibid.* 1732, 8vo. 3. Collections towards a Critical Hiſtory of the German Language, Poetry, and Eloquence, *ibid.* 1732–44, 8 vols. 8vo. 4. The Firſt Principles of General Philoſophy, *ibid.* 1733, 1735, 1739, 2 parts, 8vo. 5. The German Theatre, *ibid.* 1746–50, 6 parts, 8vo. 6. New Library of the Belles-Lettres and Fine Arts, *ibid.* 1745–50, 10 vols. 8vo. without the author's name. And in conjunction with others, 7. The Principles of the German Language, *ibid.* 1748, large octavo; of this work various improved editions have ſince been publiſhed. 8. Neweſt Poems, Ratiſbon, 1749, 4to. 9. Exerciſes in Elocution, Leipſic, 1755, 8vo. 10. Exerciſes in Latin and German Poetry, for the Uſe of Schools, *ibid.* 1757, 8vo. 11. Materials towards a Hiſtory of the German Dramatic Poetry; or, A Catalogue of all the Tragedies, Comedies, and Operas, which appeared between the Years 1450 and 1760, Leipſic, 1757–65, 2 parts, 8vo. 12. A Manual or Dictionary of the Belles-Lettres and Fine Arts, *ibid.* 1760.

GOTT'SCHEE, a town of Germany, in Middle Carniola: twenty-three miles ſouth-ſouth-eaſt of Laybach, and one hundred and ſixty ſouth-ſouth-weſt of Vienna. Lat. 45. 53. N. lon. 32. 19. E. Ferro.

GOTT'ZENDORF, a town of Germany, in the archduchy of Auſtria: five miles ſouth of Aigen.

GOUACE', a town of France, in the department of the North Coaſt: one league and three-quarters eaſt of Roſtrenen, and four and a half weſt of Uzel.

GOUA'NIA, *ſ.* [ſo named by Jacquin, in honour of *Antoine Gouan*, M. D. author of *Flora Monſpeliaca*, *Hortus Monſpelienſis*, and other celebrated works.] In botany, a genus of the claſs polygamia, order monoecia, natural order rhamni, *Juſſ.* The generic characters are—I. Hermaphrodites. Calyx: perianthium one-leafed, ſuperior, funnel-form, five-cleft; tube permanent; ſegments ovate, acute, ſpreading, deciduous. Corolla: none. Stamina: filaments five, ſubulate, length of the calyx, and alternate with the ſegments; antheræ roundiſh, incumbent, veiled; veil like a cowl, elaſtic. Piſtillum: germ inferior; ſtyle ſubulate, half three-cleft; ſtigmas obtuſe. Pericarpium: fruit dry, three-ſided, diviſible into three ſeeds. Seeds: three parts of the fruit, roundiſh inclined to three-ſided, two-winged. II. Males, on the ſame plant. Calyx, Corolla, and Stamina: as in the hermaphrodites. Piſtillum: germ none; ſtyle as in the hermaphrodites; ſtigmas obſcure or none.—*Eſſential Character.* Hermaphrodite: calyx, five-cleft; corolla, none; antheræ, five, under a veil; ſtyle, three-cleft; fruit, inferior, tripartile. Male: ſimilar, but without germ and ſtigma.

1. Gouania Domingenſis, or chaw-ſtick; a ſingle ſpecies. Stem ſhrubby, and climbing like hops by axillary tendrils; leaves ovate or ovate or oblong-ovate, acuminate, or blunt with a point, unequally ferrate-toothed, or ſlightly crenate only, ſmooth, deep green, alternate, petioled, two inches long; racemes furniſhed with one or two leaflets; the male flowers have no piſtil whatſoever; but there are three or four flowers in a hundred that have a ſtyle without any germ. Native of St. Domingo, in woods. Cultivated by Mr. Miller in 1739.

Propagation and Culture. Sow the ſeeds on a hot-bed early in the ſpring, and when the plants are ſtrong enough, tranſplant each into a ſmall pot filled with light rich earth, and plunge the pots into a moderate hot-bed of tanner's-bark, watering and ſhading the plants until they have taken new root. In winter plunge them into the bark-bed in the ſtove, and water them frequently. The ſtems muſt be ſupported, and they ſeldom produce flowers before the third ſummer.

GOVAR'DO, a diſtrict in the province of Benaco in Italy, containing ten pariſhes, and eight thouſand ſouls. The ſmall town of the ſame name, containing two thouſand inhabitants, is ſituated on the river Chieſe.

GOU'DA, or TERGOUW, a city of Holland, ſituated on a branch of the Rhine called *Iſſel*, where it receives the river Gouw, which gives it its name. It was built in the year 1272, by Florent V. comte of Holland, who granted it great privileges; the foundations had been laid long before. In 1330, it belonged to the houſe of Blois, who built a caſtle; but, in 1398, it was reſtored

to the comte of Holland, together with the lordſhip of Schoonoven; this caſtle was entirely demoliſhed by the citizens, in 1581. In 1438, it was entirely deſtroyed by fire, but afterwards rebuilt in a better manner; the grand market is in a triangular form, with a handſome town-houſe, built in 1449, ſtanding in the centre. The great church is one of the handſomeſt and largeſt in the country, and is particularly celebrated for its painted glaſs windows, ſuppoſed to be the fineſt of the kind in Europe, and preſerved with great care: the principal painters were Theodore and Walter Crabeth, both of this town. Before the Napoleon revolution, the magiſtrates were, a grand bailey, who repreſented the authority of the ancient comtes of Holland, four burgomaſters, and ſeven echevins, choſen by the common council, which conſiſted of forty citizens. The ſituation of the place is very advantageous, on account of the ſluices and the canals, which are running ſtreams; it has alſo a convenient port on the Iſſel, and five gates. It cannot eaſily be beſieged, as they could open the ſluices and lay the country round under water: beſides the great breadth and depth of the ditches; ſo that the only approach is by the banks of the Iſſel, which are ſtrongly fortified. Its principal trade conſiſts in cordage, cheeſe, and tobacco-pipes: there are boats which paſs regularly to Amſterdam, the Hague, Rotterdam, Utrecht, &c. Jaqueline, comteſſe of Holland, in the war with the duke of Burgundy, made this the chief place of her reſidence: nine miles north-eaſt of Rotterdam, and twenty-two ſouth of Amſterdam. Lat. 52. 1. N. lon. 22. 7. E. Ferro.

GOU'DELIN, or GOUDOU'LI (Peter), the moſt celebrated of the poets in the Gaſcon dialect, born in 1579, at Toulouſe. He was brought up to the bar, but devoted himſelf to the compoſition of verſes in his native tongue. By his poetical talent, and the pleaſantry of his converſation, he acquired the favour of the duke de Montmorenci, and other perſons of rank, and might have enriched himſelf, had he not been negligent of his fortune. In his declining years he was only preſerved from indigence by a penſion granted him by his fellow-citizens. He died at Toulouſe in 1649. His memory was honoured by a buſt in the hotel de ville, among the illuſtrious Touloufans. He wrote upon a great variety of ſubjects; and his poem on the death of Henry IV. has been tranſlated into Latin by father Vaniere, and is among the moſt elevated of his compoſitions. His works have been ſeveral times printed at Toulouſe, and they form a part of the Gaſcon poets, printed at Amſterdam, in 2 vols. 12mo. 1700.

GOUD'HURST, an ancient and pleaſant town, near Cranbrook, in Kent, diſtant forty-three miles from London, on the Tunbridge road. It has a market on Wedneſdays for corn and butcher's meat; and two fairs annually, on Auguſt 26 and November 5, to which conſiderable quantities of Welch and Scotch cattle are generally brought. Here are three free-ſchools, one of which is a grammar-ſchool, founded by John Horſenonden, eſq. about the year 1724. Here was formerly a very conſiderable manufactory of woollen cloths; but of late years it has declined. The church was ſo impaired by a ſtorm of thunder and lightning on Auguſt 23, 1637, that its tall ſteeple was obliged to be pulled down.

GOU'DOZ, a town of Aſiatic Turkey, in the province of Natolia: ſeventy-two miles eaſt-north-eaſt of Kiutaja.

GOUDT (Henry), an eminent engraver and painter, born of a noble family at Utrecht in 1570, and was a knight of the palatinate. Being paſſionately fond of painting and engraving, and deſirous of engaging in them, he applied himſelf diligently to drawing, and made a great proficiency therein. He went to Rome, to examine the works of the great maſters in that city. Here he contracted an intimacy with that excellent artiſt Adam Elſheimer; ſtudied his manner of penciling, deſigning, and colouring; and made the works of that painter models for his own imitation. Thoſe pictures which Goudt himſelf painted were neatly and delicately touched, in colour and pencil reſembling Elſheimer. The ſeven prints engraved by him, from Elſheimer, and which continue to be ſo highly prized, are, 1. Ceres drinking from a pitcher; diſtinguiſhed by the name of the *ſorcery*. 2. The flight into Egypt: a night-ſcene, in which the moon and ſtars are introduced with great ſucceſs. 3. The angel with Tobit, who is drawing a fiſh by his ſide. 4. The angel with Tobit, croſſing a ſtream of water. 5. Baucis and Philemon entertaining Jupiter and Mercury. 6. A landſcape, called the *Aurora*, repreſenting the dawn of day: the effect very beautiful. 7. The beheading of St. John in priſon, a ſmall upright oval print, and by far the ſcarceſt. He died in 1639.

GOVE, *ſ.* A mow. *Tuſſer.*

To GOVE, *v. n.* To mow; to put in a gove, goff, or mow. *An old word:*

Load ſafe, carry home, follow time being fair,
Gove juſt in the barn, it is out of deſpair. *Tuſſer.*

GOVE'A (Antony), an eminent juriſt and philologer, born about 1505, at Beja, in Portugal. He was educated at Paris, with two other brothers, under their uncle, who was principal of the college of St. Barbe. After teaching the claſſics for ſome time, he went in 1537 to ſtudy the law at Toulouſe, which he alſo purſued at Avignon and Lyons. At the latter city, he acquired much reputation by defending the philoſophy of Ariſtotle againſt Ramus. In 1548 he obtained a profeſſorſhip of law at Toulouſe, which he quitted the next year, and ſucceſſively occupied chairs at Cahors, Valence, Grenoble, and Turin, where he died in 1565, being then a privy counſellor of Philibert duke of Savoy. He was a man of great erudition, and has been eſteemed ſuperior to Cujas in ability, though inferior in induſtry. He publiſhed ſeveral works on the law, which he collected into one volume, folio, printed at Lyons, in 1562, under the title of *Antonii Goveani Juriſconſulti Opera Juriſcivilis*. He alſo publiſhed an eſteemed commentary on the *Topica* of Cicero, and an edition of Terence.

ANDREW, the younger brother of Antony, was recalled by the king of Portugal, for the purpoſe of eſtabliſhing a college at Coimbra, and took with him ſeveral learned men; but Portugal was no propitious ſeat for the muſes. Govea was principal of the college, and died in 1548.

To GO'VERN, *v. a.* [*gouverner*, Fr. *guberno*, Lat.] To rule as a chief magiſtrate.—This inconvenience is more hard to be redreſſed in the governor than the *governed*; as a malady in a vital part is more incurable than in an external. *Spenſer.*

Slaves to our paſſions we become, and then
It grows impoſſible to *govern* men. *Waller.*

To regulate; to influence; to direct.—The chief point, which he is to carry always in his eye, and by which he is to *govern* all his counſels, deſigns, and actions. *Atterbury.*—To manage; to reſtrain.—Go after her, ſhe's deſperate; *govern* her. *Shakeſpeare.*—To pilot; to regulate the motions of a ſhip.

[In grammar.] To have force with regard to ſyntax: as, *amo governs* the accuſative caſe.

To GO'VERN, *v. n.* To keep ſuperiority; to behave with auſterity:

Your wicked atoms may be working now
To give bad counſel, that you ſtill may *govern*. *Dryden.*

GOV'ERNABLE, *adj.* Submiſſive to authority; ſubject to rule; obedient; manageable.—The flexibleneſs of the former part of a man's age, not yet grown up to be headſtrong, makes it more *governable*. *Locke.*

GOV'ERNABLENESS, *f.* The ſtate of being governable.

GOV'ERNALL, *f.* [from *govern.*] Governance.—He of this gardin had the *governall. Spenſer.*—The old word is *governaill,* but altered by Spenſer to make it rhyme.

GOV'ERNANCE, *f.* Government; rule; management.—Jonathan took the *governance* upon him at that time, and roſe up inſtead of his brother Judas. 1 *Mac.* ix. 31.—Controul, as that of a guardian:

What! ſhall king Henry be a pupil ſtill,
Under the ſurly Glo'ſter's *governance?* *Shakeſpeare.*

Behaviour; manners. *Obſolete:*

He likeſt is to fall into miſchance
That is regardleſs of his *governance.* *Spenſer.*

GOV'ERNANT, *f.* [*gouvernante,* Fr.] A lady who has the care of young girls of quality. The more uſual and proper word is *governeſs.*

GOV'ERNESS, *f.* [*gouvernereſſe,* old French, from *gove.*] A female inveſted with authority:

The moon, the *governeſs* of floods,
Pale in her anger, waſhes all the air,
That rheumatic diſeaſes do abound. *Shakeſpeare.*

A tutoreſs; a woman that has the care of young ladies.—His three younger children were taken from the *governeſs* in whoſe hands he put them. *Clarendon.*—A tutoreſs; an inſtructreſs; a directreſs.—Great affliction that ſevere *governeſs* of the life of man brings upon thoſe ſouls ſhe ſeizes on. *More.*

GOV'ERNMENT, *f.* [*gouvernement,* Fr.] Form of a community with reſpect to the diſpoſition of the ſupreme authority.—An eſtabliſhed ſtate of legal authority:

There they ſhall found
Their *government,* and their great ſenate chuſe
Through the twelve tribes, to rule by laws ordain'd.
Milton.

Adminiſtration of public affairs:

Safety and equal *government* are things
Which ſubjects make as happy as their kings. *Waller.*

Thoſe *governments* which curb not evils, cauſe;
And a rich knave's a libel on our laws. *Young.*

Regularity of behaviour. *Not in uſe:*

You needs muſt learn, lord, to amend this fault;
Though ſometimes it ſhews greatneſs, courage, blood,
Yet oftentimes it doth preſent harſh rage,
Defect of manners, want of *government,*
Pride, haughtineſs, opinion, and diſdain. *Shakeſpeare.*

Manageableneſs; compliance; obſequiouſneſs:

Thy eyes windows fall,
Like death, when he ſhuts up the day of life;
Each part depriv'd of ſupple *government,*
Shall ſtiff and ſtark and cold appear, like death. *Shakeſp.*

Management of the limbs or body. *Obſolete:*

Many a dart they ſhot with fierce intent;
But I them warded all with wary *government.* *Spenſer.*

[In grammar.] Influence with regard to conſtruction.

The origin of civil government muſt have been nearly coeval with mankind; and was, at firſt, either patriarchal or military; as *that* of a parent over his family, or of a commander over his fellow warriors. Paternal authority, and the order of domeſtic life, ſupplied the foundation of *civil government.* Did mankind ſpring out of the earth mature and independent, it would be found perhaps impoſſible to introduce ſubjection and ſubordination among them; but the condition of human infancy prepares men for ſociety, by combining individuals into ſmall communities, and by placing them from the very beginning under direction and controul. A family contains the rudiments of an empire. The authority of one over many, and the diſpoſition to govern and to be governed, are in this way incidental to the very nature, and coeval with the exiſtence, of the human ſpecies. Moreover, the conſtitution of families not only aſſiſts the formation of civil government, by the diſpoſitions which it generates, but alſo furniſhes the firſt ſteps of the proceſs by which empires have been actually reared. A parent would retain a conſiderable part of his authority after his children were grown up, and had formed families of their own. The obedience of which they remembered not the beginning, would be conſidered as natural; and would ſcarcely, during the parent's life, be entirely withdrawn. Here then we ſee the ſecond ſtage in the progreſs of dominion. The firſt was, that of a parent over his young children: this, that of an anceſtor preſiding over his adult deſcendants.

Although the original progenitor was the centre of union to his poſterity, yet it is not probable that the aſſociation would be immediately diſſolved by his death. Connected by habits of intercourſe and affection, and by ſome common rights, neceſſities, and intereſts, they would conſider themſelves as allied to each other in a nearer degree than to the reſt of the ſpecies. Almoſt all would be ſenſible of an inclination to continue in the ſociety in which they had been brought up; and experiencing, as they ſoon would do, many inconveniencies from the abſence of that authority which their common anceſtor exerciſed, eſpecially in deciding their diſputes, and directing their operations in matters in which it was neceſſary to act in conjunction, they might be induced to ſupply his place by a formal choice of a ſucceſſor; or rather might willingly, and almoſt imperceptibly, transfer their obedience to ſome one of the family, who by his age or ſervices, or by the part he poſſeſſed in the direction of their affairs during the lifetime of the parent, had already taught them to reſpect his advice or to attend to his commands; or laſtly, the proſpect of theſe inconveniencies might prompt the firſt anceſtor to appoint a ſucceſſor; and his poſterity, from the ſame motive, united with an habitual deference to the anceſtor's authority, might receive the appointment with ſubmiſſion. Here then we have a tribe incorporated under one chief. Such communities might be increaſed by the acceſſion of numbers, and fulfil the purpoſes of civil union without any other or more regular convention, conſtitution, or form of government, than what we have deſcribed. Every branch that was ſlipped off from the primitive ſtock, and removed to a diſtance from it, would in like manner take root, and grow into a ſeparate tribe. Two or three of theſe tribes might frequently be united into one. Marriage, conqueſt, mutual defence, common diſtreſs, or other accidental coalitions, might produce this effect.

A ſecond ſource of perſonal authority, which would eaſily extend, and often ſuperſede, the patriarchal, is that which reſults from military arrangement. In wars either of aggreſſion or defence, manifeſt neceſſity would prompt thoſe who fought on the ſame ſide to array themſelves under one leader. And although their *leader* was advanced to this eminence for the purpoſe only, and during the operations of a ſingle expedition, yet his authority would not always terminate with the reaſons for which it was conferred. A warrior who had led forth his tribe againſt their enemies with repeated ſucceſs, would procure to himſelf, even in the deliberations of peace, a powerful and permanent influence. If this advantage were added to the authority of the patriarchal chief, or favoured by any previous diſtinction of anceſtry, it would be no difficult undertaking for the perſon who poſſeſſed it to obtain the almoſt abſolute direction of the affairs of the community; eſpecially if he was careful to aſſociate to himſelf proper auxiliaries, and content to practiſe the art of gratifying or removing thoſe who oppoſed his pretenſions.

But although we may be able to comprehend how by his perſonal abilities or fortune one man may obtain the rule over many, yet it ſeems more difficult to explain how empire firſt became *hereditary*, or in what manner ſovereign power, which is never acquired without great merit or management, learns to deſcend in a ſucceſſion, which has no dependence upon any qualities, either of underſtanding or activity. The cauſes which have introduced hereditary dominion into ſo general a reception in the world, are principally the following:—The influence of aſſociation, which communicates to the ſon a portion of the ſame reſpect which was wont to be paid to the virtues, or ſtation, of the father—the mutual jealouſy of other competitors—the greater envy, with which all behold the exaltation of an equal, than the continuance of an acknowledged ſuperiority—a reigning prince leaving behind him many adherents, who can preſerve their own importance only by ſupporting the ſucceſſion of his children.—Add to theſe reaſons, that elections to the ſupreme power having upon trial produced deſtructive contentions, many ſtates would take refuge from a return of the ſame calamities, in a rule of ſucceſſion; and no rule preſents itſelf ſo obvious, certain, and intelligible, as conſanguinity of birth.

The early ſtate of ſociety in moſt countries, and the modern condition of many uncivilized parts of the world, exhibit that appearance, which this account of the origin of civil government would lead us to expect. The earlieſt hiſtories of Paleſtine, Greece, Italy, Gaul, and Britain, inform us, that theſe countries were occupied by many ſmall independent nations, not much perhaps unlike thoſe which are found at preſent amongſt the ſavage inhabitants of North America, and upon the coaſt of Africa. Theſe nations may be conſidered as the amplifications of ſo many ſingle families; or as derived from the junction of two or three families, whom ſociety in war, or the approach of ſome common danger, had united. Suppoſe a country to have been firſt peopled by ſhipwreck on its coaſts, or by emigrants or exiles from a neighbouring country; the new ſettlers having no enemy to provide againſt, and occupied with the care of their perſonal ſubſiſtence, would think little of digeſting a ſyſtem of laws, of contriving a form of government, or indeed of any political union whatever; but each ſettler would remain at the head of his own family, and each family would include all of every age and generation who were deſcended from him. So many of theſe families as were holden together after the death of the original anceſtor, by the reaſons and in the method above recited, would ripen, as the individuals were multiplied, into tribes, clans, hordes, or nations, ſimilar to thoſe into which the ancient inhabitants of many countries are known to have been divided, and which are ſtill found, wherever the ſtate of ſociety and manners is immature and uncultivated.

Nor need we be ſurpriſed at the early exiſtence in the world of ſome vaſt empires, or at the rapidity with which they advanced to their greatneſs, from comparatively ſmall and obſcure originals. Whilſt the inhabitants of ſo many countries were broken into numerous communities, unconnected, and oftentimes contending, with each other; before experience had taught theſe little ſtates to ſee their own danger in their neighbour's ruin; or had inſtructed them in the neceſſity of reſiſting the aggrandizement of an aſpiring power, by alliances and timely preparations; in this condition of civil policy, a particular tribe which by any means had got the ſtart of the reſt in ſtrength, or diſcipline, and happened to fall under the conduct of an ambitious chief, by directing their firſt attempts to the part where ſucceſs was moſt ſecure, and by aſſuming, as they went along, thoſe whom they conquered into a ſhare of their future enterprizes, might ſoon gather a force, which would infallibly overbear any oppoſition that the ſcattered power and unprovided ſtate of ſuch enemies could make to the progreſs of their victories. This theory affords a preſumption, that the earlieſt governments were monarchies, becauſe the government of families, and of armies, from which civil government probably derived its inſtitution, is univerſally monarchical. And this theory incontrovertibly proves, that the notion of ABSOLUTE EQUALITY among men, is founded in error and abſurdity. See the article EQUALITY, vol. vi. p. 874–8.

In order to prove that civil obedience to a government, after it has been formed, is a moral duty, and an obligation upon the conſcience, it hath been uſual with many political writers to ſtate a *compact* between the citizen and the ſtate, as the ground and cauſe of the relation between them; which compact, binding the parties for the ſame general reaſon that private contracts do, reſolves the duty of ſubmiſſion to civil government into the univerſal obligation of fidelity in the performance of promiſes. This compact is twofold: Firſt, an *expreſs* compact by the primitive founders of the ſtate, who are ſuppoſed to have convened for the declared purpoſe of ſettling the terms of their political union, and a future conſtitution of government. The whole body is ſuppoſed, in the firſt place, to have unanimouſly conſented to be bound by the reſolutions of the majority; that majority, in the next place, to have fixed certain fundamental regulations; and then to have conſtituted, either in one perſon, or in an aſſembly (the rule of ſucceſſion or appointment being at the ſame time determined,) a *ſtanding legiſlature*, to whom, under theſe pre-eſtabliſhed reſtrictions, the government of the ſtate was thenceforward committed, and whoſe laws the ſeveral members of the convention were, by their firſt undertaking, thus perſonally engaged to obey. This tranſaction is ſometimes called the *ſocial compact*, and theſe ſuppoſed original regulations compoſe what are meant by the *conſtitution*, the *fundamental laws of the conſtitution*; and form, on one ſide, the *inherent indefeaſible prerogative of the crown*; and, on the other, the unalienable *birthright* of the ſubject.

Secondly, a *tacit* or *implied* compact, by all ſucceeding members of the ſtate, who, by accepting its protection, conſent to be bound by its laws; in like manner as whoever *voluntarily enters* into a private ſociety, is underſtood, without any other or more explicit ſtipulation, to promiſe a conformity with the rules, and obedience to the government, of that ſociety, as the known conditions upon which he is admitted to a participation of its privileges. This account of the ſubject, although ſpecious, and patronized by names the moſt reſpectable, appears to labour under the following objections: that it is founded upon a ſuppoſition falſe in fact, and leading to dangerous concluſions.

No ſocial compact, ſimilar to what is here deſcribed, was ever made or entered into in reality; no ſuch original convention of the people was ever actually held, or in any country could be held, antecedent to the exiſtence of civil government in that country. It is to ſuppoſe it poſſible to call ſavages out of caves and deſerts, to deliberate and vote upon topics, which the experience, and ſtudies, and refinements, of civil life alone ſuggeſt. Therefore no government in the univerſe *began* from this original. Some imitation of a *ſocial* compact may have taken place at a *revolution*. The preſent age has been witneſs to tranſactions, which bear the neareſt reſemblance to this political idea, of any of which hiſtory has preſerved the account or memory: the eſtabliſhment of the United States of North America; and the unprecedented revolution in France.

As the firſt members of the ſtate were bound by expreſs ſtipulation to obey the government which they had erected, ſo the ſucceeding inhabitants of the ſame country are underſtood to promiſe allegiance to the conſtitution and government they find eſtabliſhed, by accepting its protection, claiming its privileges, and acquieſcing in its laws; more eſpecially, by the purchaſe

or

or inheritance of lands, to the poſſeſſion of which, allegiance to the ſtate is annexed, as the very ſervice and condition of the tenure.—Smoothly as this train of argument proceeds, little of it will endure examination. The native ſubjects of modern ſtates are not conſcious of any ſtipulation with their ſovereigns, of ever exerciſing an election whether they will be bound or not by the acts of the legiſlature, of any alternative being propoſed to their choice, of a promiſe either required or given; nor do they apprehend that the validity or authority of the laws depends at all upon *their* recognition or conſent. In all ſtipulations, whether they be expreſſed or implied, private or public, formal or conſtructive, the parties ſtipulating muſt both poſſeſs the liberty of aſſent and refuſal, and alſo be conſcious of this liberty; which cannot with truth be affirmed of the ſubjects of civil government, as government is now, or ever was, actually adminiſtered. This is a defect, which no arguments can excuſe or ſupply: all preſumptions of conſent, without this conſciouſneſs, or in oppoſition to it, are vain and erroneous. Still leſs is it poſſible to reconcile, with any idea of ſtipulation, the practice in which all European nations agree, of founding allegiance upon the circumſtance of nativity, that is, of claiming and treating as ſubjects all thoſe who are born within the confines of their dominions, although removed to another country in their youth or infancy. In this inſtance certainly the ſtate does not preſume a *compact*.

Again, when it is contended that the taking and holding poſſeſſion of land amounts to an acknowledgment of the ſovereign, and a virtual promiſe of allegiance to his laws, it is neceſſary to the validity of the argument to prove, that the inhabitants, who firſt compoſed and conſtituted the ſtate, collectively poſſeſſed a right to the ſoil of the country—a right to parcel it out to whom they pleaſed, and to annex to the donation what conditions they thought fit. How came they by this right? An agreement amongſt themſelves would not confer it: that could only adjuſt what already belonged to them. A ſociety of men vote themſelves to be the owners of a region of the world;—does that vote, unaccompanied eſpecially with any culture, incloſure, or proper act of occupation, make it theirs? does it entitle them to exclude others from it, or to dictate the conditions upon which it ſhall be enjoyed? Yet this original collective right and ownerſhip, is the foundation of all the reaſoning, by which the duty of allegiance is inferred from the poſſeſſion of land.

The theory of government which affirms the exiſtence and the obligation of a ſocial compact, would, after all, merit little diſcuſſion, and, however groundleſs and unneceſſary, ſhould receive no oppoſition from us, did it not appear to lead to concluſions unfavourable to the improvement, and to the peace, of human ſociety: 1ſt. Upon the ſuppoſition that government was firſt erected by, and that it derives all its juſt authority from, reſolutions entered into by a convention of the people, it is capable of being preſumed, that many points were ſettled by that convention, anterior to the eſtabliſhment of the ſubſiſting legiſlature, and which the legiſlature, conſequently, has no right to alter, or interfere with. Theſe points are called the *fundamentals* of the conſtitution; and as it is impoſſible to determine how many, or what, they are, the ſuggeſting of any ſuch ſerves extremely to embarraſs the deliberations of the legiſlature, and affords a dangerous pretence for diſputing the authority of the laws. It was this ſort of reaſoning that produced in this nation the doubt, which ſo much agitated the minds of men in the reign of the ſecond Charles, whether an act of parliament could of right alter or limit the ſucceſſion of the crown.

2dly. If it be by virtue of a compact, that the ſubject owes obedience to civil government, it will follow, that he ought to abide by the form of government which he finds eſtabliſhed, be it ever ſo abſurd, or inconvenient. He is bound by his bargain. It is not permitted to any man to retreat from his engagement, merely becauſe he finds the performance diſadvantageous, or becauſe he has an opportunity of entering into a better. This law of contracts is univerſal: and to call the relation between the ſovereign and the ſubjects a contract, yet not to apply it to the rules, or allow of the effects, of a contract, is an arbitrary uſe of names, and an unſteadineſs in reaſoning, which can teach nothing. Reſiſtance to the *encroachments* of the ſupreme magiſtrate may be juſtified upon this principle; recourſe to arms, for the purpoſe of bringing about an amendment of the conſtitution, *never can*. No form of government contains a proviſion for its own diſſolution; and few governors will conſent to the extinction, or even to any abridgement, of their own power. It does not therefore appear, how deſpotic governments can ever, in conſiſtency with the obligation of the ſubject, be changed or mitigated. Deſpotiſm is the conſtitution of many ſtates; and whilſt a deſpotic prince exacts from his ſubjects the moſt rigorous ſervitude, according to this account, he is only holding them to their agreement. A people may vindicate, by force, the rights which the conſtitution has left them; but every attempt to narrow the prerogative of the crown, by *new* limitations, and in oppoſition to the will of the reigning prince, whatever opportunities may invite, or ſucceſs follow it, muſt be condemned as an infraction of the compact between the ſovereign and the ſubject.

3dly. Every violation of the compact on the part of the governor releaſes the ſubject from his allegiance, and diſſolves the government. It is impoſſible to avoid this conſequence, if we found the duty of allegiance upon compact, and admit any analogy between the ſocial compact and other contracts. In private contracts, the violation and non-performance of the conditions, by one of the parties, vacates the obligation of the other. Now the terms and articles of the ſocial compact being no where extant or expreſſed; the rights and offices of the adminiſtrator of an empire being ſo many and various; the imaginary and controverted line of his prerogative being ſo liable to be over-ſtepped in one part or other of it: the poſition, that every ſuch tranſgreſſion amounts to a forfeiture of the government, and conſequently authorizes the people to withdraw their obedience and provide for themſelves by a new ſettlement, would endanger the ſtability of every political fabric in the world, and has in fact always ſupplied the diſaffected with a topic of ſeditious declamation. If occaſions have ariſen, in which this plea has been reſorted to with juſtice and ſucceſs, they have been occaſions in which a revolution was defenſible upon other and plainer principles. The plea itſelf is at all times dangerous, and ought to be regarded with the eye of watchfulneſs and caution. Wherefore, rejecting the intervention of a compact, as unfounded in its principle, and dangerous in the application, we aſſign for the only ground of the ſubject's obligation, THE WILL OF GOD, AS COLLECTED FROM EXPEDIENCY.

The ſteps by which the argument proceeds are few and direct. "It is the will of God that the happineſs of human life be promoted:"—this is the firſt ſtep, and the foundation not only of this, but of every moral concluſion. "Civil ſociety conduces to that end:"—this is the ſecond propoſition. "Civil ſocieties cannot be upheld, unleſs, in each, the intereſt of the whole ſociety be binding upon every part and member of it:"—this is the third ſtep, and conducts us to the concluſion, namely, "That ſo long as the intereſt of the whole ſociety requires it, that is, ſo long as the eſtabliſhed government cannot be reſiſted or changed without public inconveniency, it is the will of God (which *will* univerſally determines our duty) that the eſtabliſhed government be obeyed,"—and no longer.

To

To theſe obſervations of archdeacon Paley, we might add the remarks of Dr. Shipley, biſhop of St. Aſaph: "Thoſe who think government inſtituted for the ſole uſe and emolument of the perſons who govern, muſt neceſſarily think their powers unlimited. For, on this ſuppoſition, their intereſts alone are to be regarded, of which they are the only judges; and who will ſet bounds to their own pretenſions? But they who believe government to be inſtituted purely for the good of the governed, will naturally ſuppoſe that the powers of their rulers are, in all caſes, to be limited by the end for which thoſe rulers were appointed. And, as they muſt have obſerved that the other opinion has, in all countries, very numerous and very formidable ſupporters; and in practice, at leaſt, has prevailed almoſt univerſally; they muſt regard it as a chief point of civil wiſdom to truſt no more power to rulers than is ſtrictly neceſſary to procure the good of ſociety. Nor ſhould this be conſidered as a diſadvantage even by a prince; for the happieſt ſtate that man can be placed in, is, to be endowed with great powers of doing good, and, at the ſame time, to be preſerved from the temptation to do evil; from the dangers of an unbounded truſt, and from the pride and intoxication of arbitrary power. Righteouſneſs and mercy, or, in the modern uſe of language, juſtice and benevolence, are ſo far from being fit to be excluded from the cabinets of princes, that good government is nothing elſe but the full exerciſe and diſplay of thoſe ſovereign virtues. They contain in themſelves the very art and myſtery of true policy. They are not beneath the attention of the greateſt monarchs; ſince God himſelf does not diſdain to uſe them in the government of the world. And all the miniſterial arts and refinements which lead through the crooked paths of policy, falſely ſo called, are a ſort of unwiſe cunning, that leads only to guilt and diſgrace; and to cheat and betray the people it was their duty to protect. Let it be allowed me to mention one inſtance of this falſe policy with a becoming dread and abhorrence; the art of government by a corrupt influence and bribery. Perhaps human nature does not afford a ſtronger inſtance of the power of habit to make men do wrong. It is unneceſſary and improper for me to ſay, how long this practice has prevailed. There is a decency attending our profeſſion that juſtly reſtrains us from provoking paſſions and enmities by perſonal cenſures; but there is alſo a dignity in truth, which ought to embolden us to inform the greateſt of their duty. It is the fault of the people in all countries to be credulous and ignorant, and to place a too unſuſpecting confidence in their rulers; from whence it has happened, that in moſt nations, except our own, the appearance, or name, of freedom, is hardly to be met with. But if any thing upon earth is ſacred, it is the rights which a people have expreſsly reſerved to themſelves; after truſting every thing elſe to the diſcretion of their rulers. Such, with us, is the ſecurity of our perſons; a trial by known laws and unprejudiced judges; and, above all, the independency of parliament, eſpecially of our own repreſentatives. To undermine theſe rights, and to corrupt theſe repreſentatives, would be to deprive us of all that is valuable in our free government; and to ruin the very eſſence of our conſtitution. Under the appearance and the expenſive forms of limited monarchy, it ſubjects us, in effect, to arbitrary will. It mocks men with the image of liberty, while it ſlips on their fetters, and rivets them faſt."

It were almoſt needleſs to obſerve, that the obligation of obedience to civil government, is limited to actions in themſelves not criminal. Virtue has claims, which are prior and ſuperior to thoſe of political reſtraint. When William Tell was ordered to ſhoot with an arrow at an apple placed on the head of his ſon, if he had been uncertain of his aim, and had, in conſequence, refuſed to comply with the inhuman mandate, who could have preſumed to call his conduct *criminal* on the ſcore of diſobedience? His obligation to abſtain from acting as an inſtrument, in taking away the life of his ſon, was ſuperior to that which bound his obedience to the commands of the duke of Auſtria, however juſt may be ſuppoſed to have been the foundation of the authority which the latter exerciſed over the inhabitants of Uri, either as a political chief, or as a military commander. This, however, is widely different from leaving a man's general obligation of obedience to the civil government of his country, to depend on his private opinion of its right; or his obſervance of the laws, to depend on *his* opinion of their general expediency. It is evidently incumbent on civil government, in its ordinances or adminiſtration, to reſpect the conſciences of men: duty and right in this, as in all other caſes, are reciprocal. On the other hand, it is the duty of every man to endeavour that his conſcience may be rightly informed. But with an exception of criminal actions, and in due ſubordination to the rights of conſcience, obedience and loyalty to civil government are duties of ſacred and indiſpenſable obligation.

All mankind will agree, that government ſhould be repoſed in ſuch perſons in whom thoſe qualities are moſt likely to be found, the perfection of which is among the attributes of him who is emphatically ſtiled *The Supreme Being*; the three grand requiſites of WISDOM, of GOODNESS, and of POWER: wiſdom to diſcern the real intereſt of the community; goodneſs to endeavour always to purſue that real intereſt; and ſtrength or power to carry this knowledge and intention into action. Theſe are the natural foundations of ſovereignty, and theſe are the requiſites that ought to be found in every well-conſtituted frame of government.

Political writers have in general reſtrained the powers of legiſlation to no more than three regular forms of government. The firſt, when the ſovereign power is veſted in an aggregate aſſembly conſiſting of all the free members of a community, which is called a *democracy*; the ſecond when it is lodged in a council, compoſed of ſelect members, and then it is ſtiled an *ariſtocracy*; the laſt when it is entruſted in the hands of a ſingle perſon, and then it aſſumes the name of a *monarchy*. All other ſpecies of government, they contend, are either corruptions of, or reducible to, theſe three. By the ſovereign power, is meant the power of making laws; for wherever that power reſides, all others muſt conform to, and be directed by it, whatever appearance the outward form and adminiſtration of the government may put on. For it is at any time at the option of the legiſlature to alter that form and adminiſtration by a new edict or rule, and to put the execution of the laws into whatever hands it pleaſes, by conſtituting one, or a few, or many, executive magiſtrates; and all the other powers of the ſtate muſt obey the legiſlative power in the diſcharge of their ſeveral functions, or elſe the conſtitution or form of government is at an end.

In a democracy, where the right of making laws reſides in the people at large, public virtue, or goodneſs of intention, is more likely to be found, than either of the other qualities of government. Popular aſſemblies are frequently injudicious in their contrivance, and irreſolute in their execution; but generally intend to do the thing that is moſt proper; and always manifeſt a degree of patriotiſm or public ſpirit. In ariſtocracies there is more wiſdom to be found, than in the other frames of government; being compoſed, or intended to be compoſed, of the moſt experienced citizens. But there is leſs integrity than in a republic, and leſs ſtrength than in a monarchy. A monarchy is indeed the moſt powerful of any; for by the entire conjunction of the legiſlative and executive powers, all the ſinews of government are knit together, and united in the hand of the prince;

but

but then, in abſolute monarchies, there is imminent danger of his employing that ſtrength to oppreſſive purpoſes.

Thus theſe three forms of government have, all of them, their ſeveral perfections and imperfections. Democracies are uſually the beſt calculated to direct the end of a law, ariſtocracies to invent the means by which that end ſhall be obtained, and monarchies to carry thoſe means into execution. The ancients had no idea of any other permanent form of government but theſe three: for though Cicero declares himſelf of opinion, "*eſſe optimè conſtitutam rempublicam, quæ ex tribus generibus illis, regali, optimo, et populari, ſit modicè confuſa,*" yet Tacitus treats this notion of a mixed government, formed out of them all, and partaking of the advantages of each, as a viſionary fabric, which could never be laſting or ſecure.

But, happily for Engliſhmen, The Britiſh Conſtitution has long remained, and it is to be hoped will long continue, a ſtanding exception to the truth of this obſervation. For as, with us, the executive power of the laws is lodged in a ſingle perſon, they have all the advantages of ſtrength and diſpatch, that are to be found in the moſt abſolute monarchy: and as the legiſlature of this kingdom is intruſted to three diſtinct powers, entirely independent of each other; firſt the King; ſecondly the Lords ſpiritual and temporal, which is an ariſtocratical aſſembly of perſons ſelected for their piety, their birth, their wiſdom, their valour, or their property; and thirdly the Houſe of Commons, freely choſen by the people from among themſelves, which makes it a kind of democracy; as this aggregate body, actuated by different ſprings, and attentive to different intereſts, compoſes the Britiſh parliament, and has the ſupreme diſpoſal of every thing; there can be no inconvenience attempted by either of the three branches, but which will be withſtood by one of the other two; each branch being armed with a negative power, ſufficient to repel any innovation which it ſhall think inexpedient or dangerous.

Here then is lodged the Sovereignty of the Britiſh Conſtitution; and lodged as beneficially as is poſſible for ſociety. For in no other ſhape could we be ſo certain of finding the three great qualities of government ſo well and ſo happily united. If the ſupreme power were lodged in any of the three branches ſeparately, we muſt be expoſed to the inconveniences, of either abſolute monarchy, ariſtocracy, or democracy, and ſo want two of the three principal ingredients of good policy, either virtue, wiſdom, or power. If it were lodged in any two of the branches; for inſtance in the king and houſe of lords, our laws might be providentially made, and well executed, but they might not have always the good of the people in view: if lodged in the king and commons, we ſhould want that circumſpection and mediatory caution which the wiſdom of the peers is to afford: if the ſupreme rights of legiſlature were lodged in the two houſes only, and the king had no negative upon their proceeding, they might be tempted to incroach upon the royal prerogative, or perhaps to aboliſh the kingly office, and thereby weaken (if not totally deſtroy) the ſtrength of the executive power. But the conſtitutional government of this iſland is ſo admirably tempered and compounded, that nothing can endanger or hurt it, but deſtroying the equilibrium of power between one branch of the legiſlature and the reſt. For if ever it ſhould happen that the independence of any one of the three ſhould be loſt, or that it ſhould become ſubſervient to the views of either of the other two, there would ſoon be an end of our conſtitution. 1 *Blackſtone's Comm.* 48–52. *Introd.*

Of the Britiſh Conſtitution, archdeacon Paley has given the following analyſis:—By the conſtitution of a country is meant ſo much of its law, as relates to the deſignation and form of the legiſlature; the rights and functions of the ſeveral parts of the legiſlative body; the conſtruction, office, and juriſdiction, of courts of juſtice. The conſtitution is one principal diviſion, ſection, or title, of the code of public laws; diſtinguiſhed from the reſt only by the ſuperior importance of the ſubject of which it treats. Therefore the terms *conſtitutional* and *unconſtitutional*, mean legal and illegal. The diſtinction and the ideas, which theſe terms denote, are founded in the ſame authority with the law of the land upon any other ſubject; and to be aſcertained by the ſame inquiries. In England, the ſyſtem of public juriſprudence is made up of acts of parliament, of deciſions of courts of law, and of immemorial uſages: conſequently, theſe are the principles of which the Engliſh conſtitution itſelf conſiſts; the ſources from which all our knowledge of its nature and limitations is to be deduced, and the authorities to which all appeal ought to be made, and by which every conſtitutional doubt and queſtion can alone be decided. This plain and intelligible definition is the more neceſſary to be preſerved in our thoughts, as ſome writers upon the ſubject abſurdly confound what is conſtitutional, with what is expedient; pronouncing forthwith a meaſure to be unconſtitutional, which they adjudge in any reſpect to be detrimental or dangerous: whilſt others again aſcribe a kind of tranſcendant authority, or myſterious ſanctity, to the conſtitution, as if it were founded in ſome higher original than that which gives force and obligation to the ordinary laws and ſtatutes of the realm, or were inviolable on any other account than its intrinſic utility. An act of parliament in England can never be unconſtitutional, in the ſtrict and proper acceptation of the term; in a lower ſenſe it may, viz. when it militates againſt the ſpirit, contradicts the analogy, or defeats the proviſion, of other laws, made to regulate the form of government. Even that flagitious abuſe of their truſt, by which a parliament of Henry the Eighth conferred upon the king's proclamation the authority of law, was unconſtitutional only in this latter ſenſe.

Moſt of thoſe who treat of the Britiſh conſtitution, conſider it as a ſcheme of government formerly planned and contrived by our anceſtors, in ſome certain era of our national hiſtory, and as ſet up in purſuance of ſuch regular plan and deſign. Something of this ſort is ſecretly ſuppoſed, or referred to, in the expreſſions of thoſe who ſpeak of the "principle of the conſtitution," of bringing back the conſtitution to its "firſt principles," of reſtoring it to its "original purity," or "primitive model." Now this appears to be an erroneous conception of the ſubject. No ſuch plan was ever formed, conſequently no ſuch firſt principles, original model, or ſtandard, exiſt. That is, there never was a date or point of time in our hiſtory, when the government of England was to be ſet up *anew*, and when it was referred to any ſingle perſon, or aſſembly, or committee, to frame a charter for the future government of the country; or when a conſtitution, ſo prepared and digeſted, was by common conſent received and eſtabliſhed. In the time of the civil wars, or rather between the death of Charles the Firſt and the reſtoration of his ſon, many ſuch projects were publiſhed, but none were carried into execution. The magna charta, and the bill of rights, were wiſe and ſtrenuous efforts to obtain ſecurity againſt certain abuſes of regal power, by which the ſubject had been formerly aggrieved; but theſe were, either of them, much too partial modifications of the conſtitution to give it a new original. The conſtitution of England, like that of moſt countries in Europe, hath grown out of occaſion and emergency; from the fluctuating policy of different ages; from the contentions, ſucceſſes, intereſts, and opportunities, of different orders and parties of men in the community. It reſembles one of thoſe old manſions, which inſtead of being built all at once, after a regular plan, and according to the rules of architecture at preſent eſtabliſhed, has been reared in

different ages of the art, has been altered from time to time, and has been continually receiving additions and repairs ſuited to the taſte, fortune, or conveniency, of its ſucceſſive proprietors. In ſuch a building we look in vain for the elegance and proportion, for the juſt order and correſpondence of parts, which we expect in a modern edifice; and which external ſymmetry, after all, contributes much more perhaps to the amuſement of the beholder, than the accommodation of the inhabitant.

In the Britiſh, and poſſibly in all other conſtitutions, there exiſts a wide difference between the actual ſtate of the government, and the theory. The one reſults from the other; but ſtill they are different. When we contemplate the *theory* of the Britiſh government, we ſee the king inveſted with the moſt abſolute perſonal impunity; with a power of rejecting laws, which have been reſolved upon by both houſes of parliament; of conferring by his charter, upon any ſet or ſucceſſion of men he pleaſes, the privilege of ſending repreſentatives into one houſe of parliament, as by his immediate appointment he can place whom he will in the other. What is this, a foreigner might aſk, but a more circuitous deſpotiſm? Yet, when we turn our attention from the legal extent to the actual exerciſe of royal authority in England, we ſee theſe formidable prerogatives dwindled into mere ceremonies; and, in their ſtead, a ſure and commanding influence, of which the conſtitution, it ſeems, is totally ignorant, growing out of that enormous patronage, which the increaſed territory and opulence of the empire have placed in the diſpoſal of the executive magiſtrate.

Upon queſtions of reform, the habit of reflection to be encouraged, is a ſober compariſon of the conſtitution under which we live, not with models of ſpeculative perfection, but with the actual chance of obtaining a better. This turn of thought will generate a political diſpoſition, equally removed from that puerile admiration of preſent eſtabliſhments which ſees no fault, and can endure no change, and that diſtempered ſenſibility, which is alive only to perceptions of inconveniency, and is too impatient to be delivered from the uneaſineſs which it feels, to compute either the peril, or expence, of the remedy. Political innovations commonly produce many effects beſide thoſe that are intended. The direct conſequence is often the leaſt important. Incidental, remote, and unthought-of, evils or advantages, frequently exceed the good that is deſigned, or the miſchief that is foreſeen. It is from the ſilent and unobſerved operation, from the obſcure progreſs, of cauſes ſet at work for different purpoſes, that the greateſt revolutions take their riſe. When Elizabeth, and her immediate ſucceſſor, applied themſelves to the encouragement and regulation of trade by many wiſe laws, they knew not, that, together with wealth and induſtry, they were diffuſing a conſciouſneſs of ſtrength and independency, which would not long endure, under the forms of a mixed government, the dominion of arbitrary princes. When it was debated whether the mutiny act, the law by which the army is governed and maintained, ſhould be temporary or perpetual, little elſe, probably, occurred to the advocates of an annual bill, than the expediency of retaining a controul over the moſt dangerous prerogative of the crown—the direction and command of a ſtanding army: whereas, in its effect, this ſingle reſervation has altered the whole frame and quality of the Britiſh conſtitution. For ſince, in conſequence of the military ſyſtem which prevails in neighbouring and rival nations, as well as on account of the internal exigencies of government, a ſtanding army has become eſſential to the ſafety and adminiſtration of the empire, it enables parliament, by diſcontinuing this neceſſary proviſion, ſo to enforce its reſolutions upon any other ſubject, as to render the king's diſſent to a law, which has received the approbation of both houſes, too dangerous an experiment to be in many caſes adviſed. A conteſt between the king and parliament, cannot now be perſevered in, without a diſſolution of the government. Laſtly, when the conſtitution conferred upon the crown the nomination to all employments in the public ſervice, the authors of this arrangement were led to it, by the obvious propriety of leaving to a maſter the choice of his ſervants; and by the manifeſt inconveniency of engaging the national council, upon every vacancy, in thoſe perſonal conteſts which attend elections to places of honour and emolument. Our anceſtors did not obſerve that this diſpoſition added an influence to the regal office, which, as the number and value of public employments increaſed, would ſuperſede in a great meaſure the forms, and change the character, of the ancient conſtitution. They knew not, what the experience and reflection of modern ages has diſcovered, that patronage univerſally is power; that he who poſſeſſes in a ſufficient degree the means of gratifying the deſires of mankind after wealth and diſtinction, by whatever checks and forms his authority may be limited or diſguiſed, will direct the management of public affairs. Whatever be the mechaniſm of the political engine, he will guide the motion. Theſe inſtances are adduced to illuſtrate the propoſition, that, in politics, the moſt important and permanent effects have, for the moſt part, been incidental, and unforeſeen: and this propoſition we inculcate, for the ſake of the caution which it teaches, that changes ought not to be adventured upon without a *comprehenſive* diſcernment of the conſequences—without a knowledge, as well of the remote tendency, as of the immediate deſign. The courage of a ſtateſman ſhould reſemble that of a commander, who, however regardleſs of perſonal danger, never forgets, that with his own he commits the lives and fortunes of a multitude; and who does not conſider it as any proof of zeal or valour, to ſtake the ſafety of *other* men upon the ſucceſs of a perilous or deſperate enterpriſe.

There is one end of civil government peculiar to a good conſtitution, namely, *the happineſs of its ſubjects*; there is another end eſſential to a good government, but common to it with many bad ones—*its own preſervation*. Obſerving that the beſt form of government would be defective, which did not provide for its own permanency, in our political reaſonings we conſider all ſuch proviſions as expedient; and are content to accept as a ſufficient ground for a meaſure, or law, that it is neceſſary or conducive to the preſervation of the conſtitution. Yet, in truth, ſuch proviſions are abſolutely expedient, and ſuch an excuſe final, only whilſt the conſtitution is worth preſerving; that is, until it can be exchanged for a better. We premiſe this diſtinction, becauſe many things in the Engliſh, as in every conſtitution, are to be vindicated and accounted for, ſolely from their tendency to maintain the government in its preſent ſtate, and the ſeveral parts of it in poſſeſſion of the powers which the conſtitution has aſſigned to them; and becauſe we would wiſh it to be remarked that ſuch a conſideration is always ſubordinate to another—the value and uſefulneſs of the conſtitution itſelf.

The GOVERNMENT OF ENGLAND, ſometimes called a mixed government, ſometimes a limited monarchy, is formed, as above obſerved, by a combination of the three regular ſpecies of government. The perfection intended by ſuch a ſcheme is, to unite the advantages of the ſeveral ſimple forms, and to exclude the inconveniencies. To what degree this purpoſe is attained or attainable in the Britiſh conſtitution; wherein it is loſt ſight of or neglected; and by what means it may in any part be promoted with better ſucceſs, the reader will be enabled to judge, by a ſeparate recollection of theſe advantages and inconveniences, and a diſtinct application of each to the political condition of this country. We will preſent our remarks upon the ſubject in a brief account of the expedients by which the Britiſh conſtitution

tion provides, 1ſt, For the intereſt of its ſubjects. 2dly, For its own preſervation.

The contrivances for the firſt of theſe purpoſes are the following: In order to promote the eſtabliſhment of ſalutary public laws, every citizen of the ſtate is capable of becoming a member of the ſenate; and every ſenator poſſeſſes the right of propounding to the deliberation of the legiſlature whatever law he pleaſes. Every diſtrict of the empire enjoys the privilege of chooſing repreſentatives, informed of the intereſts and circumſtances and deſires of their conſtituents, and entitled by their ſituation to communicate that information to the national council. The meaneſt ſubject has ſome one whom he can call upon to bring forward his complaints and requeſts to public attention.

By annexing the right of voting for members of the houſe of commons to different qualifications in different places, each order and profeſſion of men in the community become virtually repreſented; that is, men of all orders and profeſſions, ſtateſmen, courtiers, country gentlemen, lawyers, merchants, manufacturers, ſoldiers, ſailors, intereſted in the proſperity, and experienced in the occupation, of their reſpective profeſſions, obtain ſeats in parliament. The elections, at the ſame time, are ſo connected with the influence of landed property as to afford a certainty that a conſiderable number of men of great eſtates will be returned to parliament; and are alſo ſo modified, that men the moſt eminent and ſucceſsful in their reſpective profeſſions, are the moſt likely, by their riches or the weight of their ſtations, to prevail in theſe competitions. The number, fortune, and quality, of the members; the variety of intereſts and characters amongſt them; above all, the temporary duration of their power, and the change of men which every new election produces, are ſo many ſecurities to the public, as well againſt the ſubjection of their judgments to any external dictation, as againſt the formation of a junto in their own body, ſufficiently powerful to govern their deciſions.

The repreſentatives are ſo intermixed with the conſtituents, and the conſtituents with the reſt of the people, that they cannot, without a partiality too flagrant to be endured, impoſe any burthen upon the ſubject, in which they do not ſhare themſelves; nor ſcarcely can they adopt an advantageous regulation, in which their own intereſts will not participate of the advantage. The proceedings and debates of parliament, and the parliamentary conduct of each repreſentative, are alſo known by the people at large. The repreſentative is ſo far dependent upon the conſtituent, and political importance upon public favour, that a member of parliament cannot more effectually recommend himſelf to eminence and advancement in the ſtate, than by contriving and patronizing laws of public utility.

When intelligence of the condition, wants, and occaſions, of the people, is thus collected from every quarter, when ſuch a variety of invention, and ſo many underſtandings, are ſet at work upon the ſubject, it may be preſumed, that the moſt eligible expedient, remedy, or improvement, will occur to ſome one or other: and when a wiſe counſel, or beneficial regulation, is once ſuggeſted, it may be expected, from the diſpoſition of an aſſembly ſo conſtituted as the Britiſh houſe of commons is, that it cannot fail of receiving the approbation of a majority. To prevent thoſe deſtructive contentions for the ſupreme power, which are ſure to take place where the members of the ſtate do not live under an acknowledged head, and a known rule of ſucceſſion; to preſerve the people in tranquillity at home, by a ſpeedy and vigorous execution of the laws; to protect their intereſt abroad, by ſtrength and energy in military operations, by thoſe advantages of deciſion, ſecrecy, and diſpatch, which belong to the reſolutions of monarchical councils; for theſe purpoſes, the conſtitution has committed the executive government to the adminiſtration and limited authority of an hereditary king.

In the defence of the empire; in the maintenance of its power, dignity, and privileges, with foreign nations; in the advancement of its trade by treaties and conventions; and in the providing for the general adminiſtration of municipal juſtice, by a proper choice and appointment of magiſtrates; the inclination of the king and of the people uſually coincides: in this part, therefore, of the regal office, the conſtitution entruſts the prerogative with ample powers. The dangers principally to be apprehended from regal government, relate to the two articles, *taxation* and *puniſhment*. In every form of government, from which the people are excluded, it is the intereſt of the governors to get as much, and of the governed to give as little, as they can: the power alſo of puniſhment, in the hands of an arbitrary prince, oftentimes becomes an engine of extortion, jealouſy, and revenge. Wiſely, therefore, hath the Britiſh conſtitution guarded the ſafety of the people, in theſe two points, by the moſt ſtudious precautions.

Upon that of *taxation*, every law which, by the remoteſt conſtruction, may be deemed to levy money upon the property of the ſubject, muſt originate, that is, muſt firſt be propoſed and aſſented to, in the houſe of commons: by which regulation, accompanying the weight which that aſſembly poſſeſſes in all its functions, the levying of taxes is almoſt excluſively reſerved to the popular part of the conſtitution, who, it is preſumed, will not tax themſelves, nor their fellow-ſubjects, without being firſt convinced of the neceſſity of the aids which they grant. The application alſo of the public ſupplies, is watched with the ſame circumſpection, as the aſſeſſment. Many taxes are annual; the produce of others is mortgaged, or appropriated to ſpecific ſervices; the expenditure of all of them is accounted for in the houſe of commons; as computations of the charge of the purpoſe, for which they are wanted, are previouſly ſubmitted to the ſame tribunal.

In the infliction of *puniſhment*, the power of the crown, and of the magiſtrate appointed by the crown, is confined by the moſt preciſe limitations: the guilt of the offender muſt be pronounced by twelve men of his own order, indifferently choſen out of the county where the offence was committed: the puniſhment, or the limits to which the puniſhment may be extended, are aſcertained and affixed to the crime, by laws which knew not the perſon of the criminal. And whereas arbitrary or clandeſtine confinement is the injury moſt to be dreaded from the ſtrong hand of the executive government, becauſe it deprives the priſoner at once of protection and defence, and delivers him into the power, and to the malicious or intereſted deſigns, of his enemies; the conſtitution has provided againſt this danger with extreme ſolicitude. The ancient writ of habeas corpus, the habeas corpus act of Charles the Second, and the practice and determinations of our ſovereign courts of juſtice founded upon theſe laws, afford a complete remedy for every conceivable caſe of illegal impriſonment.

Treaſon being that charge, under colour of which the deſtruction of an obnoxious individual is often ſought; and government being at all times more immediately a party in the proſecution; the law, beſide the general care with which it watches over the ſafety of the accuſed, in this caſe, ſenſible of the unequal conteſt in which the ſubject is engaged, has aſſiſted his defence with extraordinary indulgencies. By two ſtatutes, enacted ſince the revolution, every perſon indicted for high treaſon ſhall have a copy of his indictment, a liſt of the witneſſes to be produced, and of the jury impanelled, delivered to him ten days before the trial; he is alſo permitted to make his defence by counſel—privileges which are not allowed to the priſoner, in a

trial for any other crime: and what is of more importance to the party than all the reſt, the teſtimony of two witneſſes, *at the leaſt*, is required to convict a perſon of treaſon; whereas, one poſitive witneſs is ſufficient in almoſt every other ſpecies of accuſation.

We proceed, in the ſecond place, to enquire in what manner the conſtitution has provided for its own preſervation; that is, in what manner each part of the legiſlature is ſecured in the exerciſe of the powers aſſigned to it, from the encroachment of the other parts. The ſecurity is ſometimes called the *balance of the conſtitution*; and the political equilibrium, which this phraſe denotes, conſiſts in two contrivances—a balance of power, and a balance of intereſt. By a balance of power is meant, that there is no power poſſeſſed by one part of the legiſlature, the abuſe or exceſs of which is not checked by ſome antagoniſt power reſiding in another part. Thus the power of the two houſes of parliament to frame laws is checked by the king's negative; that, if laws ſubverſive of regal government ſhould obtain the conſent of parliament, the reigning prince, by interpoſing his prerogative, may ſave the neceſſary rights and authority of his ſtation. On the other hand, the arbitrary application of this negative is checked by the privilege which parliament poſſeſſes, of refuſing ſupplies of money to the exigencies of the king's adminiſtration. The conſtitutional maxim, "that the king can do no wrong," is balanced by another maxim, not leſs conſtitutional, "that the illegal commands of the king do not juſtify thoſe who aſſiſt, or concur, in carrying them into execution;" and by a ſecond rule, ſubſidiary to this, "that the acts of the crown acquire not a legal force, until authenticated by the ſubſcription of ſome of its great officers." The wiſdom of this contrivance is worthy of obſervation. As the king could not be puniſhed, without a civil war, the conſtitution exempts his perſon from trial or account; but, leſt this impunity ſhould encourage a licentious exerciſe of dominion, various obſtacles are oppoſed to the private will of the ſovereign, when directed to illegal objects. The pleaſure of the crown muſt be announced with certain ſolemnities, and atteſted by certain officers of ſtate. In ſome caſes, the royal order muſt be ſignified by a ſecretary of ſtate; in others, it muſt paſs under the privy ſeal; and, in many, under the great ſeal. And when the king's command is regularly publiſhed, no miſchief can be achieved by it, without the miniſtry and compliance of thoſe to whom it is directed. Now all who either concur in an illegal order, by authenticating its publication with their ſeal or ſubſcription, or who in any manner aſſiſt in carrying it into execution, ſubject themſelves to proſecution and puniſhment, for the part they have taken; and are not permitted to plead or produce the command of the king, in juſtification of their obedience. But farther; the power of the crown to direct the military force of the kingdom, is balanced by the annual neceſſity of reſorting to parliament for the maintenance and government of that force. The power of the king to declare war, is checked by the privilege of the houſe of commons, to grant or withhold the ſupplies by which the war muſt be carried on. The king's choice of his miniſters is controlled by the obligation he is under of appointing thoſe men to offices in the ſtate, who are found capable of managing the affairs of his government, with the two houſes of parliament. Which conſideration impoſes ſuch a neceſſity upon the crown, as hath in a great meaſure ſubdued the influence of favouritiſm; inſomuch, that it is become no uncommon ſpectacle in this country, to ſee men promoted by the king to the higheſt offices and richeſt preferments which he has in his power to beſtow, who have been diſtinguiſhed by their oppoſition to his perſonal inclinations.

By the *balance of intereſt*, which accompanies and gives efficacy to the *balance of power*, is meant this—that the reſpective intereſts of the three eſtates of the empire are ſo diſpoſed and adjuſted, that whichever of the three ſhall attempt any encroachment, the other two will unite in reſiſting it. If the king ſhould endeavour to extend his authority, by contracting the power and privileges of the commons, the houſe of lords would ſee their own dignity endangered by every advance which the crown made to independency upon the reſolutions of parliament. The admiſſion of arbitrary power is no leſs formidable to the grandeur of the ariſtocracy, than it is fatal to the liberty of the republic; that is, it would reduce the nobility from the hereditary ſhare they poſſeſs in the national councils, in which their real greatneſs conſiſts, to the being made a part of the empty pageantry of a deſpotic court. On the other hand, if the houſe of commons ſhould intrench upon the diſtinct province, or uſurp the eſtabliſhed prerogative, of the crown, the houſe of lords would receive an inſtant alarm from every new ſtretch of popular power. In every conteſt in which the king may be engaged with the repreſentative body, in defence of his eſtabliſhed ſhare of authority, he will find a ſure ally in the collective power of the nobility. An attachment to the monarchy, from which they derive their own diſtinction; the allurements of a court, in the habits and with the ſentiments of which they have been brought up; their hatred of all levelling pretenſions, which may ultimately affect the privileges, or even the exiſtence, of their order; in ſhort, every principle and every prejudice which are wont to actuate human conduct, will determine their choice to the ſide and ſupport of the crown. Laſtly, if the nobles themſelves ſhould attempt to revive the ſuperiorities which their anceſtors exerciſed under the feudal conſtitution, the king and the people would alike remember, how the one had been inſulted, and the other enſlaved, by that barbarous tyranny. They would forget the natural oppoſition of their views and inclinations, when they ſaw themſelves threatened with the return of a domination, which was odious and intolerable to both.

The proper uſe and deſign of the lords ſpiritual and temporal, as an indiſpenſible part of the Britiſh conſtitution, are therefore the following: Firſt, to enable the king, by his right of beſtowing the peerage, to reward the ſervants of the public, in a manner moſt grateful to them, and at a ſmall expence to the nation; ſecondly, to fortify the power and to ſecure the ſtability of regal government, by an order of men naturally allied to its intereſts; and, thirdly, to anſwer a purpoſe, which, though of ſuperior importance to the other two, does not occur ſo readily to our obſervation; namely, to ſtem the progreſs of popular enthuſiaſm. Large bodies of men are ſubject to ſudden phrenzies. Opinions are ſometimes circulated amongſt a multitude without proof or examination, acquiring confidence and reputation merely by being repeated from one to another; and paſſions founded upon theſe opinions, diffuſing themſelves with a rapidity which can neither be accounted for nor reſiſted, may agitate a country with the moſt violent commotions. Now the only way to ſtop the fermentation, is to divide the maſs; that is, to erect different orders in the community, with ſeparate prejudices and intereſts. And this would moſt naturally ariſe out of an hereditary nobility, inveſted with a ſhare of legiſlation. Averſe to thoſe prejudices which actuate the minds of the vulgar; accuſtomed to condemn the clamour of the populace; diſdaining to receive laws and opinions from their inferiors in rank, they will oppoſe reſolutions which are founded in the folly and violence of the lower part of the community.

The admiſſion of a ſmall number of eccleſiaſtics into the houſe of lords, is but an equitable compenſation to the clergy for the excluſion of their order from the houſe of commons. They are a ſet of men conſiderable by

by their number and property, as well as by their influence, and the duties of their ſtation; yet, whilſt every other profeſſion has thoſe amongſt the national repreſentatives, who, being converſant in the ſame occupation, are able to ſtate, and naturally diſpoſed to ſupport, the rights and intereſts of the claſs and calling to which they belong, the clergy alone are deprived of this advantage: which hardſhip is made up to them by introducing the prelacy into parliament; and if biſhops, from gratitude or expectation, be more obſequious to the will of the crown than thoſe who poſſeſs great temporal inheritances, they are properly inſerted into that part of the conſtitution, from which much or frequent reſiſtance to the meaſures of government is not expected.

But, among political writers on the Britiſh conſtitution the grand ſubject of contention has been,—the increaſing INFLUENCE of the crown. Yet it remains a conſideration of the higheſt magnitude—whether the influence ſo loudly complained of can be deſtroyed, or even much diminiſhed, without danger to the ſtate. Whilſt the zeal of ſome men beholds this influence with a jealouſy, which nothing but its entire abolition can appeaſe, many wiſe and virtuous politicians deem a conſiderable portion of it to be as neceſſary a part of the Britiſh conſtitution, as any other ingredient in the compoſition—to be that, indeed, which gives coheſion and ſolidity to the whole. Were the meaſures of government, ſay they, oppoſed from nothing but principle, government ought to have nothing but the rectitude of its meaſures to ſupport them; but ſince oppoſition often ſprings from other motives, government muſt poſſeſs an influence to counteract theſe motives; to produce, not a bias of the paſſions, but a neutrality: it muſt have ſome weight to caſt into the ſcale, to ſet the balance even. It is the nature of power always to preſs upon the boundaries which confine it. Licentiouſneſs, faction, envy, impatience of controul, or inferiority; the ſecret pleaſure of mortifying the great, or the hope of diſpoſſeſſing them; a conſtant willingneſs to queſtion and thwart whatever is dictated or even propoſed by another; a diſpoſition common to all bodies of men to extend the claims and authority of their orders; above all, that love of power, and of ſhewing it, which reſides more or leſs in every human breaſt, and which, in popular aſſemblies, is inflamed, like every other paſſion, by communication and encouragement: theſe motives, added to private deſigns and reſentments, cheriſhed alſo by popular acclamation, and operating upon the great ſhare of power already poſſeſſed by the houſe of commons, might induce a majority, or at leaſt a large party of men in that aſſembly, to unite in endeavouring to draw to themſelves the whole government of the ſtate; or at leaſt ſo to obſtruct the conduct of public affairs, by a perverſe oppoſition, merely for oppoſition ſake, as to render it impoſſible for the wiſeſt ſtateſman to carry forwards the buſineſs of the nation with ſucceſs or ſatisfaction.

Some paſſages of our national hiſtory will ſufficiently elucidate this remark. Before the acceſſion of James I. or, at leaſt, during the reigns of his three immediate predeceſſors, the government of England was a government by force; that is, the king carried his meaſures in parliament by *intimidation*. A ſenſe of perſonal danger kept the members of the houſe of commons in ſubjection. A conjunction of fortunate cauſes delivered at laſt the parliament and nation from ſlavery. That overbearing ſyſtem, which had declined in the hands of James, expired early in the reign of his ſon. After the reſtoration there ſucceeded in its place, and ſince the revolution has been methodically purſued, the more ſucceſsful expedient of *influence*. Now we remember what paſſed between the fits of terror, and the eſtabliſhment of influence. The tranſactions of that interval, whatever we may think of their occaſion or effect, no friend of regal government would wiſh to ſee revived. But the affairs of this kingdom afford a more recent atteſtation to the ſame doctrine. In the Britiſh colonies of North America, the late aſſemblies poſſeſſed much of the power and conſtitution of our houſe of commons. The king and government of Great Britain held no patronage in the country, which could create attachment and influence ſufficient to counteract that reſtleſs arrogating ſpirit, which in popular aſſemblies, when left to itſelf, will never brook an authority, that checks and interferes with its own. To this cauſe, excited perhaps by ſome unſeaſonable provocations, we may attribute, as to their true and proper original, the changes that have taken place in the Britiſh empire. The admonition, which ſuch examples ſuggeſt, will have its weight with thoſe, who are content with the general frame of the Engliſh conſtitution; and who conſider ſtability amongſt the firſt perfections of any government.

We proteſt however againſt any conſtruction, by which what is here ſaid ſhall be attempted to be applied to the juſtification of bribery, or of any *clandeſtine* reward or ſolicitation whatever. The very ſecrecy of ſuch negociations confeſſes or begets a conſciouſneſs of guilt; which when the mind is once taught to endure without uneaſineſs, the character is prepared for every compliance: and there is the greater danger in theſe corrupt practices, as the extent of their operation is unlimited and unknown. Our apology relates ſolely to that influence, which reſults from the acceptance or expectation of public preferments. Nor does the influence, which we defend, require any ſacrifice of perſonal probity. In political, above all other ſubjects, the arguments, or rather the conjectures, on each ſide of the queſtion, are often ſo unequally poiſed, that the wiſeſt judgments may be held in ſuſpenſe. As the balance muſt preponderate, the ſerious queſtion is, what influence ſhall be admitted. If you remove the influence of the crown, it is only to make way for influence from a different quarter. If motives of expectation and gratitude be withdrawn, other motives will ſucceed in their place, acting probably in an oppoſite direction, but equally irrelative and external to the proper merits of the queſtion. There exiſt, as we have ſeen, paſſions in the human heart, which will always make a ſtrong party againſt the executive power of a mixed government. According as the diſpoſition of parliament is friendly or adverſe to the recommendation of the crown in matters which are really or apparently indifferent, the buſineſs of empire will be tranſacted with eaſe and convenience, or embarraſſed with endleſs contention and difficulty. Nor is it a concluſion founded in juſtice, or warranted by experience, that, becauſe men are induced by views of intereſt to yield their conſent to meaſures, concerning which their judgment decides nothing, they may be brought by the ſame influence to act in deliberate oppoſition to knowledge and duty. Whoever reviews the operations of government in this country ſince the revolution, will find few even of the moſt queſtionable meaſures of adminiſtration, about which the beſt inſtructed judgment might not have doubted at the time; but of which he may affirm with certainty, that they were *indifferent* to the greateſt part of thoſe who concurred in them. From the ſucceſs, or the facility, with which they who dealt out the patronage of the crown carried meaſures like theſe, ought we to conclude, that a ſimilar application of honours and emoluments would procure the conſent of parliament to counſels evidently detrimental to the common welfare? Is there not, on the contrary, more reaſon to fear, that the prerogative, if deprived of influence, would not be long able to ſupport itſelf? For when we reflect upon the power of the houſe of commons to extort a compliance with its reſolutions from the other parts of the legiſlature; or to put to death the conſtitution by a refuſal of the annual grants of money to the ſupport of the neceſſary functions of government—when we reflect alſo what motives there are,

are which, in the viciſſitudes of political intereſts and paſſions, may arm and point this power againſt the executive magiſtrate—when we attend to theſe conſiderations, we ſhall be led perhaps to acknowledge, that there is not more of paradox than of truth in that important but much-decried apophthegm, "that a totally independent parliament is incompatible with the exiſtence of the executive government;"—and hence every miniſter, ſince the days of ſir Robert Walpole, has uniformly aimed at acquiring and maintaining an *influence* in the houſe of commons, as the only certain means by which he can retain his ſituation, or conduct the affairs of the ſtate: and in many caſes where this influence is found to be on the decline, or the balance of the votes in the houſe of commons ſo nearly equal as to render the operations of the exiſting government precarious; then, as the dernier reſort, the king exerts his prerogative of diſſolving his parliament, and thus conſigns to the judgment of his people which party, or political ſyſtem, it is moſt wiſe and prudent for him to adopt, by leaving to their own choice the meaſures in the election of men, whom they ſhall deem it expedient to return to a new parliament. A ſtriking inſtance of this fact was manifeſted by the event which followed the memorable agitation of the Roman catholic bill in 1807.

GOUERNO'LO, a town of Italy, in the duchy of Mantua, at the junction of the Mincio and the Po: twelve miles ſouth-eaſt of Mantua. In 1796, a ſevere battle was fought near this town, between the French republicans and the Auſtrians, in which the latter were defeated, with the loſs of ten thouſand priſoners.

GOV'ERNOR, *ſ.* [*gouverneur*, Fr.] One who has the ſupreme direction.—They beget in us a great idea and veneration of the mighty author and *governor* of ſuch ſtupendous bodies, and excite and elevate our minds to his adoration and praiſe. *Bentley.*—One who is inveſted with ſupreme authority in a ſtate.—For the kingdom is the Lord's, and he is the *governor* among the nations. *Pſ.* xxii. 28.—One who rules any place with delegated and temporary authority:

To you, lord *governor*,
Remains the cenſure of this helliſh villain. *Shakeſpeare.*

A tutor; one who has the care of a young man.—The great work of a *governor* is to faſhion the carriage, and form the mind; to ſettle in his pupil good habits, and the principles of virtue and wiſdom. *Locke.*—Pilot; regulator; manager.—Behold all the ſhips, which though they be ſo great, and are driven of fierce winds, yet they are turned about with a very ſmall helm, whitherſoever the *governor* liſteth. *Ja.* iii. 4.

GOUEZEC', a town of France, in the department of the Finiſterre, and chief place of a canton, in the diſtrict of Châteaulin: one league and a half ſouth-eaſt of Châteaulin, and three and a half north-eaſt of Quimper.

GOUGA'NE BA'RO, a lake of Ireland, in the county of Cork: ten miles north of Bantry.

GOUGE, *ſ.* [French.] A chiſſel having a round edge, for the cutting of ſuch wood as is to be rounded or hollowed. *Moxon.*

To GOUGE, *v. a.* To ſcoop out, as with a chiſſel.

GOUGE (William), an eminent Engliſh divine, born at Bow, in the county of Middleſex, in 1575. He received his claſſical education partly at St. Paul's ſchool, in London, and partly at Eton, whence he was elected to King's-college, Cambridge, in 1595. His academic ſtudies he performed with uncommon diligence, and proportionate ſucceſs. He took his degrees in arts at the regular periods, when he performed the exerciſes in the public ſchools, required by the ſtatutes of the univerſity, with very great applauſe. He was choſen a lecturer in logic and philoſophy in his college, and acquired much credit by the able manner in which he diſcharged the duties of that appointment. In 1607 he was admitted into orders; and in the following year obtained the rectory of Blackfriars, in the city of London. In this ſituation he continued during the remainder of his life, diſcharging the paſtoral functions with exemplary diligence and fidelity, and ſetting before his pariſhioners a commendable example of the moral and religious duties which he enforced in his ſermons. In 1611 he was admitted to the degree of bachelor of divinity, and in 1628 to that of doctor in the ſame faculty. He was modeſt, humble, affable, and charitable, of ſtrict and exemplary piety, and continued to preach as long as he was able to get up into the pulpit; and for many years he was eſteemed the father of the London miniſters. He died in 1653, ſoon after he had completed his ſeventy-eighth year. The principal of his works were, 1. A Commentary on the Epiſtle to the Hebrews. 2. An Expoſition of the Lord's Prayer. 3. The whole Armour of God. 4. A treatiſe of Domeſtical Duties. 5. Of the Sin againſt the Holy Ghoſt. 6. The Sabbath's Sanctification. 7. A treatiſe of Apoſtacy. 8. The Saint's Sacrifice; or, a Comment on Pſalm 116. 9. Two Catechiſms.

GOUGE (Thomas), a very exemplary Engliſh divine, ſon of the preceding, born at Bow in 1605. He was ſent early to Eton ſchool, whence he was elected to King's-college, Cambridge, in 1626. In that univerſity he purſued his ſtudies with becoming diligence, and took his degrees in arts at the ſtatutable periods; during which time he was choſen a fellow of his college. Having afterwards taken orders, he left the univerſity and his fellowſhip, and was preſented to the living of Colſden, in Surrey, where he continued about three years. In 1638 he became incumbent of St. Sepulchre, in London, where, for about twenty-four years, he diſcharged the paſtoral duties with exemplary vigilance and fidelity. When the act of uniformity took place, as he could not conſcientiouſly ſubſcribe to its proviſions, he was ejected from his living; on which occaſion he declined preaching in the metropolis, modeſtly obſerving, "that there was no need of his labours in London, where there were ſo many godly, able, and painful, miniſters to carry on the work." His time now was zealouſly devoted to acts of beneficence and charity. He was himſelf poſſeſſed of a good eſtate, the greater part of which he employed in relieving the wants of his poorer brethren. About the year 1671, the accounts which he received of the deplorable ignorance in which the poor were involved in Wales, inſpired him with the generous and noble deſign of introducing knowledge and religion into that neglected country. For this purpoſe he viſited the principality, and commenced his undertaking by eſtabliſhing ſchools in different towns, and undertook to pay the inſtructors. By degrees theſe ſchools amounted to between three and four hundred in number, and were annually viſited by Mr. Gouge; when he carefully enquired into the improvement of his young beneficiaries, and preached occaſionally. He, likewiſe, with the aſſiſtance which he received from his friends, printed eight thouſand copies of the Bible in the Welſh language; a thouſand of which were freely given to the poor, and the reſt ſent to the principal cities and towns in Wales, to be ſold at low prices. To ſhew that he was no bigot, he alſo procured the Church Catechiſm, with a practical expoſition of it, and the Common Prayer, to be printed in Welſh, and diſtributed them to the poor, with the Welſh Bible, the Whole Duty of Man, the Practice of Piety, and many other pious and uſeful treatiſes. He died in 1681, in the ſeventy-ſeventh year of his age. He had committed but a few of his own productions to the preſs, and theſe were of the practical kind; ſuch as, 1. The Principles of Religion explained, in Queſtion and Anſwer. 2. A Word to Sinners. 3. Chriſtian Directions to walk with God. 4. The ſureſt and ſafeſt Way of Thriving, viz. by Charity to the Poor. 5. The Young Man's Guide through the Wilderneſs of this World. 6. The Chriſtian Houſeholder, &c.

GOU'GEON,

GOU'GEON, or Gou'jon (John), a French ſculptor and architect, in the reign of Francis I. accounted the firſt who introduced a true taſte for ſculpture in France, and freed it from the barbariſm of former times. The moſt conſiderable of his works is the Fountain of the Nymphs, called the Innocents, finiſhed in 1550. Among other remains of his workmanſhip, is a tribune in the hall des Cent-Suiſſes at the Louvre, enriched with ſculptures, and ſupported by four gigantic Caryatides. He was alſo an able medalliſt, and ſtruck ſeveral pieces for Catharine de Medicis, which are ſought by the curious. His reliefs are executed with great taſte, his drapery is light and elegant, his figures graceful and flexible, but their attitudes are ſometimes forced. He was a Huguenot, and met with the melancholy fate of his party on the infamous St. Bartholomew, 1572, being ſhot as he ſtood working upon a ſcaffold.

GOU'JET (Claude-Peter), a moſt fertile writer, born at Paris in 1697. He received the greateſt part of his education in the Jeſuits' college, and was ſome time in the congregation of the Oratory. Having taken orders, he became a canon of the church of St. Jacques de l'Hôpital in Paris. He was an aſſociate of ſeveral academies in France, and was generally eſteemed, not only for his learning, but for the mildneſs of his diſpoſition, and the purity of his morals. He died in 1767. He had collected a library of ten thouſand well-choſen volumes, which was the baſis of his numerous works. Of theſe, the following are the principal: 1. *Vies des Saints*, 2 vols. 4to. 2. Supplement to Moreri's Dictionary, 2 vols. folio, 1735, and 2 vols. folio, 1749. 3. *Bibliotheque des Ecrivains Eccleſiaſtiques*, 3 vols. 8vo. 4. *Diſcours ſur le Renouvellement des Etudes depuis le XIV. Siècle.* 5. *De l'Etat des Sciences en France depuis la Mort de Charlemagne juſqu'à celle du Roi Robert*, 12mo. for this curious diſſertation the author obtained the prize of the academy of belles-lettres. 6. *Bibliotheque Françoiſe, ou Hiſtoire de la Littérature Françoiſe*, 18 vols. 12mo. this is the moſt celebrated of his works, but is compoſed with more induſtry than taſte or judgment. 7. A new edition of Richelet's French Dictionary, 3 vols. folio, with numerous additions and corrections: of this he publiſhed at the ſame time an Abridgment, which has ſince been printed in an improved form by Wailly, in 2 vols. 8vo. 8. *L'Hiſtoire du College Royal de France*, 1 vol. 4to. and 3 vols. 12mo. 9. *Hiſtoire du Pontificat de Paul IV.* 2 vols. 12mo. in this piece the author is by no means friendly to the Jeſuits, though educated among them. He likewiſe furniſhed a great variety of articles for the continuation of the *Mémoires de Littérature*, by Deſmolets, and for the *Mém. des Hommes illuſtres*, of Niceron.

GOU'JIM, a town of Portugal, in the province of Beira: four leagues ſouth-weſt of St. Joao de Peſqueira.

GOU'LAND, *ſ.* A flower.—Pinks, *goulands*, king-cups, and ſweet ſops-in-wine. *B. Jonſon's Maſques.*

GOU'LART (Simon), a French proteſtant divine, born at Senlis in 1543. Having ſtudied divinity at Geneva, he was admitted into the office of the miniſtry, and was choſen paſtor of the church of which Calvin had been miniſter. He diſcharged the duties of his paſtoral office with great diligence and acceptability, and continued the exerciſe of them till within ſeven days of his death, which took place in 1628, when eighty-five years of age. He edited a number of works, with notes, comments, or additions; and, among others, The Works of Plutarch, tranſlated by Amyot; St. Cyprian's Works; Du Bartas's Weeks; Illyricus's Witneſſes to Truth, &c. He tranſlated into French All the Works of Seneca, publiſhed at Paris in 1590, in 2 vols. 4to. The Hiſtorical Meditations of Camerarius, to which he made conſiderable additions; Oſorius's Hiſtory of Portugal, 1587, in 5 vols. 8vo. The Chronicle of Carion; different treatiſes of Theodoret; John Wierus's Book concerning diabolical Impoſtures, &c. He made a collection of Remarkable Hiſtories, 1620, in 2 vols. 8vo. and alſo wrote ſeveral moral and devotional tracts, and pieces relating to the hiſtory of his own time. The moſt intereſting and curious of the latter deſcription is his Collection of the moſt memorable Events which occurred during the League, &c. 1590, in 6 vols. 8vo. afterwards reprinted at Paris in 1758, in 6 vols. 4to. with notes and original documents.

Goulart had a ſon, of the ſame name, who on that account has by ſome writers been confounded with his father. He was born at Senlis, in 1576, and died at Frederickſtadt, in Holſtein, in 1628. He was educated to the miniſtry, and was ſettled as paſtor with the Walloon church at Amſterdam, where he embraced the party of the Remonſtrants. In 1615 he was ſuſpended from his functions, for preaching againſt the horrible doctrine, connected with the notion of reprobation, that ſome children who die at the breaſt, or in their mother's womb, are eternally damned. He was afterwards baniſhed the country, together with the other miniſters of the Arminian party, in conſequence of the decrees of the ſynod of Dort; when he ſought an aſylum at firſt in Flanders, afterwards in France, and finally in Holſtein. He wrote ſome letters to the Remonſtrants at Amſterdam, conſoling them under their perſecutions, and exhorting them to conſtancy and perſeverance; which are inſerted in a collection of ſuch pieces in folio, under the title of *Epiſtolæ Eccleſiaſticæ & Theologicæ.*

GOULDS'BOROUGH HAR'BOUR, a harbour of North America, in the diſtrict of Main. Lat. 44. 25. N. lon. 67. 53. W. Greenwich.

GOULOU' (John), a French monk, born at Paris in 1576. He was educated to the profeſſion of an advocate; but having had the misfortune, the firſt time that he pleaded a cauſe, to fall into a confuſion from which he could not recover himſelf, the ſuppoſed diſgrace ſo much affected his mind, that he determined on exchanging the bar for the cloiſter. Accordingly, he entered into the order of Feuillants, in 1604, and by his talents recommended himſelf ſucceſſively to different confidential employments, and at laſt was raiſed to the poſt of general of his order. As he underſtood the Greek language, he applied himſelf to the tranſlation into French of the pretended Works of Dionyſius the Areopagite, which were printed in 1608, accompanied with an attempted defence of their genuineneſs; Epictetus's Enchiridion, printed in 1609; St. Baſil's Homilies upon the Hexameron, printed in 1616; and Arrian's Diſſertations. He alſo reviſed and publiſhed a Latin verſion of the Treatiſes of St. Gregory Nyſſen againſt Eunomius. In 1627, father Goulou made himſelf much talked of by a violent attack upon the works of M. Balzac. This naturally occaſioned M. Balzac to defend himſelf by a ſpirited apology, in which the monk was treated with no little ſeverity. A copy of this apology was ſent to father Goulou, who conſidered it in the light of a challenge, and ſoon produced two volumes of Letters from Phyllarchus to Ariſto, in which he not only attempted to diſcredit M. Balzac's merits as a writer, but attacked the morality of his work, in language unpardonably abuſive. Notwithſtanding the intemperance which diſgraced theſe letters, ſtill they had many encomiaſts, particularly among the monks. Father Goulou, however, did not long enjoy the praiſes which his partiſans beſtowed upon him, as he died in 1629, in the fifty-third year of his age.

GOUL'VIN, a town of France, in the department of Finiſterre, and chief place of a canton, in the diſtrict of Leſneven: one league and a quarter north of Leſneven, and four weſt of St. Pol-de-Leon.

GOU'NONG A'PI. See Gonapi.

GO'VON, a town of Italy, in the principality of Piedmont: ſix miles north of Alba.

GOU'PIA, *ſ.* in botany. See Glossopetalum.

GOUPIL' (James), a learned phyſician of the ſixteenth century, born of a good family at Luçon. He ſtudied

ſtudied at Poitiers, and then undertook the education of ſome young men of quality at Saintonge. Coming afterwards to Paris, he ſtudied Greek at the royal college. He was made a licentiate of the faculty in 1548, and ſoon after took his degree of doctor. In 1555, he was appointed royal profeſſor of phyſic on the death of James Sylvius. He particularly diſtinguiſhed himſelf by his editions of Alexander of Tralles, Dioſcorides, Actuarius, Paul Ægineta, Rufus, and Aretæus. He alſo tranſlated from the Italian the work of Alex. Piccolomini, On the Sphere of the World. In 1564, during the violence of the civil wars, his library was plundered by the populace, which misfortune ſo much affected him that he died ſoon after. He was then engaged on on a Commentary upon all the works of Hippocrates.

GOUR, or GOU'RA, an ancient city of Hindooſtan, the *Gangia Regia* of Ptolemy, and *Lucknouti* of other writers. It ſtill retains in the maps the name of *Gour*. It was taken in 1009, by Mahmood I. and its king made priſoner. Like Hannibal, he kept poiſon concealed in his ring, which he took, and put an end to his life. Goura was deſtroyed after Tamerlane's invaſion, but reſtored and ornamented by Akbar, in 1573, who called it *Jennutabad*; originally it was waſhed by the Ganges, but that mutable ſtream at preſent does not come within four miles of the neareſt part. The extent of the ruins are not leſs than fifteen miles, ſtretching along the old banks of the Ganges; the breadth between two and three miles. Over the ſite are ſcattered ſeveral villages, and thick woods, now the haunts of tigers and other beaſts of prey. The chief remains are a moſque, lined with black marble, elaborately carved, and two gates of the citadel, moſt ſtrikingly magnificent. The bricks of which the buildings were compoſed, have ſtood the trial of many ages; their excellency makes them greatly ſought after, and they are ſent as articles of commerce to Moorſhedabad, and ſeveral other places. In its proſperity it was the capital of Bahar and Bengal, for which it was by its ſituation particularly well adapted.

GOU'RA, or GURA, a town of Poland, in the palatinate of Maſovia, on the Viſtula: twelve miles from Warſaw.

GOV'RA, a town of Perſia, in the province of Irak: thirty-five miles eaſt of Iſpahan.

GOU'RAINCOURT, a town of France, in the department of the Meuſe, and chief place of a canton, in the diſtrict of Eſtain: five leagues north-eaſt of Verdun, and two and three quarters north of Eſtain.

GOVRAY', a cape on the eaſt coaſt of the iſland of Jerſey, four miles eaſt from St. Helier.

GOURAY' (Le), a town of France, in the department of the North Coaſt, and chief place of a canton, in the diſtrict of Broons: three leagues weſt of Broons, and two and three quarters ſouth of Lamballe.

GOURD, *ſ.* in botany. See CUCURBITA.—The word in the fourth chapter of Jonah, which the LXX. and our verſion tranſlate a *gourd*, is in Hebrew *kikajon*. Jerome and Aquila uſe the word *hedera*, ivy. Jerome in different parts of his writings, gives two (bad) reaſons for this: in one place he ſays, that he followed ancient interpreters, which is not abſolutely true, for Juſtin Martyr employs the word *gourd*. In another place, Jerome confeſſes, that the word *ivy* does not anſwer the ſignification of the Hebrew קיקיון; but, as he could not find any Latin word proper to expreſs it, he choſe rather to uſe *hedera* than to leave it *kikajon*, which might be taken for a monſtrous animal in the Indies, or mountains of Bœotia. His deſcription of it is as follows: "It is a ſhrub which grows in the ſandy places of Paleſtine, and increaſes ſo ſuddenly, that in a few days it comes to a conſiderable height; the leaves are large, almoſt like thoſe of the vine; it is ſupported by its trunk, without being upheld by any thing elſe, and furniſhes a very agreeable ſhade." From this, it is plain enough, that it can neither be ivy, nor the gourd; and accordingly it is now generally agreed to be the *Ricinus major*, a kind of Palma Chriſti, in Egyptian called *kiki*, in Greek *ſelicyprion*, in the Syriac and Carthaginian language *elkeroa*. See Saurin's Diſſ. continued by Roques, tom. viii. p. 81, 8vo. edit. and Calmet's Dict. by Taylor, article *Kikajon*.

Bitter GOURD, ſee CUCUMIS. *Sour* GOURD, ſee ADANSONIA.

GOUR'DAN (Simon), a French writer, born at Paris in 1646. When he was about fifteen years of age, he entered among the canons regular of St. Victor, at Paris, where he practiſed auſterities and mortifications of the moſt rigorous kind. He led a ſolitary aſcetic life, almoſt entirely devoted to writing and ſtudy. He was the author of numerous Hymns, printed in the different offices of the Gallican church. Towards the cloſe of his life, he engaged in the theological conteſts of the times, and publiſhed a volume of Letters on the Subject of the Conſtitution *Unigenitus*. He died in 1729, at eighty-three years of age, leaving behind him in manuſcript, A Hiſtory of thoſe Members of the Order of St. Victor who were eminent for their Piety, Science, or Dignities, in folio.

GOURD'INESS, *ſ.* in farriery, the ſwelling of a horſe's legs after a journey.

GOUR'DON, a town of France, and principal place of a diſtrict, in the department of the Lot: five leagues and a half north of Cahors, and nine and a quarter weſt-north-weſt of Figeac. Lat. 44. 44. N. lon. 19. 3. E. Ferro.

GOURD'Y, *adj.* Swelled in the legs; ſwelled with hard uſage; greaſy.

GOU'RIN, a town of France, in the department of the Morbihan, and chief place of a canton, in the diſtrict of Le Faouet: two leagues and a half north-north-weſt of Le Faouet, and nine weſt of Pontivy.

GOUR'MANDIZE, *ſ.* Voraciouſneſs:

A tigre forth out of the wood did riſe,
That with fell claws, full of fierce *gourmandize*,
And greedy mouth wide gaping like hell gate,
Did run at Paſtorell, her to ſurprize. *Spenſer.*

GOUR'NAI (Le Jars de, Mary), a lady celebrated for learning, born at Paris in 1566. She loſt her father early, and acquired an adoptive one in the famous Michael de Montaigne, who was the object of her enthuſiaſtic admiration. He was accuſtomed to call her his *daughter of alliance*, and he made her heireſs of his writings. After his death ſhe publiſhed an edition of his Eſſays, dedicated to cardinal Richelieu. She was well acquainted with the learned languages, and maintained a correſpondence with many of the moſt eminent literary characters of her time. She died at Paris in 1645, in her ſeventy-ninth year, and was honoured with many epitaphs from men of letters. Her works were collected in a quarto volume, under the title of *Les Avis ou les Préſens de la Demoiſelle de Gournai*.

GOUR'NAY, a town of France, and principal place of a diſtrict, in the department of the Lower Seine: eight leagues eaſt of Rouen. Lat. 49. 29. N. lon. 19. 18. E. Ferro.

GOU'ROCK, a town of Scotland, in the county of Renfrew, on a creek of the river Clyde, near which is a copper mine: two miles weſt of Greenock.

GOUR'VILLE (John Herauld de), born at Rochefoucauld in 1625, and taken by the famous duke of that title into his ſervice, and made his friend and confidant. He was alſo much eſteemed by the great Condé, and by the ſuperintendant Fouquet. Being employed by the latter, he was involved in his diſgrace, and obliged to take refuge in foreign countries. What Voltaire aſſerts is not exactly true, "that he was at the ſame time hanged in effigy at Paris, and the king's envoy in Germany," ſince he had not the latter employment till ſome interval had elapſed from his flight. So well did he approve his political talents, that he was propoſed

to the king as ſucceſſor to Colbert in the miniſtry. He died in 1705. Gourville left Memoirs of his Life from 1642 to 1698, 2 vols. 12mo. which are written with frankneſs and ſimplicity. They contain many curious and authentic anecdotes of the principal perſons of his time, of which Voltaire is ſaid to have made conſiderable uſe.

GOUSSAINCOU'RT, a town of France, in the department of the Meuſe, and chief place of a canton, in the diſtrict of Vaucouleurs: two leagues and a quarter eaſt of Gondrecourt, and two and a quarter ſouth of Vaucouleurs.

GOUS'SET (James), a learned French proteſtant divine, born at Blois in 1635. He was educated to the miniſtry, and became paſtor of the proteſtant church at Poitiers in 1662. So high was his reputation for abilities and erudition, that he was three times invited to fill the chair of profeſſor of divinity at Saumur; but he would not quit his flock till compelled to become a fugitive from the kingdom, in conſequence of the revocation of the edict of Nantz. On this occaſion he took refuge in Holland, and afterwards was ſettled as French miniſter at Groningen, where he obtained the poſts of profeſſor of divinity and of the Hebrew language in the univerſity of that city. He died there in 1704, when ſixty-nine years of age. He was the author of, 1. Theological and Critical Strictures on the Propoſals for a new Verſion of the Scriptures, 1698, 12mo. 2. Diſſertations in Controverſy with the Jews, 1699. 3. Theological Lectures explanatory of the Apoſtle James's Doctrine concerning a Living Faith and a Dead Faith. 4. *Commentarii Linguæ Hebraicæ*, 1702, folio, forming a valuable Hebrew dictionary, of which the beſt edition was publiſhed at Leipſic in 1743, 4to. 5. *Jeſu Chriſti, Evangeliique Veritas demonſtrata, in Confutatione Libri Chizzouk Emounac*, or The Buckler of the Faith, by Rabbi Iſaac, 1712, folio. 6. *Diſſertatione in Epiſtolam Pauli ad Hebræos, &c.* 1712. He left behind him numerous manuſcripts, among which are Commentaries upon the whole of the ſacred Scriptures.

GOUT, *ſ.* [*goutte*, Fr.] The arthritis; a periodical diſeaſe attended with great pain. See MEDICINE.

GOUT, *ſ.* [French.] A taſte. *An affected word.*—Catalogues ſerve for a direction to any one that has a *gout* for the like ſtudies. *Woodward.*

GOUTHIE'RES (James), a learned civilian of the ſeventeenth century, born at Chaumont in Baſſigni, and became an advocate in the parliament of Paris. After paſſing forty years at the bar, he retired to the country, and died in 1638. He wrote in 1612 a work *De veteri Jure Pontificio Urbis Romæ*, 4to. which was ſo well received at Rome, that the ſenate conferred upon him and his poſterity the quality of a Roman citizen. He alſo publiſhed *De Officiis Domus Auguſtæ, publicæ & privatæ*, 4to. 1628. *De Jure Manium, ſeu de Ritu, More, & Legibus, priſci Funeris*, 4to. 1615; and two moral diſcourſes, viz. *Tireſias, ſeu de Cæcitatis & Sapientiæ Cognatione*, and *Choartius Major, ſeu de Orbitate toleranda.* He compoſed Latin verſes with ſucceſs; his *Rupella Capta*, addreſſed to cardinal Richelieu, 1628, 4to. is written with ſpirit and vigour.

GOUT'INESS, *ſ.* The ſtate or condition of being gouty. *Scott.*

GOUT'WEED, *ſ.* in botany. See ÆGOPODIUM.

GOUT'Y, *adj.* Afflicted or diſeaſed with the gout.—There dies not above one of a thouſand of the gout, although I believe that more die *gouty*. *Graunt.*—Relating to the gout.—There are likewiſe other cauſes of blood ſpitting; one is the ſettlement of a *gouty* matter in the ſubſtance of the lungs. *Blackmore.*

GOUVE'A, a town of Portugal, in the province of Beira: ſeven leagues ſouth-eaſt of Viſeo.

GOUX, a town of France, in the department of the Doubs, and chief place of a canton, in the diſtrict of Pontarlier: one league and three quarters north-weſt of Pontarlier, and three ſouth-eaſt of Ornans.

GOUX DE LA BOULAY'E (Francis le), a celebrated traveller, born about 1610, at Beaugé in Anjou. His inclination led him at an early age to travel, and he employed ten years ſucceſſively in rambling through various parts of the globe. In Aſia and Africa he paſſed as a Mahometan, in Europe as a Catholic. Upon his return, he publiſhed an account of his travels, under the title of *Les Voyages & Obſervations de François de la Boulaye le Goux, en divers Pays d'Europe, d'Aſie, & d'Afrique, juſqu'à l'Année* 1650, with figures, 4to. 1653. He was ſo much altered by his travels, that, on viſiting his native place, even his mother could not recognize him, and he was obliged to inſtitute a law-ſuit to eſtabliſh his right of primogeniture. Having ſucceeded in this point, he married and ſettled. In 1668, Louis XIV. being deſirous of renewing his commerce with the Porte and the Great Mogul, choſe La Boulaye for his ambaſſador. During this miſſion he died of a fever in Perſia in 1669.

GOU'YE (Thomas), a French Jeſuit and mathematician, born at Dieppe in 1650. He entered into the order in the year 1667, and principally diſtinguiſhed himſelf by the taſte which he diſcovered for ſcientific purſuits. In 1699 he was admitted an honorary member of the Royal Academy of Sciences at Paris, and proved an aſſiduous attendant at the meetings of that illuſtrious body, to whoſe Memoirs he was an enlightened contributor. He died at Paris in 1725, when ſeventy-five years of age. He publiſhed Phyſical and Mathematical Obſervations, tending to the Improvement of Aſtronomy and of Geography, ſent from Siam to the Academy of Sciences at Paris, by the Jeſuit Miſſionaries, &c. with Reflections and Notes, in two volumes. The firſt, which is in octavo, was publiſhed in 1688, and the ſecond, in quarto, in 1692.

This author is not to be confounded with his countryman GOUYE of Longuemare, who died in 1763, and was regiſtrar of the bailiwic of Verſailles. The latter publiſhed ſeveral intereſting Memoirs and Diſſertations relative to the hiſtory of France.

GOU'ZON, a town of France, in the department of the Creuſe, and chief place of a canton, in the diſtrict of Bouſſac: five leagues eaſt of Gueret.

GO'WER, the peninſulated extremity of Glamorganſhire, to the weſt of the bay of Swanſea. It has very lofty lime-ſtone cliffs next the ſea, whence large quantities of lime are exported to the Engliſh counties acroſs the Briſtol channel. The coaſt abounds with oyſters. The land is a fertile tract of arable and paſture.

GOW'ER (John), an Engliſh poet of the fourteenth century, deſcended from a family at Stitenham in Yorkſhire. He received a liberal education, and was a member of the ſociety of the Inner Temple, where Chaucer, on coming to the metropolis, found him much reſpected in the profeſſion of the law. Some have aſſerted that he became chief juſtice of the common pleas, but others ſuppoſe him in this point to have been miſtaken for another perſon of the ſame name. He particularly attached himſelf to Thomas duke of Glouceſter, uncle to Richard II. and was noticed by that monarch, at whoſe deſire he wrote his principal work. Yet on the acceſſion of Henry IV. he employed his pen in adulation of the new king, not without ſome ſevere reflections on the miſgovernment of the depoſed one. He appears to have been in affluent circumſtances; for he contributed largely to the rebuilding of the conventual church at St. Mary Overee, in Southwark. He died at a great age, in 1401. His tomb is ſtill to be ſeen in the church to which he was ſo munificent a benefactor. He was the author of three volumes entitled *Speculum Meditantis*; *Vox Clamantis*; *Confeſſio Amantis.* Of theſe, the firſt, or the Mirror of Meditation, is a moral tract in ten books, relative to the conjugal duties, written in French rhymes. The ſecond, or Voice of one crying in the Wilderneſs, is chiefly a metrical chronicle of the inſurrection of the commons under Richard II. in Latin elegiac verſe. The

third, or Lover's Confeſſion, is an Engliſh poem in eight books, relative to the morals and metaphyſics of love. This alone has been printed; and ſuch was its reputation, that it was one of the earlieſt products of the Engliſh preſs, being ſet forth by Caxton in 1483. The language of this piece is reckoned tolerably perſpicuous, and the verſification often harmonious. With reſpect to his Latin ſtyle, Mr. Warton gives him the credit of copying Ovid's Elegiacs with ſome degree of purity. He had not, however, got over the barbariſm of monkiſh rhymes, then ſo much the vogue.

GOWER's ISLAND, a ſmall iſland in the Southern Pacific Ocean, which has no anchorage near it. Lat. 7. 55. S. lon. 158. 56. E. Greenwich.

GOW'LANS (Locker). See TROLLIUS.

GOWN, *ſ.* [*gonna*, Ital. *gwn*, Welſh and Erſe.] A long upper garment:

In length of train deſcends her ſweeping *gown*,
And by her graceful walk the queen of love is known.
Dryden.

The long habit of a man dedicated to acts of peace, as divinity, medicine, law, &c.—The benefices are often ſo mean in Iriſh counties, that they will not yield any competent maintenance for an honeſt miniſter, ſcarcely to buy him a *gown*. *Spenſer.*—The dreſs of peace:

He Mars depos'd, and arms to *gowns* made yield;
Succeſsful councils did him ſoon approve
As fit for cloſe intrigues as open field. *Dryden.*

GOWN'ED, *adj.* Dreſſed in a gown:

In velvet white as ſnow the troop was *gown'd*,
The ſeams with ſparkling emeralds ſet around. *Dryden.*

GOWN'MAN, *ſ.* A man devoted to the arts of peace; one whoſe proper habit is a gown:

Let him with pedants
Pore out his life amongſt the lazy *gownmen*. *Rowe.*

GOW'RAN, a town of Ireland, in the county of Kilkenny: ſix miles eaſt of Kilkenny.

GOY'AS, a government of South America, in Brazil, which extends from 24. to 36. degrees of lon. weſt Ferro, and from 6. 30. to 19. ſouth lat. The number inhabitants of this vaſt extent of country is eſtimated at 8930 whites, 29,630 Indians, and 34,100 negroes. The chief buſineſs is ſearching for gold in the mines, which were firſt diſcovered in the year 1726.

GOYA'VA, a town of Africa, on the Grain Coaſt.

GOY'AVE, a town on the weſt coaſt of the iſland of Grenada, in the Weſt Indies. Lat. 12. 13. N. lon. 61. 31. W. of Greenwich.

GOYA'VES, a town of the iſland of Guadaloupe, ſituated in a bay to which it gives name.

GO'YEN (John Van), a painter of landſcapes, cattle, and ſea-pieces, born at Leyden in 1596; the diſciple of Vandervelde, the moſt celebrated landſcape-painter of his time. Van Goyen very ſoon roſe into general eſteem; and his works are univerſally ſpread through Europe. He died in 1656, aged 60. His beſt works are valued ſo highly in the Low Countries, that they deſervedly afford large prices, being ranked in Holland with the pictures of Teniers.

GOZ, or GO'ZEN, a ſeaport town of Africa, in the empire of Morocco, on the coaſt of the Atlantic, not far from Mogador.

GO'ZA, or GO'ZO, a ſmall iſland in the Mediterranean, belonging to the knights of Malta, ſituated a little to the north-weſt of Malta. The inhabitants of Gozo are ſaid to be more induſtrious than thoſe of Malta, as they are more ſecluded from the world and have fewer inducements to idleneſs. Their coverlits and blankets are much eſteemed, and their ſilk ſtockings remarkably fine; ſome, they pretend, have been ſold for ten ſequins a pair. The red kind of oranges are produced from the common orange bud, engrafted on the pomegranate ſtock. The ſugar cane is cultivated with ſucceſs in Gozo, though not in any conſiderable quantity.

GO'ZAN, a river of Aſſyria, mentioned, 2 *Kings* xvii. 6. xviii. 11. xix. 12. 1 *Chron.* v. 26. *Iſaiah* xxxvii. 12.

GOZ'ZO DI CAN'DIA, a ſmall iſland, near the iſland of Candia, in the Mediterranean. Lat. 34. 58. N. lon. 41. 31. E. Ferro.

GRAAF, or GRAEF (Regner de), a phyſician and anatomiſt, born at Schoonhoven in Holland, in 1641. His father, Cornelius, an architect, diſtinguiſhed himſelf by the invention of ſeveral hydraulic machines. Regner was brought up to phyſic, and ſtudied firſt at Leyden, under James Sylvius, and then in France, where he graduated at Angers in 1665. He ſettled at Delft, and became eminent in practice; but was cut off at the early age of thirty-two, in 1673. His death was imputed to vexation, from the controverſies in which he was engaged with Swammerdam. De Graaf's firſt publication was, *De Succi Pancreatici Natura & Uſu*, Leyden, 1664, 12mo. He next publiſhed, *De Virorum Organis Generationi inſervientibus*, 1668, 8vo. a work which gained him great anatomical reputation. In this work he was the firſt who gave repreſentations of the tubes for anatomical injection; an art in which he was very expert, and which he greatly improved. In 1672 he publiſhed, *De Mulierum Organis Generationi inſervientibus*, 8vo. a work containing much that is intereſting and valuable. He maintained in it the ovarian ſyſtem of generation, and gave figures of the corpora lutea, and the fœtus in different ſtates of progreſs. A ſhort time before his death, in 1673, he publiſhed *Partium Genitalium Defenſio*, in which he aſſerts his own claims to diſcovery, in oppoſition to thoſe of Swammerdam, and adds ſome new anatomical obſervations. All the works of De Graaf have been printed together in 8vo. Leyd. 1677; Lond. 1678; Amſt. 1705.

GRAB', a town of Bohemia, in the circle of Leitmeritz: ſeventeen miles weſt-north-weſt of Leitmeritz.

GRA'BAT, *ſ.* [French; from the Greek γραβατος, a bed.] A little bed with curtains. *Phillips.*

GRABATA'RII, *ſ.* [from *grabat.*] In church hiſtory, thoſe perſons who were baptiſed on their death-beds.

GRABAU', a town of Poland, in the palatinate of Kaliſh: twenty miles ſouth of Kaliſh.

GRABAW', a town of Poland, in the palatinate of Belcz: twenty-eight miles north-north-weſt of Belcz.

To GRAB'BLE, *v. n.* [probably corrupted from *grapple.*] To grope; to feel eagerly with the hands.—My blood chills about my heart at the thought of theſe rogues, with their bloody hands *grabbling* and pulling out my very entrails. *Arbuthnot.*

To GRAB'BLE, *v. a.* To lie proſtrate on the ground. *Ainſworth.*

GRABE (John-Erneſt), a learned divine, and editor of the Alexandrian MS. in the royal library at London, born at Koningſberg, in Pruſſia, in 1666. He received his education at the univerſity in his native town, and when he had taken his degree of M. A. ſedulouſly applied himſelf to the ſtudy of divinity, and to the peruſal of the writings of the fathers. From the latter he imbibed the opinion that the outward and uninterrupted ſucceſſion of biſhops is eſſential to the being of a true church; which, as it is contrary to the tenets of Lutheraniſm, occaſioned his being ſummoned before his ſuperiors, and confined for ſeveral months. Upon his releaſe, becoming ſtill more firmly attached to that doctrine, he determined to quit the communion in which he had been educated, and came to England, where he was ſo ſtrongly recommended to king William, that his majeſty granted him a penſion of 100l. a-year, to enable him to purſue his ſtudies. From this time he adopted England for his country; and he ſhewed that he was not unworthy of the patronage which he received, by the attention and induſtry which he beſtowed on the publication of ſeveral learned works. In 1698, he publiſhed,

liſhed, 1. *Spicilegium S.S. Patrum, &c.* vol. i. 8vo. containing fragments from the writings of the catholic fathers and hereties of the firſt century, with diſſertations and remarks; and in the following year came out the ſecond volume of the ſame work. In the year 1706 Mr. Grabe was ordained a deacon of the church of England, and was preſented to a chaplaincy of Chriſtchurch, Oxford. In the ſame year he publiſhed *S. Juſtini Philoſophi & Martyris Apologia Prima pro Chriſtianis, &c.* 8vo. illuſtrated with the notes of ſeveral learned men, and additional remarks of his own; and in 1702 he publiſhed *S. Irenæi Epiſcopi Lugdunenſis contra omnes Hæreſes, Libri quinque, &c.* folio, with prolegomena, notes, &c.

Upon the acceſſion of queen Anne to the throne, Mr. Grabe's penſion was continued, and her majeſty was adviſed to employ him on an undertaking which reflected great honour on himſelf, and on the patronage by which he was enabled to complete it: that was to print from the Alexandrian manuſcript in the royal library, the Septuagint tranſlation of the Old Teſtament. When the queen informed him that he was ſelected to perform this taſk, ſhe preſented him with a purſe, as a preliminary encouragement to his exertions. In 1705, Mr. Grabe publiſhed his propoſals for printing that work by ſubſcription, annexed to an account which he had drawn up of the ſuperior value of this copy to the Vatican manuſcript. In the following year, the univerſity of Oxford, as a teſtimony of their approbation of his deſign, honoured him with the degree of doctor of divinity; and in addition to the queen's bounty, he received a preſent from his own ſovereign, the king of Pruſſia, together with ſubſcriptions from the principal nobility, clergy, and gentry, from all parts. Animated by theſe encouragements, he proceeded with diligence and ſpirit in his undertaking, and in 1707 produced the firſt volume of his work, under the title of *Vetus Teſtamentum juxta Septuaginta Interpretes; Tomus I. continens Octateuchum, &c.* in folio and 8vo. This volume contains the Pentateuch and the three following books. According to the order which the author had adopted, the ſecond volume was to contain all the hiſtorical books of the Old Teſtament, whether canonical or apocryphal; the third, all the prophetical books; and the fourth, the Pſalms, the three books of Solomon, &c. But after he had begun to print the ſecond volume, he was induced to poſtpone the appearance of that, and alſo of the third volume, by the expectation of being furniſhed with important manuſcripts and other materials, which would enable him to render them more complete. That no time might be loſt, however, in expediting the whole work, he publiſhed in 1709 the fourth volume, *continens Pſalmorum, Jobi, ac tres Salamonis Libros, cum Apocrypha Ejuſdem, necnon Siracidæ Sapientia*, in folio and 8vo. In the following year he publiſhed a Latin diſſertation, giving a particular account of the reaſons why he had departed from his original order of publication, and of the helps which he expected to receive in order to perfect his plan. Theſe were, a Syriac manuſcript of the hiſtorical books of the Old Teſtament, with Origen's remarks upon them; and two manuſcripts, one belonging to cardinal Chigi, and the other to the college of Louis XIV. Afterwards he received theſe manuſcripts, and made collations from them; while in the mean time he had prepared a volume of annotations upon the whole work, and alſo collected the materials for the Prolegomena. It required, however, ſo much time to digeſt the whole into proper method, that the ſecond and third volumes were not publiſhed till after the author's death, which happened in 1712, in only the forty-fifth year of his age. Beſides this great and laborious work, Dr. Grabe publiſhed in 1705, an elegant edition of biſhop Bull's Latin works, in folio, with his own notes, which procured him the thanks of that prelate; aſſiſted in preparing for the preſs archdeacon Gregory's edition of the New Teſtament in Greek, which was printed in the ſame year; and in 1706 he publiſhed a preface to Daubuz's *Pro Teſtimonio Flavii Joſephi de Jeſu Chriſto, Libri duo.* He alſo left behind him a number of manuſcripts, of which the following were afterwards given to the world: *Liturgia Græca Johannis Erneſti Grabe*, ſubjoined to Chriſtopher Matthew Pfaff's edition of *Irenæi Fragmenta Anecdota*, printed at the Hague, in 1715, 8vo. and *De Forma Conſecrationis Euchariſticæ, hoc eſt, Defenſio Eccleſiæ Græcæ, &c.* publiſhed with an Engliſh verſion, and notes, &c. at London, 1721, 8vo.

GRA'BEN, a town of Croatia: twelve miles ſouth of Varaſdin.

GRA'BIN, a town of Sileſia, in the principality of Oels: two miles ſouth-weſt of Feſtenburg.

GRA'BERN, a town of Bohemia, in the circle of Leitmeritz: ſix miles weſt-ſouth-weſt of Leypa.

GRA'BERN, a town of Germany, in the archduchy of Auſtria: three miles north of Sonneberg.

GRA'BINETZ, a town of Imperial Iſtria: fourteen miles north eaſt of Pedena.

GRA'BO, a town of Sweden, in the province of Eaſt Gothland: eleven miles ſouth-eaſt of Linkioping.

GRABOVENIT'ZA (Upper), a lake of Sileſia, in the principality of Oels: five miles eaſt of Militſch.

GRABOVENIT'ZA (Unter), a lake of Sileſia, in the principality of Oels: three miles and a half eaſt of Militſch.

GRA'BOW, a town of Germany, in the circle of Lower Saxony, and duchy of Mecklenburgh: twenty-two miles ſouth of Schwerin.

GRAÇAY', a town of France, in the department of the Cher, and chief place of a canton, in the diſtrict of Vierzon: four leagues north-north-weſt of Iſſoudun, and three and a quarter ſouth-weſt of Vierzon.

GRAC'CHUS (T. Sempronius), father of Tiberius and Caius Gracchus, twice conſul, and once cenſor, was diſtinguiſhed by his integrity as well as his prudence and ſuperior ability either in the ſenate or at the head of the armies. He made war in Gaul, and met with much ſucceſs in Spain. He married Sempronia, of the family of the Scipio's, a woman of great virtue, piety, and learning.——Their children, Tiberius and Caius, who had been educated under the watchful eye of their mother, rendered themſelves famous for their eloquence, ſeditions, and an obſtinate attachment to the intereſts of the populace, which at laſt proved fatal to them. With a winning eloquence, affected moderation, and uncommon popularity, Tiberius began to renew the Agrarian law, which had already cauſed ſuch diſſenſions at Rome. See AGRARIAN LAWS, vol. i. p. 204. By the means of violence, his propoſition paſſed into a law, and he was appointed commiſſioner, with his father-in-law Appius Claudius, and his brother Caius, to make an equal diviſion of the lands among the people. The riches of Attalus, which were left to the Roman people by will, were diſtributed without oppoſition; and Tiberius enjoyed the triumph of his ſucceſsful enterprize, when he was aſſaſſinated in the midſt of his adherents by P. Naſica, while the populace were all unanimous to reelect him to ſerve the office of tribune the following year. The death of Tiberius checked, for a while, the friends of the people; but Caius, ſpurred by ambition and furious zeal, attempted to remove every obſtacle which ſtood in his way by force and violence. He ſupported the cauſe of the people with more vehemence, but leſs moderation, than Tiberius; and his ſucceſs ſerved only to awaken his ambition, and animate his reſentment againſt the nobles. With the privileges of a tribune, he ſoon became the arbiter of the republic, and treated the patricians with contempt. This behaviour haſtened the ruin of Caius, and in the tumult he fled to the temple of Diana, where his friends prevented him from committing ſuicide. This increaſed the ſedition, and he was murdered by order of the conſul Opimius, B.C. 121, about thirteen years after the unfortunate end

end of Tiberius. His body was thrown into the Tiber, and his wife was forbidden to put on mourning for his death. Caius has been accuſed of having ſtained his hands in the blood of Scipio Africanus the younger, who was found murdered in his bed. *Plut. in vitâ.—Cic. in Cat.* 1.—*Lucan.* 6. v. 796.

GRACE, *ſ.* [*grace*, Fr. *gratia*, Lat. *graace*, Erſe.] Favour; kindneſs.—Is this the reward and thanks I am to have for thoſe many acts of *grace* I have lately paſſed? *King Charles.*

O momentary *grace* of mortal men,
Which we more hunt for than the *grace* of God! *Shakeſp.*

Favourable influence of God on the human mind.—The *grace* of God, that paſſeth underſtanding, keep your hearts and minds. *Common Prayer.*—Virtue; effect of God's influence.—Within the church are contained perſons truly good and ſanctified; and together with them other perſons void of all ſaving *grace*. *Pearſon.*—Pardon; mercy:

Noble pity held
His hand a while, and to their choice gave ſpace.
Which they would prove, his valour or his *grace*. *Waller.*

Favour conferred:

I ſhould therefore eſteem it great favour and *grace*,
Would you be ſo kind as to go in my place. *Prior.*

Privilege:

But to return and view the cheerful ſkies,
To few great Jupiter imparts this *grace*. *Dryden.*

Behaviour, conſidered as decent or unbecoming.—Have I reaſon or good *grace* in what I do? *Temple.*—Adventitious or artificial beauty; pleaſing appearance.—To write and ſpeak correctly gives a *grace* and gains a favourable attention to what one has to ſay. *Locke.*

One lilac only, with a ſtatelier *grace*,
Preſum'd to claim the oak's and cedar's place. *Harte.*

Natural excellence:

The charming Lauſus, full of youthful fire,
To Turnus only ſecond in the *grace*
Of manly mien, and features of the face. *Dryden.*

Embelliſhment; recommendation; beauty.—Where juſtice grows, there grows the greater *grace*. *Spenſer.*

Set all things in their own peculiar place,
And know that order is the greateſt *grace*. *Dryden.*

Single beauty.—I paſs their form and every charming *grace*. *Dryden.*—Ornament; flower; higheſt perfection:

By their hands this *grace* of kings muſt die,
If hell and treaſon hold their promiſes. *Shakeſpeare.*

Single or particular virtue.—The *graces* of religion prepare him for the moſt uſeful diſcharge of every relation of life. *Rogers.*—Virtue phyſical:

O, mickle is the pow'rful *grace* that lies
In plants, herbs, ſtones, and their true qualities. *Shakeſp.*

The title of a duke or archbiſhop; formerly of the king, meaning the ſame as *your goodneſs*, or *your clemency*:

Here come I from our princely general,
To know your grief; to tell you from his *grace*,
That he will give you audience. *Shakeſpeare.*

A ſhort prayer ſaid before and after meat:

Then cheerful healths, your miſtreſs ſhall have place:
And what's more rare, a poet ſhall ſay *grace*. *Pope.*

To GRACE, *v. a.* To adorn; to dignify; to embelliſh; to recommend; to decorate:

Though triumphs were to generals only due,
Crowns were reſerv'd to *grace* the ſoldiers too. *Pope.*

To dignify or raiſe by an act of favour:

Diſpoſe all honours of the ſword and gun,
Grace with a nod, and ruin with a frown. *Dryden.*

To favour:

When the gueſts withdrew,
Their courteous hoſt, ſaluting all the crew,
Regardleſs paſs'd her o'er, nor *grac'd* with kind adieu.
Dryden.

ACT OF GRACE, an appellation firſt given to the act of parliament of 1696, c. 32. which allows priſoners for civil debts to be ſet at liberty, upon making oath that they have not wherewithal to ſupport themſelves in priſon, unleſs they are alimented by the creditors on whoſe diligences they were impriſoned, within ten days after intimation made for that purpoſe.

DAYS OF GRACE, three days immediately following the term of payment of a bill of exchange, in the laſt of which the creditor muſt proteſt it, if payment be not obtained, in order to intitle him to recourſe againſt the drawer. See the article BILL OF EXCHANGE, vol. iii. P. 34.

GRACE-CUP, *ſ.* The cup or health drank after grace:

The *grace-cup* ſerv'd, the cloth away,
Jove thought it time to ſhew his play. *Prior.*

GRA'CED, *adj.* Beautiful; graceful; virtuous; regular; chaſte. *Not in uſe:*

Epicuriſm and luſt
Make it more like a tavern or a brothel,
Than a *grac'd* palace. *Shakeſpeare.*

GRA'CEFUL, *adj.* Beautiful with dignity:

Matchleſs his pen, victorious was his lance;
Bold in the liſts, and *graceful* in the dance. *Pope.*

Graceful to fight, and elegant to thought,
The great are vanquiſh'd, and the wiſe are taught. *Young.*

GRA'CEFULLY, *adv.* Elegantly; with pleaſing dignity.—Walking is the mode or manner of man, or of a beaſt; but walking *gracefully* implies a manner or mode ſuperadded to that action. *Watts.*

Through nature and through art ſhe rang'd,
And *gracefully* her ſubject chang'd. *Swift.*

GRA'CEFULNESS, *ſ.* Elegance of manner; dignity with beauty.—He executed with ſo much *gracefulneſs* and beauty, that he alone got money and reputation. *Dryden.*—There is a ſecret *gracefulneſs* of youth which accompanies his writings, though the ſtaidneſs and ſobriety of age be wanting. *Dryden's Ovid, Preface.*

Her hearers are amaz'd from whence
Proceeds that fund of wit and ſenſe;
While *gracefulneſs* its art conceals,
And yet through every motion ſteals. *Swift.*

GRA'CELESS, *adj.* Void of grace; wicked; hopeleſsly corrupt; abandoned.—In all manner of *graceleſs* and hopeleſs characters, ſome are loſt for want of advice, and others for want of heed. *L'Eſtrange.*

Furniſh'd for offence, he croſs'd the way,
Betwixt the *graceleſs* villain and his prey. *Dryden.*

GRA'CELESSLY, *adv.* In a graceleſs manner. *Scott.*

GRA'CELESSNESS, *ſ.* The ſtate of quality of being graceleſs. *Scott.*

GRA'CES, *ſ.* *Good graces*, for favour, is ſeldom uſed in the ſingular:

Demand deliv'ry of her heart,
Her goods and chattles, and good *graces*,
And perſon up to his embraces. *Hudibras.*

GRA'CES, or CHARITES, in mythology, were three beautiful deities who attended on Venus. Their names, *Aglia*, *Thalia*, and *Euphroſyne*, are ſaid literally to ſignify *ſhining*, *flouriſhing*, and *gay*. They are painted naked, to ſhow that the Graces borrow nothing from art, and that they have no other beauties than what are natural. Yet in the firſt ages they were not repreſented naked, as appears from Pauſanias, lib. vi. and lib. ix. who deſcribes their

their temple and ſtatues. Their robe was gilt; one of them held in her hand a roſe, another a dye, and the third a ſprig of myrtle.—See the article CHARITES, vol. iv. p. 113.

GRA'CIAN (Balthaſar), an eminent Spaniſh writer, born in 1603 at Calataiud. He entered among the Jeſuits at the age of ſixteen, and became a teacher in the ſociety ſucceſſively of belles-lettres, of philoſophy, and theology. He was likewiſe for ſome years a preacher; and finally was rector of the Jeſuits' college of Tarragona. He died in that college in 1658. His principal works are: 1. *El Heroe* (The Hero), 1637, under the name of Lorenzo Gracian, which he alſo took on other occaſions. 2. *El Politico D. Ferdinando el Catholico*, 1641; or, Reflections on the political Conduct of Ferdinand the Catholic. 3. *Agudezza y arte de Ingenio*, 1642; a treatiſe on the different kinds of witty conceptions. 4. *El Diſcreto*, 1646. 5. *El Criticon*, a work treating on the errors to which man is liable. 6. *Oraculo Manual, y Arte de Prudencia*, 1647; a manual for prudent conduct. 7. *El Comulgador*, 1655; a collection of meditations on taking the holy communion. Moſt of theſe works have been tranſlated into French, and other foreign languages.

GRA'CIAS A DI'OS, a town of North America, in the country of Mexico, and province of Honduras, ſituated at the mouth of a river, which communicates with the Bay of Honduras: 140 miles eaſt of Guatimala. Lat. 14. 30. N. lon. 72. 15. W. Greenwich.

GRA'CILE, *adj.* [*gracilis*, Lat.] Slender, ſmall.

GRA'CILENT, *adj.* [*gracilentus*, Lat.] Lean.

GRACI'LITY, *ſ.* [*gracilitas*, Lat.] Slenderneſs; ſmallneſs.

GRA'CIOUS, *adj.* [*gracieux*, Fr.] Merciful; benevolent.—To be good and *gracious*, and a lover of knowledge, are two of the moſt amiable things. *Burnet.*—Favourable; kind.—And the Lord was *gracious* unto them, and had compaſſion on them. 2 *Kings*, xiii. 23.

From now reveal
A *gracious* beam of light; from now inſpire
My tongue to ſing, my hand to touch the lyre. *Prior.*

Acceptable; favoured.—Doctrine is much more profitable and *gracious* by example than by rule. *Spenſer.*—He made us *gracious* before the kings of Perſia, ſo that they gave us food. 1 *Eſdr.* viii. 80.—Virtuous; good.—Kings are no leſs unhappy, their iſſue not being *gracious*, than they are in loſing them when they have approved their virtues. *Shakeſpeare.*—Excellent. *Now obſolete.*—The grievous abuſe which hath been of councils, ſhould rather cauſe men to ſtudy how ſo *gracious* a thing may again be reduced to that firſt perfection. *Hooker.*—Graceful; becoming. *Obſolete.*—Our women's names are more *gracious* than their Rutilia, that is red-head. *Camden.*—This ſenſe was extended to perſons.—There was not ſuch a *gracious* creature born. *Shakeſpeare.*

GRA'CIOUSLY, *adv.* Kindly; with kind condeſcenſion.—If her majeſty would but *graciouſly* be pleaſed to think a hardſhip of this nature worthy her royal conſideration. *Swift.*—In a pleaſing manner.

GRA'CIOUSNESS, *ſ.* Kind condeſcenſion.—The *graciouſneſs* and temper of this anſwer made no impreſſion on them. *Clarendon.*—Pleaſing manner.

GRAC'ULA, [Lat. ſo named from its cry.] In ornithology, the grakle; a genus of birds belonging to the order of picæ; the characters of which are: bill convex, knife-ſhaped, naked at the baſe: tongue entire, enlarged and fleſhy; feet ambulatory. None of theſe birds have been found to inhabit Europe. They are remarkable for their thick bill, compreſſed at the ſides; their minute noſtrils placed at its baſe; their hooked ſharp nails; and the middle toe of their fore feet connected at the baſe with the exterior one. There are thirteen ſpecies now aſcertained, beſides varieties.

1. Gracula religioſa, the minor grakle; plumage violet, black, with a fine gloſs on the upper-part of the body; the throat, wings, and tail, enriched with green and violet reflections; and it has a white ſpot on the wings. What is moſt remarkable, is a double yellow comb, irregularly jagged, which riſes on each ſide of the head, behind the eye; the two parts recline and approach each other, and on the back of the head they are parted only by a bar of long narrow feathers, which begins at the baſe of the bill; the other feathers on the crown of the head form a ſort of black velvet; the legs are of a tawny yellow. It feeds on fruit, and is eight inches long. This ſpecies abounds in Aſia, and is found in almoſt every iſle beyond the Ganges. It is a very tame and familiar bird; and, like the parrot, will ſoon learn to talk. There is a larger variety, which differs only in ſize, and in ſlight variations of colour.

2. Gracula calva, the bald grakle: upper part of the body light ſilver-grey, tail and wings darker, each eye encircled by a cere entirely bare, and forming an irregular ellipſe; the under part of the body is brown, varied with white ſpots; the naked ſkin which ſurrounds the eyes is fleſh-coloured; the bill, legs, and nails, black. It has the name of *goulin* in the Philippine iſlands, where it very much abounds.

3. Gracula criſtatella, the creſted grakle: this is larger than the preceding; almoſt all its plumage is black, with a dull bluiſh tint; a white ſpot appears in the middle of the wings, and a little white on the tips of the lateral quills of the tail; the bill and legs are yellow, and the iris of a fine orange. It has a ſmall tuft of feathers on the forehead, forming a creſt, which it can erect at pleaſure. Theſe birds are natives of China, where they are much eſteemed, and the figures of them are frequently ſeen in Chineſe paintings and paper-hangings.

4. Gracula barita, the boat-tailed grakle: about the ſize of a cuckow: bill ſharp, black, and an inch and a half in length; the general colour of the plumage is black, with a gloſs of purple; legs and claws black, the latter hooked. It has a great ſingularity in the folding up of the tail-feathers, which, inſtead of forming a plain ſurface at top, ſink into a hollow like a deep gutter. It always carries its tail expanded when on the ground, and folds it up in the above manner only when perched, or flying. It inhabits Jamaica; and feeds on maize, and other inſects, as well as on the fruit of the banana. It is likewiſe common in North America, where it breeds in the ſwamps, and migrates in September, after which none are ſeen.

5. Gracula quiſcala, the purple grakle; plumage black, but moſt beautifully and richly gloſſed with purple, eſpecially on the head and neck. The female is wholly of a brown colour, deepeſt on the wings and tail. This ſpecies inhabits Carolina, Mexico, and other parts of North America; alſo Jamaica; and the Weſt-India iſlands. Theſe birds are very deſtructive to the fields of maize. They build in trees; and are ſaid to paſs the winter in ſwamps which are quite overgrown with wood, from thence only appearing in mild weather; and, after the maize is got in, are content to feed on aquatic tare-graſs, buck-wheat, and oats; yet they are ſaid alſo to deſtroy that pernicious inſect the bruchus piſi. There is a pied variety of this ſpecies, with the head and breaſt white; quill-feathers and tail black; found in Mexico.

6. Gracula fœtida, the fetid grakle: plumage black; quill-feathers bluiſh; band round the neck naked; head with erect ſhort ſilky feathers; bill like that of the cuckow; noſtrils oval, naked; tongue ſharp; tail even. Inhabits America: ſize of a magpie.

7. Gracula ſaularis, the dial grakle: upper parts bluiſh-black; belly, ſpot on the wings, and lateral tail-feathers, white. Inhabits Bengal: ſize of a thruſh.

8. Gracula Atthis, the Egyptian grakle: ſuperior part of the body greeniſh-blue; belly, ferruginous; legs, blood-red. Neck with a longitudinal ruſty line at the ſides. Inhabits Egypt; four inches long; feeds on inſects.

9. Gracula longiroſtra, the long-billed grakle: body brown;

brown; beneath ochre-yellow; head, and neck, black; band round the neck naked, wrinkled; area of the wings white; tail wedge-ſhaped; black, white at the tip. Bill black, long; noſtrils placed in the middle; tongue deeply cleft, the edges jagged; irids duſky; firſt quill-feathers obliquely white at the baſe; legs long, ſtout, black; body, ſlender. Inhabits South America; about eight inches long. There is a variety of this ſpecies of a ſhining-black; ſome of the feathers of the ſhoulders and tail yellow; found in the Sandwich iſlands.

10. Gracula ſturnina, the Dauurian grakle; plumage hoary; ſpot on the crown and back between the wings violet black; tail and wings with a ſhade of green, the latter with a double white ſtripe. Inhabits the ozier banks of Dauuria; in its neſt and eggs reſembles the thruſh.

11. Gracula icterops, the yellow-faced grakle; body black; band on the wings and body beneath white; region of the eyes naked, wrinkled; bill compreſſed; noſtrils oval; legs yellow. Inhabits New Holland.

12. Gracula Cayanenſis, the climbing grakle; plumage ſtriate; above tawny, beneath yellowiſh; head, and chin, varied with tawny and white; tail wedge-ſhaped, ſharp, and with the wings tawny. Bill black, near two inches long, a little curved; legs black. Inhabits the interior parts of Guiana; climbs trees like the woodpecker.

13. Gracula carunculata, the cockſcomb grakle; upper parts of the body cinereous; tail and quill-feathers black; crown and chin with warty excreſcences. Inhabits the Cape of Good Hope? ſix inches long.

GRA'DATED, *adj.* [from the Lat. *gradus*, a ſtep.] Graduated, divided into parts or degrees. *Scott.*

GRADA'TIO, *ſ.* in rhetoric, a figure the ſame that in Greek is called climax.

GRADA'TION, *ſ.* [*gradation*, Fr. *gradus*, Lat.] Regular progreſs from one degree to another.—The deſire of more and more riſes by a natural *gradation* to moſt, and after that to all. *L'Eſtrange.*—Regular advance ſtep by ſtep.—The pſalmiſt very elegantly expreſſeth to us the ſeveral *gradations* by which men at laſt come to this horrid degree of impiety. *Tillotſon.*—Order; ſequence; ſeries:

'Tis the curſe of ſervice;
Preferment goes by letter and affection,
Not, as of old, *gradation*, where each ſecond
Stood heir to th' firſt. *Shakeſpeare.*

Regular proceſs of argument.—Certain it is, by a direct *gradation* of conſequences from this principle of merit, that the obligation to gratitude flows from, and is enjoined by, the firſt dictates of nature. *South.*

GRA'DATORY, *ſ.* [*gradus*, Lat.] Steps from the cloiſters into the church. *Ainſworth.*

GRA'DECK, a town of Lithuania, in the palatinate of Troki: twenty miles ſouth-ſouth-weſt of Grodno.

GRA'DES, or GRADUS, a town of Germany, in the duchy of Carinthia: five miles north of Gurck, and five weſt of Freiſach.

GRA'DETZ, a town of Swiſſerland, in the Valais: ſix miles eaſt of Sion.

GRA'DIENT, *adj.* [*gradiens*, Lat.] Walking; moving by ſteps.

GRADIG'NA, a town of Venetian Iſtria: ſeven miles ſouth-ſouth-eaſt of Capo d'Iſtria.

GRADIS'CA, or GRAD'ISG, a town of Sclavonia, ſituated on the river Save, near the borders of Croatia, well peopled, and ſurrounded with fortifications; a regiment of infantry takes its name, and is appointed to defend the frontiers; 132 miles weſt of Belgrade, and 170 ſouth of Vienna. Lat. 45. 28. N. lon. 34. 31. E. Ferro.

GRADIS'CA, a town of Germany, in the circle of Auſtria, and county of Friuli, on the Liſonzo; built in 1473, to ſtop the inroads of the Turks. In 1764, the fortifications were repaired and enlarged, and in 1784 it was erected into a biſhopric. It was taken by the French republicans in 1797, and its garriſon, conſiſting of three thouſand men, were made priſoners; the Auſtrian army, commanded by the arch-duke Charles, having juſt before been defeated at no great diſtance from the town. The territory of Gradiſca, which was formerly a county of itſelf, is united to Goritz: five miles ſouth of Goritz, and one hundred and eighty-two ſouth-ſouth-weſt of Vienna. Lat. 46. 6. N. lon. 31. 18. E. Ferro.

GRA'DISCHK, a town of Stiria: one mile from Windiſch Gratz.

GRADIS'TA, a town of European Turkey, in Bulgaria, on the borders of Servia: forty miles ſouth of Viddin.

GRADI'VUS, a ſurname of Mars among the Romans, perhaps from *χραδαινειν*, brandiſhing a ſpear. His reſidence was ſuppoſed to be among the fierce and ſavage Thracians and Getæ, over whom he particularly preſided. *Virgil.*

GRAD'LIZ, a town of Bohemia, in the circle of Konigingratz: twelve miles north of Konigingratz.

GRA'DO, a town of Spain, in the province of Aſturia: ten miles north-weſt of Oviedo.

GRA'DO, a ſmall iſland in the Gulf of Venice, near the coaſt of Friuli. Lat. 45. 44. N. lon. 31. 8. E. Ferro.

GRA'DUAL, *adj.* [*graduel*, Fr.] Proceeding by degrees; advancing ſtep by ſtep; from one ſtage to another:

Nobler birth
Of creatures animate with *gradual* life,
Of growth, ſenſe, reaſon, all ſumm'd up in man. *Milton.*

GRA'DUAL, *ſ.* [*gradus*, Lat.] An order of ſteps:

Before the *gradual* proſtrate they ador'd,
The pavement kiſs'd, and thus the ſaint implor'd. *Dryd.*

A prayer; a form of prayer to be ſung in the Roman church after the epiſtles.

GRADUAL PSALMS, fifteen pſalms, from the 119th to the 134th, which were wont to be ſung by the Levites, as they went up the fifteen ſteps of Solomon's temple, a pſalm on each ſtep.

GRADUAL'ITY, *ſ.* Regular progreſſion.—This ſome aſcribe unto the mixture of the elements, others to the *graduality* of opacity and light. *Brown.*

GRAD'UALLY, *adv.* By degrees; in regular progreſſion.—The Author of our being weans us *gradually* from our fondneſs of life the nearer we approach towards the end of it. *Swift.*—In degree.—Human reaſon doth not only *gradually*, but ſpecifically, differ from the fantaſtic reaſon of brutes. *Grew.*

To GRA'DUATE, *v. a.* [*graduer*, Fr. *gradus*, Lat.] To dignify with a degree in the univerſity.—John Tregonwel, *graduated* a doctor and dubbed a knight. *Carew.*—To mark with degrees.—The places were marked where the ſpirits ſtood at the ſevereſt cold and greateſt heat, and according to theſe obſervations he *graduates* his thermometers. *Derham.*—To raiſe to a higher place in the ſcale of metals: a chemical term.—The tincture was capable to tranſmute or *graduate* as much ſilver as equalled in weight that gold. *Boyle.*—To heighten; to improve.—Not only vitriol is a cauſe of blackneſs, but the ſalts of natural bodies: and dyers advance and *graduate* their colours with ſalts. *Brown.*

GRA'DUATE, *ſ.* [*gradué*, Fr. from *gradus*, Lat.] A man dignified with an academical degree:

Of *graduates* I diſlike the learned rout,
And chuſe a female doctor for the gout. *Bramſton.*

GRADUA'TION, *ſ.* [French; from *graduate*.] Regular progreſſion by ſucceſſion of degrees.—The *graduation* of the parts of the univerſe is likewiſe neceſſary to the perfection of the whole. *Grew.*—Improvement; exaltation of qualities.—The act of conferring academical degrees.—The art of dividing mathematical and aſtronomical

GRACULA.

J. Pass sc.

1. Minor Grakle. 2. Crested Grakle.

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aſtronomical inſtruments into parts or degrees; for the method of which, ſee the article SCALE. See alſo GEOMETRY of the COMPASS, in this volume.

GRA'DUS, *ſ.* [Latin, a ſtep.] A Roman meaſure, in length two feet, two inches, and ten decimal parts.

GRAD'WEIN, a town of Germany, in the duchy of Stiria: ſix miles north-north-weſt of Graz.

GRÆCI'NUS (Julius), a Roman ſenator in the reign of Caligula. He was diſtinguiſhed for eloquence and for the ſtudy of philoſophy, and he carried into practice the moral leſſons he had learned: for he refuſed to obey the command of Caligula to appear as the accuſer of Marcus Silanus, and ſuffered death in conſequence. Seneca ſays of him, "that he was put to death for the ſole reaſon, that he was too good a man to be permitted to live under a tyrant." Columella mentions him as having written a treatiſe concerning agriculture and the management of vines. He was the father of the illuſtrious Cn. Julius Agricola.

GRÆ'DER FIO'RD, a bay of Weſt Greenland. Lat. 63. 50. N. lon. 49. 30. W. Greenwich.

GRÆME (James), an admired poetical writer, born in 1749, at a village near Lanerk in Scotland, and died when only twenty-two years of age. His ſhort life, paſſed in obſcurity, and in the ſilent acquiſition of knowledge, has ſcarcely any objects for deſcription, or events to which narrative can give importance. In 1763, when Græme was fourteen years old, he was ſent to the grammar-ſchool of the neighbouring town of Lanerk, where, under Mr. Robert Thomſon, brother-in-law to the "poet of the Seaſons," he laid the foundations of claſſical knowledge and refined taſte. Like other votaries of the muſes, he was paſſionately fond of rural ſcenery, and delighted in walking alone among the beautiful caſcades and groves which the banks of the Clyde preſent in this part of Lanerkſhire. The lowlineſs of his lot conſpired with the ſimplicity of his heart, to poſſeſs him with an early veneration for the virtues and the writings of the primitive ages; and the nature of his ſtudies afforded him the beſt opportunities to heighten and confirm that veneration, by enabling him to converſe familiarly with the moſt celebrated writers of Greece and Rome. He read their remains with ardour, and imbibed their ſentiments with enthuſiaſm; on them he formed his judgment, and improved his heart. Time was not allowed him for going deep into French, Italian, and German, literature; but he had read the beſt authors in theſe languages, in Engliſh verſions. From the gentleneſs of his diſpoſition, the elegance of his fancy, and the claſſical ſimplicity of his taſte, the ſtyle of his poetry took its character, which has more tenderneſs than ſublimity, more elegance than dignity, more eaſe than force. Prompted generally by incident, and impatient of deſign, he wrote with more happineſs than care; but all his compoſitions are diſtinguiſhed by marks of genius and poetical feeling, with numbers animated and varied according to the ſubject. His thoughts are often ſtriking, and always juſt. His verſification, though not exquiſitely poliſhed, is commonly flowing and harmonious. His language is, in general, chaſte, correct, and well adapted. All his pieces were written with ſurpriſing facility; moſt of them, as occaſion ſuggeſted; and, as his cuſtom was, they were committed to any ſcrap of paper, or blank leaf of a book that came in his way. Of the incredible number of pieces he compoſed, the printed collection contains only thirty-eight elegies, and ſomewhat more than half that number of miſcellaneous poems and tranſlations; being all he deſigned for publication, or of which any complete copies have been preſerved.

His Love Elegies, the moſt finiſhed and the moſt pleaſing of his performances, are moſtly written in alternate rhyme, in the ſtyle of Hammond, whoſe ſimplicity and tenderneſs he has judiciouſly imitated, without adopting his Roman imagery derived from Tibullus, whom for the moſt part he tranſlates. Of his Elegies, moral and deſcriptive, the ſentiments, in general, are pleaſing and pathetic, and the imagery pictureſque and beautiful. The Elegy on the Loſs of the Aurora; the Elegy written at Cuthally Caſtle; October, an Elegy; and the Elegy on Mr. Fiſher, deſerve particular commendation. They unite poetical beauty with that plaintive tenderneſs which is the characteriſtic of elegy. The amiable humanity, and tender ſimplicity, which diſtinguiſh The Linnet, an Elegy, are attractive and affecting in the higheſt degree. Of his miſcellaneous poems, the Night Piece, Hymn to the Eternal Mind, Fit of the Spleen, Abra, the Student, Alexis, &c. are chiefly diſtinguiſhed for felicity of invention, ſerioufneſs of ſubject, and ſtrength and elegance of compoſition. His Epiſtles, Songs, Anacreontics, &c. diſplay invention, and no ſmall portion of that eaſe, vivacity, and delicacy, eſſential to ſucceſs in the lighter and leſs elevated productions of fancy. His Hero and Leander is for the moſt part a tranſlation from the Greek poem of Muſæus. Several paſſages in the original are omitted; others paraphraſed, and ſome entire ſpeeches and new circumſtances introduced. Upon the whole, the general poetical merit of his compoſitions muſt be allowed to be conſiderably above mediocrity. That he had great force of genius, and genuine poetical feeling, cannot be denied; and there are ſcarcely any of his performances that do not diſplay a tenderneſs of ſentiment, an energy of expreſſion, a vivacity of deſcription, and an appoſite variety of numbers, which evince the vigour of his imagination, and the accuracy of his taſte, and reflect much honour both on his heart and his underſtanding.

GRÆNTZ'GRABEN, a river of Sileſia, which runs into the river Schwartze: one mile north-weſt of Cranſt.

GRÆ'SATZ, a town of Croatia: thirty miles ſouth of Bihacs.

GRÆ'VIUS (John-George), a very eminent critic, born in 1632 at Naumburg in Saxony. After acquiring the learned languages at a college in Germany, he ſtudied at Leipſic under Rivinus and Strauchius. He then paſſed two years at Deventer in an intimate connection with the celebrated John-Frederic Gronovius, to whom he acknowledged himſelf indebted for a great part of his acquiſitions. He ſpent ſome time at Amſterdam; and at the age of twenty-four was invited by the elector of Brandenburg to occupy a profeſſorſhip at Duiſburg. Two years afterwards he ſucceeded Gronovius at Deventer. His reputation induced the ſtates of Utrecht to attract him to their univerſity; and during forty-one years he filled the chairs of politics, hiſtory, and eloquence, in Utrecht, refuſing various invitations to other ſeminaries. He drew a great concourſe of ſtudents from all parts, ſome of them of high rank; and the curators of the univerſity, conſcious of the treaſure they poſſeſſed, loaded him with favours. He died in 1703, aged ſeventy-one. The works of Grævius are well known. They conſiſt of editions of ſeveral claſſic authors, as Heſiod, the greater part of Cicero, Florus, Cæſar, Suetonius, &c. and of two great compilations. Theſe are, *Thſaurus Antiquitatum Romanorum*, 12 vols. folio, 1694 *et ſeq.* a vaſt collection of authors who have treated on this ſubject; and *Theſaurus Antiquitatum Italicorum*, 6 vols. folio, continued by Burman to the forty-fifth volume. Grævius as a critic was modeſt, and free from the pride and pedantry which too often accompany this arduous character.

GRA'FABERG, a town of Germany, in the archduchy of Auſtria: five miles ſouth-weſt of Schrattentaal.

GRA'FENDORF, a town of Germany, in the archduchy of Auſtria, ſituated on the Bielach: four miles ſouth of St. Polten.

GRA'FENHAYNCHEN, a town of Germany, in the circle of Upper Saxony, and electorate of Saxony: eleven miles ſouth-eaſt of Deſſau, and eleven ſouth-ſouth-weſt of Wittenberg.

GRA'FENSCHLAG,

GRA'FENSCHLAG, a town of Germany, in the archduchy of Auſtria: four miles ſouth of Zwetl.

GRA'FENWORTH, a town of Germany, in the archduchy of Auſtria: eleven miles ſouth-weſt of Sonneberg.

GRAFF, *ſ.* A ditch; a moat.—Though the fortifications were not regular, yet the walls were good, and the *graff* broad and deep. *Clarendon.*

GRAFF, or GRAFT, *ſ.* [*greffe*, Fr.] A ſmall branch inſerted into the ſtock of another tree, and nouriſhed by its ſap, but bearing its own fruit; a young cyon. See HORTICULTURE.—God gave unto man all kinds of ſeeds and *graffs* of life; as the vegetative life of plants, the ſenſual of beaſts, the rational of man, and the intellectual of angels. *Raleigh.*

Now the cleft rind inſerted *graffs* receives,
And yields an offſpring more than nature gives. *Pope.*

To GRAFF, or GRAFT, *v. a.* To inſert a cyon or branch of one tree into the ſtock of another:

With his pruning hook disjoin'd
Unbearing branches from their head,
And *graft* more happy in their ſtead. *Dryden.*

To propagate by inſertion or inoculation.—Now let me *graff* my pears and prune the vine. *Dryden.*—To inſert into a place or body to which it did not originally belong.—And they alſo, if they bide not ſtill in unbelief, ſhall be *grafted* in; for God is able to *graff* them in again. *Romans.*

Theſe are th' Italian names which fates will join
With ours, and *graff* upon the Trojan line. *Dryden.*

To impregnate with an adſcititious branch:

The noble iſle doth want her proper limbs;
Her royal ſtock *graft* with ignoble plants. *Shakeſpeare.*

To join one thing ſo as to receive ſupport from another:

May one kind grave unite each hapleſs name,
And *graft* my love immortal on thy fame. *Pope.*

To GRAFF, *v. n.* To practiſe inſition:

In March is good *graffing* the ſkilful do know,
So long as the wind in the eaſt do not blow:
From moon being changed, 'till paſt be the prime,
For *graffing* and cropping is very good time. *Tuſſer.*

GRAF'FENBERG, a town of Germany, in Upper Carniola: nineteen miles ſouth-eaſt of Laybach.

GRAF'FENDORFF, a town of Germany, in the duchy of Stiria: four miles north of Hardeberg.

GRAF'FENECK, a town of Germany, in the archduchy of Auſtria: ten miles ſouth-weſt of Sonneberg.

GRAF'FEN TON'NA, a town of Germany, in the circle of Upper Saxony, and principality of Gotha: eight miles north of Gotha.

GRAF'FENTHAL, a town of Germany, in the circle of Upper Saxony, and principality of Altenburg: ſeven miles ſouth of Saalfeld, and fifty-two ſouth-weſt of Altenburg.

GRAFFENWARK'MARCK, a town of Germany, in Middle Carniola: four miles ſouth of Gottſchee.

GRAFF'ER, *ſ.* [from *greffier*, Fr.] In old ſtatutes, a ſcrivener, a notary.

GRAF'FIGNY (Frances d'Iſſembourg d'Happoncourt de), a literary lady, born at Nanci about 1694. Her huſband, De Graffigny, chamberlain to the duke of Lorrain, was a man of ſuch a brutal diſpoſition, that after living many years with him, ſhe obtained a legal ſeparation. She then went to Paris with mademoiſelle de Guiſe, who was eſpouſed to marſhal Richelieu, and ſoon made her merit known to the literati of that capital. She firſt appeared as an author in a Spaniſh novel in 1745. This was followed by the *Lettres d'une Peruvienne*, 2 vols. 12mo. which were much read and admired, notwithſtanding ſome affectation in the ſtyle. A dramatic piece by madame de Graffigny, in five acts in proſe, entitled *Cenie*, was regarded as one of the beſt ſpecimens of ſentimental or pathetic comedy. Another of a ſimilar kind, named *La Fille d'Ariſtide*, obtained leſs applauſe. This authoreſs was of a very eſtimable character in private life, and had many reſpectable friends. The emperor and empreſs honoured her with their friendſhip, and made her frequent preſents. She was an aſſociate of the academy of Florence; and died at Paris in 1758, at the age of ſixty-four.

GRAF'FIUM, *ſ.* [from *graffer.*] A writing-book; a regiſter of deeds or evidences.

GRAF'TER, *ſ.* One who propagates fruit by grafting.—I am informed, by the trials of the moſt ſkilful *grafters*, that a man ſhall ſeldom fail of having cherries borne by his graft the ſame year in which the inſition is made. *Evelyn.*

GRAFT'ING, *ſ.* The art of inſerting the branch of one tree into the ſtock of another. For the proceſs, advantages, &c. ſee the article HORTICULTURE.

GRAF'TON, a county of the American States, in New Hampſhire, is bounded north by Canada, ſouth by the counties of Strafford, Hillſborough, and Cheſhire, weſt by the ſtate of Vermont, and eaſt by the diſtrict of Maine. It comprehends nearly as much territory as all the other four counties, but it is by no means ſo thickly inhabited. It is divided into fifty townſhips, and ſeventeen locations, and contains by the cenſus 13,472 inhabitants; but the increaſe of population ſince the enumeration of 1790 has been very great.

GRAF'TON, a townſhip of the American States, in the county of its own name in New Hampſhire, thirteen miles ſouth-eaſt of Dartmouth college, and nineteen ſouth-weſt of Plymouth. It was incorporated in 1778. *Lapis ſpecularis*, commonly called iſinglaſs, of the beſt quality, is found in this townſhip, in a mountain about twenty miles eaſtward of Dartmouth college. It is found adhering to white or yellow quartz, and lying in laminæ, like ſheets of paper.

GRAFTON, or the *Haſſanamiſco* of the Indians, a townſhip of the American States, in Worceſter county, Maſſachuſetts, containing nine hundred inhabitants; forty miles ſouth-weſt of Boſton, eight eaſterly of Worceſter, and thirty-four north-weſt of Providence.

GRAF'TON I'SLAND, the moſt northerly of the Baſhee iſlands, in the Eaſtern Indian Sea. Lat. 21. 4. N. lon. 239. W. Greenwich.

GRAF'VESKOI, a fortreſs of Ruſſia, in the government of Kolivan, on the Irtiſch: two hundred and forty miles ſouth-ſouth-weſt of Kolivan. Lat. 50. 15. N. lon. 97. E. Ferro.

GRAGNA'NO, a town of Italy, in the ſtate of Lucca: four miles north-eaſt of Lucca.

GRA'HAM (ſir Richard), lord viſcount Preſton, eldeſt ſon of ſir George Graham, of Netherby in Cumberland, bart. born in 1648. He was ſent ambaſſador by Charles II. to Louis XIV. and was maſter of the wardrobe and ſecretary of ſtate under James II. But when the revolution took place, he was tried and condemned, on an accuſation of attempting the reſtoration of that prince; though he obtained a pardon by the queen's interceſſion. He ſpent the remainder of his days in retirement, and publiſhed an elegant tranſlation of Boethius on the Conſolations of Philoſophy. He died in 1695.

GRA'HAM (George), an eminent mathematician and watch-maker, born at Gratwick in Cumberland, in 1675; and in 1678 he came up to London, and was received into the family of the celebrated Mr. Tompion, who treated him with a kind of parental affection as long as he lived. That Mr. Graham was, without competition, the moſt eminent of his profeſſion, is but a ſmall part of his character: he was the beſt general mechanic of his time, and had a complete knowledge of practical aſtronomy; ſo that he not only gave to various movements for meaſuring time a degree of perfection which

had never before been attained, but invented ſeveral aſtronomical inſtruments, by which conſiderable advances have been made in that ſcience. The great mural arch in the obſervatory at Greenwich was made for Dr. Halley under Mr. Graham's immediate inſpection, and divided by his own hand: and from this incomparable original, the beſt foreign inſtruments of the kind are copies made by Engliſh artiſts. The ſector by which Dr. Bradley firſt diſcovered two new motions in the fixed ſtars, was of his invention and fabric. He compriſed the whole planetary ſyſtem within the compaſs of a ſmall cabinet; from which, as a model, all the modern orreries have been conſtructed. And when the French academicians were ſent to the north to make obſervations for aſcertaining the figure of the earth, Mr. Graham was thought the fitteſt perſon in Europe to ſupply them with inſtruments; by which means they finiſhed their operations in one year; while thoſe who went to the ſouth, not being ſo well furniſhed, were very much embarraſſed and retarded in their operations. Mr. Graham was many years a member of the royal ſociety, to which he communicated ſeveral ingenious and important diſcoveries, viz. from the 31ſt to the 42d volume of the Philoſ. Tranſactions, chiefly on aſtronomical and philoſophical ſubjects; particularly a kind of horary alteration of the magnetic needle, a quickſilver pendulum, and many curious particulars relating to the true length of the ſimple pendulum, upon which he continued to make experiments till almoſt the year of his death, which happened in 1751, at ſeventy-ſix years of age. His diſpoſition was not leſs communicative than his genius was penetrating; and his principal view was the advancement of ſcience, and the benefit of mankind.

GRA'HAM's DYKE. See ANTONINUS's WALL, vol. i. p. 781.

GRA'HAM's MOOR, a place of Scotland, in the county of Stirling, where the brave ſir William Wallace fought his way through the Engliſh army, in the year 1298: three miles ſouth-eaſt of Falkirk.

GRAIL, *ſ.* [*grele*, Fr. hail.] Small particles of any kind:

Hereof this gentle knight unweeting was,
And lying down upon the ſandy *grails*,
Drank of the ſtream as clear as cryſtal glaſs. *Spenſer.*

GRAIN, *ſ.* [*graine*, Fr. *granum*, Lat. *grano*, Ital.] A ſingle ſeed of corn:

Look into the ſeeds of time,
And ſay which *grain* will grow, and which will not.
Shakeſpeare.

Corn.—'Tis a rich ſoil, I grant you; but oftener covered with weeds than *grain*. *Collier.*—The ſeed of any fruit. Any minute particle; any ſingle body:

Thou exiſt'ſt on many thouſand *grains*
That iſſue out of duſt. *Shakeſpeare.*

The ſmalleſt weight, of which in phyſic twenty make a ſcruple, and in Troy weight twenty-four make a penny-weight; ſo named becauſe it is ſuppoſed of equal weight with a grain of corn.—Unity is a precious diamond, whoſe *grains*, as they double, twice double in their value. *Holyday.*

His brain
Outweigh'd his rage but half a *grain*. *Hudibras.*

Any thing proverbially ſmall.—For the whole world before thee is as a little *grain* of the balance. *Wiſd.* xi. 22.—The ungrateful perſon lives to himſelf, and ſubſiſts by the goodnature of others, of which he himſelf has not the leaſt *grain*. *South.*—The direction of the fibres of wood, or other fibrous matter:

Knots, by the conflux of meeting ſap,
Infect the ſound pine, and divert his *grain*
Tortive and errant from his courſe of growth. *Shakeſp.*

The body of the wood as modified by the fibres:

The beech, the ſwimming alder, and the plane,
Hard box, and linden of a ſofter *grain*. *Dryden.*

The body conſidered with reſpect to the form or direction of the conſtituent particles.—The tooth of a ſea-horſe, in the midſt of the ſolider parts, contains a curdled *grain* not to be found in ivory. *Brown.*—Died or ſtained ſubſtance:

How the red roſes fluſh up in her cheeks,
And the pure ſnow with goodly vermil ſtain,
Like crimſon dy'd in *grain*. *Spenſer.*

The name of *grain colour* was given to ſcarlets, crimſons, and purples, from the kermes berries, which were uſed for theſe purpoſes before cochineal was known. *Bailey.*—Temper; diſpoſition; inclination; humour, from the direction of fibres:

Your minds, pre-occupied with what
You rather muſt do than with what you ſhould do,
Made you againſt the *grain* to voice him conſul. *Shakeſp.*

The heart; the bottom.—The one being tractable and mild, the other ſtiff and impatient of a ſuperior, they lived but in cunning concord, as brothers glued together, but not united in *grain*. *Hayward.*—The form of the ſurface with regard to roughneſs and ſmoothneſs.—Poliſh is no otherwiſe than by breaking the roughneſs to a very fine *grain*, ſo that the ſcratches and frettings of the ſurface become too ſmall to be viſible. *Newton.*

GRAIN *of Allowance*. Something indulged or remitted; ſomething above or under the exact weight.—He, whoſe very beſt actions muſt be ſeen with *grains of allowance*, cannot be too mild, moderate, and forgiving. *Addiſon.*

GRAIN, or GRIN (John-Baptiſte), a French hiſtorian, born at Paris in 1565. He was educated with care, and in his youth attended on the court, where he attached himſelf to the ſervice of Henry IV. That prince, on the eſtabliſhment of the houſhold of Mary de Medicis, appointed Le Grain to the office of her counſellor and maſter of requeſts in ordinary. His principal employment, however, was in writing, and in attending to the education of his children. It was on their account that he drew up memoirs relative to the hiſtory of France, which remained in manuſcript till his relation, the chancellor De Sillery, perſuaded him to publiſh a part of them. His firſt publication, which he printed in his own houſe, was entitled, *Decade contenant l'Hiſtoire de Henri le Grand Roi de France & Navarre, IV. du Nom*, folio, 1614, in ten books: it compriſes the period from the peace of Cambray in 1559, to the king's death in 1610. This was written with a freedom which pleaſed the young king Louis XIII. to whom it was preſented; and by his order he publiſhed a ſecond decade in 1618, giving the hiſtory of that king's reign from 1610 to 1617. The honeſty of his narration and candour of his ſentiments, raiſed a ſtorm againſt his work, and ſeveral attempts were made to procure a cenſure upon it from the Sorbonne, but without ſucceſs; that body declaring that they found nothing in it deſerving of cenſure. The treatment he met with diſguſted him with the court, and he ſpent his latter years in retirement on his eſtate of Montgeron, where he died in 1642. In his will he enjoined his deſcendants never to entruſt the education of their children to the Jeſuits.

GRAIN COAST, or MALAGUETTA, or PEPPER COAST, a country of Guinea, bounded by the Sierra Leona country, which lies to the weſt, and the Ivory Coaſt on the ſouth-eaſt, extending along the Atlantic Ocean about one hundred leagues. The climate is ſaid to be unwholeſome, eſpecially to Europeans. The productions are peaſe, beans, gourds, lemons, oranges, and a kind of nut, with an exceedingly thick ſhell, a moſt delicious fruit, for which neither Europeans nor natives

appear yet to have a name. The palm-wine and dates of this country are in the greateſt eſteem. Cows, hogs, ſheep, and goats, are in great plenty; but what conſtitutes the chief wealth of the Grain Coaſt, is the abundance of Guinea pepper, or grains of paradiſe, which it produces, called *malaguetta* by the Portugueſe, which draws a great trade, not only with all the neighbouring interior nations, but with the Europeans alſo. The natives of this diviſion are guilty of no exceſſes in eating or drinking, or indeed of intemperance in any kind of luxury. They admit the Europeans into all familiarities with their women; and even invite them to love-banquets with their own wives and daughters. One quality they have in common with all other negroes, which is, a propenſity to ſteal whatever they come near, eſpecially from ſtrangers and foreigners; and they never omit the opportunity. Their *taba, taba ſeyle*, or, as others call him, *tabo ſeil*, or king, exerts an arbitrary power and deſpotic authority over his ſubjects, and never appears abroad but with the utmoſt pomp and magnificence. His people raiſe his power by certain implicit ſentiments of a natural ſubmiſſion, and that awe with which they would regard a ſuperior being. Their ignorance attaches them to paganiſm; but natural reaſon dictates a future ſtate. They welcome the new moon with ſongs, dancing, and diverſions of every kind; and their ſuperſtitious regard for ſorcerers is extreme. The ſole employment of many of the negroes of this country is fiſhing; and every morning preſents large fleets of canoes, ranged along the ſhore, upon this employment. Their common method of fiſhing is by a hand-line and a hook, which they ſeldom draw empty out of the water. The Portugueſe had formerly the whole of the commerce of this coaſt, but the great advantages having excited the emulation of the Engliſh and Dutch, in 1664, their power began to give way to the more warlike and commercial ſpirit of theſe rivals. They loſt gradually all their ſettlements, and being forced to retire into the interior countries, reſolved, as the laſt effort, to unite themſelves with the natives by marriage; whence ſprung that mixed progeny of mulattoes, more numerous here than in any part of Guinea. From policy, and, perhaps, from natural affection, the Portugueſe entruſted them with the care of the ſmall remnant of trade they now have, gave them the appellation of *hidalgoes* or gentlemen, reconciled them to the church of Chriſt, nay even admitted them into holy orders, and rendered them uſeful in propagating Chriſtianity and the goſpel.

GRAIN'ED, *adj.* Rough; made leſs ſmooth:

Though now this *grained* face of mine be hid
In ſap-conſuming Winter's drizzled ſnow,
Yet hath my night of life ſome memory. *Shakeſpeare.*

GRAIN'GER (James, M. D.), a poetical and medical writer, born in 1724, at Dunſe in Berwickſhire, whither his father had removed, as an exciſe officer, after ſelling his eſtate of Houghton-hall, in Cumberland. James received a claſſical education at North Berwick, and was then put apprentice to a ſurgeon in Edinburgh. He attended the medical lectures in the univerſity, and entered the army as a regimental ſurgeon, in which capacity he ſerved both at home and abroad. On the peace of 1748 he took the degree of doctor of phyſic, and ſettled in the practice of his profeſſion at London. His taſte for elegant literature made him known to ſeveral of the wits and poets of the time, and the publication of his Ode on Solitude in Dodſley's collection, gave him a reſpectable rank among them; but his profeſſional encouragement was inconſiderable, ſince we find him engaged as tutor to a young man of fortune at a ſalary of two hundred pounds per annum. In 1759 he publiſhed his tranſlation of Tibullus, which he had completed many years before. It was dedicated to his pupil, whom, in the following year, he accompanied to the Weſt Indies. He ſettled at Baſſeterre, in the iſland of St. Chriſtopher, married the daughter of the governor, and purſued the practice of phyſic with great ſucceſs. At the ſame time he did not deſert the amuſement of poetry, but compoſed his didactic poem on the culture of the ſugar-cane. This he publiſhed in 1764, after reviſiting England, and ſubmitting the manuſcript to the criticiſm of his friends. He then returned to Baſſeterre, where he died in December 1767, much eſteemed and regretted. Dr. Grainger, in his poetical capacity, ſtands higheſt as the writer of the Ode on Solitude; the fine exordium of which Mr. Boſwell tells us that Dr. Johnſon repeated with great energy, adding liberal praiſe to the whole. Another ſhort piece, entitled, Bryan and Pereene, printed in Percy's Reliques, is a beautifully pathetic and deſcriptive ballad. His Sugar-Cane will be admired only by thoſe who can bear proſaic matter raiſed upon the ſtilts of blank-verſe. His tranſlation of the elegies of Tibullus is reſpectable, but not eminently happy. The doctor's medical writings were, *Hiſtoria Febris Anomalæ Batavæ, Ann.* 1746–7–8, 8vo. and a Treatiſe on the more common Weſt-India Diſeaſes, 8vo. 1764.

GRAIN'GER, a county of the American States, in the diſtrict of Hamilton, ſtate of Tenneſſee, formed of parts of the counties of Knox, Jefferſon, and Hawkins, and thus called after the maiden name of the lady of governor William Blount.

GRAIN'ING, *ſ.* [from *grain.*] Indentation.—It is called by ſome the unmilled guinea, as having no *graining* upon the rim. *Leake.*

GRAINS, *ſ.* [without a ſingular.] The huſks of malt exhauſted in brewing.

GRAIN'VILLE, a town of France, in the department of the Lower Seine: one league ſouth of Cany, and four and a half north of Caudebec.

GRAIN'Y, *adj.* Full of corn. Full of grains or kernels.

GRAI'SO (l'Ance la), a ſettlement of the American States, in Louiſiana.

GRAJUE'LA, a town of Spain, in the province of Murcia: ſeventeen miles north-north-weſt of Chinchilla.

GRAL'LÆ, *ſ.* in ornithology, an order of birds in the Linnæan ſyſtem; for particulars of which ſee the article ORNITHOLOGY.

GRAM, a river of Denmark, which runs into the North Sea: two miles weſt of Ripen.

GRAMAFFET'TEN, a town of Germany, in the archduchy of Auſtria: twelve miles ſouth-weſt of Freuſtadt.

GRA'MAT, a town of France, in the department of the Lot, and chief place of a canton, in the diſtrict of St. Ceré: ſeven leagues and a half north-north-eaſt of Cahors, and two and three quarters ſouth-weſt of St. Ceré. Lat. 44. 47. N. lon. 19. 23. E. Ferro.

GRA'MATA, a town of European Turkey, in the province of Epire: twenty-four miles ſouth of Valona.

GRAMA'YE (John-Baptiſt), a writer of hiſtory, and a native of Antwerp. He ſtudied at Louvain, and taught rhetoric in that univerſity. He was afterwards made hiſtoriographer to the Low-countries, provoſt of Arnheim, and apoſtolical prothonotary. He travelled through Germany and Italy; and proceeding from the latter country to Spain, he was taken by an Algerine corſair, and carried into Africa. This opportunity of ſeeing another part of the world was not unpleaſant to him. After returning to his native country, he travelled into Moravia and Sileſia, and in the latter province was placed by cardinal Dietrichſtein at the head of a college. He died upon a journey at Lubeck, in 1635. He was a man of learning, and compoſed Latin works both in proſe and verſe. Of the former are, 1. *Africæ illuſtratæ, Lib. X.* 4to. 1622; containing a hiſtory of Africa from the remoteſt periods to his own times, with ſome geographical details. 2. *Diarium Algerienſe*; the reſult of local

local obſervations during his captivity. 3. *Peregrinatio Belgica*, 8vo. 4. *Antiquitates Flandriæ*, 1608, folio. 5. *Hiſtoria Namurcenſis*.

GRA'MEN, *ſ.* in botany. See GRASS.

GRA'MERCY, *interj.* [contracted from *grant me mercy*.] An obſolete expreſſion of ſurpriſe.—*Gramercy*, lovely Lucius, what's the news? *Shakeſpeare.*

Gramercy, ſir, ſaid he; but mote I weet
What ſtrange adventure do ye now purſue? *Spenſer.*

GRA'MERCY, and GRA'MERCIES, *interj.* [from *grande merci*, Fr. great thanks, or great mercy.] Great thanks to you:

Gramercy, Mammon, ſaid the gentle knight,
For ſo great grace and offer'd high eſtate. *Spenſer.*

Gramercies, Tranio, well doſt thou adviſe. *Shakeſpeare.* —*Gramercies*, my deare Devill: weele put it ſeriouſly in practice, yfaith. *B. Jonſon.*

GRA'MINA, *ſ.* in botany, GRASSES. This forms the fifth family, and the ſecond nation, tribe, or caſt, in Linnæus's General Diviſion of the Vegetable Kingdom: the fourteenth order in the Fragments of a Natural Method in Philoſophia Botanicæ; and the fourth of the Natural Orders at the end of Genera Plantarum. See GRASS.

GRAMIN'EAL, *adj.* [from *gramen*, Lat. graſs.] Full of graſs.

GRAMIN'EOUS, *adj.* Graſſy.

GRAMINIFO'LIA, *ſ.* in botany. See PILULARIA, SUBULARIA, and ZANNICHELLIA.

GRAMINIFO'LIOUS, *adj.* [from *gramen*, Lat. graſs, and *folium*, a leaf.] Having leaves like graſs. *Scott.*

GRAMINIV'OROUS, *adj.* [*gramen* and *voro*, Lat.] Graſs-eating; living upon graſs.—The ancients were verſed chiefly in the diſſection of brutes, among which the *graminivorous* kind have a party-coloured choroides. *Sharp.*

GRAMINO'SE, *adj.* Full of graſs; graſſy; having leaves without footſtalks.

GRAM'INOUS, *adj.* Graſſy; full of graſs; having leaves like graſs. *Cole.*

GRAM'MA, *ſ.* [Greek.] A letter; any ſingle letter of the alphabet. Hence comes *grammar*, becauſe it ſhews how to form articulate ſounds, which are repreſented by letters.

GRAM'MAR, *ſ.* [*grammaire*, Fr. *grammatica*, Lat. γραμματική, Gr.] The ſcience of ſpeaking correctly; the art which teaches the relations of words to each other. —To be accurate in the *grammar* and idioms of the tongues, and then as a rhetorician to make all their graces ſerve his eloquence. *Fell.*—Propriety or juſtneſs of ſpeech; ſpeech according to grammar.—*Varium & mutabile ſemper fæmina*, is the ſharpeſt ſatire that ever was made on woman; for the adjectives are neuter, and *animal* muſt be underſtood to make them *grammar*. *Dryden.*—The book that treats of the various relations of words to one another.

Few authors have written with philoſophical accuracy on the principles of General Grammar; and, what is more to be regretted, fewer ſtill have thought of applying thoſe principles to the Engliſh language. While the French tongue has long been an object of attention to many able and ingenious writers of that nation, who have conſidered its conſtruction, and determined its propriety with great accuracy; the genius and grammar of the Engliſh, to the reproach of the country, have not been ſtudied with equal care, or aſcertained with the ſame preciſion. Some faint attempts have indeed been made towards ſupplying this defect; and ſome able writers have entered on the ſubject; but much remains to be done. It is not within the plan of our work to give an extended ſyſtem either of Grammar in general, or of Engliſh Grammar in particular; but we ſhall nevertheleſs take a general view of the chief principles relating to this ſubject, with ſome particular remarks on the peculiarities of our own tongue.

The firſt thing to be conſidered, is, the diviſion of the ſeveral parts of ſpeech. The eſſential parts of ſpeech are the ſame in all languages. There muſt always be ſome words which denote the names of objects, or mark the ſubject of diſcourſe; other words, which denote the qualities of thoſe objects, and expreſs what we affirm concerning them; and other words, which point out their connections and relations. Hence, ſubſtantives, pronouns, adjectives, verbs, prepoſitions, and conjunctions, muſt neceſſarily be found in all languages. The moſt ſimple and alſo the moſt ancient diviſion of the parts of ſpeech is, into *ſubſtantives*, *attributives*, and *connectives*. *Subſtantives*, are all the words which expreſs the names of objects, or the ſubjects of diſcourſe; *attributives*, are all the words which expreſs any attribute, property, or action, of the former; *connectives*, are what expreſs the connections, relations, and dependencies, which take place among them.

The following definition of Grammar and its parts, is from Siret's *Elémens de la Langue Angloiſe*. "Grammar is the art of reducing to rule the principles common to all languages. Languages are compoſed of *ſentences*, ſentences of *words*, words of *ſyllables*, and ſyllables of *letters*. Letters therefore (or ſounds, which muſt be taken to mean the ſame thing) are the firſt and principal materials of which language is compoſed.

Noun ſubſtantives. When men had diſcovered theſe ſounds or letters, they next applied themſelves to invent words to expreſs the different objects which preſented themſelves to the ſenſes. As each of theſe objects muſt be a ſubſtance either animate or inanimate, the firſt words which were formed were called *ſubſtantives*, that is, the names of ſubſtances.

Pronouns. Next, to avoid repeating the ſame words when the ſame objects were often preſented in a diſcourſe, it was found neceſſary to form words which might expreſs the ſubſtances without repeating them. Hence the origin of *pronouns*; i. e. the repreſentatives of nouns.

Adjectives and Verbs. But, in ſpeaking of things, it is neceſſary to explain what they are, how they act, &c. It was therefore neceſſary to have other words, as well to expreſs the attributes and qualities of ſubſtances, as to explain their influence and various operations. Hence came *adjectives* and *verbs*. *Adjectives* are thus called becauſe they are added to nouns, and ſhew their attributes and qualities; the *verb* (*verbum*, or the word, by way of eminence) is thus named becauſe it expreſſes the exiſtence, action, condition, and paſſion, of beings.

Adverbs. Going on to conſider the diverſity of qualities and of actions, it was ſoon diſcovered that theſe were ſuſceptible of innumerable modifications; it thence became neceſſary to invent words to expreſs theſe modifications. They called theſe words *adverbs*, becauſe they were added to verbs, to give more or leſs extent to their ſignification.

Nouns of Number. The multiplicity of individuals in each ſpecies, the frequency of actions of the ſame nature; cauſed men to ſeek in proceſs of time for a new ſpecies of words to ſpecify at once any quantity of objects, of cauſes, or of effects. This produced *nouns of number*.

Prepoſitions. To theſe ſucceeded new expreſſions to denote the reference which things have to each other, and to fix the idea of one by that of another. Theſe were called *prepoſitions*, becauſe they are placed before nouns and verbs.

Conjunctions. But as things have often diſtant relations which cannot be collected in one ſentence, it was neceſſary to form particles whereby they might be joined; and which from their uſe were therefore called *conjunctions*.

Interjections. Laſtly, having provided the means of expreſſing the nature, the ſpecies, the attributes, the influence, the exiſtence, the references, and the different modifications, of things, expreſſions were invented to paint

paint the ſudden emotions of the ſoul. Theſe are called *interjections*, and are more or leſs numerous according to the nature of the language itſelf.

Thus, it is eaſy to perceive, that grammar is built upon nine kinds of words, of which the origin is from nature itſelf. They are called the *parts of ſpeech*, becauſe there can be no word uttered but muſt belong to one or other of the ſpecies or kinds we have explained above."

Our readers will readily perceive the imperfections of the above ſyſtem; namely, the making nouns of number a ſeparate part of ſpeech, and omitting to notice the *article*. And this leads us to remark, that Mr. Horne Tooke admits of only three parts of ſpeech, of which the firſt is the *article*, the other two are the *noun* and the *verb*; he conſiders all other words as corruptions or abbreviations of the two laſt.

Our common diviſion of ſpeech into eight parts; nouns, pronouns, verbs, participles, abverbs, prepoſitions, conjunctions, and interjections, is not very logical, as it comprehends, under the general term of nouns, both ſubſtantives and adjectives, which are parts of ſpeech generically and eſſentially diſtinct; while it makes a ſeparate part of ſpeech of participles, which are no other than verbal adjectives. The *article*, alſo, is an eſſential part of ſpeech, at leaſt in the modern languages. However, as theſe are the terms to which our ears have been moſt familiariſed, and, as an exact logical diviſion is of no great conſequence to our preſent purpoſe, it will be better to make uſe of theſe known terms than of any other.

Of the PARTS of SPEECH.

We are naturally led to begin with the conſideration of SUBSTANTIVE NOUNS, which are the foundation of all grammar, and may be conſidered as the moſt ancient part of ſpeech. The more common opinion, however, is in favour of verbs; but aſſuredly, as ſoon as men had got beyond ſimple interjections, or exclamations of paſſion, and began to communicate themſelves by diſcourſe, they would be under a neceſſity of aſſigning names to the objects they ſaw around them. Nouns then are all thoſe words by which objects or ſubſtances are denominated, and which diſtinguiſh them from one another, without marking either quantity, quality, action, or relation. The ſubſtantive or noun is the *name* of the thing ſpoken of, and in Greek and Latin is called *name*; for it is ονομα in the one, and *nomen* in the other; and if in Engliſh we had called it the *name* rather than the *noun*, the appellation would have been more proper. Men could not ſpeak of themſelves or of any thing elſe, without having names for themſelves and the various objects with which they are ſurrounded. But the diverſity of objects is ſo great, that had each individual a diſtinct and proper name, it would be impoſſible for the moſt tenacious memory, during the courſe of the longeſt life, to retain even the nouns of the narroweſt language. It has therefore been found expedient, when a number of things reſemble each other in ſome important particulars, to arrange them all under one ſpecies; to which is given a name that belongs equally to the whole ſpecies, and to each individual comprehended under it. Thus the word *man* denotes a ſpecies of animals, and is equally applicable to every human being: the word *horſe* denotes another ſpecies of animals, and is equally applicable to every individual of that ſpecies of quadrupeds. We find, however, that there are ſome qualities in which ſeveral ſpecies reſemble each other; and therefore we refer them to a higher order called a *genus*, to which we give a name that is equally applicable to every ſpecies and every individual comprehended under it. Thus, men and horſes, and all living things on earth, reſemble each other in this reſpect, that they have *life*. We refer them therefore to the genus called *animal*; and this word belongs to every ſpecies of animals, and to each individual animal. It is almoſt needleſs to obſerve, that the words *genus* and *ſpecies* are here taken in the logical ſenſe, and not as we employ them when treating upon the diviſions of natural hiſtory.

When language had proceeded thus far, the notification which it made of objects was ſtill very imperfect; for, when one mentioned to another, in diſcourſe, any ſubſtantive noun; ſuch as, man, lion, or tree, how was it to be known which man, which lion, or which tree, he meant, among the many comprehended under one name? Here occurs a very curious and a very uſeful contrivance for ſpecifying the individual object intended, by means of that part of ſpeech called the *article*.

The force of the *article* conſiſts in pointing or ſingling out from the common maſs the individual of which we mean to ſpeak. In Engliſh we have two articles, *a* and *the*: *a* is more general and unlimited; *the* more definite and ſpecial. *A* is much the ſame with *one*, and marks only any one individual of a ſpecies; that individual being either unknown, or left undetermined; as, a lion, a king. *The*, which poſſeſſes more properly the force of the article, aſcertains ſome known or determined individual of the ſpecies; as, the lion, the king.

Articles are words of great uſe in ſpeech. In ſome languages, however, they are not found. The Greeks have but one article, ο η το, which anſwers to our definite or proper article, *the*. They have no word which anſwers to our article *a*; but they ſupply its place by the preſence of their article: thus, βασιλευς ſignifies, *a* king; ο βασιλευς, *the* king. The Latins have no article. In the room of it, they employ pronouns, as, *hic*, *ille*, *iſte*, for pointing out the objects which they want to diſtinguiſh. This, however, appears to be a defect in the Latin tongue; as articles contribute much to the clearneſs and preciſion of language.

In order to illuſtrate this, remark what difference there is in the meaning of the following expreſſions in Engliſh, depending wholly on the different employment of the articles: "The ſon of a king—The ſon of the king—A ſon of the king's." Each of theſe three phraſes has an entirely different meaning, which we need not explain, becauſe any one who underſtands the language conceives it clearly at firſt hearing, through the different application of the articles *a* and *the*. Whereas, in Latin, *filius regis* is wholly undetermined; and to explain in which of theſe three ſenſes it is to be underſtood, (for it may bear any of them,) a circumlocution of ſeveral words muſt be uſed. In the ſame manner, "Are you *a* king?—Are you *the* king?" are queſtions of quite ſeparate import; which, however, are confounded together in the Latin phraſe, *Eſne tu rex?* "Thou art *a* man," is a very general and harmleſs poſition; but, "Thou art *the* man," is an aſſertion, capable, we know, of ſtriking terror and remorſe into the heart. Theſe obſervations illuſtrate the force and importance of articles.

Beſides this quality of being particulariſed by the article, three affections belong to ſubſtantive nouns, number, gender, and caſe, which require our conſideration.

Number diſtinguiſhes them as one, or many, of the ſame kind, called the *ſingular* and *plural*; a diſtinction found in all languages, and which muſt, indeed, have been coeval with the very infancy of language; as there were few things which men had more frequent occaſion to expreſs, than the difference between *one* and *many*. For the greater facility of expreſſing it, it has, in all languages, been marked by ſome variation made upon the ſubſtantive noun; as we ſee, in Engliſh, our plural is commonly formed by the addition of the letter *s*. In the Hebrew, Greek, and ſome other ancient languages, we find, not only a plural, but a *dual*, number; the riſe of which may very naturally be accounted for, from ſeparate terms of numbering not being yet invented, and one, two, and many, being all, or at leaſt

the chief, numeral diſtinctions which men, at firſt, had any occaſion to take notice of.

Gender is an affection of ſubſtantive nouns, which will lead us into more diſcuſſion than number. Gender, being founded on the diſtinction of the two ſexes, it is plain, that in a proper ſenſe, it can only find place in the names of living creatures, which admit the diſtinction of male and female, and therefore can be ranged under the maſculine or feminine genders. All other ſubſtantive nouns ought to belong to what grammarians call the *neuter* gender, which is meant to imply the negation of either ſex. But, with reſpect to this diſtribution, ſomewhat ſingular hath obtained in the ſtructure of language. For, in correſpondence to that diſtinction of male and female ſex, which runs through all the claſſes of animals, men have, in moſt languages, ranked a great number of inanimate objects alſo, under the like diſtinctions of maſculine and feminine. Thus we find it, both in the Greek and Latin tongues. *Gladius*, a ſword, for inſtance, is maſculine; *ſagitta*, an arrow, is feminine; and this aſſignation of ſex to inanimate objects, this diſtinction of them into maſculine and feminine, appears often to be entirely capricious; derived from no other principle than the caſual ſtructure of the language, which refers to a certain gender, words of a certain termination. In the Greek and Latin, however, all inanimate objects are not diſtributed into maſculine and feminine; but many of them are alſo claſſed, where all of them ought to have been, under the neuter gender; as, *templum*, a church; *ſedile*, a ſeat. But the genius of the French and Italian tongues differs, in this reſpect, from the Greek and Latin. In the French and Italian, from whatever cauſe it has happened, ſo it is, that the neuter gender is wholly unknown, and that all their names of inanimate objects are put upon the ſame footing with living creatures; and diſtributed, without exception, into maſculine and feminine. The French have two articles, the maſculine *le*, and the feminine *la*; and one or other of theſe is prefixed to all ſubſtantive nouns in the language, to denote their gender. The Italians make the ſame univerſal uſe of their articles *il* and *lo*, for the maſculine; and *la* for the feminine.

In the Engliſh language, it is remarkable that there obtains a peculiarity quite oppoſite. In the French and Italian, there is no neuter gender. In the Engliſh, when we uſe common diſcourſe, all ſubſtantive nouns, that are not names of living creatures, are neuter, without exception. *He*, *ſhe*, and *it*, are the marks of the three genders; and we always uſe *it*, in ſpeaking of any object where there is no ſex, or where the ſex is not known. The Engliſh is, perhaps, the only language in the known world (except the Chineſe, which is ſaid to agree with it in this particular) where the diſtinction of gender is properly and philoſophically applied in the uſe of words, and confined, as it ought to be, to mark the real diſtinctions of male and female. Hence ariſes a very great and ſignal advantage of the Engliſh tongue, which it is of conſequence to remark. Though in common diſcourſe, as already obſerved, we employ only the proper and literal diſtinction of ſexes; yet the genius of the language permits us, whenever it will add beauty to our diſcourſe, to make the names of inanimate objects maſculine or feminine in a metaphorical ſenſe; and when we do ſo, we are underſtood to quit the literal ſtyle, and to uſe one of the figures of diſcourſe. For inſtance; if I am ſpeaking of virtue, in the courſe of ordinary converſation, or of ſtrict reaſoning, I refer the word to no ſex or gender; I ſay, "Virtue is its own reward;" or, "it is the law of our nature." But if I chuſe to riſe into a higher tone; if I ſeek to embelliſh and animate my diſcourſe, I give a ſex to virtue; I ſay, "She deſcends from heaven;—ſhe alone confers true honour upon man; her gifts are the only durable rewards." By this means, we have it in our power to vary our ſtyle at pleaſure. By making a very ſlight alteration, we can perſonify any object that we chuſe to introduce with dignity; and by this change of manner, we give warning, that we are paſſing from the ſtrict and logical to the ornamented and rhetorical ſtyle. This is an advantage which not only every poet, but every good writer and ſpeaker in proſe, is, on many occaſions, glad to lay hold of, and improve: and it is an advantage peculiar to our tongue; no other language poſſeſſes it. For, in other languages, every word has one fixed gender, maſculine, feminine, or neuter, which can upon no occaſion be changed; ἀρετη, for inſtance, in Greek; *virtus*, in Latin; and *la vertu*, in French; are uniformly feminine. *She* muſt always be the pronoun anſwering to the word, whether you be writing in poetry or proſe, whether you be uſing the ſtyle of reaſoning or that of declamation: whereas, in Engliſh, we can either expreſs ourſelves with the philoſophical accuracy of giving no gender to things inanimate; or by giving them gender, and transforming them into perſons, we adapt them to the ſtyle of poetry, and, when it is proper, we enliven proſe.

It deſerves to be further remarked on this ſubject, that, when we employ that liberty which our language allows, of aſcribing ſex to any inanimate object, we have not, however, the liberty of making it of what gender we pleaſe, maſculine or feminine; but are, in general, ſubjected to ſome rule of gender which the currency of language has fixed to that ſubject. The foundation of that rule is imagined, by Mr. Harris, in his Philoſophical Enquiry into the Principles of Grammar, to be laid in a certain diſtant reſemblance, or analogy, to the natural diſtinction of the two ſexes. Thus, according to him, we commonly give the maſculine gender to thoſe ſubſtantive nouns uſed figuratively, which are conſpicuous for the attributes of imparting, or communicating; which are by nature ſtrong and efficacious, either to good or evil; or which have a claim to ſome eminence, whether laudable or not. Thoſe again, he imagines to be generally made feminine, which are conſpicuous for the attributes of containing, and of bringing forth; which have more of the paſſive in their nature, than the active; which are peculiarly beautiful or amiable; or which have reſpect to ſuch exceſſes as are rather feminine than maſculine. Upon theſe principles he takes notice, that the ſun is always put in the maſculine gender with us; the moon in the feminine, as being the receptacle of the ſun's light. The earth is, univerſally, feminine. A ſhip, a country, a city, are likewiſe made feminine, as receivers, or containers. God, in all languages, is maſculine. Time, we make maſculine, on account of its mighty efficacy; virtue, feminine, from its beauty, and its being the object of love. Fortune is always feminine. Mr. Harris imagines, that the reaſons which determine the gender of ſuch words as theſe, hold in moſt other languages, as well as the Engliſh. This, however, appears doubtful. A variety of circumſtances, which ſeem caſual to us, becauſe we cannot reduce them to principles, muſt, unqueſtionably, have influenced the original formation of languages; and in no article whatever does language appear to have been more capricious, and to have proceeded leſs according to fixed rule, than in the impoſition of gender upon things inanimate; eſpecially among ſuch nations as have applied the diſtinction of maſculine and feminine to all ſubſtantive nouns. Thus in the French and German languages we have ſtrange inſtances of caprice, if not of abſurdity, in this part of grammar. The words patrole and ſentinel are in French of the feminine gender, *la patrouille*, *la ſentinelle*; and the king is always ſpoken of in the feminine, *ſa majeſté*. In German, many of the words relating to the female ſex are of the *neuter* gender; as, *frauen-volk*, *weiber-volk*, *frauen-zimmer*, women in general; *fraulein*, a young woman; *weib*, a woman or wife; *weibchen*, *weiblein*, a little woman or wife, the female of animals in general, &c.

We next proceed to that peculiarity of ſubſtantive nouns, which, in the ſtyle of grammar, is called their

declenſion by *caſes*. Let us, firſt, conſider what caſes ſignify. In order to underſtand this, it is neceſſary to obſerve, that, after men had given names to external objects, had particularized them by means of the article, and diſtinguiſhed them by number and gender, ſtill their language remained extremely imperfect, till they had deviſed ſome method of expreſſing the relations which thoſe objects bore one towards another. They would find it of little uſe to have a name for man, lion, tree, river, without being able, at the ſame time, to ſignify how theſe ſtood with reſpect to each other; whether as approaching to, receding from, joined with, and the like. Indeed, the relations which objects bear to one another are immenſely numerous; and therefore, to deviſe names for them all muſt have been among the laſt and moſt difficult refinements of language. But, in its moſt early periods, it was abſolutely neceſſary to expreſs, in ſome way or other, ſuch relations as were moſt important, and as occurred moſt frequently in common ſpeech. Hence the genitive, dative, and ablative, caſes of nouns, which expreſs the noun itſelf, together with thoſe relations, *of*, *to*, *with*, *from*, and *by*; the relations which we have the moſt frequent occaſion to mention. The proper idea then of caſes in declenſion, is no other than an expreſſion of the ſtate, or relation, which one object bears to another, denoted by ſome variation made upon the name of that object; moſt commonly in the final letters, and by ſome languages in the initial. All languages, however, do not agree in this mode of expreſſion. The Greek, Latin, and ſeveral other languages, uſe declenſion. The Engliſh, French, and Italian, do not; or, at moſt, uſe it very imperfectly. In place of the variations of caſes, the modern tongues expreſs the relations of objects, by means of the words called prepoſitions, which denote thoſe relations, prefixed to the name of the object. Engliſh nouns have no caſe whatever, except a ſort of genitive, commonly formed by the addition of the letter *s* to the noun; as when we ſay "Dryden's poems," meaning the poems of Dryden. Our perſonal pronouns have alſo a caſe, which anſwers to the accuſative of the Latin: *I, me,—he, him,—who, whom*. There is nothing, then, or at leaſt very little, in the grammar of our language, which correſponds to declenſion in the ancient languages.

Two queſtions, reſpecting this ſubject, may be put. Firſt, Which of theſe methods of expreſſing relations, whether that by declenſion, or that by prepoſitions, was the moſt ancient uſage in language? And next, Which of them has the beſt effect? Both methods, it is plain, are the ſame as to the ſenſe, and differ only in form. For the ſignificancy of the Roman language would not have been altered, though the nouns, like ours, had been without caſes, provided they had employed prepoſitions; and though, to expreſs a diſciple of Plato, they had ſaid, *Diſcipulus de Plato*, like the modern Italians, in place of *Diſcipulus Platonis*. Now, with reſpect to the antiquity of caſes, although they may, on firſt view, ſeem to conſtitute a more artificial method than the other, of denoting relations, yet there are ſtrong reaſons for thinking that this was the earlieſt method practiſed by men. We find, in fact, that declenſions and caſes are uſed in moſt of what are called the *mother tongues*, or original languages, as well as in the Greek and Latin. And a very natural and ſatisfying account can be given why this uſage ſhould have early obtained. Relations are the moſt abſtract and metaphyſical ideas of any which men have occaſion to form, when they are conſidered by themſelves, and ſeparated from the related object. It would puzzle any man, as has been well obſerved by an author on this ſubject, to give a diſtinct account of what is meant by ſuch a word as *of*, or *from*, when it ſtands by itſelf, and to explain all that may be included under it. The firſt rude inventors of language, therefore, would not, for a long while, arrive at ſuch general terms. In place of conſidering any relation in the abſtract, and deviſing a name for it, they would much more eaſily conceive it in conjunction with a particular object; and they would expreſs their conceptions of it, by varying the name of that object through all the different caſes; *hominis*, of a man; *homini*, to a man; *homine*, with a man, &c.

But, though this method of declenſion was, probably, the only method which men employed at firſt, for denoting relations, yet, in progreſs of time, many other relations being obſerved, beſides thoſe which are ſignified by the caſes of nouns, and men alſo becoming more capable of general and metaphyſical ideas, ſeparate names were gradually invented for all the relations which occurred, forming that part of ſpeech which we now call *prepoſitions*. Prepoſitions being once introduced, they were found to be capable of ſupplying the place of caſes, by being prefixed to the nominative of the noun. Hence, it came to paſs that, as nations were intermixed by migrations and conqueſts, and were obliged to learn and adopt the languages of one another, prepoſitions ſupplanted the uſe of caſes and declenſions. When the Italian tongue, for inſtance, ſprung out of the Roman, it was found more eaſy and ſimple, by the Gothic nations, to accommodate a few prepoſitions to the nominative of every noun, and to ſay, *di Roma*, *al Roma*, *di Carthago*, *al Carthago*, than to remember all the variety of terminations, *Romæ*, *Romam*, *Carthaginis*, *Carthaginem*, which the uſe of declenſions required in the ancient nouns. By this progreſs we can give a natural account how nouns, in our modern tongues, come to be ſo void of declenſion: a progreſs which is fully illuſtrated in Dr. Adam Smith's ingenious Diſſertation on the Formation of Languages.

With regard to the other queſtion on this ſubject, Which of theſe two methods is of the greateſt utility and beauty? we ſhall find advantages and diſadvantages to be balanced on both ſides. There is no doubt that, by aboliſhing caſes, we have rendered the ſtructure of modern languages more ſimple. We have diſembarraſſed it of all the intricacy which aroſe from the different forms of declenſion, of which the Romans had no fewer than five; and from all the irregularities in theſe ſeveral declenſions. We have thereby rendered our languages more eaſy to be acquired, and leſs ſubject to the perplexity of rules. But, though the ſimplicity and eaſe of language be great and eſtimable advantages, yet there are alſo ſuch diſadvantages attending the modern method, as leave the balance, on the whole, doubtful, or rather incline it to the ſide of antiquity. For, in the firſt place, by our conſtant uſe of prepoſitions for expreſſing the relations of things, we have filled language with a multitude of thoſe little words, which are eternally occurring in every ſentence, and may be thought thereby to have encumbered ſpeech, by an addition of terms; and by rendering it more prolix, to have enervated its force. In the ſecond place, we have certainly rendered the ſound of language leſs agreeable to the ear, by depriving it of that variety and ſweetneſs, which aroſe from the length of words, and the change of terminations, occaſioned by the caſes in the Greek and Latin. But, in the third place, the moſt material diſadvantage is, that, by this abolition of caſes, and by a ſimilar alteration in the conjugation of verbs, we have deprived ourſelves of that liberty of tranſpoſition in the arrangement of words, which the ancient languages enjoyed.

PRONOUNS are the claſs of words moſt nearly related to ſubſtantive nouns; being, as the name imports, repreſentatives, or ſubſtitutes, of nouns. *I, thou, he, ſhe*, and *it*, are no other than an abridged way of naming the perſons, or objects, with which we have immediate intercourſe, or to which we are obliged frequently to refer in diſcourſe. In communicating thoughts, a perſon muſt either ſpeak of himſelf, of the perſon to whom he is ſpeaking, or of ſome other perſons or things. The word

word referring to the ſpeaker is called the pronoun of the firſt perſon; the word referring to the perſon ſpoken to is the pronoun of the ſecond perſon; the word referring to other perſons is the pronoun of the third perſon. Pronouns are ſubject to the ſame modifications as nouns, viz. number, gender, and caſe. But in moſt languages the firſt and ſecond perſons of pronouns are without gender: in Hebrew, however, the ſecond is modified to ſignify the male or female. This diſtinction has been conſidered as ſuperfluous, ſince the ſexes of the two perſons in converſation are known by their appearance. But ſometimes it may be elegant. Thus, if we were to ſay to a woman, Wouldeſt *thou* do ſuch a thing? then, meaning to imply that the action was derogatory to the female character, we cannot do it by the pronoun alone. The change of *at* for *attah* in Hebrew, may convey this reproof very pointedly in one word.

The pronoun of the third perſon denoting neither the *ſpeaker* nor the *hearer*, but the *ſubject* of the diſcourſe, and being merely the ſubſtitute of a *noun* which may be either *maſculine*, *feminine*, or *neuter*, muſt of neceſſity agree with the noun which it repreſents, and admit of a triple diſtinction ſignificant of gender. In Engliſh, which allows its adjectives no genders, this pronoun is *he* in the maſculine, *ſhe* in the feminine, and *it* in the neuter; the utility of which diſtinction may be better found in ſuppoſing it away. Suppoſe, for example, that we ſhould in hiſtory read theſe words: *He cauſed him to deſtroy him*—and were informed that the pronoun, which is here thrice repeated, ſtood each time for ſomething different; that is to ſay, for a man, for a woman, and for a city, whoſe names were *Alexander*, *Thais*, and *Perſepolis*. Taking the pronoun in this manner—diveſted of its gender—how would it appear which was deſtroyed, which the deſtroyer, and which the cauſe that moved to the deſtruction? But there is no ambiguity when we hear the genders diſtinguiſhed: when we are told, with the proper diſtinctions, that SHE *cauſed* HIM *to deſtroy* IT, we know with certainty that the *promoter* was the *woman*; that her *inſtrument* was the *hero*; and that the *ſubject* of their cruelty was the *unfortunate city*. From this example we ſhould be ſurpriſed how the Italians, French, and Spaniards, could expreſs themſelves with preciſion or elegance with no more than two variations of this pronoun.

Although, in every language with which we are now acquainted, there is but one pronoun for each of the firſt and ſecond perſons; and although it is obvious from the nature and import of thoſe words, that no more can be neceſſary; yet the mere Engliſh reader may perhaps be puzzled with finding three diſtinct words applied to each; *I*, *mine*, and *me*, for the firſt perſon; *thou*, *thine*, and *thee*, for the ſecond. The learned reader will ſee at once that the words *mine* and *me*, *thine* and *thee*, are equivalent to the genitive and accuſative caſes of the Latin pronouns of the firſt and ſecond perſons. That *mine* is a pronoun in the poſſeſſive caſe is obvious; for if I were aſked, "Whoſe book is that before me?" I ſhould reply—"It is *mine*;" meaning that it belongs to *me*. That the word *me* is the ſame pronoun in the caſe which the Latin grammarians call the *accuſative*, is evident from the import of that word in the ſentence, *he admires me*, where the admiration is ſuppoſed to proceed from the perſon ſpoken of to the perſon who ſpeaks. It appears therefore, that though Engliſh nouns have only two caſes, the nominative and poſſeſſive, the pronouns of that language have three, as, *I*, *mine*, *me*; *thou*, *thine*, *thee*; *he*, *his*, *him*, &c. Both pronouns, the Latin and the Engliſh, are irregularly inflected; and thoſe words which are called the oblique caſes of each were originally derived from nominatives different from *ego* and *I*; but theſe nominatives are now loſt, and *mei* and *mine* have, beyond all diſpute, the effect of the genitives of the Latin and Engliſh pronouns of the firſt perſon. If we miſtake not, Dr. Johnſon has ſomewhere affected to ridicule biſhop Lowth for conſidering the word *mine* as the poſſeſſive caſe of the pronoun of the firſt perſon. According to the doctor, *mine* is the ſame word with the pronominal adjective *my*, and was anciently uſed before a vowel, as *my* was before a conſonant. This is not ſaid with the great lexicographer's uſual preciſion. That *mine* was anciently uſed before a vowel is certain; but it does not therefore follow, that it is the ſame word with *my*. If it were, we might on every occaſion ſubſtitute either of theſe for the other, without offending againſt grammar, however we might injure the ſound; but we apprehend that this is not the caſe. "That book is *mine*," is good Engliſh; but "That book is *my*," would be a groſs ſoleciſm: the reaſon is, that *mine* is a *genuine pronoun*, and ſtands by itſelf with the power of a noun; but *my*, being an *adjective*, cannot ſtand by itſelf.

Upon the *perſonal pronouns* it may alſo be proper to obſerve, that the ancient mode in England, as well as among the Greeks and Romans, was to uſe the ſecond perſon ſingular in addreſſing people of whatever rank. This is the ſtyle of Scripture; and thus Diogenes ſpeaking to Alexander the Great, Cicero to Cæſar, and Pliny to Trajan, always uſed *tu*, thou. The ſame mode is preſerved in tranſlating the claſſics. It has now, however, been long a cuſtom throughout all Europe to uſe the ſecond perſon plural inſtead of the ſingular: it was firſt introduced for the purpoſe of ſhewing a reſpect for diſtinguiſhed perſons, but as long ago as the time of Charles V. it had become a common mark of civility among ordinary perſons. But in the ſeventeenth century, a higher degree of politeneſs and reſpect was invented in Germany and Italy, but which has not been received into the Engliſh language; that of ſpeaking in the third perſon ſingular; and, inſtead of ſaying, *Du haſt mir es geſagt*, "Thou haſt told me ſo," it was counted reſpectful to ſay, *Er hat mir es geſagt*, "He has ſaid ſo;" and the ſame in Italian. But at the beginning of the laſt century, it was carried ſtill farther; and they began to employ the third perſon plural inſtead of the ſecond perſon ſingular, ſo that now they are accuſtomed in Germany to ſay, *Sie haben mir es geſagt*, "They have ſaid it," though ſpeaking to one perſon. In the mean time, the higheſt mark of reſpect of all is ſtill the original form; for we uniformly addreſs the Deity in the ſecond perſon ſingular.

In the firſt ſtage of ſpeech, it is probable that the places of pronouns were ſupplied by pointing to the object when preſent, and naming it when abſent. For one can hardly think that pronouns were of early invention; as they are words of ſuch a particular and artificial nature. *I*, *thou*, *he*, *it*, it is to be obſerved, are not names peculiar to any ſingle object, but ſo very general, that they may be applied to all perſons, or objects, whatever, in certain circumſtances. *It*, is the moſt general term that can poſſibly be conceived, as it may ſtand for any one thing in the univerſe of which we ſpeak. At the ſame time, theſe pronouns have this quality, that, in the circumſtances in which they are applied, they never denote more than one preciſe individual; which they aſcertain, and ſpecify, much in the ſame manner as is done by the article. So that pronouns are, at once, the moſt general and the moſt particular words in language. They are commonly the moſt irregular and troubleſome words to the learner, in the grammar of all tongues; as being the words moſt in common uſe, and ſubjected thereby to the greateſt varieties.

Of ADJECTIVES.—Nouns, we have ſaid, are words by which objects are denominated, and which diſtinguiſh them from one another without marking their quality; and hence, as theſe objects have a vaſt variety of qualities by which they may be compared together, there muſt be words to expreſs theſe qualities only, and theſe words are called *adjectives*. Thus of apples we

may

may ſay, "This is a ſweet apple, that a ſour apple." The words *ſweet* and *ſour* are adjectives. Since the adjective is the word expreſſing the quality of ſome object, it can have no meaning by itſelf, and requires the preſence, or the implied preſence, of the ſubſtantive; and hence that ſingularity which attends them in the Greek and Latin, of having the ſame form given them with ſubſtantive nouns; being declined, like them, by caſes, and ſubjected to the like diſtinctions of number and gender. And hence it has happened, that grammarians have made them to belong to the ſame part of ſpeech, and divided the noun into ſubſtantive and adjective; an arrangement founded more on attention to the external form of words than to their nature and force. For adjectives, or terms of quality, have not, by their nature, the leaſt reſemblance to ſubſtantive nouns, as they never expreſs any thing which can poſſibly ſubſiſt by itſelf; which is the very eſſence of the ſubſtantive noun. They are, indeed, more a-kin to verbs, which, like them, expreſs the attribute of ſome ſubſtance.

It may, at firſt view, appear ſomewhat odd and fantaſtic, that adjectives ſhould, in the ancient languages, have aſſumed ſo much the form of ſubſtantives; ſince neither number, nor gender, nor caſes, nor relations, have any thing to do, in a proper ſenſe, with mere qualities, ſuch as, *good* or *great*, *ſoft* or *hard*. And yet *bonus*, and *magnus*, and *tener*, have their ſingular and plural, their maſculine and feminine, their genitives and datives, like any of the names of ſubſtances or perſons. But this can be accounted for, from the genius of thoſe tongues. They avoided, as much as poſſible, conſidering qualities ſeparately or in the abſtract. They made them a part or appendage of the ſubſtance which they ſerved to diſtinguiſh; they made the adjective depend on its ſubſtantive, and reſemble it in termination, in number, and gender, in order that the two might coaleſce the more intimately, and be joined in the form of expreſſion as they were in the nature of things. The liberty of tranſpoſition, too, which thoſe languages indulged, required ſuch a method as this to be followed. For, allowing the related words of a ſentence to be placed at a diſtance from each other, it required the relation of adjectives to their proper ſubſtantives to be pointed out, by ſuch ſimilar circumſtances of form and termination, as, according to the grammatical ſtyle, ſhould ſhow their concordance. When we ſay, in Engliſh, the "Beautiful wife of a brave man," the juxtapoſition of the words prevents all ambiguity. But when we ſay, in Latin, "*Formoſa fortis viri uxor*;" it is only the agreement, in gender, number, and caſe, of the adjective *formoſa*, which is the firſt word of the ſentence, with the ſubſtantive *uxor*, which is the laſt word, that declares the meaning.

"The ſame word," ſays Mr. Tooke, in the Second Part of his Diverſions of Purley, "is *not* ſometimes an adjective and ſometimes a ſubſtantive. But it is true that ſome languages have ſuch defects, that, for want of an adjective diſtinction to ſome of their terms, they are forced to attribute the term itſelf without any adherent intimation of its attribution. Which defect, viz. the want of an *adjective* termination, was, I ſuppoſe, originally the caſe with all terms in the rude ſtate of all languages: and this defect ſtill continues moſt in the moſt imperfect and unimproved languages. The want of an *adjective* termination to the ſigns of ideas, is more eaſily borne in languages where the *added* ſign is cloſely joined to the ſign which it is intended to accompany. But, without an *adjective* termination, all tranſpoſition would be excluded: and therefore the tranſpoſed languages are never ſo deficient in this reſpect as the others. In Engliſh, inſtead of *adjectiving* our own ſubſtantives, we have borrowed, in immenſe numbers, *adjectived* ſigns from other languages; without borrowing the *unadjectived* ſigns of thoſe ſame ideas: becauſe our authors frequently found they had occaſion for the former, but not for the latter: and, not underſtanding the nature of language, or the nature of the very benefit they were receiving; they did not, as they might and ſhould have done, improve their own language by the ſame contrivance within itſelf; but borrowed from other languages abbreviations ready made to their hands. Thus, while the ſubſtantives are Engliſh, as *boy*, *man*, *woman*, *mind*, *birth*, *life*, &c. the adjectives are of foreign origin, as *infantine*, *puerile*, *virile*, *human*, *female*, *feminine*, *mental*, *natal*, *vital*, &c. The adoption of ſuch words as theſe, was indeed a benefit and an improvement of our language; which however would have been much better and more properly obtained by *adjectiving* our own words. For, as the matter now ſtands, when a poor foreigner has learned all the names of things in the Engliſh tongue, he muſt go to other languages for a multitude of the *adjectived* names of the *ſame things*. And even an unlearned native can never underſtand the meaning of one quarter of that which is called his native tongue." Hence the common remark, that we cannot underſtand our own language without firſt learning Latin.

Of VERBS.—Of the whole claſs of words that are called attributive, and indeed of all the parts of ſpeech, the moſt complex by far is the verb. It is chiefly in this part of ſpeech that the ſubtile and profound metaphyſic of language appears; and therefore, in examining the nature and different variations of the verb, there might be room for ample diſcuſſion. But as ſuch grammatical diſcuſſions, when purſued far, become intricate and obſcure, we ſhall avoid dwelling any longer on this ſubject than is abſolutely neceſſary. The verb is ſo far of the ſame nature with the adjective, that it expreſſes, like it, as M. Siret obſerves, an attribute or property of ſome perſon or thing. But it does more than this. For, in all verbs in every language, there are no leſs than three things implied at once; the attribute of ſome ſubſtantive, an affirmation concerning that attribute, and time. Thus, when we ſay "the ſun ſhines;" ſhining is the attribute aſcribed to the ſun; the preſent time is marked; and an affirmation is included, that this property of ſhining belongs at that time to the ſun. The participle *ſhining* is merely an adjective, which denotes an attribute or property, and alſo expreſſes time; but carries no affirmation. The infinitive mood, *to ſhine*, may be called the name of the verb; it carries neither time nor affirmation, but ſimply expreſſes that attribute, action, or ſtate of things, which is to be the ſubject of the other moods and tenſes. Hence the infinitive often carries the reſemblance of a ſubſtantive noun; and, both in Engliſh and Latin, is ſometimes conſtructed as ſuch. As, *Scire tuum nihil eſt*; *Dulce et decorum eſt pro patria mori*. And, in Engliſh, in the ſame manner: "To write well is difficult; to ſpeak eloquently is ſtill more difficult." But as through all the other tenſes and moods the affirmation runs, and is eſſential to them; "The ſun ſhines, was ſhining, ſhone, will ſhine, would have ſhone, &c. the affirmation ſeems to be that which chiefly diſtinguiſhes the verb from the other parts of ſpeech, and give it its moſt conſpicuous power. Hence there can be no ſentence or complete propoſition, without a verb either expreſſed or implied. For, whenever we ſpeak, we always mean to aſſert that ſomething is, or is not; and the word which carries this aſſertion or affirmation, is a verb. From this ſort of eminence belonging to it, this part of ſpeech hath received its name, verb, from the Latin *verbum*, or 'the word,' by way of diſtinction.

Verbs, therefore, from their importance and neceſſity in ſpeech, muſt have been coeval with men's firſt attempts towards the formation of language: though, indeed, it muſt have been the work of long time to rear them up to that accurate and complex ſtructure which they now poſſeſs. It ſeems very probable, as Dr. Smith hath ſuggeſted, that the radical verb, or the firſt form

of it, in moſt languages, would be what we now call the *imperſonal verb*; "It rains; it thunders; it is light; it is agreeable;" and the like; as this is the very ſimpleſt form of the verb, and merely affirms the exiſtence of an event, or of a ſtate of things. By degrees, after pronouns were invented, ſuch verbs became perſonal, and were branched out into all the variety of tenſes and moods.

The *tenſes* of the verb are contrived to imply the ſeveral diſtinctions of time. Of theſe we muſt take ſome notice, in order to ſhow the admirable accuracy with which language is conſtructed. We think commonly of no more than the three great diviſions of time, into the *paſt*, the *preſent*, and the *future*: and we might imagine, that if verbs had been ſo contrived as ſimply to expreſs theſe, no more was needful. But language proceeds with much greater ſubtilty. It ſplits time into its ſeveral moments. It conſiders time as never ſtanding ſtill, but always flowing; things paſt, as more or leſs perfectly completed; and things future, as more or leſs remote, by different gradations. Hence the great variety of tenſes.

The *preſent* may indeed be always conſidered as one indiviſible point, ſuſceptible of no variety. "I write, or I am writing;" *ſcribo*. But it is not ſo with the *paſt*: there is no language ſo poor, but it hath two or three tenſes to expreſs the varieties of it. Ours hath no fewer than four. 1. A paſt action may be conſidered as left unfiniſhed; which makes the imperfect tenſe, "I was writing;" *ſcribebam* 2. As juſt now finiſhed: this makes the proper perfect tenſe, which in Engliſh is always expreſſed by the help of the auxiliary verb, "I have written." 3. It may be conſidered as finiſhed ſome time ago; the particular time left indefinite: "I wrote; *ſcripſi*; which may either ſignify, I wrote yeſterday, or I wrote a twelvemonth ago." This is what grammarians call an *aöriſt*, or indefinite paſt. 4. It may be conſidered as finiſhed before ſomething elſe, which is alſo paſt. This is the pluſquamperfect: "I had written; *ſcripſeram*: I had written before I received his letter." Here we obſerve, with ſome pleaſure, that we have an advantage over the Latins, who have only three varieties upon the paſt time. They have no proper perfect tenſe, or one which diſtinguiſhes an action juſt now finiſhed from an action that was finiſhed ſome time ago. In both theſe caſes they muſt ſay *ſcripſi*, though there be a manifeſt difference in the tenſes which our language expreſſes by this variation, "I have written," meaning, I have juſt now finiſhed writing; and "I wrote," meaning at ſome former time, ſince which other things have intervened. This difference the Romans have no tenſe to expreſs; and therefore can only do it by a circumlocution. The chief varieties in the *future* time are two. A ſimple or indefinite future; "I ſhall write;" *ſcribam*: and a future relating to ſomething elſe which is alſo future; "I ſhall have written;" *ſcripſero*; I ſhall have written before he arrives. On the tenſes of verbs, Mr. Harris's Hermes may be conſulted by ſuch as deſire to ſee them ſcrutinized with metaphyſical accuracy; and alſo, the Treatiſe on the Origin and Progreſs of Language, vol. ii. p. 125.

Beſides tenſes, or the power of expreſſing time, verbs admit the diſtinction of *voices* as they are called, the *active* and the *paſſive*; according as the affirmation reſpects ſomething that is done, or ſomething that is ſuffered; "I love," or "I am loved." *Neuter verbs* may be known by this, that a paſſive verb cannot be formed from them, as from a verb active. Verbs admit alſo the diſtinction of *moods*, which are deſigned to expreſs the affirmation, whether active or paſſive, under different forms. The *indicative mood*, for inſtance, ſimply declares a propoſition, "I write; I have written;" the *imperative* requires, commands, threatens: "Write thou; let him write." The *ſubjunctive* expreſſes the propoſition under the form of a condition, or in ſubordination to ſome other thing to which a reference is made: "I might write, I could write, I ſhould write, if the caſe were ſo and ſo." This manner of expreſſing an affirmation under ſo many different forms, together alſo with the diſtinction of the three perſons, *I*, *thou*, and *he*, conſtitutes what is called the *conjugation* of verbs, which makes ſo great a part of the grammar of all languages.

It now clearly appears, as before obſerved, that of all the parts of ſpeech, verbs are by far the moſt artificial and complex. Conſider only, how many things are denoted by this ſingle Latin word, *amaviſſem*, "I would have loved." Firſt, The perſon who ſpeaks, "I." Secondly, An attribute or action of that perſon, "loving." Thirdly, An affirmation concerning that action. Fourthly, The paſt time denoted in that affirmation, "have loved." Fifthly, A condition on which the action is ſuſpended, "*would* have loved." It appears curious and remarkable, that words of this complex import, and with more or leſs of this artificial ſtructure, are to be found, as far as we know, in all languages of the world. Indeed, the form of *conjugation*, or the manner of expreſſing all theſe varieties in the verb, differs greatly in different tongues. Conjugation is eſteemed moſt perfect in thoſe languages which, by varying either the termination or the initial ſyllable of the verb, expreſs the greateſt number of important circumſtances without the help of auxiliary words. In the oriental tongues, the verbs are ſaid to have few tenſes or expreſſions of time; but then their moods are ſo contrived as to expreſs a great variety of circumſtances and relations. In the Hebrew for inſtance, they ſay, in one word, without the help of any auxiliary, not only "I have taught," but, "I have taught exactly, or often; I have been commanded to teach; I have taught myſelf." The Greek, which is the moſt perfect of all the known tongues, is very regular and complete in all the tenſes and moods. The Latin is formed on the ſame model, but more imperfect; eſpecially in the paſſive voice, which forms moſt of the tenſes by the help of the auxiliary *ſum*, I am.

In all the modern European tongues, conjugation is very defective. They admit few varieties in the termination of the verb itſelf; but have almoſt conſtant recourſe to their auxiliary verbs throughout all the moods and tenſes, both active and paſſive. Language has undergone a change in conjugation perfectly ſimilar to that which it underwent with reſpect to declenſion. As prepoſitions prefixed to the noun ſuperſeded the uſe of caſes; ſo the two great auxiliary verbs, *to have*, and *to be*, with thoſe other auxiliaries which we uſe in Engliſh, *do*, *ſhall*, *will*, *may*, and *can*, prefixed to the participle, ſuperſede in a great meaſure the different terminations of moods and tenſes which formed the ancient conjugations. The alteration, in both caſes, was owing to the ſame cauſe, and will be eaſily underſtood, from reflecting on what was formerly obſerved.

Auxiliary verbs are, like prepoſitions, words of a very general and abſtract nature. They imply the different modifications of ſimple exiſtence conſidered alone, and without reference to any particular thing. In the early ſtate of ſpeech, the import of them would be incorporated with every particular verb in its tenſes and moods, long before words were invented for denoting ſuch abſtract conceptions of exiſtence, alone and by themſelves. But after thoſe auxiliary verbs came, in the progreſs of language, to be invented and known, and to have tenſes and moods given to them like other verbs; it was found that, as they carried in their nature the force of that affirmation which diſtinguiſhes the verb, they might, by being joined with the participle which gives the meaning of the verb, ſupply the place of moſt of the moods and tenſes. Hence, as the modern tongues began to riſe out of the ruins of the ancient, this method eſtabliſhed itſelf in the new formation of ſpeech. Such words, for inſtance, as *am*, *was*, *have*, *ſhall*, being once familiar, it

appeared more eaſy to apply theſe to any verb whatever; as, "I am loved; I was loved; I have loved;" than to remember that variety of terminations which were requiſite in conjugating the ancient verbs, *amor*, *amabar*, *amavi*, &c. Two or three varieties only in the termination of the verb were retained, as, *love*, *loved*, *loving*; and all the reſt were dropped. The conſequence however of this practice, was the ſame as that of abolifhing declenſions. It rendered language more ſimple and eaſy in its ſtructure; but withal more prolix and leſs graceful. The uſe of auxiliary verbs in the conjugations of the Italian, Spaniſh, and French, languages, ſeems to have been borrowed from the German, ſince their mother-tongue, the Latin, makes no uſe of them but in the compound tenſes of the paſſive voice.

PARTICIPLES are in our grammars made a ſeparate part of ſpeech, though evidently a part of the verb, while adjectives are confounded with nouns, to which they have no relation whatever. They are two in number; the participle of the *preſent*, and the participle of the *paſt*; *loving*, *loved*; *learning*, *learned*. They are called *participles* becauſe they *partake* of the nature of the verb. *Loving*, *learning*, may be applied to perſons, as may *loved*, *learned*, the former implying the actual exiſtence of the quality in the perſon at the time ſpoken of; the latter that the quality had exiſted in the perſon. *He is learning French*, or *he has been learning French for ſome time paſt*. The preſent tenſe of the Engliſh language being rather an indefinite tenſe, this participle is alſo indefinite: *learning* in both of the above inſtances ſhowing that the quality was exiſting in the man for an indefinite time. In the ſentences, "he is loved," or, "he has been loved," the participle *loved* ſhows that the quality had exiſted in the man at a former period; "he has been loved," namely, at a diſtant time; "he is loved," implies that the perſon at the preſent time is one who had love, and no intimation being given that the love of him ceaſed to exiſt, it naturally follows that we preſume he will continue to be beloved. In all languages the participle has thus the circumſtance of *time* attending the quality expreſſed, which may belong to a perſon; and in this chiefly it differs from the adjective.

ADVERBS form a very numerous claſs of words in every language, reducible in general to the head of attributives; as they ſerve to modify or to denote ſome circumſtance of an action or of a quality, relative to its time, place, order, degree, and the other properties of it which we have occaſion to ſpecify. They are for the moſt part no more than an abridged mode of ſpeech, expreſſing by one word what might by a circumlocution be reſolved into two or more words belonging to the other parts of ſpeech. *Exceedingly*, for inſtance, is the ſame as "in a high degree;" *bravely*, the ſame as "with bravery or valour;" *here*, the ſame as "in this place;" *often*, and *ſeldom*, the ſame as "for many, and for few, times:" and ſo of the reſt. Hence, adverbs may be conceived as of leſs neceſſity, and of later introduction into the ſyſtem of ſpeech, than many other claſſes of words; and accordingly the great body of them are derived from other words formerly eſtabliſhed in the language.

PREPOSITIONS and CONJUNCTIONS, are words more eſſential to diſcourſe than the greateſt part of adverbs. They form that claſs of words called *connectives*, without which there could be no language; ſerving to expreſs the relations which things bear to one another, their mutual influence, dependencies, and coherence; thereby joining words together into intelligible and ſignificant propoſitions.

CONJUNCTIONS are defined as words which are to "connect words, either two or more words in a ſentence, or to make of two ſimple ſentences one compound ſentence." This is the general account: but unfortunately we ſtumble at the next ſtep without having enquired after any of theſe words; for theſe conjunctions are immediately after divided into two claſſes, the one called *connective*, and the other *disjunctive*; that is, one claſs of theſe connecting words, inſtead of connecting, disjoin: and hence ariſes an abſurdity. There are certain words in all languages, which by frequent repetition have loſt their original form, and their meaning is not obvious. Such are the words *if*, *and*, *becauſe*, *or*. From their meaning not being known, ſome writers have ſuppoſed them to have no meaning at all, and that they were mere ſounds to connect or disjoin, were continuative, ſubcontinuative, collective, &c. But Mr. Horne Tooke has ſhown, that many of theſe words are the imperatives of old Saxon verbs; and the Hebrew language is a confirmation of his theory. We ſhall ſubjoin his table:

The Engliſh Conjunctions	Are the Imperatives	Of their reſpective Saxon Verbs,	
if	*gif*	*gifan*	to give
an	*an*	*anan*	to grant
unleſs	*onles*	*onlefan*	to diſmiſs
eke	*cac*	*eacan*	to add
yet	*get*	*getan*	to get
ſtill	*ſtell*	*ſtellan*	to put
elſe	*ales*	*alefan*	to diminiſh
though or	*thafig* or	*thafigan* or	to allow
tho'	*thaf*	*thafian*	
but	*bot*	*botan*	to boot; to ſuperadd
but	*be-utan*	*beon-utan*	to be out
without	*wyrth-utan*	*wyrthan-utan*	to be out
and	*an-ad*	*anan-ad*	dare con-geriem

leſt is the participle *leſed* of *leſan*, to diſmiſs.

Since { *ſiththan*, *ſine*, *ſeandes*, *ſiththe* or *ſin-es* } is the participle of *ſeon*, to ſee.

That is the Saxon article or pronoun ðat. *As* is *es*, a German article, meaning *it*, *that*, or *which*. And *ſo* is *ſa* or *ſo*, a Gothic article of the ſame import with *as*.

From conſidering the above ſynopſis, and referring to a ſimilar derivation in other languages, we have reaſon to believe that there is no ſuch ſeparate claſs as conjunctions, or words without meaning, to connect and diſjoin, but that the connection or disjunction is to be found in the meaning of the word. See ETYMOLOGY, vol. vii. p. 44.

If we are right in our opinion with reſpect to conjunctions, we ſhall naturally be little inclined to admit PREPOSITIONS as another claſs of words without meaning themſelves, but merely intended "to unite two words of meaning together, which without this aſſiſtance could not coaleſce." We ſhall look to derivation for the meaning of theſe words; and if we have any grounds for giving them a meaning, we ſhall claſs them accordingly. Let us try then with the ſuppoſed prepoſitions, *with*, *without*, *chez*, χωρις, *ſonder*.

With means, in all caſes where it is employed, addition; *without*, the contrary. "The king of England, *with* the lords and commons, can make a law: *without* the lords and commons, cannot make a law." Join the lords and commons to the king, and his act is good: take them away, and in law making he becomes a cipher. There is an Anglo-Saxon verb, *withan*, whoſe imperative is *with*; this imperative, we ſay, remains in uſe in what is called the prepoſition *with*; the other parts of the verb are obſolete. *Without* comes from the Saxon *wyrthan-utan*, be out. Thus in French *avec*, correſponding to our *with*, is from the imperative of *avoir* and the adjective *ce*, have that. *Chez* is called a prepoſition in French; but it is in reality a corruption of *caſa*, a houſe; *chez moi*, at my houſe. χωρις may very reaſonably

ſonably be referred to χορίζω, when *ſonder* of the Germans, of ſimilar import, ſeems to have the ſame relationſhip to *ſondern*, the verb.

Thorough, *thourough*, *thorow*, *through*, or *thro'*, is no other, ſays Horne Tooke, than the Gothic ſubſtantive *dauro*, or the Teutonic ſubſtantive *thuruh*, and, like them, means *door*, *gate*, *paſſage*. So that the ſentence cited by him, reſolved upon his principles, ſtands thus: "The ſplendid ſun—*join* his beams—genially warmeth—*paſſage* the air, (or, the air being the *paſſage* or *medium*)—the fertile earth." And in the ſame manner may we tranſlate the prepoſition *through* in every inſtance where *through* is uſed in Engliſh, or its equivalent prepoſition in any language; as from the Latin and Italian word *porta* (in Spaniſh *puerta* and in French *porte*), have come the Latin and Italian prepoſition *per*, the French *par*, and the Spaniſh *por*.

Up, *upon*, *over*, *bove*, *above*, have all, ſays the ſame philologiſt, one common origin and ſignification. In the Anglo-Saxon, *ufa*, *ufera*, *ufemæſt*, are the adjectives *altus*, *altior*, *altiſſimus*. *Ufa* or *ufan*, up; comparative *ufera*, *ofere* or *ofer*, over or upper; ſuperlative *ufemæſt*, upmoſt or uppermoſt. *Beufan*, *bufan*, *on-bufan*, bove, above.—If this be a juſt account of the origin of theſe words, the ſentences where *upon*, *over*, and *above*, occur, will run thus: "The ſtatue ſtood *on high* a pedeſtal;" "The river ran *higher* a ſand;" "The ſun is riſen *on high* the hills." And here we may obſerve, that the mere relation between ſtanding, running, &c. and place, is rather inferred from the verb itſelf than expreſſed by a ſeparated word; and the reaſon is obvious. For if a ſtatue ſtand, every one knows that it muſt ſtand *on* ſome thing as well as *at* ſome time. There is therefore no neceſſity, whatever elegance there may be in it, for employing any word to denote that relation, which is commonly believed to be ſignified by *on*; but it is neceſſary to inſert, between the verb and pedeſtal, a word ſignificant of *place*, that *pedeſtal* may not be miſtaken by an ignorant perſon for a *portion of time*, or any thing elſe connected with the ſtanding of the ſtatue.

Our very beſt writers are extremely incorrect in the uſe of the prepoſition. Few names ſtand higher in our language than thoſe of Swift, Dryden, Bentley, Bolingbroke, Pope, and Addiſon. We might therefore reaſonably expect that the writings of theſe eminent men would afford a ſtandard of propriety. Swift wrote upon the ſubject of the Engliſh tongue, and was remarkably attentive to grammatical preciſion. Dryden was the firſt poet, Engliſh critic, and proſe-writer, of his time. Bentley's literary character was well-known through Europe. Bolingbroke and Pope were both very elegant, and generally very correct, writers. And Johnſon concludes Addiſon's Life with ſaying, that "whoever wiſhes to attain an Engliſh ſtyle, muſt give his days and nights to the volumes of Addiſon." But yet theſe authorities, though claſſical, might lead a writer into many groſs errors; for they are all guilty of faults, or rather of anomalies. The inaccuracies moſtly noticed are in the uſe of the prepoſition. Swift writes: "Value themſelves *by* drawing your character;—beſtow favour *to* the moſt deſerving;—fell *into* their cognizance;—factions *into* which we are engaged." Dryden: "Reſtore *into* the good graces;—accuſed *for* luxuriancy;—may congratulate *to* themſelves." Bolingbroke: "Reproached *to* Tacitus;—ſwerve *out* of the path." Bentley: "Reſolved *of* going;—made much *on*." Addiſon: "Policy prevail'd *upon* force;—diſſent *with* the examiner." Pope: "And virgins ſmil'd at what they bluſh'd [at] before."

At length biſhop Louth gives one rule upon the ſubject reſpecting the government of nouns, viz. that nouns generally require after them the ſame prepoſition as the verb from which they are formed. We exceedingly lament that he did not give us a chapter upon the uſe of the prepoſition after the verb itſelf.

If it be ſaid that theſe errors might have been avoided, we aſk, through what means? Had theſe authors ever been told, that the prepoſitions they thus made uſe of were improper? or had it ever been ſettled, that the regimen of ſuch words as were naturalized ſhould follow that of the parent language? It may be ſaid, that we are not likely again to fall into the *ſame* errors, becauſe the biſhop has pointed out the impropriety. But it would not be difficult to quote from living authors, of great ability and claſſical education, inaccuracies as groſs as thoſe mentioned in the biſhop's note, which, we conceive, can ariſe only from the want of ſome rule or ſtandard of acknowledged authority. We ſhall venture to notice a few expreſſions which appear incorrect, in Johnſon, Harris, and others of the ſame date: "Turned their thoughts *upon* the modes of virtue;—Johnſon expatiates freely *into* whatever is collateral;—ſatisfied *in* the works." *Preface to the Hermes*. "Cenſured *of* vanity." *Shenſtone*. "Contraſted *to*." *Warton*. "Compliance *to*." *More*. "Congenial *to*;—antipathy *at*;—eloquent *of*." *Mackenzie*. Theſe writers are of conſiderable authority; and the expreſſions are taken from ſhort eſſays, a ſpecies of literary production in which perſpicuity, accuracy, and expreſſion, are more particularly attended to.

We have now only to ſpeak of the INTERJECTION. The genuine interjections are very few in number, and of very little importance, as they are thrown into a ſentence without altering its form either in ſyntax or ſignification. In the words of Horne Tooke, "The brutiſh *inarticulate* interjection has nothing to do with ſpeech, and is only the miſerable refuge of the ſpeechleſs. The dominion of ſpeech (according to the ſame author) is erected on the downfal of interjections. Without the artful contrivances of language, mankind would have nothing but interjections with which to communicate orally any of their feelings. The neighing of a horſe, the lowing of a cow, the barking of a dog, the purring of a cat, ſneezing, coughing, groaning, ſhrieking, and every other involuntary convulſion with oral ſound, have almoſt as good a title to be called parts of ſpeech as interjections. In the intercourſe of language, interjections are employed only when the ſuddenneſs or vehemence of ſome affection or paſſion returns men to their natural ſtate, and makes them for a moment forget the uſe of ſpeech; or when, from ſome circumſtance, the ſhortneſs of time will not permit them to exerciſe it." The genuine interjection, which is always expreſſive of ſome very ſtrong ſenſation, ſuch as *Ah!* when we feel pain, does not owe its characteriſtical expreſſion to the arbitrary form of articulation, but derives its whole force from the tone of voice and modification of countenance and geſture. Of conſequence, theſe tones and geſtures expreſs the ſame meaning, without any relation to the articulation which they may aſſume; and are therefore univerſally underſtood by all mankind. Voluntary interjections are uſed in books only for embelliſhment, and to mark forcibly a ſtrong emotion. But where ſpeech can be employed, they are totally uſeleſs; and are always inſufficient for the purpoſe of communicating thought. Dr. Beattie ranks *ſtrange*, *prodigious*, *amazing*, *wonderful*, *O dear*, *dear me*, &c. when uſed alone and without apparent grammatical ſyntax, among the interjections: but he might with as much propriety have conſidered *hardly*, *truly*, *really*, and even many Latin verbs, as interjections; for theſe too are often uſed alone to ſupply the place of whole ſentences. The truth is, that all men, when ſuddenly and violently agitated, have a ſtrong tendency to ſhorten their diſcourſe by employing a ſingle word to expreſs a ſentiment. In ſuch caſes, the word employed, whether noun, adjective, or verb, would be the principal word of the ſentence, if that ſentence were completed; and the agitation of the ſpeaker is ſuch, and the cauſe of it ſo obvious, that the hearer is in no danger of miſtaking

the

the ſenſe, and can himſelf ſupply the words that are wanting. Thus if a perſon, after liſtening to a romantic narrative, were to exclaim, *ſtrange!* would any man of common ſenſe ſuppoſe that the word *ſtrange*, becauſe uttered alone, had loſt the power of an *adjective* and become an *interjection?* No, ſurely: every one ſees that the exclamation is equivalent to, *that is ſtrange*, or, *that is a ſtrange ſtory*. Real interjections are never employed to convey truth of any kind. They are not to be found amongſt laws, in books of civil inſtitution, in hiſtory, or in any treatiſe of uſeful arts or ſciences; but in rhetoric and poetry, in novels, plays, and romances, where in Engliſh, ſo far from giving pathos to the ſtyle, they have generally an effect that is diſguſting or ridiculous.

Of DERIVATION.

Upon ETYMOLOGY in general we have ſpoken in the preceding volume, p. 44. But it may be proper to add ſomething relative to the derivation of Engliſh words.

Though there is little doubt but nouns were the firſt words invented and uſed, yet in the preſent ſtate of language we generally find the noun to be derived from the verb.—The thing implied in the verb, as done or produced, is commonly either the preſent of the verb; as to love, *love*; to fright, a *fright*; to fight, a *fight*; or the preterite of the verb, as, to ſtrike, I ſtrick *or* ſtrook, a *ſtroke*. The action is the ſame with the participle preſent, as, *loving*, *frighting*, *fighting*, *ſtriking*. The agent, or perſon acting, is denoted by the ſyllable *er* added to the verb, as, *lover*, *frighter*, *ſtriker*. Subſtantives, adjectives, and ſometimes other parts of ſpeech, are changed into verbs; in which caſe the vowel is often lengthened, or the conſonant ſoftened; as, a houſe, *to houſe*; braſs, *to braze*; glaſs, *to glaze*; graſs, *to graze*; price, *to prize*; breath, *to breathe*; a fiſh, *to fiſh*; oil, *to oil*; further, *to further*; forward, *to forward*; hinder, *to hinder*. Sometimes the termination *en* is added, eſpecially to adjectives: as, haſte, *to haſten*; length, *to lengthen*; ſtrength, *to ſtrengthen*; ſhort, *to ſhorten*; faſt, *to faſten*; white, *to whiten*; black, *to blacken*; hard, *to harden*; ſoft, *to ſoften*.

From ſubſtantives are formed adjectives of plenty, by adding the termination *y*; as, wealth, *wealthy*; health, *healthy*; might, *mighty*; worth, *worthy*; wit, *witty*; luſt, *luſty*; water, *watery*; earth, *earthy*; wood, a wood, *woody*; air, *airy*; a heart, *hearty*; a hand, *handy*. Or, by adding the termination *ful*, denoting abundance; as joy, *joyful*; fruit, *fruitful*; youth, *youthful*; care, *careful*; uſe, *uſeful*; delight, *delightful*; plenty, *plentiful*; help, *helpful*. Sometimes, in almoſt the ſame ſenſe, but with ſome kind of diminution thereof, the termination *ſome* is added, denoting *ſomething*, or *in ſome degree*; as delight, *delightſome*; game, *gameſome*; irk, *irkſome*; burden, *burdenſome*; trouble, *troubleſome*; light, *lightſome*; hand, *handſome*; alone, *loneſome*; toil, *toilſome*.

On the contrary, the termination *leſs* added to ſubſtantives, makes adjectives ſignifying want; as, *worthleſs*, *witleſs*, *heartleſs*, *joyleſs*, *careleſs*, *helpleſs*. Thus, comfort, *comfortleſs*; ſap, *ſapleſs*. Privation or contrariety is very often denoted by the particle *un* prefixed to many adjectives, or *in* before words derived from the Latin; as, pleaſant, *unpleaſant*; wiſe, *unwiſe*; profitable, *unprofitable*; patient, *impatient*. Thus, *unworthy*, *unhealthy*, *unfruitful*, *unuſeful*, and many more.

The original Engliſh privative is *un*; but as we often borrow from the Latin, or its deſcendants, words already ſignifying privation, as, *inefficacious*, *impious*, *indiſcreet*, the inſeparable particles *un* and *in* have fallen into confuſion from which it is not eaſy to diſentangle them. *Un* is prefixed to all words originally Engliſh; as, *untrue*, *untruth*, *untaught*, *unhandſome*. *Un* is prefixed to all participles made privative adjectives; as, *unfeeling*, *unaſſiſting*, *unpleaſing*, *unaided*, *undelighted*, *unendeared*. *Un* ought never to be prefixed to a participle preſent, to mark a forbearance of action, as *unſighing*; but a privation of habit, as, *unpitying*. *Un* is prefixed to moſt ſubſtantives which have an Engliſh termination, as, *unfertileneſs*, *unperfectneſs*, which, if they have borrowed terminations, take *in* or *im*, as, *infertility*, *imperfection*; *uncivil*, *incivility*; *unactive*, *inactivity*. In borrowing adjectives, if we receive them already compounded, it is uſual to retain the particle prefixed; as, *indecent*, *inelegant*, *improper*; but if we borrow the adjective, and add the privative particle, we commonly prefix *un*, as, *unpolite*, *ungallant*.

The prepoſitive particles *dis* and *mis*, derived from the *des* and *mes* of the French, ſignify almoſt the ſame as *un*; yet *dis* rather imports contrariety than privation, ſince it anſwers to the Latin prepoſition *de*. *Mis* inſinuates ſome error, and for the moſt part may be rendered by the Latin words *male* or *perperam*. To like, *to diſlike*; honour, *diſhonour*; to honour, to grace, *to diſhonour*, *to diſgrace*; to deign, *to diſdeign*; chance, hap, *miſchance*, *miſhap*; to take, *to miſtake*; deed, *miſdeed*; to uſe, *to miſuſe*; to employ, *to miſemploy*; to apply, *to miſapply*. Words derived from Latin written with *de* or *dis* retain the ſame ſignification; as, *diſtinguiſh*, diſtinguo; *detract*, detraho; *defame*, defamo; *detain*, detineo.

The termination *ly* added to ſubſtantives, and ſometimes to adjectives, forms adjectives that import ſome kind of ſimilitude or agreement, being formed by contraction of *lic* or *like*. A giant, *giantly*, *gianthike*; earth, *earthly*; heaven, *heavenly*; world, *worldly*; God, *godly*; good, *goodly*. The ſame termination *ly* added to adjectives, forms adverbs of like ſignification; as, beautiful, *beautifully*; ſweet, *ſweetly*; that is, *in a beautiful manner*; *with ſome degree of ſweetneſs*. The termination *iſh* added to adjectives, imports diminution; and added to ſubſtantives, imports ſimilitude or tendency to a character; as, green, *greeniſh*; white, *whitiſh*; ſoft, *ſoftiſh*; a thief, *thieviſh*; a wolf, *wolviſh*; a child, *childiſh*. We have forms of diminutives in ſubſtantives, though not frequent; as, a hill, *a hillock*; a cock, *a cockrel*; a pike, *a pickrel*, this is a French termination; a gooſe, *a goſling*, this is a German termination; a lamb, *a lambkin*; a chick, *a chicken*; a man, *a manikin*; a pipe, *a pipkin*; and thus *Halkin*, whence the patronimic, *Hawkins*, *Wilkins*, *Tomkins*, and others.

Of concrete adjectives are made abſtract ſubſtantives, by adding the termination *neſs*, and a few in *hood* or *head*, noting character or qualities; as, white, *whiteneſs*; hard, *hardneſs*; great, *greatneſs*; ſkilful, *ſkilfulneſs*, *unſkilfulneſs*; *godhead*, *manhood*, *maidenhead*, *widowhood*, *knighthood*, *prieſthood*, *likelihood*, *falſehood*. There are other abſtracts, partly derived from adjectives and partly from verbs, which are formed by the addition of the termination *th*, a ſmall change being ſometimes made; as, long, *length*; ſtrong, *ſtrength*; broad, *breadth*; wide, *width*; deep, *depth*; true, *truth*; warm, *warmth*; dear, *dearth*; ſlow, *ſlowth*; merry, *mirth*; heal, *health*; well, weal, *wealth*; dry, *droughth*; young, *youth*; and ſo moon, *month*.

Like theſe are ſome words derived from verbs; die, *death*; till, *tilth*; grow, *growth*; mow, later-*mow'th*, after-*mow'th*; commonly ſpoken and written later-*math*, after-*math*; ſteal, *ſtealth*; bear, *birth*; rue, *ruth*; and probably *earth* from *to ear* or *plow*; fly, *flight*; weigh, *weight*; fray, *fright*; to draw, *draught*.

We have many words borrowed from the Latin; but the greateſt part of them were communicated by the intervention of the French; as, *grace*, *face*, *elegant*, *elegance*, *reſemble*. Some verbs, which ſeem borrowed from the Latin, are formed from the preſent tenſe, and ſome from the ſupine. From the preſent are formed *ſpend*, *expend*, expendo; *conduce*, conduco; *deſpiſe*, deſpicio; *approve*, approbo; *conceive*, concipio. From the ſupines, *ſupplicate*, ſupplico; *demonſtrate*, demonſtro; *diſpoſe*, diſpono; *expatiate*, expatior; *ſuppreſs*, ſupprimo; *exempt*, eximo.

Some words purely French, not derived from the Latin, we have transferred into our language; as, *gar-*

den,

den, *garter*, *buckler*, *to advance*, *to cry*, *to plead*, from the French *jardin*, *jartier*, *boucher*, *avancer*, *crier*, *plaider*; though indeed even of theſe part is of Latin original.

As to many words which we have in common with the Germans, it is doubtful whether the old Teutons borrowed them from the Latins, or the Latins from the Teutons, or both had them from ſome common original: as, *wine*, vinum; *wind*, ventus; *went*, veni; *way*, via; *wall*, vallum; *wallow*, volvo; *wool*, vellus; *will*, volo; *worm*, vermis; *worth*, virtus; *waſp*, veſpa; *day*, dies; *draw*, traho; *tame*, domo, δαμαω; *yoke*, jugum, ζευγος; *over*, *upper*, ſuper, υπερ; *am*, ſum, ειμι; *break*, frango; *fly*, volo; *blow*, flo.

Our anceſtors were ſtudious to form borrowed words, however long, into monoſyllables; and not only cut off the formative terminations, but cropped the firſt ſyllable, eſpecially in words beginning with a vowel; and rejected not only vowels in the middle, but likewiſe conſonants of a weaker ſound, retaining the ſtronger, which ſeem the bones of words, or changing them for others of the ſame organ, in order that the ſound might become the ſofter; but eſpecially tranſpoſing their order, that they might the more readily be pronounced without the intermediate vowels. For example, in expendo, *ſpend*; exemplum, *ſample*; excipio, *ſcape*; extraneus, *ſtrange*; extractum, *ſtretched*; excrucio, *to ſcrew*; exſcorio, *to ſcour*; excorio, *to ſcourge*; excortico, *to ſcratch*; and others beginning with *ex*: as alſo, emendo, *to mend*; epiſcopus, *biſhop*, in Daniſh *biſp*; epiſtola, *epiſtle*; hoſpitale, *ſpittle*; Hiſpania, *Spain*; hiſtoria, *ſtory*.

The ſame word, according to its different ſignifications, often has a different origin; as, *to bear a burden*, from *fero*; but *to bear*, whence *birth*, *born*, *bairn*, comes from *pario*; and *a bear*, at leaſt if it be of Latin original, from *fera*. Thus *perch*, a fiſh, from *perca*; but *perch*, a meaſure, from *pertica*, and likewiſe *to perch*. *To ſpell*, is from *ſyllaba*; but *ſpell*, an inchantment, by which it is believed that the boundaries are ſo fixed in lands that none can paſs them againſt the maſter's will, from *expello*; and *ſpell*, a meſſenger, from *epiſtola*; whence *goſpel*, *good-ſpell*, or *god-ſpell*. Thus *freeſe* or *freeze*, from *frigeſco*; but *frieze*, an architectonic word, from *zophorus*; and *freeſe*, for *cloth*, from *Friſia*, or perhaps from *frigeſco*, as being more fit than any other for keeping out the cold.

There are many words among us, even monoſyllables, compounded of two or more words, at leaſt ſerving inſtead of compounds, and compriſing the ſignification of more words than one; as from *ſcript* and *roll*, comes *ſcroll*; from *proud* and *dance*, *prance*; from *ſt* of the verb *ſtay* or *ſtand*, and *out*, is made *ſtout*; from *ſtout* and *hardy*, *ſturdy*; from *ſp* of *ſpit* or *ſpew*, and *out*, comes *ſpout*; from the ſame *ſp*, with the termination *in*, is *ſpin*; and adding *out*, *ſpin out*; and from the ſame *ſp*, with *it*, is *ſpit*, which only differs from *ſpout* in that it is ſmaller, and with leſs noiſe and force; but *ſputter* is, becauſe of the obſcure *u*, ſomething between *ſpit* and *ſpout*; and by reaſon of adding *r*, it intimates a frequent iteration and noiſe, but obſcurely confuſed; whereas *ſpatter*, on account of the ſharper and clearer vowel *a*, intimates a more diſtinct noiſe, in which it chiefly differs from *ſputter*. From the ſame *ſp*, and the termination *ark*, comes *ſpark*, ſignifying a ſingle emiſſion of fire with a noiſe; namely, *ſp* the emiſſion, *ar* the more acute noiſe, and *k* the mute conſonant, intimates its being ſuddenly terminated; but adding *l*, is made the frequentative *ſparkle*. The ſame *ſp*, by adding *r*, that is *ſpr*, implies a more lively impetus of diffuſing or expanding itſelf; to which adding the termination *ing*, it becomes *ſpring*; its vigour *ſpr* imports, its ſharpneſs the termination *ing*; and laſtly *in* acute and tremulous, ending in the mute conſonant *g*, denotes the ſudden ending of any motion, that it is meant in its primary ſignification of a ſingle, not a complicated, exilition. Hence we call *ſpring* whatever has an elaſtic force; as alſo a fountain of water, and thence the origin of any thing; and *to ſpring*, to germinate; and *ſpring*, one of the four ſeaſons. From the ſame *ſpr* and *out*, is formed *ſprout*, and with the termination *ig*, *ſprig*; of which the following, for the moſt part, is the difference: *ſprout*, of a groſſer ſound, imports a fatter or groſſer bud; *ſprig*, of a ſlenderer ſound, denotes a ſmaller ſhoot. In like manner, from *ſtr* of the verb *ſtrive*, and *out*, comes *ſtrout* and *ſtrut*. From the ſame *ſtr* and the termination *uggle*, is made *ſtruggle*; and this *gl* imports, but without any great noiſe, by reaſon of the obſcure ſound of the vowel *u*. In like manner from *throw* and *roll* is made *troll*; and almoſt in the ſame ſenſe is *trundle*, from *throw* or *thruſt*, and *rundle*. Thus *graff* or *grough* is compounded of *grave* and *rough*; and *trudge* from *tread* or *trot*, and *drudge*.

It is for the ſake of preſerving the etymology of words, that people write differently from what they ſpeak: a phenomenon, which indeed has been hitherto repreſented, by grammarians and philoſophic linguiſts, as the moſt palpable abſurdity that can be conceived; although the agreement of all the weſtern nations of Europe, in what they have thus termed abſurdity, ſhould have convinced them, that there muſt be ſome reaſon for it, and which ought not to be overlooked. This reaſon then is no other, than to preſerve, as long as is neceſſary, to the eye at leaſt, the proximate derivation by means of writing, although the pronunciation has loſt it; to promote thereby that univerſal intelligibility, which is the firſt and principal object of language; for, as the pronunciation in all mixed languages, is from time to time conſiderably changed, many words would ſoon become altogether obſcure and unintelligible, did not the etymological way of writing them, ſtill maintain their true form, as long as is practicable and neceſſary. Beſides, the adherence to the neareſt derivation, and the preſervation of the original form of words, by accurate writing, are likewiſe the means of preventing the extremely fluctuating pronunciation from ſtill greater deviations. This is the true reaſon, why all the weſtern Europeans, and conſequently the Engliſh too, write differently from what they ſpeak: and as this phenomenon has been produced entirely by "the latent perception of purpoſe and means," which is involved in ſo much obſcurity, that grammarians have not yet been able to account for it; hence we receive a leſſon, not to cenſure the like regulations, if they are univerſally adopted by one or more nations, until the real foundation of them has been diſcovered. The difference of this mode of writing from that of ſpeaking, is indeed in itſelf an imperfection; but in all thoſe languages, that are ſo thoroughly mixed, it is a real perfection; becauſe it preſerves, at leaſt to the eye, the immediate derivation, and conſtantly furniſhes us with the eaſieſt poſſible method of underſtanding words, while it ſerves to prevent any further deviations in the pronunciation.

Some difference of opinion prevails as to doubling of conſonants in various words. As to the final *k* after *c*, it is now generally omitted; and it is ſingular enough that C, having the very form of an ancient Greek ſigma, ever came to be appropriated to the expreſſion of the ſame ſound as K; but as this is the caſe at preſent, it ſeems to be frequently (and perhaps, from the ſuperior elegance and lightneſs of its ſhape, juſtly) preferred for that purpoſe. Now when the laſt ſyllable is unaccented, only one final conſonant is required; and the *c* is taken: both *c* and *k* being adopted in monoſyllables. In final variations or additions however, beginning with a vowel before which *c* would regularly have the ſound of *s*, *k* is properly interpoſed; as in "phyſicked:" except when *s* is the ſound wanted, as in "phyſician;" and any ſuch reſource being of courſe unneceſſary with thoſe vowels upon which *c* has alone the force of *k*, as in "phyſical." Yet, though *c* may be eligibly preferred to *k* when the matter is indifferent, the uſe of it in "ſceptic" ſeems contrary to all analogy of pronunciation.

In polyſyllables, doubling a conſonant is the effectual

way of throwing the accent upon the preceding; and it is upon this principle that we write "offered" and "referred," "profited" and "omitted." This then appears the ground of diſcrimination; that (generally ſpeaking) an accented ſyllable requires a double, and an unaccented a ſingle, conſonant: a rule which might lead us to differ in ſome inſtances from common uſage, but in none from propriety: it would lead us to write "bridewel, waterfal, dunghil, handful; foretell, miſcall." It would lead us to recall the *d* in alledge and pidgeon; but to leave it out as uſual in college and knowlege. Attention to pronunciation, and to the diviſion of ſyllables, would alone be ſufficient to make the eliſion very improper in "chargeable, manageable," &c. and perſpicuity requires it to be avoided in "ſingeing," the participle of *ſinge*.

Of SYNTAX.

The Engliſh tongue poſſeſſes, undoubtedly, this property, that it is the moſt ſimple in its form and conſtruction of all the European dialects. Its words are ſubject to fewer variations from their original form than thoſe of any other language. Its ſubſtantives have no diſtinction of gender, except what nature has made, and but one variation in caſe. Its adjectives admit of no change at all, except what expreſſes the degree of compariſon. Its verbs, inſtead of running through all the varieties of ancient conjugation, ſuffer no more than four or five changes in termination. By the help of a few prepoſitions and auxiliary verbs, all the purpoſes of ſignificancy in meaning are accompliſhed; while the words, for the moſt part, preſerve their form unchanged. The diſadvantages in point of elegance, brevity, and force, which follow from this ſtructure of our language, have been before pointed out. But, at the ſame time, it muſt be admitted, that ſuch a ſtructure contributes to facility; it renders the acquiſition of our language leſs laborious, the arrangement of our words more plain and obvious, the rules of our ſyntax fewer and more ſimple. We agree, indeed, with Dr. Lowth, (Preface to his Grammar,) in thinking that the ſimplicity and facility of our language occaſion its being frequently written and ſpoken with leſs accuracy. It was neceſſary to ſtudy languages, which were of a more complex and artificial form, with greater care. The marks of gender and caſe, the varieties of conjugation and declenſion, the multiplied rules of ſyntax, were all to be attended to in ſpeech. Hence language became more an object of art. It was reduced into form; a ſtandard was eſtabliſhed, and any departure from the ſtandard became conſpicuous. Whereas, among us, language is hardly conſidered as an object of grammatical rule. We take it for granted, that a competent ſkill in it may be acquired without any ſtudy; and that, in a ſyntax ſo narrow and confined as ours, there is nothing which demands attention. Hence ariſes the habit of writing in a looſe and inaccurate manner. For perhaps no grammatical rules have ſufficient authority to controul the firm and eſtabliſhed uſage of language. Eſtabliſhed cuſtom, in ſpeaking and writing, is the ſtandard to which we muſt at laſt reſort for determining every controverted point in language and ſtyle. But it will not follow from this, that grammatical rules are ſuperſeded as uſeleſs. In every language, which has been in any degree cultivated, there prevails a certain ſtructure and analogy of parts, which is underſtood to give foundation to the moſt reputable uſage of ſpeech; and which, in all caſes, when uſage is looſe or dubious, poſſeſſes conſiderable authority. In every language, there are rules of ſyntax which muſt be inviolably obſerved by all who would either write or ſpeak with any propriety. For ſyntax is no other than that arrangement of words, in a ſentence, which renders the meaning of each word, and the relation of all the words to one another, moſt clear and intelligible.

All the rules of Latin ſyntax, it is true, cannot be applied to our language. Many of theſe rules aroſe from the particular form of their language, which occaſioned verbs or prepoſitions to govern, ſome the genitive, ſome the dative, ſome the accuſative or ablative, caſe. But, abſtracting from theſe peculiarities, it is to be always remembered, that the chief and fundamental rules of ſyntax are common to the Engliſh as well as the Latin tongue; and, indeed, belong equally to all languages. For, in all languages, the parts which compoſe ſpeech are eſſentially the ſame; ſubſtantives, adjectives, verbs, and connecting particles: and wherever theſe parts of ſpeech are found, there are certain neceſſary relations among them, which regulate their ſyntax, or the place which they ought to poſſeſs in a ſentence. Thus, in Engliſh, juſt as much as in Latin, the adjective muſt, by poſition, be made to agree with its ſubſtantive; and the verb muſt agree with its nominative in perſon and number; becauſe, from the nature of things, a word, which expreſſes either a quality or an action, muſt correſpond as cloſely as poſſible with the name of that thing whoſe quality, or whoſe action, it expreſſes. Two or more ſubſtantives, joined by a copulative, muſt always require the verbs or pronouns, to which they refer, to be placed in the plural number; otherwiſe, their common relation to theſe verbs or pronouns is not pointed out. An active verb muſt, in every language, govern the accuſative; that is, clearly point out ſome ſubſtantive noun, as the object to which its action is directed. A relative pronoun muſt, in every form of ſpeech, agree with its antecedent in gender, number, and perſon; and conjunctions, or connecting particles, ought always to couple like caſes and moods; that is, ought to join together words which are of the ſame form and ſtate with each other. The rule for the prepoſition, and thoſe for ſome other of the parts of ſpeech, may be gathered from the foregoing diſquiſitions on the noun, verb, &c.

Whatever the advantages or defects of the Engliſh language be, as it is our own language, it deſerves a high degree of our ſtudy and attention, both with regard to the choice of words which we employ, and with regard to the ſyntax, or the arrangement of theſe words in a ſentence. We know how much the Greeks and the Romans, in their moſt poliſhed and flouriſhing times, cultivated their own tongues. We know how much ſtudy both the French and the Italians have beſtowed upon theirs. Whatever knowledge may be acquired by the ſtudy of other languages, it can never be communicated with advantage, unleſs by ſuch as can write and ſpeak their own language well. Let the matter of an author be ever ſo good and uſeful, his compoſitions will always ſuffer in the public eſteem, if his expreſſion be deficient in purity and propriety. The many errors, even in point of grammar, the many offences againſt purity of language, which are committed by writers who are far from being contemptible, demonſtrate, that a careful ſtudy of the language is previouſly requiſite, in all who aim at writing it properly. On this ſubject, the reader ought to peruſe Dr. Lowth's Short Introduction to Engliſh Grammar, with Critical Notes; which is the grammatical performance of higheſt authority that has appeared in our time, and in which he will ſee, what has been ſaid concerning the inaccuracies in language of ſome of our beſt writers, fully verified. In Dr. Campbell's Philoſophy of Rhetoric, he will likewiſe find many acute and ingenious obſervations, both on the Engliſh language, and on ſtyle in general. And Dr. Prieſtley's Rudiments of Engliſh Grammar will alſo be uſeful, by pointing out ſeveral of the errors into which writers are apt to fall.

Of PROSODY.

Prosody compriſes *orthoepy*, or the rules of pronunciation; and *orthometry*, or the laws of verſification.

Pronun-

PRONUNCIATION is juſt, when every letter has its proper ſound, and when every ſyllable has its proper accent, or, which in Engliſh verſification is the ſame, its proper quantity.

The *accent* conſiſts in a particular elevation of the voice, by which, in polyſyllables, one ſyllable is as it were raiſed above the others: thus in *emer'gency, employ'ment*, the ſyllables *mer* and *ploy* are called *accentuated ſyllables*. The reaſon of this mode of diſtinguiſhing one ſyllable from another, is properly contained in the nature of the word and the intention of the ſpeaker, who, by this elevation of the voice, points out that ſyllable, which expreſſes the principal idea, and to which he chiefly directs the attention of the hearer. Hence the two accentuated ſyllables, above-mentioned, contain the principal ideas of the words in which they occur, and all the other ſyllables denote only collateral ideas, or further determinations, inflexions, and the like. This, in the nature of the thing, is *properly* the intention of the accent; for this reaſon, in the German, and probably too in all other unmixed languages, we meet with the general rule, that the radical ſyllable, in ſuch words as conſiſt of a plurality of ſyllables, always receives the accent; ſince it contains the principal idea of the word. In the German language this rule is ſo general, that the few exceptions from it ſcarcely deſerve any attention. But, as the Engliſh is a very mixed language, this rule is liable here to a much greater number of exceptions; eſpecially with reſpect to words borrowed from the Latin and French, in which the radical ſyllable has become obſcure, ſo that it cannot in all inſtances preſerve its due accent. But thoſe words from the Anglo-Saxon, which are ſtill current in the Engliſh language, follow this rule, and perhaps as uniformly as in the German.

The great diſtinction of our accent depends upon its ſeat; which may be either upon a vowel or a conſonant. Upon a vowel, as in the words, *glóry, fáther, hóly*. Upon a conſonant, as in the words, *hab'it, bor'row, bat'tle*. When the accent is on the vowel, the ſyllable is long; becauſe the accent is made by dwelling upon the vowel. When it is on the conſonant, the ſyllable is ſhort; becauſe the accent is made by paſſing rapidly over the vowel, and giving a ſmart ſtroke of the voice to the following conſonant. Thus the words, *add', led', bid', rod', cub'*, are all ſhort, the voice paſſing quickly over the vowel to the conſonant: but for a contrary reaſon, the words, *áll, láid, líde, róad, cúbe*, are long; the accent being on the vowels, on which the voice dwells ſome time, before it takes in the ſound of the conſonant. Obvious as this point is, it has wholly eſcaped the obſervation of moſt of our grammarians, and compilers of dictionaries; who, inſtead of examining the peculiar genius of our tongue, have followed the Greek method, of always placing the accentual mark over a vowel. Now the reaſon of this practice among the Greeks was, that as their accents conſiſted in change of notes, they could not be diſtinctly expreſſed but by the vowels; in uttering which, the paſſage is entirely clear for the voice to iſſue, and not interrupted or ſtopped by the different poſitions of the organs in forming the conſonants. But as our accent conſiſts in ſtreſs only, it can juſt as well be placed on a conſonant as a vowel. By this method of marking the accented ſyllable, our compilers of dictionaries, vocabularies, and ſpelling-books, muſt miſlead provincials and foreigners in the pronunciation of perhaps one half of the words in our language. For inſtance; if they ſhould look for the word *endeavour*, finding the accent over the vowel *é*, they will of courſe found it endéavour. In the ſame manner *ded'icate* will be called *dédicate*; precip'itate, preci-pitate; phenom'enon, phenó-menon; and ſo on through all words of the ſame claſs. And in fact we find the Scots do pronounce all ſuch words in that manner; nor do they ever lay the accent upon the conſonant in any word in the whole language; in which the diverſity of their pronunciation from that of the people of England chiefly conſiſts. It is a pity that our compilers of dictionaries ſhould have fallen into ſo groſs an error, as the marking of the accents in the right way would have afforded one of the moſt general and certain guides to true pronunciation, that is to be found with reſpect to our tongue; this therefore is the method we have adopted.

VERSIFICATION is the arrangement of a certain number of ſyllables according to certain laws. The feet of our verſes are either iambic, as *alóft, create*; or trochaic, as *hóly, lófty*. The iambic meaſure comprehends verſes of four, ſix, eight, ten, and even of twelve and fourteen, ſyllables; in all which meaſures the accent is to be placed on the even ſyllables, i. e. the ſecond, fourth, &c. in every line; and every line, conſidered by itſelf, is more harmonious, as this rule is more ſtrictly obſerved. —The trochaic meaſure includes verſes of three, five, and ſeven, ſyllables; the accent being on the odd ſyllables.

There is alſo another meaſure in Engliſh verſe, called the *anapeſtic*, in which, though the number of ſyllables may be even, ſtill the accent is upon the odd one:

May I góvern my páſſions with ábſolute ſwáy,
And grow wíſer and bétter as time wears awáy. *Dr. Pope.*

To this meaſure Mrs. Hannah More has thought fit to refer the heroic meaſure of the French, which ſhe ſays is to be read like our ſong of "A cóbler there wás and he lív'd in a ſtáll." Nothing can be more erroneous, or ſhow a greater ignorance of French metre, than ſuch an aſſertion. The French verſe is our Alexandrine line of twelve ſyllables, with the accent on each even ſyllable; and ſhould be read like "The lóng majéſtic márch and énergy' divíne."—Example:

Je chánte cé herós qui régna ſúr la Fránce
Et pár droit dé conquéte et pár droit dé naiſſánce.

Not as H. M. would read it; Je chánt' ce herós qui regná ſur la Fránce, &c.

Our verſification admits of few licences, except a *ſynalæpha*, or eliſion of *e* in *the* before a vowel, as *th' eternal*; and more rarely of *o* in *to*, as *t' accept*; and a *ſynæreſis*, by which two ſhort vowels coaleſce into one ſyllable, as *queſtion, ſpecial*; or a word is contracted by the expulſion of a ſhort vowel before a liquid, as *av'rice, temp'rance*. Cutting off the *e* in *liv'd, cloſ'd*, &c. is now frequently neglected in poetry, being thought unneceſſary, becauſe the words, though written at length, are generally ſhortened in pronunciation, even in proſe. But this reaſon is very inſufficient; for the meaſure frequently requires ſuch words to be pronounced with their full complement of ſyllables. Inſtances are very numerous indeed in Spenſer; but we ſhall quote only one from a modern writer:

Her eyes which ſo beautiful ſhone
Are cloſed for ever in ſleep. *Lyttleton.*

On the other hand, a cuſtom has obtained of printing the words *though* and *through* elliptically, thus, *tho', thro'*: now, being words already of one ſyllable, there can be no neceſſity for contracting them, as the ellipſis cannot make them more ſuitable to the meaſure of any verſe.

OF PUNCTUATION.

Punctuation has generally been conſidered as a modern invention; but ſome ſpecies of pauſes and diviſions of ſentences in ſpeaking and writing muſt have been coeval with the knowledge of communicating ideas by ſounds or by ſymbols. Suidas ſays, that the period and the colon were diſcovered and explained by Thraſymacus, about 380 years before the Chriſtian era. Cicero ſays, that Thraſymacus was the firſt who ſtudied oratorical numbers, which entirely conſiſted in the artificial ſtructure of periods and colons. It appears from a paſſage in Ariſtotle, that punctuation was known in his time. The learned Dr. Edward Bernard refers the know-

ledge of pointing to the time of that philoſopher, and ſays, that it conſiſted in the different poſitions of one ſingle point. At the bottom of a letter, thus, (A.) it was equivalent to a comma; in the middle (A·) it was equal to a colon; at the top (A˙) it denoted a period, or the concluſion of a ſentence. This mode was eaſily practiſed in Greek manuſcripts, while they were written in capitals. But when the ſmall letters were adopted, that is, about the ninth century, this diſtinction could not be obſerved; a change was therefore made in the ſcheme of punctuation.

According to Cicero, the ancient Romans, as well as the Greeks, made uſe of points. He mentions them under the appellation of *librariorum notæ*; and in ſeveral parts of his works he ſpeaks of *interpunctæ clauſulæ in orationibus*, of *clauſulæ atque interpuncta verborum*, of *interpunctiones verborum*, &c. Seneca, who died A.D. 65, expreſsly ſays, that Latin writers, in his time, had been uſed to punctuation. *Nos, cum ſcribimus, interpungere conſuevimus.* Muretus and Lipſius imagined that theſe words alluded to the inſertion of a point after each word: but they certainly miſtook; for they muſt neceſſarily refer to marks of punctuation in the diviſion of ſentences, becauſe, in the paſſage in which theſe words occur, Seneca is ſpeaking of one Q. Haterius, who made no pauſes in his orations. According to Suetonius, Valerius Probus procured copies of many old books, and employed himſelf in correcting, pointing, and illuſtrating, them; devoting his time to this and no other part of grammar. It appears from hence, that in the time of Probus, or about the year 68, Latin manuſcripts had not been uſually pointed, and that grammarians made it their buſineſs to ſupply this deficiency.

Quinctilian, who wrote his celebrated treatiſe on Oratory about the year 88, ſpeaks of commas, colons, and periods; but it muſt be obſerved, that by theſe terms he means clauſes, members, and complete ſentences, and not the marks of punctuation. Ælius Donatus publiſhed a treatiſe on Grammar in the fourth century, in which he explains the *diſtinctio*, the *media diſtinctio*, and the *ſubdiſtinctio*; that is, the uſe of a ſingle point in the various poſitions already mentioned. Jerom, who had been the pupil of Donatus, in his Latin Verſion of the Scriptures made uſe of certain diſtinctions or diviſions, which he calls *cola* and *commata*. It has, however, been thought probable, that theſe diviſions were not made by the addition of any points or ſtops; but were formed by writing, in one line, as many words as conſtituted a clauſe, equivalent to what we diſtinguiſh by a comma or a colon. Theſe diviſions had the appearance of ſhort irregular verſes in poetry. There are ſome Greek manuſcripts ſtill extant, which are written in this manner.

Though punctuation had been for ſo many hundred years in uſe, yet the period, in different poſitions, as before obſerved, had ſerved every purpoſe; and our very early printers employed no other mark, but uſed it indiſcriminately for every pauſe. The colon was introduced about the year 1485; the comma about 1521; and the ſemicolon, after being long uſed as a contraction for *ue* in *que*, as *arma virumq*; is ſaid to have been firſt introduced as a ſtop by our countryman ſir Philip Sidney, in 1587. The ſemicolon is not uſed in Roger Aſcham's Schoolmaſter, printed in 1570. About the year 1578, we begin to obſerve the inverted commas (") as a mark for quotations; alſo parentheſes (), crotchets or brackets [], the note of interrogation (?); alſo the marks of reference, as *, †, ¶; and the accents, ', `, ^.

The ſyſtem of points, as now uſed, may be regarded as ſufficient for every purpoſe of elucidation; though ſome would diſcard the ſemicolon altogether; and others, on the contrary, are of opinion that we rather want an additional point, a *ſemicomma*. But let us proceed to demonſtrate the uſe of thoſe we have.

The art of punctuation, though of the greateſt importance in writing, in printing, and in directing the voice of the reader, has hitherto been much neglected, or conſidered as an arbitrary invention, depending on fancy and caprice. "The doctrine of punctuation," ſays biſhop Lowth, "muſt needs be very imperfect; few preciſe rules can be given which will hold without exception in all caſes, but much muſt be left to the judgment and taſte of the writer." Our writers ſeem to have availed themſelves of this conceſſion: infected with the daſhing mania of Sterne, many of them appear even to have given up this modern art in deſpair, and to have conſidered it as already obſolete, or at leaſt uncertain. Yet a little attention to this art, however imperfect it may be, would much conduce to the intelligibility of ſome of theſe very authors. In moſt of them we indeed meet with commas, ſemicolons, colons, and periods; but in ſuch confuſion, that the old Roman manner, *continuo ductu*, would be as comprehenſible. The practice is here in fault, and deſerves ſevere reprehenſion. The arbitrary uſage of the fourteenth century is not creditable in a writer of the nineteenth. We ſhall therefore undertake to ſhow, by the following rules, that a right punctuation is founded on rational and determinate principles; and is really an indiſpenſible part of grammar.

ESSENTIAL and GENERAL RULES for POINTING.

I. Two ſubſtantives, or any two words of the ſame part of ſpeech, connected by the conjunction *and*, do not admit of a comma between them.—*Examples.* 1ſt. Of Subſtantives: "Painting and ſculpture are imitations of viſible objects."—2d. Of Verbs: "The ſtudy of natural hiſtory expands and elevates the mind."—3d. Of Pronouns: "You and I were formerly inſeparable."—4th. Of Adverbs: "However eaſily and agreeably you may conduct yourſelf, a rival will deal his praiſe but ſparingly and cautiouſly."

II. Three or more ſubſtantives, pronouns, adverbs, &c. in the ſame caſe, &c. and in immediate ſucceſſion, are ſeparated by commas.—*Ex.* 1ſt. Of Subſtantives: "Climate, ſoil, laws, cuſtoms, food, and other accidental differences, have produced an aſtoniſhing variety in the complexion, features, manners, and faculties, of the human ſpecies."—2d. Of Pronouns: "He, you, and I, went with her, him, and them, into the country."—3d. Of Adverbs: "However truly, eloquently, and forcibly, he ſpoke on the ſubject, it made no impreſſion on the audience."

The common, but very erroneous, practice, is to omit the laſt comma, or that which ſeparates the laſt ſubſtantive, &c. from the reſt of the ſentence; and ſometimes to omit that alſo which precedes the word *and*:

Ex. ——— "Now beneath the walls
At their command arms, food and fire they bring."
Lewis's Statius, x. 28.

Which certainly ſhould be pointed thus:

Now beneath the walls,
At their command, arms, food, and fire, they bring.

III. Subſtantives, or any words of the ſame part of ſpeech, immediately following one another, in the ſame caſe, tenſe, &c. and joined in pairs by the conjunction *and*, are ſeparated in pairs by commas.—*Ex.* 1ſt. Of Subſtantives: "Shape and beauty, worth and education, wit and underſtanding, gentle nature and agreeable humour, honour and virtue, were to come in for their ſhare of ſuch contracts."—2d. Of Verbs: "If honour were to prompt and impel, guide and direct, enforce and execute, all our wiſhes, laws would be uſeleſs."—3d. Of Adjectives: "He behaved himſelf in a manner eaſy and agreeable, affable and courteous, obliging and mild."—4th. Of Adverbs: "He behaved himſelf eaſily and agreeably, affably and courteouſly, obligingly and mildly."

IV. Two ſubſtantives, or any other words of the ſame part of ſpeech, connected by the disjunctive *or*, ſhould have

have a comma between them, if the latter be explanatory of the former; but, when the former word will admit the word *either* to precede it, the latter cannot be explanatory of the former, conſequently a comma is unneceſſary.—*Ex.* "Milton too frequently uſes technical words, or terms of art."—"You certainly muſt be [*either*] mad or fooliſh."—The difference is obvious. It is allowed, that punctuation ſhould not only direct the reader in pauſe, but ſhould point to the ſenſe of an author; and, in this caſe, the comma is made to perform its double office.

V. Nouns in appoſition, that is, nouns added to other nouns in the ſame caſe, by way of explication, or illuſtration, when accompanied with adjuncts, are ſeparated from the reſt of the ſentence by commas.—*Ex.* "Cupid, the god of love, was the ſon of Venus, the goddeſs of beauty."—In this example, *the god of love* is in appoſition to *Cupid*, and *the goddeſs of beauty* is in appoſition to *Venus*.

VI. Two nouns in appoſition, not accompanied with adjuncts, the latter noun forming, as it were, part of a proper name, are not divided.—*Ex.* "The emperor Antoninus wrote an excellent book."

VII. Expreſſions in a direct addreſs, or what is called in Latin the vocative caſe, are ſeparated from the reſt of the ſentence by commas.—*Ex.* "Beware, Amaſia, of the artful ſycophant."

To ſhow more clearly the uſe of the comma after the vocative caſe, let us take the following ſentence; and firſt we ſhall ſet it down without any point: "Sextus Nævius my client does not vie with you in intereſt." *Guthrie's Cicero*, iii. 349. Thus pointed, we cannot tell who was Cicero's client. If we ſhould point thus, "Sextus Nævius, my client, does not vie, &c." it would appear that S. Nævius was his client. But the true pointing, "S. Nævius, my client does not vie, &c." ſhews at once, that S. Nævius is the perſon addreſſed, or in the vocative caſe, and that the client was (P. Quintius) a perſon not then named.

VIII. A noun or pronoun, in what is called the caſe abſolute, and the participle, &c. with which it is connected, when it begins a ſentence, ſhould be ſeparated from the reſt of the ſentence by a comma.—*Ex.* "Harold being ſlain in the field, the conqueror marched directly to London."—"Harold's being ſlain in the field cauſed great joy to the friends of the conqueror."—In this latter example, *Harold's being ſlain in the field* is the complex nominative caſe to the verb *cauſed*, and does not therefore admit of a comma, notwithſtanding the length of the ſentence.

IX. Two adjectives, belonging to a ſubſtantive immediately following, with or without conjunctions, admit the intervention of no point.—*Ex.* "Beware of a cenſorious four ſeverity."—Commas placed after each adjective would be too rigid, and therefore the commas muſt be totally expunged. Another reaſon is, that the firſt adjective may be conſidered as acting adverbially upon the ſecond, (as if it had ſtood "cenſoriouſly-four,") and therefore admits no ſeparation from it or from its ſubſtantive. But the prevailing method, of putting a comma after the firſt only of two adjectives, ("Beware of a cenſorious, four ſeverity,") is abſurd in the higheſt degree. Take the following inſtance: In the edition of Boyer's French Grammar from which the compiler of this article ſtudied when a boy, the title-page expreſſes, among other things, "A Well digeſted, and copious Vocabulary." Here the *digeſted Well* is made quite a diſtinct thing from the Vocabulary, and is what no one would expect to find in a French Grammar.

A ſimilar rule holds with the verb: Two adverbs belonging to a verb immediately following muſt not have a point between them. The following inſtance will ſhow the abſurdity of departing from this rule: "Camden's Britannia is a work too long, and too well known, to have its merits now eſtimated." *Monthly Rev.* iii. 176. If we read this ſentence according to its punctuation, we ſhall ſuppoſe, that one reaſon why the merits of the Britannia cannot or need not now be eſtimated, is becauſe the work is *too long*; but, from the word *now* being inſerted, it can hardly be doubted but the writer of the article meant to ſay, that work had been *too long known* and *too well known*: therefore the comma after the word *long* ſhould have been omitted.

The abſurdity of inſulating certain words from thoſe they immediately belong to occurs ſo very frequently, that few books can be opened without preſenting inſtances ſuch as the following:—"A dray, or cart-horſe, ſhould be ſmooth trimmed about the head and ears." *Laurence on Horſes*, i. 308.—"As I choſe rather to be an ear, than an eye-witneſs of ſuch events, I departed." *Guthrie's Cicero*, ii. 20.—Here the word *dray* and the word *ear* are moſt carefully ſeparated from the very words which the ſenſe ſo cloſely connects them with; and even the hyphen is preſſed into the ſervice to increaſe the abſurdity.

X. Three or more adjectives, belonging to the ſame ſubſtantive, are ſeparated from each other, and from their concordant ſubſtantive, by commas.—*Ex.* "Sacred hiſtory is a ſimple, chaſte, faithful, diſpaſſionate, impartial, detail of facts."

XI. Three or more verbs having the ſame nominative caſe, and immediately following one another, are ſeparated by commas.—*Ex.* "Exerciſe ferments the humours, caſts them into their proper channels, throws off redundancies, and aſſiſts nature in her neceſſary operations."

XII. Several verbs in the infinitive mood, depending on one common word, and immediately ſucceeding one another, are divided by commas.—*Ex.* "The Spartan youth were accuſtomed to go barefoot, to lie on the ground, to ſuffer heat and cold, to live on the moſt ordinary proviſions, to be engaged in continual exerciſe, and to be enured to blows and wounds."

XIII. When the expreſſion is ſuch as would be tranſlated into Latin by a prepoſition and a gerundial adjective, a comma muſt always precede; for that expreſſion, in Engliſh, is ſtrictly rendered *in order to*, although it more frequently differs not in form from the infinitive mood.—*Ex.* "An old man muſt be a father, *to bear* the follies and abſurdities of youth."—In this place, *to bear* means *in order to bear*; and this is a diſtinction between the two ways in which the infinitive mood may be uſed.

XIV. A remarkable expreſſion, or a ſhort obſervation, in the form of a quotation, ought to be ſeparated from the words which introduce and follow it: If the quotation be very ſhort, or cloſely connected with the context, a comma will be ſufficient.—*Ex.* "Swift ſays, no wiſe man ever wiſhed himſelf younger."

XV. Between a nominative caſe and its verb, or between a verb and its objective caſe, no point can be admitted, provided they immediately ſucceed each other; but all words and ſentences that intervene, except an adverb or the like, are to be included between commas; and, when the nominative and objective caſes are not connected with their verbs by juxta-poſition, it is univerſal to lead from one to the other by commas.—*Ex.* "Epicurus, we are told, left behind him three hundred volumes of his works."—"Epicurus undoubtedly left behind him three hundred volumes of his works."

No ſingle uncompounded ſentence, conſiſting of a nominative caſe, a verb, and its objective caſe, can be ſo long as to juſtify the inſertion of a comma. As the natural connexion between thoſe parts of ſpeech, and their dependence upon each other, would be divided, the comma, ſo inſerted, would be improper. A pauſe in reading, indeed, may be allowable; but not a pauſe of ſuch length as the comma indicates. Beſides, there would ariſe a difference of opinion, in whether the pauſe ſhould follow the nominative caſe or precede the objective caſe. There are infinite inflections and pauſes of

the voice neceſſary to good reading, which the preſent points can never denote; but theſe modulations muſt be intirely left to the diſcretion and feeling of the reader.

Thus much for the comma. Thoſe, who are acquainted with the proper uſe of this point, will ſeldom be at a loſs in the others.

XVI. A ſemi-colón may be uſed, in dividing ſentences, where the grammatical conſtruction is not fully complete.—*Ex.*

"There entertain him all the ſaints above,
In ſolemn troops and ſweet ſocieties
Who ſing; and, ſinging, in their glory move."

The above rule, it ſhould be obſerved, is given chiefly as a mark of diſtinction between the uſe of the ſemi-colon and colon, as the colon ſhould not be uſed but where the grammatical conſtruction is quite complete. In juſtice to the author of the Elements of Punctuation, from whom we have borrowed theſe rules, we mention this, becauſe the Critical Review, vol. ii. for 1786, p. 73. taking the rule in itſelf, without the diſcriminating principle expreſſed by the author, treated the work very unhandſomely. See Steel's Elements of Punctuation, 2d. edit. p. xiv.

XVII. Semi-colons aptly divide ſentences that have one common nominative caſe, when any of them contain two or three clauſes; for the ſemi-colon ſhews the completion of each ſentence; and a diſtinction is thereby preſerved, which a continuance of commas would deſtroy.—*Ex.*

——— "Induſtry approach'd,
And rous'd him from his miſerable ſloth;
His faculties unfolded; pointed out
Where laviſh nature the directing hand
Of art demanded; ſhew'd him how to raiſe
His feeble force by the mechanic powers,
To dig the mineral from the vaulted earth,
On what to turn the piercing rage of fire,
On what the torrent of the gather'd blaſt;
Gave the tall ancient foreſt to his axe;
Taught him to chip the wood and hew the ſtone,
Till, by degrees, the finiſh'd fabric roſe;
Tore from his limbs the blood-polluted fur,
And wrapt them in the woolly veſtment warm,
Or bright in gloſſy ſilk and flowing lawn."

The infinitive moods in the 5th, 7th, and 8th, lines of this example, viz. *to raiſe, to dig, to turn*, are dependent upon the verb *ſhew'd*; and therefore, with their adjuncts, form but one ſentence, ſeparated at the end by a ſemi-colon. Whatever point a ſentence or member of a ſentence may require at the end of it, points of inferior power ſhould be uſed in the middle.

XVIII. A colon is admiſſible only where the grammatical conſtruction is quite perfect.—*Ex.*

"Then, too, the pillar'd dome magnific heav'd
Its ample roof; and Luxury, within,
Pour'd out her glittering ſtores: the canvas ſmooth,
With glowing life protuberant, to the view
Embodied roſe: the ſtatue ſeem'd to breathe."

XIX. Parenthetical marks demand every point which the ſenſe would require if the parentheſis were omitted, except where the parentheſis is interrogative or exclamatory.—*Ex.*

——— "As armies, at the call
Of trumpet, (for of armies thou haſt heard,)
Troop to their ſtandard, &c." *Milton.*

——— "Therefore, th' omnipotent
Eternal Father (for where is not he
Preſent?) thus to his Son audibly ſpake." *Milton.*

——— "They, not obeying,
Incurr'd (what could they leſs?) the penalty;
And, manifold in ſin, deſerv'd to fall." *Milton.*

To produce rules ſufficient for every purpoſe of compoſition, in all the poſſible variations of phraſe and conſtruction, would be tedious, difficult, and ineffectual: their number would deſtroy their utility. A nice acquaintance with punctuation is ſcarcely attainable by rules, as a knowledge of ſyntax may be acquired; but it muſt be procured by a kind of internal conviction, that the rules of grammar are never to be violated. What is meant by never violating the rules of grammar, is, that a proper connexion be always preſerved, in compound ſentences, between the nominative caſe, however complex, and its verb; the verb and its objective caſe, however complex; the relative and its antecedent. And this is to be chiefly attained by a liberal and proper uſe of the comma.

Let us take an inſtance from the work before us, vol. iv. p. 835. "Columna compiled a chronicle in thirty-ſix books, and wrote ſeveral hiſtorical tracts in relation to England." Was the *chronicle* relative to England? If ſo, there ſhould be a comma after the word *tracts*; if not, the ſentence is rightly pointed, but then we do not know what the chronicle was about.

The following line from Lewis's Statius is rendered almoſt unintelligible by wrong punctuation: "Deep, deep within Death, his half-brother lies." From this punctuation it would appear, that the half-brother of Death, or of ſome other perſon, had got deep within Death. Let us point it properly, "Deep deep within, Death, his half-brother, lies;" and we at once perceive the meaning to be, that *deep within* the cave lay *Death, the half-brother* of ſome being mentioned before.

Moſt people have heard an anecdote ſaid to be connected with the murder of our Edward II. A note, intended to encourage the murder, was written, by a perſon in authority, to the keeper of Berkeley-caſtle, in theſe words: *Edvardum occidere nolite timere, bonum eſt*; which, if pointed as above, is clearly an encouragement to the murder; remove the comma from *timere* to *nolite*, and it is the direct contrary. But the ſcrap was written without any point at all, ſo that it might be interpreted as ſuited the convenience or deſigns of the parties.

As points, when uſed at all in writing, are very frequently put in at hazard, they ſometimes have a ludicrous effect in altering the ſenſe, or at leaſt the meaning. Under Sharp's portrait of Brothers are theſe words: "Believing Brothers to be a prophet really appointed by God, I have engraved his portrait." By a ſlip of the graver, the comma was put in the wrong place, and the ſubſcription ſtood thus: "Believing Brothers to be a prophet really appointed, by God I have engraved his portrait." Theſe miſtakes, ludicrous or ſerious, are moſtly in the placing of the comma; and it has been before obſerved, that thoſe, who are intimate with the comma, will ſeldom be at a loſs in placing the other points.

Few will heſitate in placing the period; for almoſt all know when the ſenſe is complete; and, conſequently, ſuppoſing them poſſeſſed of the comma's uſe and of the period's ſituation, the difficulty is reduced to the remaining two only. The colon never intervenes in grammatical conſtruction, and the ſemi-colon but ſeldom; they are uſeful in marking a different degree of connexion between one ſentence and another; but in reading no material error can ariſe from ſubſtituting one for the other. It is becauſe the colon never interferes in grammatical conſtruction, that it was ſo long a cuſtom, in printing, to place a capital letter after a colon, the ſame as after a period: this was adhered to as long as books were printed with a capital letter to every ſubſtantive.

Punctuation ſhould lead to the ſenſe; the ſenſe will guide to modulation and emphaſis. When punctuation performs its office thus, it will point out likewiſe the grammatical conſtruction; for the ſenſe of a paſſage and its

its grammatical conſtruction are inſeparable. It follows, that a knowledge of grammar is neceſſary; it certainly is; and any rules, militating againſt grammar, may be made ſpecious, but they will ultimately be found defective.

In poetry, where ſubordinate ſentences muſt be introduced ſo as to preſerve the rhime or meaſure, punctuation is more particularly ſerviceable to the ſenſe. In proſe, the habitual phraſe of life, we can more readily perceive it; and the omiſſion or inſertion of a point does not long ſuſpend the judgement from diſcovering the meaning of an author: but, in metrical compoſitions, where ſentences are incomplete for, perhaps, four or five lines together, a proper uſe of the points agreeably facilitates our approximation to the ſenſe; and we find pleaſure in the peruſal proportionate to the readineſs and eaſe with which we diſcover the meaning of our author.

It certainly is among our deſiderata, that juſt punctuation ſhould be more generally cultivated. Did it form an attentive part of our education, a reference to books would teach the minutiæ better than any rules. With a few exceptions, we might recommend the numbers of the Monthly Review as a model for correct punctuation; we think they offend chiefly againſt the ixth rule.

The above rules for punctuation, and many of the remarks, are extracted from Steel's Elements of Punctuation, a book which contains every thing that can be deſired on the ſubject. The author of it was an elegant ſcholar, and bred to a profeſſion moſt likely to induce an attention to the minutiæ of literature, that of a printer. The literary world has cauſe to lament his premature death; and the compiler of this article takes the preſent opportunity of paying a tribute of reſpect to the memory of his departed friend, the gay companion of his boyiſh days.

GRAM'MAR-SCHOOL, *ſ.* A ſchool in which the learned languages are grammatically taught.

GRAMMA'RIAN, *ſ.* [*grammairien*, Fr. from *grammar*.] One who teaches grammar; a philologer.—The term *grammarian*, in ancient times, appears to have been applied as a title of literary honour to diſtinguiſhed writers. Even as late as the ſixteenth century, Baillet obſerves, that Saxo Grammaticus was thus called merely for the beauty of his ſtyle; and Thomas d'Avergne, a civilian of Naples, who lived in 1580, although he wrote upon no ſubject but what related to his profeſſion, is diſtinguiſhed by the title of *Grammarian*.

GRAMMA'TIC, or GRAMMA'TICAL, *adj.* [*grammaticus*, Lat.] Belonging to grammar.—I ſhall take the number of conſonants, not from the *grammatical* alphabets of any language, but from the diverſity of ſounds framed by ſingle articulations with appulſe. *Holder.*—Taught by grammar.—They ſeldom know more than the *grammatical* conſtruction, unleſs born with a poetical genius. *Dryden.*

GRAMMA'TICALLY, *adv.* According to the rules or ſcience of grammar.—When a ſentence is diſtinguiſhed into the nouns, the verbs, pronouns, adverbs, and other particles of ſpeech which compoſe it, then it is ſaid to be analyſed *grammatically*. *Watts.*

GRAMMATICAS'TER, *ſ.* [Latin.] A mean verbal pedant; a low grammarian.—I have not vexed language with the doubts, the remarks, and eternal trifling, of the French *grammaticaſters*. *Rymer.*

GRAM'MATIST, *ſ.* [from γραμμα, Gr. a letter.] A young grammarian; a grammaticaſter. *Cole.*

GRAM'MEN, a town of Flanders: five miles ſouth-weſt of Deinſe.

GRAM'MIC, *adj.* [*grammicus*, Lat. of γραμμη, Gr. a line.] Made by lines; demonſtrated by lines.

GRAMMI'TIS, *ſ.* in botany, a genus of the claſs cryptogamia, order filices. Generic characters—Fructification in ſtraight ſcattered lines; involucre, none.

Species. 1. Grammitis linearis: fronds linear, pointed, entire: ſtalks briſtly.

2. Grammitis marginella: fronds lance-lingulate, edged with brown: ſtalks very ſhort, ſlightly ciliate.

3. Grammitis lanceolata: fronds lanceolate, pointed, tapering to the baſe: lines of fructification nearly parallel with the rib.

4. Grammatis ſerrulata: fronds linear, toothed, from a rooting ſhoot.

5. Grammitis graminoides: fronds linear, undivided and forked at top: line of fructification ſolitary, terminal.

6. Grammitis myoſuroides: fronds pinnatifid: ſegments ſemiovate, obtuſe; upper ones united into a linear fructiferous tip.

GRAM'MONT, or GEERSBERGHE, a town of Flanders, which was in the beginning only a caſtle, built at the foot of a mountain by the Goths, and thence called Gotteghem. Baldwin de Mons, comte of Flanders and Hainaut, having purchaſed the lordſhip of Gerard, in 1068, he built a town, and called it the name of the former lord, Gerardmont, by corruption Grammont. It is ſituated for the moſt part on a hill, with the river Dender running through it, and ſeparating it into the Higher and Lower town: twenty miles weſt of Bruſſels, and ten ſouth-weſt of Oudenarde.

GRAM'PIAN HILLS, mountains of Scotland, which extend through the counties of Perth, Angus, Mearns, and Aberdeen. They take their name from a ſingle hill, the Mons Grampius of Tacitus, where Galgacus waited the approach of Agricola, and where the battle was fought ſo fatal to the brave Caledonians. Antiquarians have not agreed upon the particular ſpot.

GRAM'PLE, *ſ.* A crab fiſh. *Ainſworth.*

GRAM'POUND, an ancient town in Cornwall, diſtant 243 miles from London. It has a bridge over the river Vale, or Fale; and was made a borough ſo early as the reign of Edward III. Some think that this town is the Voluba of the ancients, becauſe it ſtands on the ſame river; and that on the building of the bridge it was changed into Grandpont. By the charter of king Edward it was endowed with large privileges, particularly freedom of toll through all Cornwall, a market on Saturday, and fairs on January 18, March 25, and June 11, which the burgeſſes hold of the duchy of Cornwall, in fee-farm, confirmed by Henry VIII. Here are ſtill the remains of a famous Cædefula, which, in Britiſh, ſignifies Felon wood, granted, with all the lands in it, to the town, in the time of Edward III. The corporation conſiſts of a mayor, eight magiſtrates, a recorder, and town-clerk. The river Fale riſes about two miles weſt of Roche Hills, and, running about eight miles in a ſouthern direction, becomes a conſiderable river at this place, where it paſſes under a ſtrong bridge. About a mile below this bridge the river was formerly navigable, at leaſt for boats; but the country has for ſome time been deprived of that advantage. Here is a conſiderable manufactory of gloves.

GRAM'PUS, *ſ.* A large fiſh of the cetaceous kind. See the article DELPHINUS, vol. v. p. 684, and the correſpondent engraving.

GRAN, a river of Hungary, which joins the Danube oppoſite Gran.

GRAN, or ESZTERGON, a town of Hungary, ſituated near the conflux of the rivers Gran and Danube; the ſee of an archbiſhop. In 1683, this town was taken by the king of Poland, and prince Charles of Lorraine, after a ſiege of five days. The Turks had been in poſſeſſion of it 143 years. The loſs of this fortreſs coſt the vizier his life, who might eaſily have covered the town, if he had not retreated to Eſzek, from whence retiring to Belgrade, he was ſtrangled by order of the grand ſignor: fifty-five miles ſouth-eaſt of Preſburg, and eighty-two eaſt-ſouth-eaſt of Vienna.

GRA'NA,

GRA'NA, a ſea-port town of Spain, in the province of Galicia: two miles weſt of Ferrol.

GRA'NA, a town of Italy, in the duchy of Aoſta: twelve miles eaſt-ſouth-eaſt of Aoſta.

GRA'NA PARADISI, *ſ.* in botany. See AMOMUM.

GRANADIL'LA, *ſ.* in botany. See PASSIFLORA.

GRAN'ADA. See GRENADA.

GRANA'DO. See GRENADE.

GRAN'ADO (El), a town of Spain, in the province of Seville: five leagues north of Ayamonte.

GRAN'AL, a town of Spain, in the province of Leon: twenty-eight miles ſouth-eaſt of Leon.

GRAN'ARD, a town of Ireland, in the county of Longford: eleven miles north-eaſt of Longford, and ſixteen ſouth of Cavan.

GRAN'ARY, *ſ.* [*granarium*, Lat.] A ſtorehouſe for threſhed corn.—Ants, by their labour and induſtry, contrive that corn will keep as dry in their neſts as in our *granaries*. *Addiſon*.

The two moſt important cautions to be obſerved in the building of granaries are, to make them ſufficiently ſtrong, and to expoſe their apertures or windows to the moſt drying winds. In this free country, public granaries have never been conſidered as an object worthy of the attention of the legiſlature. In moſt other countries, however, they appear to claim the firſt regard of the commonweal. In Geneva, the public granary is a very large building, of ſix ſtories high. Every ſtory forms one apartment for grain ungrinded only, becauſe meal or grinded grain can by no means be long preſerved. The dimenſions of each apartment are the ſame, in length about thirty-ſix paces, by twenty-four in breadth, and about nine feet in height. To ſupport the great extent of floor, and ſuch a weight of grain, there are very large and ſolid wooden pillars, through every apartment from top to bottom. There are ſix rows of theſe pillars, and nine pillars in every row; the diſtance of one pillar from another is ſix paces. The grain is chiefly wheat, imported occaſionally from Barbary, Sardinia, Franche Compté, &c. The loweſt flat of this granary is ſtored with as much grain as can be packed or heaped in it, and the quantity is gradually diminiſhed as they riſe to the upper ſtories, for the obvious purpoſe of ſaving labour and expence. Every apartment has many very cloſe windows, which are opened in dry weather, for the benefit of ventilation. Before they lodge the grain, it is moderately and ſkilfully kiln-dried, yet while it continues new, it muſt be turned over at leaſt once in twenty days. When this practice has been continued till the grain becomes ſufficiently firm and dry, generally in two years, it is rarely neceſſary to turn it any more. By this method of management, they have experience of preſerving the grain in perfect ſoundneſs for many years, and they have no doubt that it may be ſo preſerved even for a century. Thus by wiſe regulations, and well-directed economy, the public granaries are here rendered effectual means of reſtraining monopolies, moderating the markets, and preventing the calamities of ſcarcity, or exceſſive prices for bread. For other intereſting particulars on this ſubject, and the method of preſerving grain from the ravages of inſects, ſee the article CORN, vol. v. p. 207.

GRAN'ATAN, a town of Germany, in the circle of Upper Saxony, and circle of Erzgeburg: twelve miles north-eaſt of Freyburg.

GRANATA'RIUS, *ſ.* An officer who kept the corn chamber in a religious houſe.

GRAN'ATE, *ſ.* [from *granum*, Lat.] A kind of marble ſo called, becauſe it is marked with ſmall variegations like grains: more properly written GRANITE, which ſee.

GRAN'ATE, *ſ.* See GARNET.

GRAN'ATE, *adj.* [*granatus*, Lat.] That hath many grains or kernels.

GRAN'ATUM, *ſ.* in botany. See PUNICA.

GRAN'BY, a townſhip of the American States, in Eſſex county, Vermont.

GRAN'BY, a townſhip of the American States, in Hampſhire county, Maſſachuſetts, eaſt of South Hadley, about ninety miles weſterly of Boſton; incorporated in 1768, and contains, by the cenſus, 596 inhabitants.

GRAN'BY, a townſhip of the American States, in Hartford county, Connecticut, on the line which ſeparates Connecticut from Maſſachuſetts. It was formerly a part of Symſbury, and is eighteen miles north of Hartford.

GRAN'BY, a town of the American States, on the Congaree, in South Carolina, about two miles below the junction of Broad and Saluda rivers. Here a curious bridge has been built, whoſe arches are ſupported by wooden pillars, ſtrongly ſecured in iron-work, fixed in the ſolid rock. Its height is forty feet above the level of the water. The centre arch is upwards of one hundred feet in the clear, to give a paſſage to large trees which are always brought down by the floods. The ingenious architect has the toll ſecured to him by the legiſlature for one hundred years.

GRAN'BY BAY, a bay on the north coaſt of the iſland of Dominica. Lat. 15. 42. N. lon. 61. 25. W. Greenwich.

GRAN'CEY, a town of France, in the department of the Côte-d'Or, and chief place of a canton, in the diſtrict of Is-ſur-Tille: ſeven leagues ſouth-eaſt of Châtillon-ſur-Seine, and three and a half north-weſt of Is-ſur-Tille.

GRANCOLA'S (John), a French writer in eccleſiaſtical antiquities, and a native of Paris, where he died in 1732. He was admitted to the degree of doctor by the faculty of the Sorbonne, in 1685. He was made chaplain to the duke of Orleans, the regent, and after his death chaplain of St. Bennet's. Becoming attached to the ſtudy of eccleſiaſtical rites and uſages, he made large collections from the fathers, and publiſhed a great number of treatiſes, from the year 1692 to 1728, which, though chiefly compilations, ſerve to throw great light on the diſcipline and ceremonies of the Greek and Latin churches. His principal works, beſides a tranſlation into French of The Works of St. Cyril, 1715, 4to. were, 1. A Treatiſe on Liturgies, or the Manner of celebrating Maſs, in every Age, both in the Eaſtern and Weſtern Churches, 1698, 12mo. 2. The ancient Sacramentary of the Church, 1699. 3. An Hiſtorical Commentary on the Roman Breviary, 1727, in 2 vols. 12mo. 4. A Critique on Eccleſiaſtical Authors, in 2 vols. 8vo. 5. A Conciſe Hiſtory of the Church in the City of Paris, in 2 vols. 12mo.

GRANC'WOLDEN, a town of Norway, in the dioceſe of Chriſtiania: twenty-ſix miles ſouth of Chriſtiania.

GRAND, *adj.* [*grand*, Fr. *grandis*, Lat.] Great; illuſtrious; high in power or dignity.—God had planted, that is, made to grow, the trees of life and knowledge, plants only proper and becoming the paradiſe of ſo *grand* a Lord. *Raleigh*.—Great; ſplendid; magnificent:

A voice has flown
To re-enflame a *grand* deſign. *Young*.

Principal; chief:

What cauſe
Mov'd our *grand* parents in that happy ſtate,
Favour'd of heav'n ſo highly, to fall off
From their Creator. *Milton*.

Eminent; ſuperior: very frequently in an ill ſenſe.—So clomb this firſt *grand* thief into God's fold. *Milton*.—Noble; ſublime; lofty; conceived or expreſſed with great dignity. It is uſed to ſignify aſcent or deſcent of conſanguinity.

GRAND (Anthony le), a French carteſian philoſopher in the ſeventeenth century, called the abbreviator of Deſcartes, born at Douay. He was the author of various

various works, of which the principal were, 1. *Inſtitutio Philoſophiæ ſecundum Principia Ren. Deſcartes*, 4to. 2. *Curioſus Naturæ Arcanorum Perſcrutator*, 1673, 8vo. 3. Notes upon The Phyſics of Rohault, which have been frequently printed. 4. *Hiſtoria Sacra a Mundo condito ad Conſtantinum Magnum*, 8vo. which is his beſt performance.

GRAND (Joachim le), a political and hiſtorical writer, born in 1653, at Thorigny in Normandy. He entered into the congregation of the Oratory, which he quitted in 1676, and went to Paris, where he engaged in the education of two young men of rank, and at the ſame time applied to hiſtorical ſtudies under the direction of father Le Cointe. He firſt appeared as a writer in 1688, when he publiſhed A Hiſtory of the Divorce of Henry VIII. and Catharine of Arragon, 3 vols. 12mo. In this he attempts to juſtify the jeſuit Sanders, and to refute the two firſt books of Burnet's Hiſtory of the Reformation. He alſo, in 1691, addreſſed three letters in a 12mo. volume to biſhop Burnet, on his critique of Boſſuet's Hiſtory of the Variations of Proteſtant Churches. He was taken from his literary purſuits by the appointment of ſecretary to the abbé d'Eſtrees, in his embaſſy to Portugal, in 1692, which continued till 1697. Some tranſlations of Voyages and Travels from the Portugueſe were part of the fruits of this employ. In 1702 he accompanied the ſame miniſter to Spain, where he remained as ſecretary till 1704. The marquis de Torci, miniſter of ſtate, took him into his ſervice in 1705, and employed his pen in ſeveral memorials concerning the ſucceſſion to the Spaniſh monarchy, and other political topics, in which he acquitted himſelf with great ability. His laſt printed work was a treatiſe On the Succeſſion to the Crown of France, 1718, 12mo. which is reckoned a curious and uſeful performance. He died at the age of eighty, in 1733. He was poſſeſſed of two priories, and had been for a time cenſor-royal of books.

GRAND (Louis le), a learned French eccleſiaſtic, born at Luzigni, in the dioceſe of Autun, where he died in 1780. He was educated in the ſeminary of St. Sulpice, at Paris, and admitted to the degree of doctor by the faculty of the Sorbonne. The whole of his time which was not taken up in the diſcharge of his clerical functions he devoted to cloſe ſtudy. He publiſhed, 1. *Prælectiones Theologicæ de Deo*, in 2 vols. 12mo. 2. *De Incarnatione Verbi Divini*, in 2 vols. 12mo. 3. A treatiſe *De Eccleſia Chriſti*, 8vo. His writings are eſteemed for their perſpicuity, and the excellence of their arrangement.

GRAND, a town of France, in the department of the Voſges, and chief place of a canton, in the diſtrict of Neufchateau: three leagues weſt of Neufchateau.

GRAND ANSE, or JEREMIE, a town in the weſtern part of the iſland of St. Domingo. The town is well built, but the road is ſo bad, that veſſels, to eſcape the wind, are compelled to take ſhelter behind cape Donna Maria.

GRAND ASSI'ZE, in law, a writ in a real action to determine the right of property in lands.

GRAND BAY, a bay on the ſouth coaſt of Newfoundland, a little to the ſouth of Cape Ray.

GRAND CA'PE, in law, a writ on plea of land, where the tenant makes default in appearance at the day given, for the king to take the land into his hands, &c. *Reg. Jud.* 1.

GRAND CHAMP, a town of France, in the department of the Morbihan, and chief place of a canton, in the diſtrict of Vannes: two leagues and a quarter north-north-weſt of Vannes, and two and a half north-eaſt of Auray.

GRAND DISTRESS', in law, a writ ſo called, becauſe the extent thereof is very great, being to all the goods and chattels of the party diſtrained within the county: it lies in two caſes, either when the tenant or defendant is attached, and appears not, but makes default; or where the tenant hath once appeared, and after makes default, then this writ is had by the common law, in lieu of a petit cape, by ſtat. Weſt. 1, c. 44. 52 *Hen.* III. c. 9.

GRAND FO'RO, a town of Africa, on the Slave Coaſt.

GRAND GUS'TO, among painters, a term uſed to expreſs, that in a picture there is ſomething very great and extraordinary, to ſurpriſe, pleaſe, and inſtruct.

GRAND I'SLAND, an iſland at the mouth of Lake Ontario, within the Britiſh territories, having Roebuck and Foreſt iſlands on the ſouth-weſt, and the Thouſand Iſles on the north-eaſt. It is twenty miles in length, and its greateſt breadth four miles.

GRAND I'SLAND, an iſland in Lake Superior, ſituated on the north ſide of the lake.

GRAND I'SLAND, an iſland in Niſagara river, about ſix miles long and three broad. The ſouth end is four miles north of Fort Erie; and its northern extremity three miles ſouth of Fort Sluſher, and fourteen ſouth of Niagara fort.

GRAND I'SLES, two large iſlands in Lake Champlain; each about ten miles long, and each forms a townſhip belonging to Vermont, in the American States.

GRAND JU'ROR, *ſ.* One of a grand jury.—You are *grand jurors*, are ye? *Shakeſpeare.*

GRAND JU'RY, in law, the jury that find bills of indictment before juſtices of peace, and of gaol-delivery, or oyer and terminer, &c. See the article JURY.

GRAND LAKE, a lake in the province of New Brunſwick, near the river St. John's, thirty miles in length, ten in breadth, and in ſome places forty fathoms deep.

GRAND MA'NAN, an iſland ſituated about ſix miles ſouth by ſouth-eaſt of Campo-Bello iſland, in the Atlantic Ocean, oppoſite to Paſſamaquoddy Bay, on the eaſtern border of the American States.

GRAND MAS'TER, *ſ.* The chief of the Teutonic order of knighthood.—The firſt *grand maſter* of the order was Henry Wallpot. *Cheſterfield.*

GRAND MAS'TERSHIP, *ſ.* Dignity of grand maſter.—He then quitted his *grand maſterſhip*. *Cheſterfield.*

GRAND RI'VER, a river of North America, which runs a north-weſt courſe into Lake Erie, twenty miles below the Forks, and eighty miles ſouth-weſt of Preſque Iſle.

GRAND SER'JEANTY, an ancient tenure by military ſervice. See the article TENURE.

GRAND SIGNOR', *ſ.* [Ital. great lord.] A title given to the emperor of the Turks.

GRAND SO'NE, a town of France, in the department of the Doubs; one league and a quarter eaſt of Beſançon, and two and a half north of Ornans.

GRAN'DAM, *ſ.* Grandmother; the father's or mother's mother:

Thy tigreſs heart belies thy angel face:
Too well thou ſhew'ſt thy pedigree from ſtone;
Thy *grandame*'s was the firſt by Pyrrha thrown. *Dryden.*

An old withered woman:

Cry'd, one and all, the ſuppliant ſhould have right,
And to the *grandame* hag adjudg'd the knight. *Dryden.*

GRAND'CHILD, *ſ.* The ſon or daughter of a ſon or daughter; one in the ſecond degree of deſcent.—Auguſtus Cæſar, out of indignation againſt his daughters and Agrippa his *grandchild*, would ſay that they were not his ſeed, but impoſthumes broken from him. *Bacon.*

He 'ſcaping with his gods and reliques fled,
And tow'rds the ſhore his little *grandchild* led. *Denham.*

GRANDCOU'R, a town of Swiſſerland, in the canton of Berne: ten miles weſt of Friburg.

GRANDCOU'RT, a town of France, in the department of the Lower Seine, and chief place of a canton, in the diſtrict of Neufchatel: five leagues eaſt of Dieppe, and four north of Neufchatel.

GRAND'DAUGHTER, *ſ.* The daughter of a ſon or daughter.

GRAN'DE, *adj.* [Italian.] In muſic books, great, diſtinguiſhing the grand chords.

GRAN'DE, a town of Norway, in the dioceſe of Drontheim: twenty-eight miles north-weſt of Drontheim.

GRAN'DE, a river in South America, in Peru, near Cayanta; remarkable for its ſands enriched with gold duſt.

GRANDE RIVIE'RE, or Rio Grande, a river of Africa, which runs into the Atlantic, in lat. 11. N. lon. 13. 50. W. Greenwich.

GRANDE RIVIE'RE, a ſettlement in a hilly tract of the iſland of St. Domingo, or Hiſpaniola, ſix leagues and a half ſouth-weſt of Fort Dauphin, and four leagues and three quarters north-by-eaſt of St. Raphael, in that which was the Spaniſh part of the iſland. Lat. 19. 34. N. lon. 74. 30. W. from Paris.—Alſo the name of a ſmall river, in the ſame iſland, which riſes at Limonade, and empties into the ſea at Qr. Morin, five leagues eaſt of Cape François.

GRANDE RIVIE'RE, a river on the northern ſide of Chaleur Bay, about ſix leagues weſt-north-weſt of Cape Deſpair. Here is a fine cod fiſhery.

GRANDE SEAU'X, an Indian nation, in North America, who inhabit ſouth of the Miſſouri, and can furniſh 800 warriors.

GRANDEE', *ſ.* [*grand*, Fr. *grandis*, Lat.] A man of great rank, power, or dignity.—Some parts of the Spaniſh monarchy are rather for ornament than ſtrength: they furniſh out vice-royalties for the *grandees*, and poſts of honour for the noble families. *Addiſon.*

GRAN'DESHAGEN, a town of Germany, in the circle of Upper Saxony, in Pomerania: two miles north-weſt of Grieffenburg.

GRAN'DET (Joſeph), a pious French divine, born at Angers, in 1646. Having embraced the eccleſiaſtical life, he ſpent ſome years in the ſeminary of St. Sulpice, at Paris, whence he returned to his native place in 1674. He was there appointed ſuperior of the ſeminary in that city. In 1685 he was preſented to the church of the Holy Croſs at Angers, where he continued his miniſterial functions for thirty-two years, beloved and reſpected for his numerous acts of benevolence and charity. He died in 1724, in the ſeventy-ninth year of his age. He was the author of ſeveral lives of perſons eminent for their ſanctity, which have been much read by pious catholics.

GRANDEV'ITY, *ſ.* [from *grandævus*, Lat.] Great age; length of life.

GRANDE'VOUS, *adj.* [from *grandævus*, Lat.] Long-lived; of great age.

GRAN'DEUR, *ſ.* [French.] State; ſplendour of appearance; magnificence.—As a magiſtrate or great officer, he locks himſelf from all approaches by the multiplied formalities of attendance, by the diſtance of ceremony and *grandeur*. *South.*—Elevation of ſentiment, language, or mien.

The pleaſures which ariſe from the contemplation of objects in themſelves grand, awful, or ſublime, many diſtinguiſhed writers have attempted to explain; yet we are far from having attained to any preciſe ſyſtem on this intellectual ſpeculation. Mr. Addiſon appears to have been the firſt who attempted a regular enquiry on this ſubject, in his "Eſſay on the Pleaſures of the Imagination," publiſhed in the ſixth volume of the Spectator. His ſpeculations, if not exceedingly profound, are, however, very beautiful and entertaining; and he has the merit of having opened a track, which was before unbeaten. The advances made ſince his time in this philoſophical enquiry, are not very conſiderable. This is owing, doubtleſs, to that thinneſs and ſubtilty which are found to be properties in all the feelings of taſte. For inſtance; we all learn by experience, that certain figures of bodies appear to us more beautiful than others. On inquiring farther, we find that the regularity of ſome figures, and the graceful variety of others, are the foundation of the beauty or grandeur which we diſcern in them; but when we attempt to go a ſtep beyond this, and inquire what is the cauſe of regularity and variety producing in our minds the ſenſation of beauty or grandeur, any reaſon we can aſſign is extremely imperfect. Theſe firſt principles of internal ſenſation, nature ſeems to have covered with an impenetrable veil. But it affords ſome gratification to reflect, that although the efficient cauſe be obſcure, the final cauſe of thoſe ſenſations lies in many caſes more open: and, in contemplating the ſubject, we cannot avoid taking notice of the ſtrong impreſſion which theſe powers of taſte and imagination are calculated to give us of the benignity of our Creator. By endowing us with ſuch powers, he hath widely enlarged the ſphere of the pleaſures of human life; and thoſe too of a kind the moſt pure and innocent. The neceſſary purpoſes of life might have been abundantly anſwered, without conveying to us any of thoſe refined and delicate ſenſations of grandeur and ſublimity, with which we are now ſo much delighted. This additional embelliſhment, which, for promoting our entertainment, the Author of Nature hath poured forth upon his works, is one ſtriking teſtimony, among many others, of benevolence and goodneſs. This thought, which Mr. Addiſon firſt ſtarted, Dr. Akenſide, in his poem on the Pleaſures of the Imagination, has happily purſued;

——— Not content
With every food of life to nouriſh man,
By kind illuſions of the wandering ſenſe,
Thou mak'ſt all nature beauty to his eye
Or muſic to his ear.———

The pleaſures which ariſe from ſublimity or grandeur, appear to have a character more diſtinctly marked than any other of the pleaſures of the imagination; and here we might conſider grandeur and ſublimity as terms ſynonymous, or nearly ſo. If there be any diſtinction between them, it ariſes from ſublimity's expreſſing grandeur in a ſuperlative degree. It is not perhaps eaſy to deſcribe the preciſe impreſſion which grand and ſublime objects make upon us, when we behold them; but every one has a conception of it. It produces a ſort of internal elevation and expanſion of thought; it raiſes the mind much above its ordinary ſtate; and fills it with a degree of wonder and aſtoniſhment, which it cannot well expreſs. The emotion is always delightful; but it is altogether of the ſerious kind: a degree of awfulneſs and ſolemnity, even approaching to ſeverity, commonly attends it when at its height; very diſtinguiſhable from the more gay and ſprightly emotion raiſed merely by beautiful objects.

The ſimpleſt form of external grandeur appears in the vaſt and boundleſs proſpects preſented to us by nature; ſuch as wide extended regions, to which the eye can ſee no limits; the firmament of heaven; or the boundleſs expanſe of the ocean. All vaſtneſs produces the impreſſion of ſublimity. It is to be remarked however, that ſpace extended in length makes not ſo ſtrong an impreſſion as height or depth. Though a boundleſs plain be a grand object, yet a high mountain to which we look up, or an awful precipice or impending cliff, whence we look down on the objects below, is ſtill more ſo. The exceſſive grandeur of the firmament of heaven ariſes from its height joined to its boundleſs extent; and that of the ocean, not from its extent alone, but from the perpetual motion and irreſiſtible force of that vaſt abyſs of waters. Wherever ſpace is concerned, it is clear that amplitude or greatneſs of extent, in one dimenſion or other, is neceſſary to grandeur. Remove all bounds from any object, and you preſently render it ſublime. Hence infinite ſpace, endleſs numbers, and eternal duration, fill the mind with ſublime ideas.

From this fact, ſome have imagined that vaſtneſs, or amplitude of extent, is the foundation of all ſublimity. But this cannot be, becauſe many objects appear ſublime which have no relation to ſpace at all. Such, for inſtance, is great loudneſs of ſound. The burſt of thunder or of cannon, the roaring of winds, the ſhouting of multitudes, the ſound of vaſt cataracts of water, are all inconteſtibly grand objects. "I heard the voice of a great multitude, as the ſound of many waters and of mighty thunderings, ſaying Allelujah." In general we may obſerve, that great power and force exerted, always raiſe ſublime ideas; and perhaps the moſt copious ſource of theſe is derived from this quarter. Hence the grandeur of earthquakes and burning mountains; of great conflagrations; of the ſtormy ocean, and overflowing waters; of tempeſts of wind; of thunder and lightning; and of all the uncommon concuſſions of the elements. Nothing is more ſublime than mighty power and ſtrength. A ſtream that runs within its banks, is a beautiful object; but when it ruſhes down with the impetuoſity and roar of a torrent, it becomes a ſublime one. From lions, and other animals of ſtrength, are drawn ſublime compariſons in poetry. A race-horſe is looked upon with pleaſure; but it is the war-horſe, "whoſe neck is clothed with thunder," that carries grandeur in its idea. The engagement of two great armies, as it is the higheſt exertion of human might, combines a variety of ſources of the ſublime; and has accordingly been conſidered as one of the moſt ſtriking and magnificent ſpectacles that can be either preſented to the eye, or exhibited to the imagination by deſcription.

All ideas of an awful and ſolemn deſcription, or even bordering on the terrible, tend greatly to heighten the ſublime; ſuch as darkneſs, ſolitude, and ſilence. What are the ſcenes of nature that elevate the mind in the higheſt degree, and produce the ſublime ſenſation? Not the gay landſcape, the flowery field, or the flouriſhing city; but the hoary mountain, and the ſolitary lake; the aged foreſt, and the torrent foaming over the rock. Hence too, night-ſcenes are commonly the moſt ſublime. The firmament when filled with ſtars, ſcattered in ſuch vaſt numbers and with ſuch magnificent profuſion, ſtrikes the imagination with a more awful grandeur than when we view it enlightened with all the ſplendour of the mid-day ſun. The deep ſound of a great bell, or the ſtriking of a great clock, are at any time grand; but, when heard amid the ſilence and ſtillneſs of the night, they become doubly ſo. Darkneſs is very commonly applied for adding ſublimity to all our ideas of the Deity. "He maketh darkneſs his pavilion; he dwelleth in the thick cloud." So Milton:

——How oft, amidſt
Thick clouds and dark, does heaven's all-ruling Sire
Chuſe to reſide, his glory unobſcur'd,
And, with the majeſty of darkneſs, round
Circles his throne—— Book ii. 263.

With wonderful art Virgil has worked up all thoſe ideas of ſilence, vacuity, and darkneſs, when he is going to introduce his hero to the infernal regions, and to diſcloſe the ſecrets of the great deep:

Dii quibus imperium eſt animarum, umbræque ſilentes,
Et Chaos, et Phlegethon, loca nocte ſilentia latè,
Sit mihi fas audita loqui; ſit numine veſtro
Pandere res altâ terrâ, et caligine merſas.
Ibant obſcuri, ſola ſub nocte, per umbram,
Perque domos Ditis vacuos, et inania regna;
Quale per incertam lunam, ſub luce maligna
Eſt iter in ſylvis——

Ye ſubterranean gods, whoſe awful ſway
The gliding ghoſts and ſilent ſhades obey;
O Chaos hoar! and Phlegethon profound!
Whoſe ſolemn empire ſtretches wide around!
Give me, ye great tremendous powers! to tell
Of ſcenes and wonders in the depth of hell;
Give me your mighty ſecrets to diſplay,
From thoſe black realms of darkneſs to the day. *Pitt.*
Obſcure they went; through dreary ſhades, that led
Along the waſte dominions of the dead;
As wander travellers in woods by night,
By the moon's doubtful and malignant light. *Dryden.*

Obſcurity, we might alſo remark, is not unfavourable to ſublime ideas. Though it render the object indiſtinct, the impreſſion may nevertheleſs be great; for it is one thing to make an idea clear, and another to make it affecting to the imagination; and the imagination may be ſtrongly affected, and in fact often is ſo, by objects of which we have no clear conception. Thus we ſee, that almoſt all the deſcriptions given us of the appearances of ſupernatural beings carry ſome ſublimity, though the conceptions which they afford us be confuſed and indiſtinct. Their ſublimity ariſes from the ideas, which they always convey, of ſuperior power and might joined with an awful obſcurity. We may ſee this fully exemplified in the following noble paſſage of the book of Job: "In thoughts from the viſions of the night, when deep ſleep falleth upon men, fear came upon me, and trembling, which made all my bones to ſhake. Then a ſpirit paſſed before my face; the hair of my fleſh ſtood up: it ſtood ſtill; but I could not diſcern the form thereof; an image was before mine eyes; there was ſilence; and I heard a voice—Shall mortal man be more juſt than God?" (Job, iv. 15.) No ideas, it is plain, are ſo ſublime as thoſe taken from the Supreme Being; the moſt unknown, but the greateſt, of all objects; the infinity of whoſe nature, and the eternity of whoſe duration, joined with the omnipotence of his power, though they ſurpaſs our conceptions, yet exalt them to the higheſt. In general, all objects that are greatly raiſed above us, or far removed from us either in ſpace or in time, are apt to ſtrike us as great. Our viewing them, as through the miſt of ſuperſtition or antiquity, is favourable to the impreſſions of their ſublimity.

The picture which Lucretius has drawn of the dominion of ſuperſtition over mankind, repreſenting it as a portentous ſpectre ſhowing its head from the clouds, and diſmaying the whole human race with its countenance, together with the magnanimity of Epicurus in raiſing himſelf up againſt it, carries all the grandeur of a ſublime, *obſcure*, and awful, image:

Humana ante oculos fœde cum vita jaceret
In terris, oppreſſa gravi ſub religione,
Quæ caput a cœli regionibus oſtendebat,
Horribili ſuper aſpectu mortalibus inſtans,
Primum Graius homo mortales tollere contra
Eſt oculos auſus.— Lib. I.

As obſcurity, ſo *diſorder*, too, is very compatible with grandeur; nay, frequently heightens it. Few things that are ſtrictly regular, and methodical, appear ſublime. We ſee the limits on every ſide; we feel ourſelves confined; there is no room for the towering exertion of the mind. Exact proportion of parts, though it enters often into the beautiful, is much diſregarded in the ſublime. A huge maſs of rocks, thrown together by the hand of nature with wildneſs and confuſion, ſtrike the mind with more grandeur, than if they had been adjuſted or laid together with the moſt accurate ſymmetry. In the boldeſt attempts which human art can make towards producing grand objects, greatneſs of dimenſions always conſtitutes a principal part. No pile of building can convey any idea of ſublimity, unleſs it be majeſtic and lofty. There is, too, in architecture, what is called greatneſs of manner; which ſeems chiefly to ariſe, from preſenting the object to us in one full point of view; ſo that it ſhall make its impreſſion whole, entire, and undivided, upon the mind. A Gothic cathedral raiſes ideas of grandeur

by

by its ſize, its height, its awful ſolemnity, its ſtrength, its antiquity, and its durability. No perſon can enter the cathedrals of York, of Durham, or Wincheſter, without being forcibly ſtruck with theſe ſenſations.

There ſtill remains to be mentioned one claſs of grand or ſublime objects, which may be called the moral or ſentimental ſublime; ariſing from certain exertions of the human mind; from certain affections, and actions, of our fellow-creatures. Theſe will be found to be all, or chiefly, of that claſs, which comes under the name of *magnanimity* or *heroiſm*; and they produce an effect extremely ſimilar to what is produced by the view of grand objects in nature; filling the mind with admiration, and elevating it above itſelf. A noted inſtance of this, quoted by all the French critics, is the celebrated *Qu'il mourut* of Corneille, in the tragedy of *Horace*. In the famous combat betwixt the Horatii and Curiatii, the old Horatius, being informed that two of his ſons are ſlain, and that the third had betaken himſelf to flight, at firſt will not believe the report; but being thoroughly aſſured of the fact, is fired with all the ſentiments of high honour and indignation at this ſuppoſed unworthy behaviour of his ſurviving ſon. He is reminded, that his ſon ſtood alone againſt three, and aſked what he wiſhed him to have done?—"To have died,"—he anſwers. In the ſame manner Porus, taken priſoner by Alexander, after a gallant defence, and aſked how he wiſhed to be treated? anſwering, "Like a king;" and Cæſar chiding the pilot who was afraid to ſet out with him in a ſtorm, "Quid times? Cæſarem vehis;" are extraordinary inſtances of this ſentimental ſublime. Wherever, in ſome perilous and high ſituation, we behold a man uncommonly intrepid, and reſting upon himſelf; ſuperior to paſſion and to fear; animated by ſome great principle to the contempt of popular opinion, of ſelfiſh intereſt, of dangers, or of death; there we are ſtruck with the ſenſe of the grand and ſublime.

High virtue is above all others the moſt natural and fertile ſource of moral ſublimity. However, on ſome occaſions, where virtue either has no place, or is but imperfectly diſplayed, yet if extraordinary vigour and force of mind be diſcovered, we are not inſenſible to a degree of grandeur in the character; and from the ſplendid conqueror, or the daring conſpirator, whom we are far from approving, we cannot withhold our admiration. The ſublime, in natural and in moral objects, is brought before us in one view, and compared together, in the following beautiful paſſage of Akenſide's Pleaſures of the Imagination:

Look then abroad through nature; to the range
Of planets, ſuns, and adamantine ſpheres,
Wheeling, unſhaken, through the void immenſe;
And ſpeak, O man! does this capacious ſcene,
With half that kindling majeſty, dilate
Thy ſtrong conception, as when Brutus roſe
Refulgent, from the ſtroke of Cæſar's fate,
Amid the crowd of patriots; and his arm
Aloft extending, like eternal Jove,
When guilt brings down the thunder, call'd aloud
On Tully's name, and ſhook his crimſon ſteel,
And bade the father of his country hail!
For lo! the tyrant proſtrate on the duſt;
And Rome again is free.— Book I.

Silius Italicus has endeavoured to give an auguſt idea of Hannibal, by repreſenting him as ſurrounded with all his victories, in the place of guards. One who had formed a deſign of aſſaſſinating him in the midſt of a feaſt, is thus addreſſed:

Fallit te, menſas inter quod credis inermem;
Tot belliis quæſita viro, tot cædibus, armat
Majeſtas æterna ducem. Si admoveris ora
Cannas, & Trebium ante oculos, Traſymenaque buſta
Et Pauli ſtare ingentem miraberis umbram.

A thought ſomewhat of the ſame nature occurs in a French author: "Il ſe cache; mais ſa réputation le découvre. Il marche ſans ſuite & ſans équipage; mais chacun, dans ſon eſprit, le met ſur un char de triomphe. On compte, en le voiant, les ennemis qu'il a vaincus, non pas les ſerviteurs qui le ſuivent. Tout ſeul qu'il eſt, on ſe figure, autour de lui, ſes vertus & ſes victoires qui l'accompagnent. Moins il eſt ſuperbe, plus il devient vénérable." *Oraiſon funebre de M. de Turenne, par M. Flechier.*—Both theſe paſſages are ſplendid, rather than ſublime. In the firſt, there is a want of juſtneſs in the thought; in the ſecond, of ſimplicity in the expreſſion.

A queſtion has ariſen, whether we are able to diſcover ſome one fundamental quality in which all theſe different objects agree, and which is the cauſe of their producing an emotion of the ſame nature in our minds? Various hypotheſes have been formed concerning this; but, hitherto, unſatisfactory. Some have imagined that amplitude, or great extent, joined with ſimplicity, is either immediately, or remotely, the fundamental quality of whatever is ſublime; but we have ſeen that amplitude is confined to one ſpecies of ſublime objects; and cannot, without violent ſtraining, be applied to them all. The admired author of "A Philoſophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful," propoſes a formal theory upon this foundation, That terror is the ſource of the ſublime, and that no objects have this character, but ſuch as produce impreſſions of pain and danger. It is indeed true, that many terrible objects are highly ſublime; and that grandeur does not refuſe an alliance with the idea of danger. But though this is very properly illuſtrated by the author, yet he ſeems to ſtretch his theory too far, when he repreſents the ſublime as conſiſting *wholly* in modes of danger or of pain. For the proper ſenſation of ſublimity appears to be very diſtinguiſhable from the ſenſation of either of theſe; and, on ſeveral occaſions, to be entirely ſeparated from them. In many grand objects, there is no coincidence with terror at all; as in the magnificent proſpect of wide-extended plains, and of the ſtarry firmament; or in the moral diſpoſitions and ſentiments, which we view with high admiration; and in many painful and terrible objects alſo, it is clear, there is no ſort of grandeur. The amputation of a limb, or the bite of a viper, are exceedingly terrible; but are deſtitute of all claim whatever to ſublimity. We are inclined to think, that mighty force or power, whether accompanied with terror or not, whether employed in protecting or in alarming us, has a better title, than any thing that has yet been mentioned, to be the fundamental quality of the grand and ſublime; as, after the review which we have taken, there ſeems not to occur any ſublime object, into the idea of which, power, ſtrength, and force, either enter not directly, or are not, at leaſt, intimately aſſociated with the idea, by leading our thoughts to ſome aſtoniſhing or uncontroulable power, as concerned in the production of the object.

That which is termed grand or ſublime in writing or compoſition, is ſuch a deſcription of objects, or exhibition of ſentiments, that are in themſelves of ſuch a grand or ſublime nature, as ſhall fill the mind with ſtrong impreſſions of them. But there is another very indefinite, and therefore very improper, ſenſe, which has been often put upon it; as when it is applied to ſignify any remarkable excellency of compoſition; whether it raiſe in us the ideas of grandeur, or thoſe of gentleneſs, elegance, or any other ſort of beauty. In this ſenſe we ſhould agree with Bergerus, that Cæſar's Commentaries may be termed ſublime; and ſo may many ſonnets, paſtorals, and love elegies, as well as Homer's Iliad. But this evidently confounds the uſe of words; and marks no one eſſential ſpecies, or character, of compoſition whatever.

It may be obſerved, that the *ſublime* is too often uſed in this laſt ſenſe, even by the celebrated Longinus, in his

his treatiſe on this ſubject. Thus, many of the paſſages which he produces as inſtances of the ſublime, are merely elegant, without having the moſt diſtant relation to grandeur or ſublimity. He points out five ſources of the ſublime: the firſt is, boldneſs or grandeur in the thoughts; the ſecond, the pathetic; the third, the proper application of figures; the fourth, the uſe of tropes and beautiful expreſſions; the fifth, muſical ſtructure in the arrangement of words. This is rather the plan of one who would write a treatiſe of rhetoric, or of the beauties of writing in general; and not of the ſublime in particular. For of theſe five heads, only the two firſt, viz. boldneſs and grandeur of thought, have any relation to the ſublime; and, in ſome inſtances, the pathetic, or ſtrong exertions of paſſion: but tropes, figures, and muſical arrangement, have no more relation to the grand and ſublime, than to other kinds of elegant writing.

We are then to enquire, What is the proper and natural idea of the grand and ſublime in compoſition? The foundation of it muſt always be laid in the nature of the object deſcribed; unleſs it be ſuch an object as, if preſented to our eyes, and exhibited to us in reality, would raiſe ideas of that elevating, that awful and magnificent, kind, which we call ſublime: for the deſcription, however finely drawn, is not entitled to come under this claſs. In the next place, the object muſt not only, in itſelf, be ſublime, but it muſt be ſet before us in ſuch a light as is moſt proper to give us a clear and full impreſſion of it; it muſt be deſcribed with energy, with conciſeneſs, and ſimplicity. This depends, principally, upon the lively impreſſion which the poet, or orator, has of the object which he exhibits; and upon his being deeply affected, and warmed, by the grand idea which he would convey. If his own feeling be languid, he can never inſpire us with any ſtrong emotion. Inſtances, which are extremely neceſſary on this ſubject, will clearly ſhow the importance of all the requiſites now mentioned.

It is, generally ſpeaking, among the moſt ancient authors, that we are to look for the moſt ſtriking inſtances of grandeur and ſublimity in compoſition. The early ages of the world, and the rude unimproved ſtate of ſociety, are peculiarly favourable to the ſtrongeſt impreſſions upon the imagination. The genius of men ſeems then moſtly turned to admiration and aſtoniſhment. Meeting with many objects, to them new and ſtrange, their imagination is kept glowing, and their paſſions raiſed to the loftieſt ideas. They think, and expreſs themſelves boldly, and without reſtraint; while in the progreſs of ſociety, the genius and manners of men undergo a change much more favourable to literary accuracy than to grandeur or ſublimity.

Of all writings, ancient or modern, the ſacred ſcriptures afford us the grandeſt inſtances of the ſublime. The deſcriptions of the Deity, in them, are wonderfully noble; both from the grandeur of the object, and the manner of repreſenting it. What an aſſemblage, for inſtance, of awful and ſublime ideas is preſented to us, in that paſſage of the xviiith Pſalm, where an appearance of the Almighty is deſcribed? "In my diſtreſs I called upon the Lord; he heard my voice out of his temple, and my cry came before him. Then the earth ſhook and trembled; the foundations alſo of the hills were moved; becauſe he was wroth. He bowed the heavens, and came down, and darkneſs was under his feet; and he did ride upon a cherub, and did fly; yea, he did fly upon the wings of the wind. He made darkneſs his ſecret place; his pavilion round about him were dark waters, and thick clouds of the ſky." Here, we ſee, with what propriety and ſucceſs the circumſtances of darkneſs and terror are applied for heightening the ſublime. So, alſo, the prophet Habakkuk, in a ſimilar paſſage: "He ſtood, and meaſured the earth; he beheld, and drove aſunder the nations. The everlaſting mountains were ſcattered; the perpetual hills did bow; his ways are everlaſting. The mountains ſaw thee; and they trembled. The overflowing of the water paſſed by. The deep uttered his voice, and lifted up his hands on high."

The noted inſtance, given by Longinus, from Moſes, "God ſaid, Let there be light; and there was light;" belongs to the true ſublime; and the grandeur of it ariſes from the ſtrong conception it gives, of an exertion of power, producing its effect with the utmoſt ſpeed and facility. A thought of the ſame kind is magnificently expreſſed in the following paſſage of Iſaiah xliv. 24, 27, 28: "Thus ſaith the Lord, thy Redeemer, and he that formed thee from the womb: I am the Lord that maketh all things, that ſtretcheth forth the heavens alone, that ſpreadeth abroad the earth by myſelf—that ſaith to the deep, Be dry, and I will dry up thy rivers; that ſaith of Cyrus, He is my ſhepherd, and ſhall perform all my pleaſure; even ſaying to Jeruſalem, Thou ſhalt be built; and to the temple, Thy foundation ſhall be laid." There is alſo a paſſage in the Pſalms, which deſerves to be mentioned under this head; "God," ſays the pſalmiſt, "ſtilleth the noiſe of the ſeas, the noiſe of their waves, and the tumults of the people." The joining together two ſuch grand objects, as the ragings of the waters and the tumults of the people, between which there is ſo much reſemblance as to form a very natural aſſociation in the fancy, and the repreſenting them both as ſubject, at one moment, to the command of God, produces a very noble effect.

Homer, the prince of poets, owes much of his grandeur to that native and unaffected ſimplicity, which characteriſes his manner. His deſcriptions of hoſts engaging; the animation, the fire, and rapidity, which he throws into his battles, preſent to every reader of the Iliad, frequent inſtances of ſublime writing. His introduction of the gods, tends often to heighten, in a ſuperior degree, the majeſty of his warlike ſcenes. Hence Longinus beſtows ſuch high commendations on that paſſage, in the xvth book of the Iliad, where Neptune, when preparing to iſſue forth into the engagement, is deſcribed as ſhaking the mountains with his ſteps, and driving his chariot along the ocean. Minerva, arming herſelf for fight in the vth book; and Apollo, in the xvth, leading on the Trojans, and flaſhing terror with his ægis on the face of the Greeks, are ſimilar inſtances of great ſublimity added to the deſcription of battles, by the appearances of thoſe celeſtial beings. In the xxth book, where all the gods take part in the engagement, according as they ſeverally favour either the Grecians, or the Trojans, the poet's genius is ſignally diſplayed, and the deſcription riſes into the moſt awful magnificence. All nature is repreſented as in commotion. Jupiter thunders in the heavens; Neptune ſtrikes the earth with his trident; the ſhips, the city, and the mountains, ſhake; the earth trembles to its centre; Pluto ſtarts from his throne, in dread leſt the ſecrets of the infernal region ſhould be laid open to the view of mortals. The paſſage is worthy of being written in letters of gold:

Αυταρ επει μεθ' ομιλον Ολυμπιοι ηλυθον ανδρων,
Ωρτο δ' Ερις κρατερη, λαοσσοος· αυε δ' Αθηνη,—
Αυε δ' Αρης στερεωθεν, εφεμνη λαιλαπι ισος,—
Ως της αμφω εξος μαλλαρες θεοι στησαν ες,
Σημβλαν, εν δ' αυτοις εριδα ρηγνυντο βαρειαν·
Δεινον δ' εβρονησε πατης ανδρων τε θεων τε
Υψοθεν· αυταρ ενερθε Ποσειδαων ετιναξε
Γαιαν απειρεσιην, ορεων τ' αιπεινα καρηνα.
Παντες δ' εσσειουτο ποδες πολυπιδακος Ιδης,
Και κορυφαι, Τρωων τε πολις, και νηες Αχαιων.
Εδδεισεν δ' υπενερθεν αναξ ευρεων, Αιδωνευς,
Δεισας δ' εκ θρονου αλτο, και ιαχε· μη οι υπερθε
Γαιαν αναρρηξειε Ποσειδαων ενοσιχθων,
Οικια δε θνητοισι και αθανατοισι φανειη
Σμερδαλε', ευρωεντα, τα τε στυγεουσι θεοι περ'
Τοσσος αρα κτυπος ωρτο θεων εριδι ξυνιοντων. Iliad xx. 47, &c.

But when the powers deſcending ſwell'd the fight,
Then tumult roſe, fierce rage, and pale affright;
Now through the trembling ſhores Minerva calls,
And now ſhe thunders from the Grecian walls.
Mars hov'ring o'er his Troy, his terror ſhrouds
In gloomy tempeſts, and a night of clouds;
Now through each Trojan heart he fury pours,
With voice divine, from Ilion's topmoſt towers.——
Above, the Sire of Gods his thunder rolls,
And peals on peals redoubled rend the poles;
Beneath, ſtern Neptune ſhakes the ſolid ground,
The foreſts wave, the mountains nod around;
Through all her ſummits tremble Ida's woods,
And from their ſources boil her hundred floods:
Troy's turrets totter on the rocking plain,
And the toſs'd navies beat the heaving main:
Deep in the diſmal region of the dead,
Th' infernal monarch rear'd his horrid head,
Leapt from his throne, leſt Neptune's arm ſhould lay
His dark dominions open to the day;
And pour in light on Pluto's drear abodes,
Abhorr'd by men, and dreadful ev'n to gods.
Such wars th' immortals wage; ſuch horrors rend
The world's vaſt concave, when the gods contend. *Pope.*

The works of Oſſian alſo abound with examples of the grand and ſublime. The ſubjects of which that author treats, and the manner in which he writes, are particularly favourable to it. He deals in no ſuperfluous or gaudy ornaments; but throws forth his images with a rapid conciſeneſs, which enables them to ſtrike the mind with the greateſt force. Among poets of more poliſhed times, we are to look for the graces of correct writing, for juſt proportion of parts, and ſkilfully-conducted narration. In the midſt of ſmiling ſcenery and pleaſurable themes, the gay and the beautiful will undoubtedly appear to more advantage. But amidſt the rude ſcenes of nature and of ſociety, ſuch as Oſſian deſcribes; amidſt rocks, and torrents, and whirlwinds, and battles, dwells the ſublime; and naturally aſſociates itſelf with that grave and ſolemn ſpirit which diſtinguiſhes the author of Fingal. "As autumn's dark ſtorms pour from two echoing hills, ſo toward each other approached the heroes. As two dark ſtreams from high rocks meet and mix, and roar on the plain: loud, rough, and dark, in battle, met Lochlin and Inisfail; chief mixed his ſtrokes with chief, and man with man. Steel clanging ſounded on ſteel. Helmets are cleft on high; blood burſts, and ſmokes around. As the troubled noiſe of the ocean when roll the waves on high; as the laſt peal of the thunder of heaven; ſuch is the noiſe of battle. The groan of the people ſpread over the hills. It was like the thunder of night, when the cloud burſts on Cona, and a thouſand ghoſts ſhriek at once on the hollow wind." Never were images of more awful ſublimity employed to heighten the terror of battle.

In general, Engliſh verſe in rhyme appears to be, if not inconſiſtent with the ſublime, at leaſt very unfavourable to it. The conſtrained elegance of this kind of verſe, and the ſtudied ſmoothneſs of the ſounds, anſwering regularly to each other at the end of the line, though they be quite conſiſtent with gentle emotions, yet weaken the native grandeur and force of ſublimity; beſides, that the ſuperfluous words which the poet is often obliged to introduce, in order to fill up the rhyme, tend farther to enfeeble it. Homer's deſcription of the nod of Jupiter, as ſhaking the heavens, has been admired in all ages, as highly grand and ſublime. Literally tranſlated, it runs thus: "He ſpoke, and bending his ſable brows, gave the awful nod; while he ſhook the celeſtial locks of his immortal head, all Olympus was ſhaken."—Mr. Pope tranſlates it thus:

He ſpoke; and awful bends his ſable brows,
Shakes his ambroſial curls, and gives the nod,
The ſtamp of fate, and ſanction of a god.
High heaven with trembling the dread ſignal took,
And all Olympus to its centre ſhook

Here the image is ſpread out, and attempted to be beautified; but it is, in truth, weakened. The third line—"The ſtamp of fate, and ſanction of a god," is merely expletive; and introduced for no other reaſon but to fill up the rhyme; for it interrupts the deſcription, and clogs the image. For the ſame reaſon, out of mere compliance with the rhyme, Jupiter is repreſented as ſhaking his locks before he gives the nod;—"Shakes his ambroſial curls, and gives the nod," which is trifling, and without meaning. Whereas, in the original, the hair of his head ſhaken, is the effect of his nod, and makes a happy picturesque circumſtance in the deſcription. But on the other hand, the boldneſs, freedom, and variety, of our blank verſe, is infinitely more favourable than rhyme, to all kinds of ſublime poetry. The fulleſt proof of this is afforded by Milton; whoſe genius led him eminently to the grand and ſublime. The whole firſt and ſecond books of his Paradiſe Loſt are continued inſtances of it; one of the moſt ſtriking of which is, the deſcription of Satan after his fall, appearing at the head of the infernal hoſts:

——He, above the reſt,
In ſhape and geſture proudly eminent,
Stood like a tower: his form had not yet loſt
All her original brightneſs, nor appeared
Leſs than archangel ruined; and the exceſs
Of glory obſcured. As when the ſun, new riſen,
Looks through the horizontal miſty air,
Shorn of his beams; or, from behind, the moon,
In dim eclipſe, diſaſtrous twilight ſheds
On half the nations, and with fear of change
Perplexes monarchs——Darken'd ſo, yet ſhone
Above them all th' archangel.——

Here concur a variety of ſources of the grand and ſublime: the principal object eminently great; a high ſuperior nature, fallen indeed, but erecting itſelf againſt diſtreſs; the grandeur of the principal object heightened, by aſſociating it with ſo noble an idea as that of the ſun ſuffering an eclipſe; this picture, ſhaded with all thoſe images of change and trouble, of darkneſs and terror, which coincide ſo finely with the ſublime emotion; and the whole expreſſed in a ſtyle and verſification, eaſy, natural, and ſimple, yet very magnificent.

Strength of deſcription is in all caſes highly expedient; and this generally follows from a ſimple conciſeneſs; but, it ſuppoſes alſo ſomething more; namely, a proper choice of circumſtances in the deſcription, ſo as to exhibit the object in its full and moſt elevated point of view. For every object has ſeveral faces, ſo to ſpeak, by which it may be preſented to us, according to the circumſtances with which we ſurround it; and it will appear eminently ſublime, or not, in proportion as all theſe circumſtances are happily choſen. Herein lies the great art of the writer; and indeed, the great difficulty of ſublime compoſition. If the deſcription be too general, and diveſted of circumſtances, the object appears in a faint light; it makes a feeble impreſſion, or no impreſſion at all, on the reader. At the ſame time, if any trivial or improper circumſtances are mingled, the whole becomes degraded.

A ſtorm or tempeſt, for inſtance, is a grand object in nature. But, to render it ſublime in deſcription, it is not enough, either to give us mere general expreſſions concerning the violence of the tempeſt, or to deſcribe its common effects in overthrowing trees and houſes. It muſt be painted with ſuch circumſtances as fill the mind with great and awful ideas. This is moſt happily effected by Virgil, in the following paſſage:

Ipſe Pater, media nimborum in nocte, coruſcâ
Fulmina moliter dextrâ; quo maxima motu
Terro tremit; fugere feræ; et mortalia corda,
Per gentes humilis ſtravit pavor. Ille, flagranti
Aut Atho, aut Rhodopen, aut alta Ceraunia telo
Dejicit.—— GEORG. I.

The Father of the Gods his glory ſhrouds,
Involv'd in tempeſts, and a night of clouds:
And from the middle darkneſs flaſhing out,
By fits he deals his fiery bolts about.
Earth feels the motions of her angry god,
Her entrails tremble, and her mountains nod,
And flying beaſts in foreſts ſeek abode.
Deep horror ſeizes every human breaſt;
Their pride is humbled, and their fears confeſt;
While he, from high, his rolling thunder throws,
And fires the mountains with repeated blows;
The rocks are from their old foundations rent;
The winds redouble, and the rains augment. *Dryden.*

Every circumſtance in this noble deſcription is the production of an imagination heated and aſtoniſhed with the grandeur of the object. If there be any defect, it is in the words immediately following thoſe quoted; "Ingeminant Auſtri, et denſiſſimus imber;" where the tranſition appears to be made too haſtily from the preceding ſublime images, to a thick ſhower, and the blowing of the ſouth wind; which ſhews how difficult it is to deſcend with grace, without ſeeming to fall.

The high importance of a proper choice of circumſtances, when a deſcription is meant to be ſublime, ſeems not to have been ſufficiently attended to. It has, however, ſuch a foundation in nature, as renders the leaſt deflexion from it fatal. When a writer is aiming at the beautiful only, his deſcriptions may have improprieties in them, and yet be beautiful ſtill. Some trivial or miſjudged circumſtances can be overlooked by the reader; they make only the difference of more or leſs; the gay, or pleaſing, emotion, which he has raiſed, ſubſiſts ſtill. But the caſe is quite different with the ſublime. There, one trifling circumſtance, one mean idea, is ſufficient to deſtroy the whole charm. This is owing to the nature of the emotion aimed at by ſublime compoſition, which admits of no mediocrity, and cannot ſubſiſt in a middle ſtate; but muſt either highly tranſport us, or, if unſucceſsful in the execution, leave us greatly diſguſted, and diſpleaſed. We attempt to riſe along with the writer; the imagination is awakened, and put upon the ſtretch; but it requires to be ſupported; and if, in the midſt of its efforts, you deſert it unexpectedly, down it comes, with a painful ſhock. When Milton, in his battle of the angels, deſcribes them as tearing up the mountains, and throwing them at one another; there are, in his deſcription, as Mr. Addiſon has obſerved, no circumſtances but what are properly ſublime:

From their foundations loos'ning to and fro,
They pluck'd the ſeated hills, with all their load,
Rocks, waters, woods; and by the ſhaggy tops
Uplifting, bore them in their hands.——

Whereas Claudian, in a fragment upon the wars of the giants, has contrived to render this idea of their throwing the mountains, in itſelf ſo grand, quite burleſque and ridiculous; by this ſingle circumſtance, of one of his giants with the mountain Ida upon his ſhoulders, and a river, which flowed from the mountain, running down along the giant's back, as he held it up in that poſture. There is a deſcription too in Virgil, which is cenſurable, though more ſlightly, in this reſpect. It is that of the burning mountain Ætna; a ſubject certainly very proper to be worked up by a poet into a ſublime deſcription:

——Horrificis juxta tonat Ætna ruinis.
Interdumque atram prorumpit ad æthera nubem,
Turbine fumantem piceo, & candente favilla;
Attollitque globos flammarum, & ſidera lambit.
Interdum ſcopulos, avulſaque viſcera montis
Erigit eructans, liquefactaque ſaxe ſub auras
Cum genitu glomerat, fundoque exæſtuat imo.
ÆN. III. 571.

The port capacious, and ſecure from wind,
Is to the foot of thundering Ætna join'd.
By turns a pitchy cloud ſhe rolls on high,
By turns hot embers from her entrails fly,
And flakes of mounting flames that lick the ſky.
Oft from her bowels maſſy rocks are thrown,
And ſhiver'd by the force, come piece-meal down.
Oft liquid lakes of burning ſulphur flow,
Fed from the fiery ſprings that boil below. *Dryden.*

In the tranſlation of Dryden, the debaſing circumſtance objected to in the original, is, with propriety, omitted. This debaſement lies here: that after ſeveral magnificent images, the poet concludes with perſonifying the mountain, under this figure, "eructans viſcera cum gemitu," belching up its bowels with a groan; which, by likening the mountain to a ſick or drunken perſon, degrades the majeſty of the deſcription. It is to no purpoſe to tell us, that the poet here alludes to the fable of the giant Enceladus lying under mount Ætna; and that he ſuppoſes his motions and toſſings to have occaſioned the fiery eructations. He intended the deſcription of a ſublime object; and the natural ideas, raiſed by a burning mountain, are infinitely more lofty than the belchings of a giant, how huge ſoever.

From the account here given of the nature of the grand or ſublime, it clearly follows, that it is an emotion which can never be long protracted. The mind, by no force of genius, can be kept, for any conſiderable time, ſo far raiſed above its uſual balance; but will, of courſe, relax into its ordinary ſituation. Neither are the abilities of any human writer ſufficient to furniſh a long continuation of uninterrupted ſublime ideas. The utmoſt we can expect is, that this fire of imagination ſhould ſometimes flaſh upon us like lightning, and then diſappear. In Homer and Milton, this effulgence of genius breaks forth more frequently, and with greater luſtre, than in moſt other authors. Shakeſpeare alſo riſes often into the true ſublime. But no author whatever is ſublime throughout. Some, indeed, there are, who, by a ſtrength and dignity in their conceptions, and a current of lofty ideas, preſerve the reader's mind always in a tone nearly allied to the ſublime; for which reaſon they may, in a limited ſenſe, merit the name of ſublime writers; and in which claſs we may juſtly place Demoſthenes and Plato.

Some writers are apt to imagine, that magnificent words, accumulated epithets, and a certain ſwelling tone of expreſſion, by riſing above what is uſual or vulgar, contributes to, or even forms, the ſublime. Nothing can be more erroneous. In all the inſtances of ſublime writing here given, nothing of this kind appears. In general, in all good writing, the ſublime lies in the thought, not in the words; and when the thought is truly noble, it will, for the moſt part, clothe itſelf in dignity of language. The ſublime, indeed, rejects mean, low, or trivial, expreſſions; but it is equally an enemy to ſuch as are turgid. The main ſecret of being ſublime, is to ſay great things in few and plain words. It will be found to hold, without exception, that the moſt ſublime authors are the ſimpleſt in their ſtyle; and wherever we find a writer, who affects a more than ordinary pomp and parade of words, and is always endeavouring to magnify his ſubject by epithets, there we may ſuſpect, that, feeble in ſentiment, he is ſtudying to ſupport himſelf by mere expreſſion.

The ſame unfavourable judgment we muſt paſs on all that laboured apparatus with which ſome writers introduce a paſſage, or deſcription, which they intend ſhall be ſublime; calling on their readers to attend, invoking their muſe, or breaking forth into general, unmeaning, exclamations, concerning the greatneſs, terribleneſs, or majeſty, of the object which they are to deſcribe. Mr. Addiſon, in his "Campaign," has fallen into an error of this kind, when about to deſcribe the battle of Blenheim:

But

But O! my muſe! what numbers wilt thou find
To ſing the furious troops in battle join'd?
Methinks, I hear the drums tumultuous ſound,
The victor's ſhouts, and dying groans, confound; &c.

Introductions of this ſort, are a forced attempt in a writer, to ſpur up himſelf, and his reader, when he finds his imagination begin to flag. It is like taking artificial ſpirits in order to ſupply the want of ſuch as are natural. Yet Mr. Addiſon's Campaign is far from wanting merit; and, in particular, the compariſon of his hero to the angel who rides in the whirlwind and directs the ſtorm, is a truly ſublime image.

The faults oppoſite to the grand and ſublime, are the frigid, and the bombaſt. The frigid conſiſts, in degrading an object, or ſentiment, which is ſublime in itſelf, by a mean conception of it; or by a weak, low, and childiſh, deſcription of it. This generally betrays great poverty of genius. Of this, there are too many examples in different writers.—The bombaſt lies, in forcing a trivial object out of its rank, and endeavouring to raiſe it into the ſublime; or, in attempting to exalt a grand object beyond all natural and reaſonable bounds. Into this error, which is alſo too common, writers of genius may ſometimes fall, by unluckily loſing ſight of the true principles of grandeur and ſimplicity.—See Addiſon's Spectator; Akenſide's Pleaſures of the Imagination; Webb on the Beauties of Poetry; Gerard on Taſte; Blair's Lectures on Rhetoric, &c.

GRAND'FATHER, *ſ.* The father of my father or mother; the next above my father or mother in the ſcale of aſcent.—Our grandchildren will ſee a few rags hung up in Weſtminſter-hall, which coſt an hundred millions, whereof they are paying the arrears, and boaſt that their *grandfathers* were rich and great. *Swift.*

GRAND'FATHERS, ſeveral large detached mountains in the ſouth-eaſt corner of Tenneſſee, belonging to the American States; in which are the head waters of French, Broad, and Cataba rivers.

GRAN'DI (Francis-Louis), an Italian abbot, philoſopher, and mathematician, born at Cremona in 1671. As he early poſſeſſed a ſtudious inclination, he determined to embrace the eccleſiaſtical life for the ſake of freely indulging it. Accordingly, when he was about ſixteen years of age, he entered into the order of Camaldolites, at Ravenna; on which occaſion, in compliance with the uſage of the order, he relinquiſhed his chriſtian name and received that of *Guy*. He ſoon diſtinguiſhed himſelf by his proficiency in the different branches of literature and ſcience; and becoming in the courſe of his enquiries diſſatisfied with the peripatetic philoſophy which then prevailed in the ſchools, he was ambitious of contributing to introduce a more rational ſyſtem. With this deſign he offered himſelf a candidate for a vacant chair of philoſophy in the univerſity of Florence, and obtained his object. In this ſituation he diligently applied himſelf to exterminate the Ariſtotelian dogmas, and to introduce in their room the philoſophy of Deſcartes; while at the ſame time he became zealouſly attached to mathematical ſtudies. Having publiſhed a treatiſe intended to reſolve the problems of Viviani, relative to the conſtruction of arches, which he dedicated to the grand-duke Coſmo III. that prince was ſo well pleaſed with it, that he appointed him profeſſor of philoſophy in the univerſity of Piſa. From this time father Grandi applied cloſely to the ſtudy of pure mathematics; and he had the honour of ranking among his friends and correſpondents Leibnitz, Newton, Bernouilli, Baglivi, and Magalotti. Yet in the midſt of his ſcientific ſtudies he paid due attention to hiſtory, criticiſm, and eccleſiaſtical antiquities. In 1683, Dr. Narciſſus Marſh, archbiſhop of Armagh, having preſented to the royal ſociety in Dublin ſome difficult problems for the improvement of acouſtics, father Grandi was requeſted, by his friend count Laurence Magalotti, to reſolve them; which taſk he accompliſhed; and his performance was tranſmitted by the Britiſh miniſter at the court of Florence to the royal ſociety at London. One of his principal works was, On Series and Infiniteſimals. Father Grandi's talents were alſo employed on matters of political economy. To him were referred various diſputes reſpecting the rights of fiſhery and tolls on the rivers; and he was employed in a joint commiſſion from the grand-duke and the court of Rome to ſettle the differences between the inhabitants of Ferrara and Bologna, concerning the neceſſary works to preſerve their territories from inundation. Theſe ſervices he performed to the ſatisfaction of all parties. He died in 1742, when ſeventy-two years of age.

GRANDI'ER (Urban), a French prieſt, who was condemned for the pretended crime of magic, and burnt alive, in 1634. He was the ſon of a notary-royal at Sablé, and born at Bovere, near that town. He was educated under the Jeſuits at Bourdeaux, and ſoon recommended himſelf to notice by the dawnings of a fine genius, and his proficiency in his ſtudies. On appreciating his talents, the ſociety collated him to the living of St. Peter at Loudun; and alſo procured for him a prebend in the church of the Holy Croſs. Theſe benefices made him the object of envy with the eccleſiaſtics, which was ſtill farther heightened by his great accompliſhments. He often appeared in the pulpit, where his talents as a preacher procured him numerous admirers. His ruin, however, was ſoon decided upon by the college of monks; and they deviſed a ſcheme for engaging cardinal Richelieu, the prime miniſter, to favour their deſigns. For this purpoſe the capuchins of Loudun wrote to father Joſeph, one of their fraternity, whom the cardinal had aſſociated with himſelf in the adminiſtration, informing him that Grandier was the author of a ſatirical libel, entitled, The Shoemaker's Wife of Loudun, containing reflections on the cardinal's perſon and birth, which had excited in his boſom the ſharpeſt ſtings of reſentment. Suffering himſelf to be perſuaded that this information was well founded, he determined to make Grandier feel the weight of his vengeance. At that time M. Laubardemont, maſter of the requeſts, was commiſſioned by the king to demoliſh the fortifications of Loudun. This man was entirely devoted to the cardinal, and the ordinary inſtrument of his vengeance when that miniſter was diſpoſed to put any perſon to death under the formal ſhow of juſtice. To him the cardinal wrote, giving him ſufficient intimations that he wiſhed the deſtruction of Grandier. Laubardemont immediately ordered the unhappy prieſt to be impriſoned; and after waiting upon the cardinal to concert with him the manner of his future proceedings, received a commiſſion to carry on a proceſs againſt Grandier for ſorcery. This commiſſion was directed to M. Laubardemont, and to twelve judges of the courts in the neighbourhood of Loudun. After a tedious proceſs, in which the farce of exorciſing the poſſeſſed was ſeveral times repeated, and Laubardemont's tyranny diſplayed in the moſt glaring light, "upon the depoſition of Aſhtaroth, a devil of the order of Seraphim, and the chief of the poſſeſſing devils, and of Eaſas, Celſus, Acaos," &c. the commiſſioners gave judgment, declaring Grandier "duly attainted and convicted of the crime of magic, ſorcery, and poſſeſſion happening by his means in the perſons of ſome of the Urſuline nuns of Loudun, &c. for the reparation of which he was condemned to be burnt alive with the magical pacts and characters, &c." Grandier heard this ſentence without any emotion, and afterwards ſuſtained the torture with aſtoniſhing fortitude, not ſuffering one repining expreſſion againſt his enemies to eſcape him throughout the whole ſcene; and, being brought to the ſtake, he expired amidſt the flames with unabated courage, commending himſelf to the divine mercy in the

the laſt words he was able to utter. A curious relation of his caſe may be ſeen in the Hiſtory of the Devils of Loudun, firſt publiſhed at Amſterdam in 1693, and frequently reprinted. The only compoſition of his which has been publiſhed is, A Funeral Oration for Scævola de St. Martha, which is highly commended for the ſtrokes of eloquence with which it is interſperſed, and is printed among the works of that author.

GRANDIF'IC, *adj.* [*grandis* and *facio*, Lat.] Making great.

GRANDIL'OQUENCE, *ſ.* [from the Lat. *grandis*, great, and *loquor*, to ſpeak.] A lofty ſtyle; a ſuperb manner of expreſſion. *Scott. Not much uſed.*

GRANDIL'OQUENT, *adj.* Uſing lofty ſtyle; ſpeaking in a ſuperb manner. *Cole.*

GRANDIL'OQUOUS, *adj.* Uſing a lofty ſtyle; ſpeaking in a ſuperb manner. *Cole.*

GRANDIL'OQUY, *ſ.* A lofty ſtyle; a ſuperb manner of ſpeaking. *Cole.*

GRAN'DIN (Martin), a learned French theological profeſſor, born at St. Quintin in 1604. He was inſtructed in grammar learning at Noyon and Amiens, and when he was ſeventeen years old was ſent to Paris, where he ſtudied theology under father Le Mairat, a Jeſuit. Afterwards he became a member of the college of cardinal Le Moine, where for ſome time he filled the chair of philoſophical profeſſor. He was next received into the ſociety of the Sorbonne, and having taken orders, devoted ſeveral years to the exerciſe of the paſtoral functions. His learning and talents occaſioned the laſt-mentioned faculty to recal him into their body in 1638, and to appoint him to the poſt of profeſſor of divinity. The duties of this office he diſcharged for more than fifty years with great reputation, and died in 1691, when about eighty-ſeven years of age. He had been admitted by the Sorbonne to the degree of doctor. He left behind him a ſyſtem of divinity, which was publiſhed after his death by M. du Pleſſis d'Argentré, in 1710 and 1712, under the title of, *Opera Theologica*, &c. in 6 vols. 4to. which met with a favourable reception from the public.

GRAN'DINOUS, *adj.* [*grando*, Lat.] Full of hail; conſiſting of hail.

GRANDI'SONOUS, *adj.* [*grandiſonus*, Lat.] Making a great ſound.

GRAN'DITY, *ſ.* [from *grandis*, Lat.] Greatneſs; grandeur; magnificence. *An old word.*—Our poets excel in *grandity* and gravity, ſmoothneſs and property, in quickneſs and briefneſs. *Camden.*

GRANDLUCE', a town of France, in the department of the Sarte, and chief place of a canton, in the diſtrict of Chateau-du-Lois: fourteen miles ſouth-eaſt of Le Mans.

GRANDMO'NT, a town of France, in the department of the Upper Vienne: near which was a celebrated abbey, ſuppreſſed in 1769, after the death of the then profeſſed members: five leagues north-eaſt of Limoges.

GRAND'MOTHER, *ſ.* The father's or mother's mother.—Thy *grandmother* Lois, and thy mother Eunice. 1 *Tim.* i. 5.

GRANDO'LA, a town of Portugal, in the province of Eſtremadura: nine leagues ſouth-eaſt of Setuval.

GRANDPRE', a town of France, and principal place of a diſtrict, in the department of the Ardennes: eleven leagues eaſt of Reims, and nine ſouth-ſouth-eaſt of Mezieres. Here the French army commanded by general Dumourier, on the 14th of September 1794, was attacked by the duke of Brunſwick, and compelled to retreat to St. Menehould. Lat. 49. 20. N. lon. 22. 32. E. Ferro.

GRANDRIEU'X, a town of France, in the department of the Lozere, and chief place of a canton, in the diſtrict of Langogne: three leagues and a half north-weſt of Langogne, and five eaſt of St. Chely.

GRAND'SIRE, *ſ.* Grandfather:

Think'ſt thou, that I will leave my kingly throne,
Wherein my *grandſire* and my father ſat? *Shakeſpeare.*

Any anceſtor, poetically:

Why ſhould a man whoſe blood is warm within,
Sit like his *grandſire* cut in alabaſter? *Shakeſpeare.*

So mimic ancient wits at beſt,
As apes our *grandſires* in their doublets dreſt. *Pope.*

GRAND'SON, *ſ.* The ſon of a ſon or daughter:

Almighty Jove augment your wealthy ſtore,
Give much to you, and to his *grandſons* more. *Dryden.*

GRAND'VILLE (La), a town of France, in the department of the Moſelle, and chief place of a canton, in the diſtrict of Longwy: one league ſouth-weſt of Longwy, and one and a half north-north-eaſt of Longuion.

GRAND'VILLE, or GRANVILLE, a ſeaport town of France, in the department of the Channel, and chief place of a canton, in the diſtrict of Avranches. The harbour is only capable of receiving about ſixty ſmall veſſels. The town is ſituated on a ſharp rock, forming a peninſula of an oval form, and ſurrounded with walls: it has two gates, two fauxbourgs, and about two thouſand five hundred inhabitants; near it is an oyſter fiſhery, and on the land ſide are quarries of ſtone of a very large ſize, and remarkable hardneſs: four leagues north-weſt of Avranches, and four and a half ſouth-ſouth-weſt of Coutances. Lat. 48. 50. N. lon. 16. 3. E. Ferro.

GRANDVILLIER', a town of France, and principal place of a diſtrict, in the department of the Oiſe: fourteen miles north-north-weſt of Beauvais, and fourteen weſt of Breteuil. Lat. 49. 39. N. lon. 19. 38. E. Ferro.

GRA'NEN, a town of Spain, in the province of Aragon: thirteen miles ſouth of Hueſca.

GRANE'NA, a town of Spain, in the province of Catalonia: ten miles ſouth of Lerida.

GRANEVSKA'IA, a fortreſs of Ruſſia, on the Volga, in the government of Saratov: ninety-two miles ſouth-eaſt of Tzaritzin.

GRANGE, a town of France, in the department of the Voſges, and chief place of a canton, in the diſtrict of Bruyères: five miles ſouth-eaſt of Bruyères.

GRANGE, a town of Sweden, in the province of Dalecarlia; thirty miles ſouth of Fahlun.

GRANGE *Cape La*, or CAPE MONTE CHRISTI, on the north ſide of the iſland of St. Domingo. It is a high hill in the form of a tent, and may be ſeen by the naked eye at Cape Francois, from which it is fourteen leagues eaſt by north. A ſtrip of land joins it to the territory of Monte Chriſti; ſo that at a diſtance it ſeems to be an iſland. The cruiſers from Jamaica often lie off here. This cape lies in lat. 19. 54. 30. N. and lon. 74. 9. 30. W. from Paris; and with Point de Dunes forms the mouth of the bay of Monte Chriſti.

GRANGE (Joſeph de Chancel de la), born in 1676 of an ancient family at Antoniat in Perigord. When at the Jeſuits' ſchool at Bourdeaux, at the age of only nine years, he compoſed a comedy in three acts, which was repreſented by the ſcholars. His tragedy of Jugurtha was repreſented in the capital when he was but ſixteen, and was conſidered as an extraordinary effort for one ſo young. He continued to write pieces for the ſtage, which augmented his reputation; but the production which rendered him moſt famous, at the ſame time that it expoſed him to much ſuffering, was his *Philippiques*, a ſatire in verſe againſt Philip the regent-duke of Orleans. This appeared about 1718, and, though anonymous, was univerſally attributed to him. Its literary merit conſiſted in ſome very vigorous ſtanzas amidſt many proſaic and careleſs lines. Its matter was ſo atrociouſly libellous, charging the duke even with the crime of poiſoning ſeveral of the royal family, that the author could not be expected to remain ſecure. He

fled to Avignon, where the treachery of a French officer drew him into a ſnare which put him in the hands of his purſuers, and he was committed to the priſon of St. Marguerite. Having found means to corrupt his guard, he made his eſcape, firſt to Spain and then to Holland. Thence he was invited by Auguſtus king of Poland to his court; but upon the regent's death he returned to France, where he ever after lived unmoleſted. He continued to write, and was not ſparing of his epigrams and lampoons, as well againſt his relations and acquaintances as his enemies. He died at the family ſeat of Antoniat, in 1758. The works of La Grange, corrected by himſelf, appeared in 5 vols. 12mo. Paris, 1759. They conſiſt of tragedies, operas, and miſcellaneous poems. Of theſe, his tragedies are moſt eſteemed. The principal are, 1. Jugurtha. 2. Oreſtes and Pylades. 3. Athenais. 4. Amaſis. 5. Ino and Melicerte. In his latter years he long employed himſelf on a Hiſtory of Perigord, which he left unfiniſhed in manuſcript.

GRANGE, [*grangia*, Lat. from *granum*.] A houſe or farm where corn is laid up in barns, granaries, &c. and provided with ſtables for horſes, ſtalls for oxen, and other things neceſſary for huſbandry. This definition is agreeable to Spelman. According to Mr. Warton, grange is ſtrictly and properly the farm of a monaſtery, where the religious repoſited their corn. But in Lincolnſhire and other northern counties, they call every lone houſe, or farm, which ſtands ſolitary, a grange. See *Steevens's Shakeſpeare*.—Dr. Johnſon, in his Dictionary, derives the word from *grange*, French, and defines it, a farm, generally: a farm with a houſe, at a diſtance from neighbours.

GRANGEA'RIUS, the perſon who has the care of a *grange* for corn and huſbandry: and there was anciently a granger, or grange-keeper, belonging to religious houſes, who was to look after their granges, or farms in their own hands. *Fleta, lib. 2. c. 8.*

GRANGE-LE-BOURG, a town of France, in the department of the Upper Saône, and chief place of a canton, in the diſtrict of Lure: two leagues and a half ſouth-ſouth-eaſt of Lure.

GRANGES, a town of United America, in the ſtate of North Carolina: twenty-three miles ſouth-weſt of Exeter.

GRANGES, a town of France, in the department of the Lot and Garonne: two leagues eaſt of Tonneins.

GRANGNA'NO, a town of Italy, in the kingdom of Naples, and province of Principato Citra: fifteen miles weſt of Salerno.

GRAN'HULT, a town of Sweden, in the province of Smaland: thirty-five miles north-weſt of Calmar.

GRANGE'RIA, *ſ.* in botany, a genus of the claſs dodecandria, order monogynia. The generic characters are—Calyx five-cleft; petals five; ſtamina fifteen; drupe ſomewhat three-ſided; nut three-ſided, bony, one-ſeeded.

Grangeria Borbonica, a ſingle ſpecies. It is a tree with alternate, ovate, entire, leaves: flowers racemed. Grows at Bourbon.

GRANGE'RUS, or GRANGIA'RUS, *ſ.* An officer of a religious houſe, who was to look after their grange or farm. See GRANGEARIUS.

GRAN'ICUS, in ancient geography, a ſmall river near the Helleſpont in Leſſer Aſia, remarkable for the firſt victory gained by Alexander the Great over the armies of Darius:—for an account of which ſee the article GREECE, in this volume.

GRANIF'EROUS, *adj.* Among botaniſts, pods which bear ſeed like grains.

GRAN'ITE, *ſ.* [*granit*, Fr. from *granum*, Lat. becauſe conſiſting as it where of grains or ſmall diſtinct particles.] A compound rock, uſually conſidered as the material or nucleus of primitive mountains; conſiſting of quartz, feltſpar, and mica, and occaſionally of hornblende, ſteatites, garnet, or baſaltes. The proportion and ſize of its component parts are extremely variable, as well as their colour. The quartz, feltſpar, and mica, conſtitute the hardeſt ſort of granite, the moſt anciently known. That into which the ſhoerl enters is more ſubject to decompoſition. The granite never has any regular form, but conſiſts of enormous ſhapeleſs maſſes, of great hardneſs. In the finer ſpecimens the quartz is tranſparent; in others, generally white or grey, violet or brown. The feltſpar, white, yellow, red, green, or black, is generally the moſt copious ingredient. The mica is alſo grey, brown, yellow, green, red, violet, or black, and is commonly leaſt copious. The ſhoerl is generally black. Hence the colour of granites chiefly depends on that of the ſpar or ſhoerl. The red granites conſiſt commonly of white quartz, red feltſpar, and grey mica. The grey of white quartz, grey or violet feltſpar, and black mica. The black commonly contian ſhoerl, inſtead of feltſpar; and the green commonly contain green quartz.—For the different ſpecies, and countries where found, ſee *Granites*, under the article MINERALOGY.

GRANIV'OROUS, *adj.* [*granum*, and *voro*, Lat.] Eating grain; living upon grain.—*Granivorous* birds, as a crane, upon the firſt peck of their bills, can diſtinguiſh the qualities of hard bodies, which the ſenſe of men diſcerns not without maſtication. *Brown.*

GRAN'NA, a town of Sweden, in the province of Smaland: eighteen miles north-north-eaſt of Johnkioping.

GRAN'NAM, *ſ.* [for *grandam*.] Grandmother. Only uſed in burleſque works.—Oft my kind *grannam* told me, Tim, take warning. *Gay.*

GRANOL'LERS, a town of Spain, in the province of Catalonia: eighteen miles north-north-eaſt of Barcelona.

GRAN'SEE, a town of Germany, in the circle of Upper Saxony, and Middle Mark of Brandenbugh: fifteen miles eaſt-north-eaſt of New Ruppin, and thirty north-weſt of Berlin. Lat. 53. 2. N. lon. 30. 59. E. Ferro.

GRANSKE'VITZ, a town of Germany, in the circle of Upper Saxony, and duchy of Pomerania: twelve miles north-weſt of Rugen.

GRAN'SO, an iſland in the Baltic, near the eaſt coaſt of Sweden. Lat. 57. 46. N. lon. 16. 36. E. Ferro.

GRAN'SON, a town of Swiſſerland, and capital of a bailiwick, in the county of Neufchatel ſituated between the lake of Neufchatel and Mount-Jura: celebrated for a victory, which the Swiſs attained over Charles the Hardy, in 1476. The reformation was pretty generally received here in 1566: ſixteen miles ſouth-weſt of Neufchatel. Lat. 46. 50. N. lon. 24. 14. E. Ferro.

GRANT, otherwiſe called the river CAM, which ſee.

To GRANT, *v. a.* [from *garantir*, Fr. *Junius* and *Skinner*; perhaps, as *Minſhew* thinks, from *gratuito*, Lat. or rather from *gratia* or *gratificor*.] To admit that which is not yet proved; to allow; to yield; to concede.—If he be one indifferent as to the rebellion, they may take it for *granted* his complaint is the rage of a diſappointed man. *Addiſon.*

Suppoſe, which yet I *grant* not, thy deſire
A moment elder than my rival fire,
Can chance of ſeeing firſt thy title prove? *Dryden.*

To beſtow ſomething which cannot be claimed of right.—The God of Iſrael *grant* thee thy petition that thou haſt aſked of him. 1 *Sam.* xvii.—Then hath God alſo to the Gentiles *granted* repentance unto life. *Acts*, xiii. 18.

GRANT, *ſ.* The act of granting or beſtowing. The thing granted; a gift; a boon:

Courtiers juſtle for a *grant*,
And when they break their friendſhip plead their want.
Dryden.

Conceſſion; admiſſion of ſomething in diſpute.—This *grant* deſtroys all you have urg'd before. *Dryden.*

GRANT,

GRANT, in law, a conveyance in writing of incorporeal things, not lying in livery, and which cannot paſs by word only; as of reverſions, advowſons in groſs, tithes, rents, ſervices, common in groſs, &c. It has alſo been taken generally, for every gift and grant of any thing whatſoever. *Co. Lit.* 172. Grants are made by ſuch perſons as cannot give but by deed: he that granteth is termed the *grantor*, he to whom the grant is the *grantee*.

Grant is the regular method, by the common-law, of transferring the property of incorporeal hereditaments or ſuch things whereof no livery can be had. *Co. Lit.* 9. For which reaſon all corporeal hereditaments, as lands and houſes, are ſaid to lie in livery, and the others as advowſons, commons, rents, reverſions, &c. to lie in grant. And the reaſon is given by Bracton, *Traditio*, [livery] *nihil aliud eſt quàm rei corporalis, de perſonâ in perſonam, de manu in manum tranſlatio, aut in poſſeſſionem inductio: ſed res incorporales quæ ſunt ipſum jus rei vel corpori inhærens, traditionem non patiuntur.* Bract. l. 2. c. 18. Incorporeal hereditaments therefore paſs merely by delivery of the deed. And in ſeignories or reverſions of lands, ſuch grant, together with the attornment of the tenant, (while attornments were requiſite,) were held to be of equal notoriety with, and therefore equivalent to, a feoffment and livery of lands in immediate poſſeſſion. It therefore differs but little from a feoffment, except in its ſubject matter, for the operative words therein commonly uſed are *Dedi et conceſſi*; Have *given* and *granted*. 2 *Comm.* 316. c. 20.

It was formerly held, that by a grant of all a man's goods and chattels, bonds would paſs; now it is held the contrary, that the words *goods* and *chattels* do not extend to bonds, deeds, or ſpecialties, being things in action, unleſs in ſpecial caſes. *Co. Lit.* 152. The ſtat. 2 Geo. II. cap. 25, was found neceſſary to make the ſtealing ſuch bonds, &c. felony, as in caſe of other goods and chattels.

In all grants there muſt be a foundation of intereſt, or they will not be binding: If a perſon grants a rent-charge out of lands, when he hath nothing in the land, the grant will be void. *Perk.* 15. Though it is ſaid, if a man grant an annual rent out of land, wherein he hath no kind of intereſt, yet it may be good to charge the perſon of the grantor. *Owen Rep.* 3. A man may grant an annuity for him, and his heirs, to commence after his death, and it ſhall charge the heir. *Bac. Max.* 58. And after the grant of an annuity, &c. is determined, debt lies for the arrears; and the perſon of the tertenant will be charged. 7 *Rep.* 39. If a common perſon grants a rent, or other thing that lies in grant, without limitation of any eſtate, by the delivery of the deed, a freehold paſſes: but if the king make ſuch a grant of a rent, &c. it is void for uncertainty. *Danv. Rep.* 45 *a*. A grant to a man, with a blank for his chriſtian name, is void, except to an officer known by his office, when it muſt be averred: and it is the ſame where the grantee's chriſtian name is miſtaken. *Cro. Eliz.* 328.

Grants may be void by incertainty, impoſſibility, being againſt law, on a wrong title, to defraud creditors, &c. *Co. Lit.* 183. Such things as lie in grant, may not be granted or held without deed: and if any thing not grantable is granted with other things, the grant will be void for all. 2 *Shep. Abr.* 269. 273. Truſts and confidences are perſonal things, and may not be granted over to others in moſt caſes; as offices of truſt, and the like: but all kinds of chattels, real and perſonal, are grantable. *Plowd.* 141, 397.

If one grant any thing that lies in livery, or grant, and that is *in eſſe* at the time of the grant, in fee, or for life, and the eſtate is to begin at a day to come; this for the moſt part will be void: but a leaſe or grant for years, may be good *in futuro*; and may be to one for term of years, or years determinable on lives, and after to another, to begin at the end of that eſtate. 5 *Rep.* 1. *Dyer*, 58. Where a man hath a reverſion after an eſtate for life of land, and he grants a rent out of it; the grant is good, and will faſten upon the land after the eſtate of the tenant for life is ended: and if a perſon grant rents, &c. and a ſtranger take them at that time; in this caſe the grant will be good, for one may not be out of poſſeſſion of theſe things but at his pleaſure. *Perk.* 92, 98. If a man grants that to one, that he hath granted before to another, for the like term, &c. the ſecond grant will be made void. *Dyer*, 23. *Perk.* § 102. Grants are uſually made by theſe words, viz. *Have given, granted, and confirmed, &c.* And words in grants ſhall be conſtrued according to a reaſonable ſenſe, and not be ſtrained to what is unlikely. *Hob.* 304. Alſo it hath been adjudged, that grants ſhall be expounded according to the ſubſtance of the deed, not the ſtrict grammatical ſenſe; and agreeable to the intention of the parties. *Co. Lit.* 146, 313.

Where the principal thing is granted, the incident ſhall paſs; but the principal will not paſs by the grant of the incident. *Co. Lit.* 152. A lord of a manor cannot grant the ſame, and reſerve the court baron, it being inſeparably incident. *Co. Lit.* 313. A grant of a manor, without the word *cum pertinentiis*, will paſs all things belonging to the manor: the grant of a farm will alſo paſs all lands belonging to it; but a grant of a meſſuage paſſes only the houſe, out-houſes, and gardens. *Owen's Rep.* 51. When lands are granted by deed; the houſes which ſtand thereon will paſs; houſes and mills paſs by the grant of all lands, becauſe that is the moſt durable thing on which they are built. 2 *And.* 123. By grant of all the lands, the woods will paſs: and if a man grant all his trees in a certain place, this paſſeth the ſoil; though an exception of wood extends to the trees only, not the ſoil. 1 *Rol. Rep.* 33. *Dyer*, 19.

The grants of perſons under dureſs are void; that is, if they were made under an apprehenſion of ſome bodily hurt, or if the grantor were impriſoned without cauſe, and the grantee refuſed to releaſe or diſcharge him, unleſs he made ſuch grant. 2 *Inſt.* 483. But menacing to burn houſes, or ſpoil or carry away the party's goods, are not ſufficient to avoid the grant; for if he ſhould ſuffer what he is threatened, he may ſue and recover damages in proportion to the injury done him. *Perk.* 18. There are but few (if any) perſons excluded from being grantees: therefore a man attainted of felony, murder, or treaſon, may be a grantee; ſo the king's villein, an alien, one outlawed in a perſonal action, or a baſtard, may be grantees. A baſtard who is known to be the ſon of ſuch a one, may purchaſe, or be a grantee, by ſuch reputed name; for all ſurnames were originally acquired by reputation. *Co. Lit.* 3.

GRANTS OF THE KING.—The king's grants are matters of public record: for the king's excellency is ſo high in the law, that no freehold may be given to, nor derived from, him, but by matter of record. *Doct.* and *Stud. b.* 1. *d.* 8.—To this end a variety of offices are erected, communicating in a regular ſubordination one with another, through which all the king's grants muſt paſs, and be tranſcribed and enrolled; that the ſame may be narrowly inſpected by his officers, who will inform him if any thing contained therein is improper, or unlawful to be granted. Theſe grants, whether of lands, honors, liberties, franchiſes, or aught beſides, are contained in charters or letters patent; that is open letters, *literæ patentes*, ſo called becauſe they are not ſealed up, but expoſed to open view, with the great ſeal pendant at the bottom: and are uſually directed or addreſſed by the king to all his ſubjects at large. Theſe grants or letters-patent muſt firſt paſs by bill; which is prepared by the attorney and ſolicitor-general, in conſequence of a warrant from the crown: and is there ſigned, that is ſubſcribed at top, with the king's own ſign-manual, and ſealed with his privy ſignet, which is always in the cuſtody of the principal ſecretary of ſtate: and then ſometimes it immediately paſſes under the

great ſeal, in which caſe the patent is ſubſcribed in theſe words, *Per ipſum regem*, By the king himſelf.—Otherwiſe the courſe is to carry an extract of the bill to the keeper of the privy ſeal, who makes out a writ or warrant thereupon to the chancery, ſo that the ſign manual is the warrant to the privy ſeal, and the privy ſeal is the warrant to the great ſeal: and in this laſt caſe the patent is ſubſcribed, *Per breve de privato ſigillo*; By writ of privy ſeal. But there are ſome grants which only paſs through certain offices, as the Admiralty or Treaſury, in conſequence of a ſign-manual, without the confirmation of either the ſignet, the great, or the privy, ſeal. 2 *Blackſt. Comm. c.* 21.

The manner of granting by the king does not more differ from that by a ſubject, than the conſtruction of his grants when made. A grant made by the king at the ſuit of the grantee, ſhall be taken moſt beneficially for the king, and againſt the party; whereas the grant of a ſubject is conſtrued moſt ſtrongly againſt the grantor. Wherefore it is uſual to inſert in the king's grants, that they are made, not at the ſuit of the grantee, but *ex ſpeciali gratiâ, certâ ſcientiâ, et mero motu, regis*; of the king's ſpecial favour, certain knowledge, and mere motion; and then they have a more liberal conſtruction. *Finch L.* 100.

A ſubject's grant ſhall be conſtrued to include many things beſides what are expreſſed, if neceſſary for the operation of the grant. Therefore, in a private grant of the profits of land for one year, free ingreſs, egreſs, and regreſs, to cut and carry away thoſe profits, are alſo incluſively granted; and if a feoffment of land was made by a lord to his villein, this operated as manumiſſion, for he was otherwiſe unable to hold it. *Co. Lit.* 56. But the king's grant ſhall not enure to any other intent, than that which is preciſely expreſſed in the grant. As if he grants land to an alien, it operates nothing; for ſuch grant ſhall not alſo enure to make him a denizen, that ſo he may be capable of taking by grant. *Finch L.* 110.

When it appears from the face of the grant that the king is miſtaken, or deceived, either in matter of fact or of law, as in caſe of falſe ſuggeſtion, miſinformation, or miſrecital of former grants; or if his own title to the thing granted be different from what he ſuppoſes; or if the grant be informal; or if he grants an eſtate contrary to the rules of law; in any of thoſe caſes the grant is abſolutely void. *Freem.* 172. For inſtance, if the king grants lands to one and his heirs-male, this is merely void: for it ſhall not be an eſtate-tail, becauſe there want words of procreation, to aſcertain the body out of which the heirs ſhall iſſue: neither is it a fee-ſimple as in common grants it would be, becauſe it may reaſonably be ſuppoſed that the king meant to give no more than eſtate-tail: the grantee is therefore, if any thing, nothing more than tenant at will. *Finch*, 101 2. 5 *Rep.* 94.

To prevent deceits of the king with regard to the value of eſtates granted, it is particularly provided by ſtat. 1 H. IV. c. 6, that no grant of his ſhall be good, unleſs in the grantee's petition for them, expreſs mention be made of the real value of the lands. Other ſtatutes have alſo been paſſed relative to this ſubject. The king's grantee ſhall not forfeit for non-payment of rent, where the rent has been anſwered before proceſs iſſued. *Stat.* 21 *Jac.* 1. *c.* 25. The crown reſtrained from granting lands, except for thirty-one years, &c. forfeited eſtates excepted. *Stat.* 1 *Ann. c.* 7. Before the ſtatute *de Prerogativa Regis*, dowers, advowſons, and other things, have paſſed by the general grant of the king; but by that ſtatute they are to be granted in expreſs words. 1 *Rep.* 50. The king's grant is good for himſelf and ſucceſſors, though his ſucceſſors are not named. *Yelv.* 13.

The king may not grant away an eſtate tail in the crown, &c. And the law takes care to preſerve the inheritance of the king for the benefit of the ſucceſſor. 2 *And.* 154. A grant may not be made by the king which tends to a monopoly, againſt the intereſt and liberty of the ſubject. Nor can the king make a grant *non obſtante* any ſtatute made, or to be made; if he doth, any ſubſequent ſtatute, prohibiting what is granted, will be a revocation of the grant. *Dyer*, 52. Where the king is reſtrained by the common law to make a grant, if he makes a grant *non obſtante* the common law, it will not make the grant good: but when he may lawfully make a grant, and the law requires he ſhould be fully appriſed of what he grants, and not be deceived, a *non obſtante* ſupplies it, and makes the grant good. If the words are not ſufficient to paſs the thing granted, a *non obſtante* will not help. *Nelſ. Abr.* 904. If a grant is made by the king, and a former grant is in being of the ſame thing, if it be not recited, the grant will be void: and reciting a void grant, when there is another good, may make the king's grant void. *Cro. Car.* 143. And there may be a *non obſtante* to a former grant. 5 *Rep.* 94.

The king's grants may be void, by reaſon of incertainty; as if debts and duties are granted, without ſaying in particular what duties, &c. 12 *Rep.* 46. But where there is a particular certainty preceding, they ſhall not be deſtroyed by any incertainty or miſtake which follows: and there is a diſtinction where a miſtake of title is prejudicial to the king, and when it is in ſome deſcription of the thing which is ſupplemental only, and not material or iſſuable. 1 *Mod.* 195. The king grants the manor of D. which he has by the attainder of a certain perſon, &c. and in fact the king hath it not ſo; this grant is void. 10 *Rep.* 109.

If the king grants a meſſuage of the value of five pounds a year to A. B. and it be of the yearly value of ten pounds, the value being in the ſame ſentence with the grant, will make it void: though if it be mentioned in another ſentence it may be good. *Jenk. Cent.* 261. The grant of the king to a corporation, that they ſhall not be impleaded for lands, nor for any cauſe ariſing there, elſewhere than before themſelves, doth not bind the king where he is party: and the king by his grant cannot exclude himſelf from proſecuting pleas of the crown; for it concerns the public government. *Keilw.* 88. *Dyer*, 376.

The king cannot grant a thing intruſted to him in reſpect of his ſovereignty: as, the laſe of a church, before or after it becomes void. 2 *Rol.* 187. Nor purveyance, butlerage, priſage, &c. Nor the power to make a diſpenſation of a ſtatute. 7 *Co.* 36 *b.* So he cannot grant the lands, or goods, of a recuſant-convict, before the commiſſion returned. Nor the lands or goods of one attainted of treaſon, before his attainder. *Dyer*, 108. *a.* So the king cannot grant the proſecution or execution of any penal ſtatute to another; for it is intruſted with him as the head of the public-weal. *Co.* 37. *a.* Nor the penalty or benefit of a penal ſtatute, before it be recovered. 7 *Co.* 36. *b.* Nor any fine or forfeiture of a particular perſon, before he be convicted.—Declared by ſtat. 1 Will. and Mary, ſtat. 2. c. 2, that ſuch grant or promiſe is illegal and void.

GRANT (Francis), an eminent lawyer and judge in Scotland, deſcended from the family of the Grants of Grant in that kingdom, and born about the year 1660. The abilities he ſhowed in favour of the revolution, recommended him to an extenſive practice; in which he acquired ſo much honour, that when the union between the two kingdoms was in agitation, queen Anne created him a baronet, with a view of ſecuring his intereſt in that meaſure; and upon the ſame principle, ſhe ſoon after created him a judge, or one of the lords of ſeſſion. From this time, according to the cuſtom of Scotland, he was ſtyled, from the name of his eſtate, Lord Cullen; and the ſame good qualities that recommended him to this honourable office, were very conſpicuous in the diſcharge of it; which he continued for twenty years with the higheſt reputation. He died on March 16, 1726.

1726. His eſſays on law, religion, and education, were dedicated to George II. when prince of Wales; and his royal highneſs's ſecretary, Mr. Samuel Molineaux, wrote him a letter of thanks, in which were many gracious expreſſions, as well in relation to the piece as to its author.

GRANT'ABLE, *adj.* That which may be granted.—The office of the biſhop's chancellor was *grantable* for life. *Ayliffe.*

GRANTEE', *ſ.* He to whom any grant is made.—To ſmooth the way to popery in Mary's time, the *grantees* were confirmed by the pope in the poſſeſſion of the abbey-lands. *Swift.*

GRANTOR', *ſ.* He by whom a grant is made.—A *duplex querela* ſhall not be granted under pain of ſuſpenſion of the *grantor* from the execution of his office. *Ayliffe.*

GRANT'HAM, a rich and populous town in Lincolnſhire, ſeated on the river Witham, about thirty miles to the ſouth of Lincoln, in the road from London to York, (which was formerly the Ermine-ſtreet of the Romans,) twenty-one miles north-by-weſt of Stamford, fourteen ſouth of Newark, and one hundred and ten north-by-weſt of London. The church is a lofty ſtructure, with one of the higheſt ſtone ſpires in England, being one hundred yards high. This beautiful ſpire was materially injured by a ſtorm on the 30th of July, 1797. The inſide of the church is very handſome, and contains a fine-toned organ with a double front, and ten good muſical bells. Here are two charity-ſchools: one founded by biſhop Fox, who was born in a poor mean houſe at Ropeſley, about five miles diſtant from this place, now nearly deſtroyed by time; and here ſir Iſaac Newton received the firſt principles of literature, under the famous William Walker, then ſchoolmaſter. Grantham has a large market on Saturdays for corn, and abundance of all kinds of proviſions at a reaſonable rate. Alſo five fairs, as follow:—the fifth Monday in Lent; Holy Thurſday; July the 10th; October the 26th; and December the 17th: all for horſes, ſheep, and other cattle. The town is governed by an ancient corporation, conſiſting of an alderman, a recorder, twelve burgeſſes, a coroner, an eſcheator, twelve ſecond men, who are the common-council, and ſix conſtables, to attend on the court: the alderman and burgeſſes have power to act as juſtices of the peace in the Soke of Grantham, comprehending twelve neighbouring towns. It ſends two members to parliament, who are choſen by the freemen of the corporation. In 1793, an act of parliament was obtained to make a navigable canal from Grantham to the Trent at Nottingham, which opens a communication, by water-carriage, to moſt parts of the kingdom; and is highly beneficial to this town and neighbourhood.

GRANT'STON, a ſmall lake of United America, in the ſtate of North Carolina: twenty-five miles weſt of Exeter.

GRANTZ'WASSER, a river of Germany, in the circle of Upper Saxony, which runs into the Elſter, two miles ſouth-weſt of Muckenburg, in the marggraviate of Meiſſen.

GRAN'VILLE, [*grande ville*, Fr.] A great town; a ſurname.

GRAN'VILLE (George), baron Lanſdown, a nobleman diſtinguiſhed as a poet, born in 1667. He was entered as early as his twelfth year at Trinity college, Cambridge; and in 1679, diſplayed his juvenile propenſity to poetry by a copy of verſes addreſſed to the ducheſs of York on her viſit to the univerſity. On the acceſſion of James II. in 1685, his courtly muſe reſumed her ſtrains to celebrate the new monarch, in three ſhort pieces. When, in 1688, the invaſion of the prince of Orange was threatened, he wrote a ſpirited, though reſpectful, letter to his father, requeſting to be preſented to his majeſty as one who was ambitious to devote his life to his ſervice. After the revolution, being poſſeſſed neither of intereſt nor conſiderable fortune, he lived in retirement. During this period his dramatic works were chiefly compoſed and acted. The firſt of theſe was, The She Gallants, ſaid to have been written at an age when ſome perſons are but beginning to ſpell. He afterwards gave it in a more correct form, under the title of, Once a Lover and always a Lover; and it appears, according to the faſhion of thoſe times, to have been more diſtinguiſhed for licentiouſneſs than wit. His tragedy of Heroic Love, founded on the fable of Homer's Iliad, was acted in 1696, with great applauſe from the wits and critics. Dryden addreſſed a copy of complimentary verſes to him on the occaſion, in which the old bard adopts the young one as his ſucceſſor in fame:

But ſince 'tis nature's law, in love and wit,
That youth ſhould reign, and with'ring age ſubmit,
With leſs regret thoſe laurels I reſign,
Which, dying on my brows, revive on thine.

Dryden, however, though a poet, was no prophet; and it was beyond even his powers to raiſe mediocrity to the rank of excellence. His Maſque of Peleus and Thetis, joined to an alteration of Shakeſpeare's Merchant of Venice, and his Britiſh Enchanters, a dramatic Poem, complete the liſt of his performances in this claſs. They are ſaid to have been well received on the ſtage, but have retained no place there.

When queen Anne came to the crown, Mr. Granville was elected a member for the borough of Fowey in the firſt parliament of the new reign; and ſoon after, partaking of the ardour againſt the ambition of Louis XIV. he joined in a tranſlation of the Philippics of Demoſthenes, intended to rouſe the nation to arms under the victorious and invincible duke of Marlborough. On the change of the miniſtry in 1710, he was appointed ſecretary at war, in the room of Robert Walpole, afterwards earl of Orford. He married in that year Mary, daughter of Edward Villiers earl of Jerſey, then the widow of Thomas Thynne, eſq. He was introduced into the houſe of peers by the title of lord Landſdown, baron of Biddeford, at the memorable creation of twelve peers in one day, December 31, 1711: and his elevation was not one of thoſe which appeared extraordinary, as two peerages had become extinct in the Granville family. On account of his principles and conduct he ſtood high in the favour of the queen, who conferred upon him firſt the poſt of comptroller of the houſehold, with a ſeat in the privy-council, and then of treaſurer of the houſehold. The acceſſion of George I. put an end to the power of his party, and deprived him of his place. He remained ſteady to his former connections, and proteſted againſt the bill for attainting the duke of Ormond and lord Bolingbroke. He was, in conſequence, reckoned among thoſe who were diſaffected to the new order of things; and, upon the breaking out of the rebellion in 1715, was committed to the Tower. He was kept in impriſonment till February, 1717, when he obtained his liberty, and reſumed his ſeat in the houſe of lords. The ſtedfaſtneſs of his political principles was diſplayed in 1719, by an animated ſpeech againſt the propoſed repeal of the bill to prevent occaſional conformity, which he printed. It is ſuppoſed that a derangement in his affairs, owing to want of economy, was the cauſe of his ſpending ſome years afterwards upon the continent. During his abſence, the firſt volume of biſhop Burnet's Hiſtory of his own Times making its appearance, lord Landſdown was induced to undertake the vindication of the characters of Monk duke of Albemarle and the earl of Bath from ſome aſperſions thrown upon them in that work. On his return home, in 1732, he publiſhed a ſplendid edition of his works. He was now ſo well reconciled to the change in the ſucceſſion, that he went to court, where he was graciouſly received by queen Caroline, to whom he preſented his works, with ſome elegant lines written on the

laſt leaf. He died, a few days after his lady, on January 30, 1735, in his ſixty-eighth year. He had no male iſſue, but left four daughters. He is chiefly known as a writer of ſongs and ſhort amatory pieces, moſt of which are addreſſed to "Myra," who was the counteſs of Newburgh, his youthful flame. They are not, however, either highly poetical or ſtrongly expreſſive of feeling. Of his other pieces, Dr. Johnſon characteriſes his Eſſay on unnatural Flights in Poetry as poſſeſſing didactic merit; and his Britiſh Enchanters as lively and pleaſing, though he acknowledges that it confounds the manners of different ages. He ſpeaks favourably alſo of his Prologues and Epilogues, but they appear to riſe little above the uſual ſtyle of thoſe compoſitions.

GRAN'VILLE, a town of France, in the department of the Upper Saône, and chief place of a canton, in the diſtrict of Veſoul: three leagues and a quarter ſouth-weſt of Veſoul, and five eaſt-north-eaſt of Gray.

GRAN'VILLE, a county of the American States, in Hillſborough diſtrict, North Carolina, has the ſtate of Virginia north, and contains 10,982 inhabitants. Chief town Williamſburg.

GRAN'VILLE, a townſhip of the American States, in Annapolis county, Nova-Scotia. It lies on the north ſide of Annapolis river, on the Bay of Fundy, and is thirty miles in length; firſt ſettled from New-England.

GRAN'VILLE, a townſhip of the American States, in Hampſhire county, Maſſachuſetts, fourteen miles weſt of Springfield. It was incorporated in 1754, and contains 1979 inhabitants.

GRAN'VILLE, a townſhip of the American States, in Waſhington county, New-York, containing 2240 inhabitants, of whom 422 are electors.

GRANVILLE's RIVER, a river of the iſland of Egmont, of New Guernſey, which runs into the ſea. Lat. 10. 42. S. lon. 163. 58. E. Greenwich.

GRANULA'RIA, *ſ.* in botany, a genus of the claſs cryptogamia, order fungi. Generic characters—Fungus roundiſh, filled with granulations immerſed in a mucilage. There is but one ſpecies, called Granularia piſiformis.

GRAN'ULARY, *adj.* Small and compact; reſembling a ſmall grain or ſeed.—Small-coal, with ſulphur and nitre, proportionably mixed, tempered, and formed into *granulary* bodies, do make up that powder which is uſed for guns. *Brown.*

To GRAN'ULATE, *v. n.* [*granuler*, Fr. from *granum*, Lat.] To be formed into ſmall grains.—The juice of grapes, inſpiſſated by heat, *granulates* into ſugar. *Spratt.*

To GRAN'ULATE, *v. a.* To break into ſmall maſſes or granules. To raiſe into ſmall aſperities.—I have obſerved, in many birds, the gullet, before its entrance into the gizard, to be much dilated, and thick ſet, or as it were *granulated* with a multitude of glandules, each whereof was provided with its excretory veſſel. *Ray.*

GRANULA'TION, *ſ.* [*granulation*, Fr. from *granulate.*] The act of pouring or agitating melted metal, ſo that it may granulate or congeal into ſmall grains.—Gunpowder and ſome ſalts are ſaid to be granulated, from their reſemblance to grain or ſeed. *Quincy.*—The act of ſhooting or breaking in ſmall maſſes.—Tents in wounds, by reſiſting the growth of the little *granulations* of the fleſh, in proceſs of time harden them, and in that manner produce a fiſtula. *Sharp.*

The art of dividing metallic ſubſtances into grains or ſmall particles, is of great importance in commerce; and has of late undergone conſiderable improvement. Since the entire metals cannot be pulveriſed, becauſe not ſufficiently brittle, and ſince the mechanical ſubdiviſion of their parts is attended with much labour and difficulty, recourſe is generally had to fuſion; and the ſubdiviſion is made at the inſtant of congelation. This is done either by pouring the melted metal into water, or by agitating it in a box until the moment of congelation, at which inſtant the whole becomes converted into a powder. Theſe different proceſſes are preferable the one to the other, according to the nature of the metallic ſubſtance. Thus gold, ſilver, copper, or iron, cannot be granulated by agitation, not only becauſe the great heat required for their fuſion would be productive of inconvenience, but likewiſe becauſe they poſſeſs a great degree of tenacity when heated almoſt to melting. Lead, tin, and braſs, on the contrary, are very brittle when heated, and therefore beſt granulated in this way. Various contrivances are uſed to prevent danger and inſure ſucceſs in the ſeveral manufactories that require granulation. Copper is granulated for making braſs, by pouring it through a perforated ladle into a covered veſſel of water with a moveable falſe bottom. A compound metal, conſiſting chiefly of lead, is poured into water through a perforated veſſel of another kind, for making ſmall ſhot, in which the height above the ſurface of the fluid is ſaid to require particular adjuſtment; but in the new manufactory of patent ſhot the height is very great, being upwards of one hundred feet.

GRAN'ULE, *ſ.* [from *granum*, Lat.] A ſmall compact particle.—With an excellent microſcope, where the naked eye did ſee but a green powder, the aſſiſted eye could diſcern particular *granules*, ſome blue, and ſome yellow. *Boyle.*

GRAN'ULOUS, *adj.* Full of little grains.

GRAN'ZA, a town of Africa, in the kingdom of Mogadoxa.

GRAN'ZOW, a town of Germany, in the circle of Upper Saxony, and Ucker Mark of Brandenburgh: eight miles ſouth-eaſt of Prenzlow.

GRAPE, *ſ.* [*grappe*, Fr. *krappe*, Dutch.] The fruit of the vine, growing in cluſters; the fruit from which wine is expreſſed. For the natural hiſtory and culture of the plant, and the ſpecies from which the different kinds of wine are manufactured, ſee the article VITIS.—Thou ſhalt not glean thy vineyard, neither ſhalt thou gather every *grape* of thy vineyard; thou ſhalt leave them for the poor and ſtranger. *Lev.* xix. 10.

Here are the vines in early flow'r deſcry'd,
Here *grapes* diſcolour'd on the ſunny ſide. *Pope.*

GRAPE (HYACINTH), *ſ.* in botany. See HYACINTHUS. GRAPE (SEA), ſee EPHEDRA. GRAPE (SEA-SIDE), ſee COCCOLOBA.

GRAPE-SHOT, *ſ.* In artillery, a combination of ſmall ſhot, put into a thick canvas bag, and corded ſtrongly together, ſo as to form a kind of cylinder, whoſe diameter is equal to that of the ball adapted to the cannon.

GRA'PE-STONE, *ſ.* The ſtone or ſeed contained in the grape:

When obedient nature knows his will,
A fly, a *grape-ſtone*, or a hair, can kill. *Prior.*

GRA'PHIC, or GRAPHICAL, *adj.* [γραφικος, of γραφω, Gr. to deſcribe.] Well delineated.—Write with a needle, or bodkin, or knife, when the fruit or trees are young; for as they grow, ſo the letters will grow more large and *graphical*. *Bacon.*

He can
Find all our atoms from a point t' a ſpan:
Our cloſeſt creeks and corners; and can trace
Each line, as it were *graphic*, in the face. *B. Jonſon.*

GRA'PHICALLY, *adv.* In pictureſque manner; with good deſcription or delineation.—The hyena odorata, or civet cat, is *graphically* deſcribed by Caſtellus. *Brown.*

GRAPH'ICE, *ſ.* [from *graphic.*] The act of drawing, the act of painting to the life. *Not much uſed. Scott.*

GRAPHIS'CUS, [γραφισκος, Gr. from γραφος, a ſtyle or dart.] A ſurgical inſtrument to extract darts.

GRA'PHITES. See MINERALOGY.

GRA'PHIUM, *ſ.* [from γραφω, Gr. to write.] The ſtyle or iron pen with which the ancients wrote on plates covered with wax.

GRAPHOI'DES,

GRAPHOI'DES, *ſ.* In anatomy, the proceſs of the ſcull bone, near the baſis of the brain, ſhaped like the ſtyle of the ancients.

GRAPHOM'ETER, *ſ.* [from γραφω, to write, and μετρεω, to meaſure.] A mathematical inſtrument, uſed in taking heights and diſtances.

GRAP'NEL, *ſ.* [*grapin*, Fr.] A ſmall anchor belonging to a little veſſel. A grappling-iron with which in fight one ſhip faſtens to another.

To GRAP'PLE, *v. n.* [*grabbelen*, Dutch; *krappeln*, German.] To contend by ſeizing each other, as wreſtlers. Does he think that he can *grapple* with divine vengeance, and endure the everlaſting burnings? *South.*

Living virtue, all atchievements paſt,
Meets envy, ſtill to *grapple* with at laſt. *Waller.*

To conteſt in cloſe fight:

Sometimes, from fighting ſquadrons of each fleet,
Two *grappling* Ætnas on the ocean meet,
And Engliſh fires with Belgian flames contend. *Dryden.*

To GRAP'PLE, *v. a.* To faſten; to fix; to join indiſſolubly. *Obſolete:*

Grapple your minds to ſternage of the navy,
And leave your England as dead midnight ſtill. *Shakeſ.*

To ſeize; to lay faſt hold of.—For hippagines, veſſels for the tranſporting of horſe, we are indebted to the Salaminians; for *grappling* hooks, to Anacharſis. *Heylyn.*

GRAP'PLE, *ſ.* Conteſt hand to hand, in which the combatants ſeize each other; the wreſtlers' hold:

As when Earth's ſon, Antæus, ſtrove
With Jove's Alcides, and, oft foil'd, ſtill roſe
Freſh from his fall, and fiercer *grapple* join'd,
Throttled at length in th' air, expir'd and fell. *Milton.*

Cloſe fight.—In the *grapple* I boarded them; on the inſtant they got clear of our ſhip; ſo I alone became their priſoner. *Shakeſpeare.*—Iron inſtrument by which one ſhip faſtens to another:

But Cymon ſoon his crooked *grapples* caſt,
Which with tenacious hold his foes embrac'd. *Dryden.*

GRAP'PLEMENT, *ſ.* Cloſe fight; hoſtile embrace. *Not in uſe:*

They catching hold of him, as down he lent,
Him backward overthrew, and down him ſtay'd
With their rude hands and grieſly *grapplement*. *Spenſer.*

GRA'RAH, a town of Africa, in the country of Beni Mezzab: ſixty miles north-weſt of Guergela.

GRAS'HOLM, one of the ſmaller Orkney iſlands: half a mile ſouth of Shapinſha.

GRAS'HOPPER, *ſ.* A ſmall inſect that hops in the ſummer graſs; the locuſt: for the natural hiſtory and figures of which, ſee the article GRYLLUS. The *cicada* is often by the poets tranſlated *graſhopper*, but improperly:

Where ſilver lakes, with verdant ſhadows crown'd,
Diſperſe a grateful chilneſs all around;
The *graſhopper* avoids th' untainted air,
Nor in the midſt of ſummer ventures there. *Addiſon.*

GRA'SIER. See GRAZIER.

GRA'SKA, a town of Poland, in the palatinate of Braclaw: fifty miles ſouth-weſt of Braclaw.

GRAS'MARK, a town of Sweden, in the province of Warmeland: forty-two miles north of Carlſtadt.

GRAS'MERE, a fine lake and beautiful village in Weſtmoreland, to the weſt of Ambleſide. Its margin is hollowed into ſmall bays, with bold eminences; ſome of rock, ſome of turf, that half conceal and vary the figure of the water. From the ſhore, a low promontory projects far into the lake; and on it ſtands the village, with the pariſh church riſing in the midſt of it.

GRA'SON, an iſland in the gulph of Bothnia, near the coaſt of Sweden: fifteen miles long, and two wide. Lat. 60. 22. N. lon. 18 20. E. Greenwich.

To GRASP, *v. a.* [*graſpare*, Ital.] To hold in the hand; to gripe.—O fool that I am, that thought I could *graſp* water and bind the wind. *Sidney.*

Kings, by *graſping* more than they can hold,
Firſt made their ſubjects, by oppreſſion, bold. *Denham.*

To ſeize; to catch at:

For what are men who *graſp* at praiſe ſublime,
But bubbles on the rapid ſtream of time? *Young.*

To GRASP, *v. n.* To catch: to endeavour to ſeize; to try at.—So endleſs and exorbitant are the deſires of men, that they will *graſp* at all, and can form no ſcheme of perfect happineſs with leſs. *Swift.*—To ſtruggle; to ſtrive; to grapple. *Not now in uſe:*

See, his face is black, and full of blood;
His hands abroad diſplay'd, as one that *graſpt*
And tugg'd for life. *Shakeſpeare.*

To gripe; to encroach:

Like a miſer 'midſt his ſtore,
Who *graſps* and *graſps* 'till he can hold no more. *Dryden.*

GRASP, *ſ.* The gripe or ſeizure of the hand:

This hand and ſword have been acquainted well;
It would have come before into my *graſp*,
To kill the raviſher. *Dryden.*

Poſſeſſion; hold;

I would not be the villain that thou think'ſt
For the whole ſpace that's in the tyrant's *graſp*. *Shakeſ.*

Power of ſeizing.—They looked upon it as their own, and had it even within their *graſp*. *Clarendon.*

GRAS'PER, *ſ.* One that graſps, ſeizes, or catches at.

GRASP'ING, *ſ.* A graſp, the act of ſeizing with the hand.

GRASS, *ſ.* [ȝnæꝛ, Sax.] The common herbage of the field on which cattle feed.—Ye are grown fat as the heifer at *graſs*, and bellow as bulls. *Jer.* l. 11.

The graſſes, ſo extenſively uſeful in rural economy, are chiefly to be found in the ſecond order of the third claſs, *triandria digynia*, in the Linnæan ſyſtem. However numerous they may be, and diſtinct from each other, they generally agree in the following circumſtances; which, taken together, form the natural character of this tribe or family. The *calyx* is a glume or chaff, in moſt ſpecies compoſed of two valves, one larger and gibbous, the other ſmaller and flat. The *corolla* alſo is a bivalve glume, and is accompanied by a very ſmall, ſuperior, two-leaved, nectarium, of an oblong form. The *ſtamens* are three in number; the filaments capillary; the antheræ oblong and bicapſular. There are two *piſtilla*, which are pubeſcent, reflex, or bent back from each other, and terminated by pubeſcent ſtigmas. One *ſeed* only, or grain, ſucceeds to each flower; it has no pericarp, but is covered by the calyx, corolla, or both; it is of an oblong form, drawn to a point at both ends, and monocotyledonous, or compoſed of one lobe only.

Beſides this agreement in the fructification, graſſes are known at firſt ſight to perſons totally unſkilled in botany, by their peculiar appearance, or habit, as botaniſts call it. Their ſtalk is ſimple or unbranched, ſtraight, hollow, and jointed; their leaves are quite entire, of a long linear ſhape, acuminate or drawing gradually to a point at the end, marked with lines parallel to the midrib or middle nerve. See this exemplified in the article BOTANY, vol. iii. Plate XI. fig. 11, 12, 13. p. 265. Upon the culm or ſtalk, there is only one of theſe leaves to each joint, ariſing from a ſheath which inveſts the ſtalk uſually to a conſiderable diſtance. The ſeed, it is well known, is farinaceous or abounding in meal, and is the principal food of many tribes of birds; as the

the ſeeds of the larger ſorts, which we call corn, are of mankind. One genus of graſs, entitled *anthoxanthum*, differs from the reſt in having two ſtamens only. And there are ſeveral genera, which, having male flowers mixed with the hermaphrodites, are placed by Linnæus in his claſs *polygamia*.

Artificial graſſes, viz. clover, lucern, ſaintfoin, trefoil, &c. are moſtly leguminous plants, totally different in every reſpect from graſſes, except in being uſed as food for cattle; and are to be ſought for in the claſs *diadelphia*. All the graſſes are particularly treated of under their reſpective genera, as enumerated under the article BOTANY, vol. iii. p. 294.

It is wonderful (remarks the ingenious and benevolent Stillingfleet,) how long mankind has neglected to make a proper advantage of plants ſo important as graſſes, which in almoſt every region and country of the earth are the ſupport and ſuſtentation of cattle. The farmer and grazier, as well as moſt country gentlemen, for want of diſtinguiſhing and ſelecting the beſt graſſes for ſeed, ſuffer their paſtures to be over-run with weeds, or rendered unproductive by a ſpecies of graſs unfavourable and ill-adapted to the ſoil; whereas, by making a proper choice of ſeeds, with due care and good huſbandry, they might be ſure of the beſt crops of graſs, and in the greateſt abundance that the nature of their land will admit of. The number of the beſt graſſes are indeed comparatively ſmall; yet are there ſufficient of them to ſtock advantageouſly every kind of ſoil, and to render even the poorer ſandy lands productive.

Mr. Stillingfleet, in his Obſervations on Graſſes, has ſelected eleven ſpecies, which he recommends above all others for cultivation; viz. 1. *Vernal graſs*, common on dry hills, on ſound rich meadow land, and alſo in woods. It is very early, and a good graſs for ſheep paſtures. It is very eaſy to propagate, ſince it ſheds its ſeeds upon the leaſt rubbing. See ANTHOXANTHUM odoratum.

2. *Meadow fox-tail graſs*, found in great plenty in the beſt meadows about London, and makes very good hay. Linnæus recommends it to be ſown on grounds that have been drained. It may be gathered at any time of the year from hay-ricks, for it does not ſhed its ſeeds without rubbing. See ALOPECURUS pratenſis.

3. *Fine bent graſs*, found in great plenty on the beſt ſheep paſtures. See AGROSTIS capillaris.

4. *Mountain hair graſs*, abundant alſo in ſimilar ſituations. See AIRA montana.

5. *Silver hair graſs*, found in the ſame kinds of paſtures. See AIRA caryophyllea.

6. *Great meadow graſs*, which, together with the narrow-leaved ſort, is common in the beſt meadows, and makes both good paſture and hay. See POA pratenſis, anguſtifolia, and compreſſa.

7. *Annual meadow graſs*, which makes the fineſt turf. It grows every where by way-ſides, and on rich ſound commons. In ſome parts it is called *Suffolk graſs*. See POA annua.

8. *Sheep's feſcue graſs*, ſo much eſteemed as the ſweeteſt feed for ſheep, and common on ſheep downs. See FESTUCA ovina.

9. *Purple feſcue graſs*, found on ſheep downs, with fine bent and ſilver hair-graſs. See FESTUCA rubra.

10. *Flote feſcue graſs*, a very fattening graſs when growing in water. See FESTUCA fluitans.

11. *Creſted dog's-tail graſs*, proper for deer in parks, and for ſheep; and making a fine turf upon dry ſandy or chalky ſoils. See CYNOSURUS criſtatus.

Beſides theſe, Mr. Stillingfleet mentions as ſecondary kinds, the following:

12. *Yellow oat graſs*, eaſily propagated for ſheep, and not uncommon in good meadows. See AVENA flaveſcens.

13. *Perennial darnel*, or *ray graſs*, well known and generally cultivated all over England. See LOLIUM perenne.

The above graſſes come into ear between the beginning of May and the middle of June, in the following order: viz. 1. Annual meadow. 2. Meadow fox-tail. 3. Vernal. 4. Great meadow. 5. Narrow-leaved meadow. 6. Creſted dog-tail. 7. Sheep's feſcue. 8. Purple feſcue. 9. Fine bent. 10. Marſh bent. 11. Silver hair. 12. Yellow oat. 13. Flote feſcue.

The late ingenious Mr. Curtis, who beſtowed much attention, and tried many experiments, on this ſubject, remarks, that although it is an opinion which has long prevailed among many of the more enlightened agriculturiſts of the preſent age, that much of our meadow and paſture land may be rendered far more valuable than it is at preſent, by the introduction of ſome of our beſt graſſes; that although Stillingfleet and others have endeavoured to excite the huſbandman to collect and cultivate graſs-ſeeds, by writings fraught with the ſoundeſt reaſoning; and the Society for the Encouragement of Arts, Manufactures, and Commerce, have attempted to attract him by the offers of well-directed premiums; yet hitherto they have not been productive of the deſired effect: ray-graſs, with very few exceptions, continuing ſtill to be the only graſs whoſe ſeeds can be purchaſed for laying down land. But, this graſs not being adapted to every ſoil and ſituation, Mr. Curtis has judiciouſly ſelected ſix of the beſt ſorts of graſſes, adapted to ground of different quality. 1. Anthoxanthum vernum, or ſweet-ſcented vernal graſs, which is the earlieſt of all our graſſes next to Cynoſurus cœruleus: it will grow in any ſoil or ſituation; cattle are fond of it: but it is not ſo productive in point of crop as ſome others, and it yields the feweſt ſeeds.

2. Alopecurus pratenſis, or meadow fox-tail graſs, is almoſt as early as the foregoing, much larger, and of quicker growth; conſequently much more productive.

3. Poa pratenſis, or ſmooth-ſtalked meadow graſs. The foliage ſhoots early, but the flowering-ſtems are not produced ſo ſoon as the foregoing. Where early graſs paſturage is deſired, it cannot better be obtained than by a combination of theſe three; if crop be an object, this will have the preference. Smooth-ſtalked meadow graſs rather affects a dry ſituation, and hence keeps its verdure in long-continued dry weather better than moſt others; it will grow on the top of a wall, but more luxuriantly in a rich meadow: it has a root which creeps like couch graſs, and is almoſt as difficult to extirpate; it ought therefore to be introduced with caution where the paſturage is not intended to be permanent.

4. Poa trivialis, or rough-ſtalked meadow-graſs, loves moiſture and a ſheltered ſituation; hence, though few graſſes are more productive or more adaped to hay or paſturage, it is tender, and liable to be injured by ſevere cold or exceſſive drought.

5. Feſtuca pratenſis, or meadow feſcue graſs, comes neareſt to ray graſs, to which however it is much ſuperior. It is ſtrictly perennial, very hardy, and will thrive not only in very wet, but alſo in dry, ground; it produces more ſeeds than any of the others, which are eaſily gathered, and readily grow.

6. Cynoſurus criſtatus, or creſted dog's-tail graſs, grows in dry ſituations, and will not thrive in wet meadows: the ſtems are wiry, and the roots penetrating to no great depth, in dry ſummers it becomes little better than an annual.

Of the above ſix graſſes the ſecond and fourth are fitteſt for moiſt land; the firſt and fifth for land moiſt, or moderately dry; the third and ſixth for dry paſture. The order of their flowering is as follows: 1. Vernal. 2. Meadow fox-tail. 3. Smooth-ſtalked meadow. 4. Rough-ſtalked meadow. 5. Meadow feſcue. 6. Creſted dog's tail.—To theſe ſix graſſes we may add: 7. Avena elatior, or tall oat graſs. Early, very productive, and producing a plentiful aftermath.

8. Avena flaveſcens, or yellow oat graſs; affecting dry ſoils, rather early, and tolerably productive.

9. Bromus

9. Bromus mollis, or ſoft brome graſs: as an early graſs it might perhaps be cultivated to advantage; but with other graſſes it ſheds the ſeeds and withers, before the whole is ready for mowing.

10. Cynoſurus cæruleus, or blue dog's-tail graſs, is the earlieſt of all our graſſes, but not productive, or of a good quality.

11. Dactylis glomeratus, or rough cock's-foot graſs, is a rough coarſe graſs, extremely hardy and productive, common in orchards and meadows, and rather early.

12. Feſtuca ovina, or ſheep's feſcue graſs; native of dry elevated heaths and commons; a ſmall plant even in a rich ſoil.

13. Hordeum murinum, wall barley graſs, or ſquirrel-tail graſs. Common by walls and the ſide of paths. Among hay very injurious to horſes, by the awns or beards of the ears ſticking in their throats.

14. Hordeum pratenſe, or meadow barley graſs; taller and more delicate; ſometimes forming great part of the crop in good meadows; neither early nor very productive: it may poſſibly have the ſame bad quality as the foregoing.

15. Holcus lanatus, or meadow ſoft graſs. Hardy and productive; flowering a month later than the Anthoxanthum; foliage ſoft and woolly.

16. Holcus mollis, or creeping ſoft graſs. Grows well in ſandy ſoils, and bears drought.

17. Lolium perenne, or ray graſs; wiry with little foliage in upland paſtures; but in rich meadows its foliage is abundant and of rapid growth.

18. Poa annua, or dwarf meadow graſs; perpetually flowering and ſeeding moſt rapidly, unleſs prevented by cold; growing in almoſt any ſoil and ſituation, but never acquiring any great height; its foliage is tender and grateful to cattle, but liable to be killed by winter's froſt and ſummer's drought.

19. Phleum pratenſe, or meadow cat's-tail graſs; in wet ſituations very productive, but coarſe and late; it has no excellence which Alopecurus pratenſis does not poſſeſs in an equal or ſuperior degree.

20. Triticum repens, creeping wheat graſs, quick, quich or couch graſs. Too well known to farmers and gardeners as a moſt troubleſome and unprofitable graſs, though its foliage is early.

From the preceding liſts, Dr. Dickſon, in his "Syſtem of Modern Huſbandry," publiſhed in 1805,—(a work of abundant information, highly deſerving the attention of every agriculturiſt,) has ſelected the following as the moſt uſeful and beneficial to the generality of farmers and graziers, viz. the Sweet-ſcented Vernal Graſs; Meadow Fox-tail Graſs; Smooth-ſtalked Meadow Graſs; Rough-ſtalked Meadow Graſs; Meadow Feſcue Graſs; Sheep's Feſcue Graſs; Hard Feſcue Graſs; Creſted Dog's-tail Graſs; Ray or Rye Graſs; Meadow Soft Graſs, or Yorkſhire White; Rough Cock's-foot Graſs; Tall Oat Graſs; Meadow Cat's-tail or Timothy Graſs; the valuable artificial graſſes.

Sweet-scented Vernal Grass.

This graſs comes early into bloſſom, and is of courſe valuable as ſpring graſs, and alſo for its readineſs to grow in moſt kinds of ſoil and ſituation, being found in bogs, in woods of low growth, or which have had the underwood removed, in water meadows, and in dry paſtures; but in point of crop it is not ſo productive as ſome, yet more than ſo others: cattle are very fond of it, and it is the only graſs of this climate which is ſtrongly odoriferous; the agreeable ſcent of new-made hay being produced almoſt entirely by it; and the green leaves, when bruiſed, readily impart this odour to the fingers, by which means the foliage may conſtantly be known; and it may be readily diſtinguiſhed when in bloſſom, by its having only two threads or ſtamina to each flower. It thrives well even on poor ſandy ſoils.—See Anthoxanthum odoratum.

Meadow Fox-tail Grass.

This graſs ſends forth its ſpike almoſt as ſoon, and in ſome ſituations full as early, as the Sweet-ſcented Vernal: conſequently it is equally valuable as an early ſpring graſs; and as it is larger and quicker in its growth, it is of courſe much more productive: it ſhoots rapidly after mowing, producing a very plentiful aftermath: and where the land is rich, and two crops are not thought too much for it to bear, of all the graſſes of this climate it appears to be the moſt favourable for ſuch a purpoſe, and ought to form a principal part of the crop in ſuch caſes. Its foliage may ſeem coarſe to ſome; but it muſt be kept in mind that no graſs can be productive that is not in ſome degree coarſe. If it be mown early, juſt as it comes into bloom, though the leaves are large, the hay will not be coarſe. In general, the great advantage proceeding from the earlineſs of theſe two graſſes is entirely loſt in thoſe diſtricts where hay-making begins at a late period, and where a crop of indiſcriminate herbage is waited for by the cultivator. It is in ſome meaſure diſtinguiſhed by the largeneſs of its foliage, and by its producing a ſoft ſpike on a long ſtalk about the beginning of May. This is ſome objection to it, as the ſeed cannot be always obtained in plenty. On a ſituation where it was perfectly eſtabliſhed with thick herbage, it was found by Mr. Secretary Young to produce but few ſeed-ſtems.

In reſpect to the places of its growth, it is more confined than the firſt ſort, growing naturally in a moiſt ſoil only: on this account ſome think it beſt adapted for improving ſuch wet grounds as may be newly drained, or for forming or meliorating meadows that have a moiſt bottom, and are not apt to be burnt up in dry ſummer ſeaſons. Others, however, ſuppoſe that there is ſcarcely a better graſs for moiſt loams and clays, as it is extremely early; and abides nine or ten years on ſoils upon which the Meadow Feſcue gives way to thoſe of other kinds. It has likewiſe by ſome been found hardier againſt froſt and exceſſive cold. Others ſpeak of it as excellent, both for paſture and hay, as being highly productive, and the firſt as a dairy graſs. It has been obſerved that if ſown alone, and cut for hay, it dries in far leſs time than moſt other graſſes, and requires to be ricked ſooner, or its quality will be injured by too long expoſure. The ſeeds are eaſily collected, and by being ſown before the roller in the ſpring ſeaſon, will greatly improve moſt kinds of meadow and paſture lands. See Alopecurus pratenſis.

Smooth-stalked Meadow Grass.

This graſs alſo begins to ſhoot and to aſſume a beautiful verdure at an early period in the ſpring; but the flowering ſtems are not produced ſo ſoon, by a week at leaſt, as thoſe of the laſt: this ſlight difference, in point of carlineſs of flowering, does not, however, prevent it from being properly ranked with the two preceding graſſes. Where early paſturage is the great object of the cultivator, it cannot be better obtained than by a judicious combination of theſe three graſſes. If quantity of crop be at the ſame time in view, the Meadow Fox-tail Graſs ſhould predominate in a conſiderable degree. It in ſome meaſure prefers a rather dry than a moiſt ſituation, on which account it keeps its verdure in long-continued dry ſeaſons better than moſt other ſorts; but it is capable of thriving well in either ſituation, though more luxuriantly in rich meadows. It is conſidered as a highly valuable graſs, becauſe all animals are fond of it; and it affords ſome of the beſt hay, as well as the richeſt paſturage. In addition to its other qualities, it has the property of abiding continually in the ſame ground, while moſt other ſorts are liable to change. It is readily diſtinguiſhed from the Common Meadow Graſs, as it has a ſmooth ſtalk, while the other has a rough one, which is perceptible when drawn betwixt the thumb and finger, and which pro-

ceeds from little ſharp points, viſible when the ſheath of the leaf, which covers the ſtalk, is magnified: beſides, the latter has a long pointed membrane at the baſe of the leaf, while in the former it is a ſhort blunt one. And further, it only throws up flowering-ſtems or bents once in a ſeaſon; from which peculiarity, combined with its hardineſs and verdure, it appears well ſuited for the lawns or graſs-plats of pleaſure-grounds. This ſcantineſs of producing flowering ſtems is however unfortunate, inaſmuch as it renders its ſeed very ſcarce, and will not allow it to produce abundantly, even when ſown with this particular view.—See POA pratenſis.

ROUGH-STALKED MEADOW GRASS.

Though this graſs has much ſimilarity to the preceding in its appearance, eſpecially in the mode of flowering, it differs eſſentially in its qualities, as the former is chiefly found in dry paſtures, while the latter principally occurs in water-meadows. It delights in ſtrong loamy and clayey ſoils, and in ſituations that are ſheltered; on which account, though there are few more productive, or better adapted for the purpoſe of hay or paſturage, in dry ſoils it is tender, and liable to be injured by ſevere cold or froſt; and in moiſt rich ground it has been obſerved to grow tall, while in poor land it has been found equally diminutive and unproductive. On the continent it is greatly eſteemed both for dry paſtures and water-meadows, as it multiplies much by ſeed as well as root. It is therefore neceſſary to permit the ſeeds to fall, before mowing, in order to preſerve the quantity undiminiſhed. The produce is admirable for the feeding of all ſorts of cattle. It is, however, conſidered by ſome as inferior to the laſt ſort, from its property of going off after being cut, being ſupplanted by thoſe of the bent kind: but its radical as well as ſtem-leaves grow larger.—See POA trivialis.

MEADOW FESCUE GRASS.

This graſs comes near in its appearance to Ray Graſs, but to which it ſeems greatly ſuperior, at leaſt for the purpoſe of improving meadows; as being larger, and more productive of foliage. It is ſtrictly perennial and hardy, thriving well both in wet and dry grounds; and it abounds in the beſt meadows, in the beſt hay diſtricts: in ſhort, it ſeems well calculated to ſupply the defects of Ray Graſs. Beſides, it has the quality of producing more ſeeds than moſt of the other ſorts of natural graſſes, which are eaſily gathered, and grow readily. It is however inferior to the three firſt ſorts in one property, which is, that it does not produce its flowering-ſtems ſooner than about the middle of June, which is a fortnight or more later than the ſecond of them; though it cannot be conſidered as a late graſs, ſince thoſe of the bent and ſome other ſorts flower later by three weeks or more. Upon the whole, few of the natural graſſes merit the attention of the farmer and grazier more than this; it being of certain growth, eaſy culture, abundantly productive, and remarkably ſweet, in almoſt all deſcriptions of meadow or paſture land.—See FESTUCA pratenſis.

SHEEP'S FESCUE GRASS.

This ſpecies has been much valued both for the purpoſes of paſture and hay; ſheep and other ſorts of live ſtock, being very fond of it, are ſoon rendered fat in paſtures where it prevails. But from its often affording in dry heathy ſituations, and commons, rather a ſcanty produce, and its foliage being ſmall, it has been diſcouraged as a hay graſs. It is nevertheleſs ſaid to be capable of thriving on any ſoil, with proper care and culture; but beſt on thoſe of the light ſpongy kinds, ſince it can live with leſs moiſture than moſt other graſſes. And it is aſſerted to be one of the excellencies of this graſs, that it will eſtabliſh itſelf upon ſuch ſoils as ſcarcely any other plant can be made to live on; and is hence of much utility in clothing barren ſpots, that might otherwiſe have remained uncovered for a great length of time. Some agriculturiſts erroneouſly obſerve, that if it were ſown on rich moiſt ſoils, the graſſes and other plants, which are natural to ſuch lands and ſituations, would ſoon overpower it, and in a very ſhort time there would ſcarcely be a blade remaining on the ground; and were it for the purpoſe of ſheep-feed to be ſown on the high downs and heath lands, the animals would ſtarve upon them in dry ſummer ſeaſons. But this is certainly a great miſtake. Where a cloſe matted turf, without a great produce, is required, it will ever be found uſeful.—See FESTUCA ovina.

The *Hard Feſcue* is an early and more productive graſs, though with fine foliage; and grows abundantly on downs, and in rich meadows. It is well adapted for being combined with other graſſes in forming ſheep paſtures; and it helps to conſtitute the beſt hay.—See FESTUCA duriuſcula.

CRESTED DOG'S-TAIL GRASS.

This ſpecies is much recommended as a favourite and wholeſome food for ſheep. It is found in the foundeſt and richeſt paſtures, but grows beſt in dry ſituations, and will not thrive in meadows that are very moiſt. It flowers nearly at the ſame time as the Meadow Feſcue Graſs, but is not very abundant in foliage. The appearance of its bents in poor, high, moiſt paſtures, ſuggeſts an idea of its being an indifferent plant. But its abounding in moſt of the richeſt grazing paſtures in different parts of the kingdom, and its being in ſome the principal herbage, beſides that the butter made from paſtures where this graſs chiefly abounds being eſteemed excellent in flavour, proves that it is a valuable graſs. As its flowering ſtems and heads are ſeldom conſumed by cattle, its ſeeds may be collected, even where the paſtures are fed, with great eaſe and facility. On the continent it is in high eſtimation as a paſture graſs; yet from the fibrous nature of its roots, not admitting the running down much into the ſoil, there is danger of its being deſtroyed in dry ſummer ſeaſons. Since it abounds greatly in the beſt paſtures, and is a blade-graſs that ſhoots up the firſt after the land has been mown, its thickeſt tufts are ſaid to afford much food for ſheep in the time of ſnow and ſevere weather in the winter ſeaſon. Thoſe who are not accuſtomed to diſtinguiſh the difference of graſſes with botanical accuracy, may deſpiſe it, as of an improper and uſeleſs kind; but the ſheep and the ox, as better judges, will ſoon convince them of its importance. From the rapidity of its growth it is apt to get coarſe, if not cut down in proper time. The ſeed is ſmall and fine, yet may be obtained with facility by paſſing the ſtem in a tight manner through the hand.—See CYNOSURUS criſtatus.

RAY OR RYE GRASS.

This graſs is in conſtant cultivation, though it is deficient in ſome of the properties requiſite for meadow or paſture lands. The objection on the ſcore of its producing little more than flower-ſtems or bents, is ſaid to be only found valid when it grows in upland paſtures and dry ſituations: in rich and moiſt meadows its foliage is more abundant; and it ſeems probable that it is highly nutritious in feeding cattle: its foliage is of a rapid growth, the flowering ſtems continually ſhooting forth. It is, however, a graſs that varies greatly, according to ſituation and circumſtances. It ſeems beſt adapted to loamy and ſandy ſoils; but it will ſucceed on all except ſtiff clay, and even on that it may be grown. On the richer ſorts of the two firſt kinds of land, it frequently turns out both a good vernal and permanent paſture graſs, when properly mixed with other ſorts; and it is particularly adapted to the feed of ſheep. It is not, however, ſo early as ſome of the graſſes deſcribed above. As a ready means of converting

1. Sweet-scented vernal Grass. 2. Meadow Fox-tail Grass. 3 Smooth-stalked meadow Grass. 4. Rough-stalked meadow Grass. 5 Meadow fescue Grass. 6. Sheeps fescue Grass.

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GRASS.

7. Hard fescue Grass. 8. Crested Dogs-tail Grass. 9. Ray or Rye Grass. 10. Meadow soft Grass. 11. Rough Cocks-foot Grass. 12. Tall oat Grass. 13. Meadow Cats-tail Grass.

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ing arable into graſs, this ſpecies is invaluable. When land is in a proper ſtate of cultivation, ray-graſs, united with white clover, will form a perfect ſward the latter end of the ſecond year after it is ſown. For making into hay, it is neceſſary to cut it at a period previous to its being ſo ripe as to have perfected its ſeed, and changed its green colour; for in this caſe a great part of the juices of the plant, which conſtitute the nutriment it is to afford, will be abſorbed, and the ſtalk becomes a ſpecies of ſtraw, with all its nutritive properties diminiſhed. When it is made into hay, perſons not acquainted with its qualities are apt to object to its apparent coarſeneſs, which proceeds from its conſiſting almoſt entirely of flowering-ſtems, the Ray-graſs having a comparatively ſmaller proportion of leaves than moſt other graſſes. Whether this be a defect, or a merit, will depend upon a ſolution of this queſtion: Do the ſtems and flowering parts of graſs, or the leaves, taken weight for weight, contain the greater proportion of nutriment? It does not appear that this queſtion has been determined by experiments inſtituted for the purpoſe; but it ſeems probable, from the ſtems being ſo much ſweeter than the leaves, which is particularly perceptible upon chewing them when about half dry, and from thoſe vegetables which contain much ſaccharine matter being particularly nutritious, that the greater proportionate quantity of nutriment will be found to reſide in the ſtalks; and if ſo, the advantages of Ray-graſs become deciſive. But, however this be, it is certain that, ſuppoſing wet weather comes on during the proceſs of hay-making, the firſt part of the graſs that decays is the leaf, which ſoon turns yellow, and then black, loſing all its nutritive properties; in which caſe, it is evident that almoſt the whole nutriment contained in the hay muſt reſide, excluſively, in the flowering-ſtalks. Ray-graſs therefore has, in unfavourable hay ſeaſons, an advantage over all others, inaſmuch as, from having fewer leaves, it is not ſo apt to be injured by a continuance of rain: and it is beſides, when in the cocks, more acceſſible to the air and wind, from lying more open and light; and conſequently not ſo apt to heat and mould as other graſſes in ſimilar ſituations. Hence it appears that Ray-graſs poſſeſſes the following valuable properties: 1. That there are but few graſſes which come ſo early in the ſpring. 2. That there are none better reliſhed by cattle, or more nutritive. 3. That it has the power of reſiſting the effects of bad weather in a greater degree than other graſſes. 4. That there is a greater facility in collecting its ſeed, and ſtocking land therewith, than of any other graſs at preſent in cultivation.—See LOLIUM perenne.

MEADOW SOFT GRASS, OR YORKSHIRE WHITE.

This graſs is common in meadows and paſtures, and is both hardy and productive of foliage, but flowers much later than the firſt of the above graſſes: its foliage is ſoft and woolly; whence its characteriſtic name. It thrives beſt on ſoils of the moiſt kinds; but may be grown on almoſt any that are not very dry, and in poor condition; yet even on theſe it is ſometimes met with. By ſome cultivators it is chiefly adviſed to be made uſe of with a view to ſheep paſture, as not being found equally good for all other kinds of ſtock. For all purpoſes, however, it is found to anſwer beſt when kept very cloſely fed. It vegetates in a quick manner, and hence affords good ſheep-feed in the winter ſeaſon.—See HOLCUS lanatus.

ROUGH COCK'S-FOOT GRASS.

This is a coarſe ſpecies, though very hardy and productive. It is commonly found in meadows; and is rather early in its growth. Some condemn it as not only an indifferent graſs, but one that is often rejected by cattle. Others, however, on the authority of experience, conſider it as highly valuable on moiſt loams, where the bottom is of a clayey nature, and where graſſes that are of a finer kind are liable to be overpowered and deſtroyed by plants more common to ſuch ſoil. When it is kept cloſely fed down, it affords good paſturage for ſheep; but when this is neglected, like many other graſſes, it becomes coarſe: if ſown with red clover, in the proportion of two buſhels of the graſs-ſeeds to ten pounds of the clover, it forms a better ſward; and as the latter wears out or diſappears, the former reſumes its place, and thickly covers the land. It is alſo a graſs that vegetates better during the winter ſeaſon than many others. It affords much ſeed, and has therefore been found highly beneficial in affording early ſpring feed for ſheep.—See DACTYLIS glomerata.

TALL OAT GRASS.

This is almoſt every where found abundantly in meadows. It is indeed coarſe; but it is early and productive, and affords a plentiful aftermath. In value it approaches the Meadow Fox-tail, for which it may, in many caſes, be made a good ſubſtitute. It is cultivated on the continent with advantage. This, like the preceding graſs, is found the moſt beneficial when retained in a cloſe ſtate of feeding. It makes good hay, and experiment has ſhown it to afford a greater weight of produce than moſt other graſſes. See AVENA elatior.

MEADOW CAT'S-TAIL, OR TIMOTHY GRASS.

This graſs ſucceeds beſt in all moiſt ſoils and ſituations, is very productive, but coarſe and late. It poſſeſſes no advantages over the Meadow Fox-tail. It is the moſt proper for clays, the moiſter kinds of loams, and thoſe of the peat moor. On theſe ſoils it has been found very uſeful, eſpecially when kept cloſely fed down by ſheep. According to the accounts of travellers in America, it conſtitutes the principal ſupport of cattle and other animals, in their deep ſavannahs and lands of the natural meadow kind. It affords plenty of feed, of which a buſhel is ſaid to be ſufficient, when mixed with thoſe of other ſorts, to ſow four or five acres of land. This ſeed is now commonly imported from America.—See PHLEUM pratenſe.

Of thoſe great and valuable aids to the ſuſtentation of ſheep and cattle, called ARTIFICIAL GRASSES, Dr. Dickſon recommends the higheſt regard to the Dutch or white clover; for which ſee TRIFOLIUM *repens*: the marl-clover or cow-graſs; for which ſee TRIFOLIUM *medium*: the trefoil or black non-ſuch; for which ſee MEDICAGO *lupulina*: the bird's-foot trefoil; for which ſee LOTUS *corniculatus*: the true red clover; for which ſee TRIFOLIUM *pratenſe*: the French clover or ſaintfoin; for which ſee HEDYSARUM *onobrichis*: and the luxuriant lucern; for which ſee MEDICAGO *ſativa*; with the correſpondent Engravings to each genus.—And for the moſt improved methods of cultivation, both of the natural and artificial Graſſes, ſee the article HUSBANDRY.

To GRASS, *v. n.* To breed graſs; to become paſture:

Land arable, driven, or worn to the proof,
With oats ye may ſow it, the ſooner to *graſs*,
More ſoon to be paſture, to bring it to paſs. *Tuſſer.*

GRASS'-COCK, *ſ.* A ſmall heap of mowed graſs lying the firſt day to dry.

GRASS'-GREEN, *adj.* Green with graſs:

Ah! not the nymph ſo blooming and ſo gay,
That led the dance beneath the feſtive ſhade:
But ſhe, that in the morning of her day
Intomb'd beneath the *graſs-green* ſod was laid. *Shenſt.*

GRASS'-HEARTH, *ſ.* In the feudal law, the graſing or turning up the earth with a plough; whence the cuſtomary ſervice for the inferior tenants of the manor of Amerſden,

Amerſden, in Oxfordſhire, to bring their ploughs and do one day's work for their lord, was called *graſs-hearth* or *graſs-hurt*: and we ſtill ſay the ſkin is graſed, or ſlightly hurt; and a bullet graſes on any place, when it gently turns up the ſurface of what it ſtrikes upon. *Paroch. Antiq.* 496.

GRASS'-PLOT, *ſ.* A ſmall level covered with ſhort graſs.—The part of your garden next your houſe ſhould be a parterre for flowers, or *graſs-plots* bordered with flowers. *Temple.*—See the article HORTICULTURE.

GRASS WEEK, *ſ.* Rogation week, ſo called in the inns of court and chancery.

GRASSA'NO, a town of Italy, in the kingdom of Naples, and province of Baſilicata: eighteen miles eaſt-ſouth-eaſt of Cirenza.

GRASSA'TION, *ſ.* [from the Lat. *graſſor*, to aſſail.] The act of robbing; the act of laying waſte. *Bailey. Not ſufficiently authoriſed.*

GRASSE, a town of France, and principal place of a diſtrict, in the department of the Var; before the revolution the ſee of a biſhop, ſuffragan of Embrun. The principal trade of the inhabitants is in dry fruit, olives, oil, perfumes, and tanned leather: five leagues weſt-ſouth-weſt of Nice, and three weſt-north-weſt of Antibes. Lat. 43. 42. N. lon. 24. 35. E. Ferro.

GRASSE (La), a town of France, and principal place of a diſtrict, in the department of the Aude, ſituated on the river Orbien: fourteen miles ſouth-eaſt of Carcaſſone, and eighteen ſouth-weſt of Narbonne.

GRASSEL'LA, a town of France, and principal place of a diſtrict, in the department of the Aude: ſix leagues and three quarters ſouth-weſt of Narbonne, and eight and a half north-north-weſt of Perpignan. Lat. 43. 5. N. lon. 20. 17. E. Ferro.

GRASSE'NA, a town of Italy, in the duchy of Aoſta: eighteen miles eaſt of Aoſta.

GRAS'SETH ORTH, a town of Germany, in the archduchy of Auſtria: ſix miles ſouth-eaſt of Voglapruck.

GRASS'INESS, *ſ.* The ſtate of abounding in graſs.

GRAS'SY, *adj.* Covered with graſs; abounding with graſs:

Ne did he leave the mountains bare unſeen,
Nor the rank *graſſy* fens delights untry'd. *Spenſer.*

GRAS'WINKEL (Theodore), a learned civilian of the ſeventeenth century, born at Delft. He wrote various works upon legal and political ſubjects; by which he acquired ſo much reputation, that he was made fiſcal of the domains of the ſtates of Holland, and ſecretary of the bipartite chamber on the part of the ſtates-general. He died at Mechlin in 1666, and was buried in the great church at the Hague. In 1634 he publiſhed a work entitled, *Libertas Veneta, ſeu Venetorum in Se & Suos imperandi Jus*; and in 1644 he defended the republic of Venice in a diſpute with the duke of Savoy concerning precedence. For theſe ſervices that republic created him a knight of St. Mark. In 1642 he publiſhed a work, *De Jure Majeſtatis*; deſigned as a confutation of the popular maxims of Buchanan. This was dedicated to Chriſtina queen of Sweden, a great aſſertor of regal privileges. In a work entitled, *Maris Liberi Vindiciæ*, he maintained the liberty of the ſea againſt a Genoeſe named Burgus, who had followed the ſteps of Seldeh. He wrote a treatiſe in 1660, entitled, *De Preludiis Juſtitiæ & Juris*, together with a diſſertation, *De Fide Hereticis et Rebellibus Servanda*, intended to refute a Portugueſe Jeſuit. He alſo compoſed various Latin poems; and he wrote ſome works in the Dutch language, among which was a treatiſe On the Sovereignty of the States of Holland, 2 vols. 4to.

GRAT'CHI, a town of Ruſſia, in the country of Coſacs: twenty miles north-weſt of Tzaritzin.

GRATE, *ſ.* [*crates*, Lat.] A partition made with bars placed near to one another, or croſſing each other: ſuch as in cloiſters or priſons.—A fan has on it a nunnery of lively black-eyed veſtals, who are endeavouring to creep out at the *grates*. *Addiſon.*

Out at a little *grate* his eyes he caſt
Upon thoſe bord'ring hills, and open plain. *Daniel.*

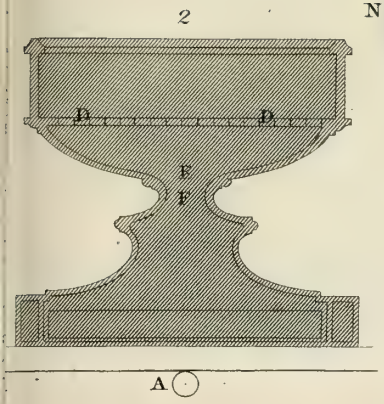
The range of bars within which fires are made.—An old faſhioned *grate* conſumes coals, but gives no heat. *Spectator.*

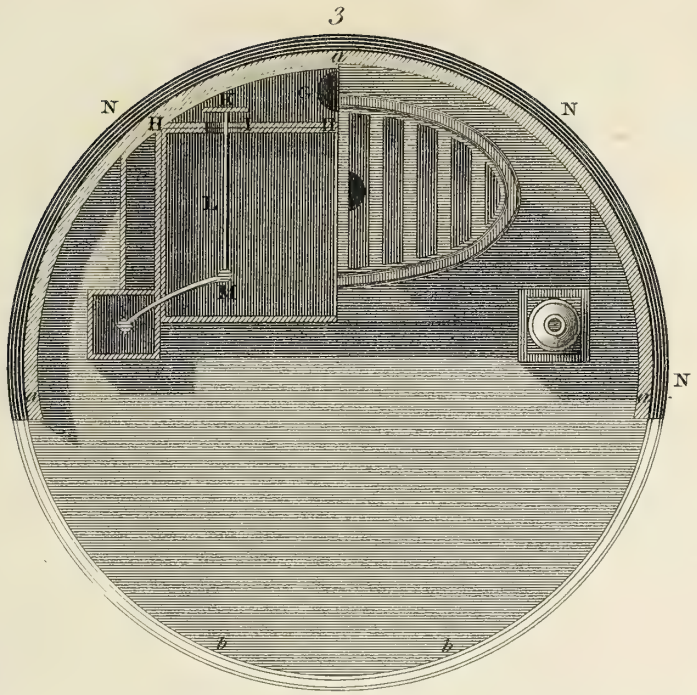
Among the numerous claſſes of new and valuable improvements, few are pregnant with more intereſt than thoſe which appertain to Grates and Stoves. For many of theſe the public are indebted to the philoſophic count Rumford; and, for one of very general utility, to Mr. James Burns of Glaſgow, which has been honoured by the protection of his majeſty's letters patent. The principal merit of Mr. Burns's invention, and it is by no means a trivial one, conſiſts in his contriving to maintain the combuſtion of the fuel in an *open* ſtove, without employing for that purpoſe the air of the room in which they are placed. The heat liberated and thrown out into the apartment is thus prevented from being waſted and hurried up the chimney, as is unavoidably the caſe in the common method, where the combuſtion is maintained by air from the apartment, the waſte of which is ſupplied by exterior cold air that comes pouring in at the bottom of the doors and the ſides of the windows, thereby undoing a great part of the effect produced by the fire.

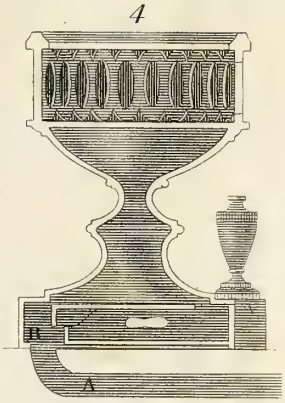
To prevent this waſte, the air that maintains the fire in Mr. Burns's grates, or in others to which his improvements are applied, ſhould be brought through a tube from the outſide of the houſe, or be made to paſs from the outſide of the houſe, between two of the joiſts, where the floors and ceilings are found enough to allow this, ſo as to be brought to the bottom bars of the grate, without having any communication with the interior air of the room, while at the ſame time the grates, and parts connected with them, ſhould be ſo conſtructed, that, when the fire is not wiſhed to be ſupplied with cold air from the outſide of the houſe, the paſſage may be ſhut more or leſs perfectly by means of a valve, a ſmall door, a cock, or any ſimilar contrivance. When convenience does not admit of the air-tube being carried to the outſide of the houſe, if carried to a cellar, larder, ſtair-caſe, or any lumber-room, the ſame end will be gained; with this further advantage, that ſuch cellar, larder, &c. will thereby be well ventilated, and prevented from acquiring or retaining any unhealthy or diſagreeable ſmells.

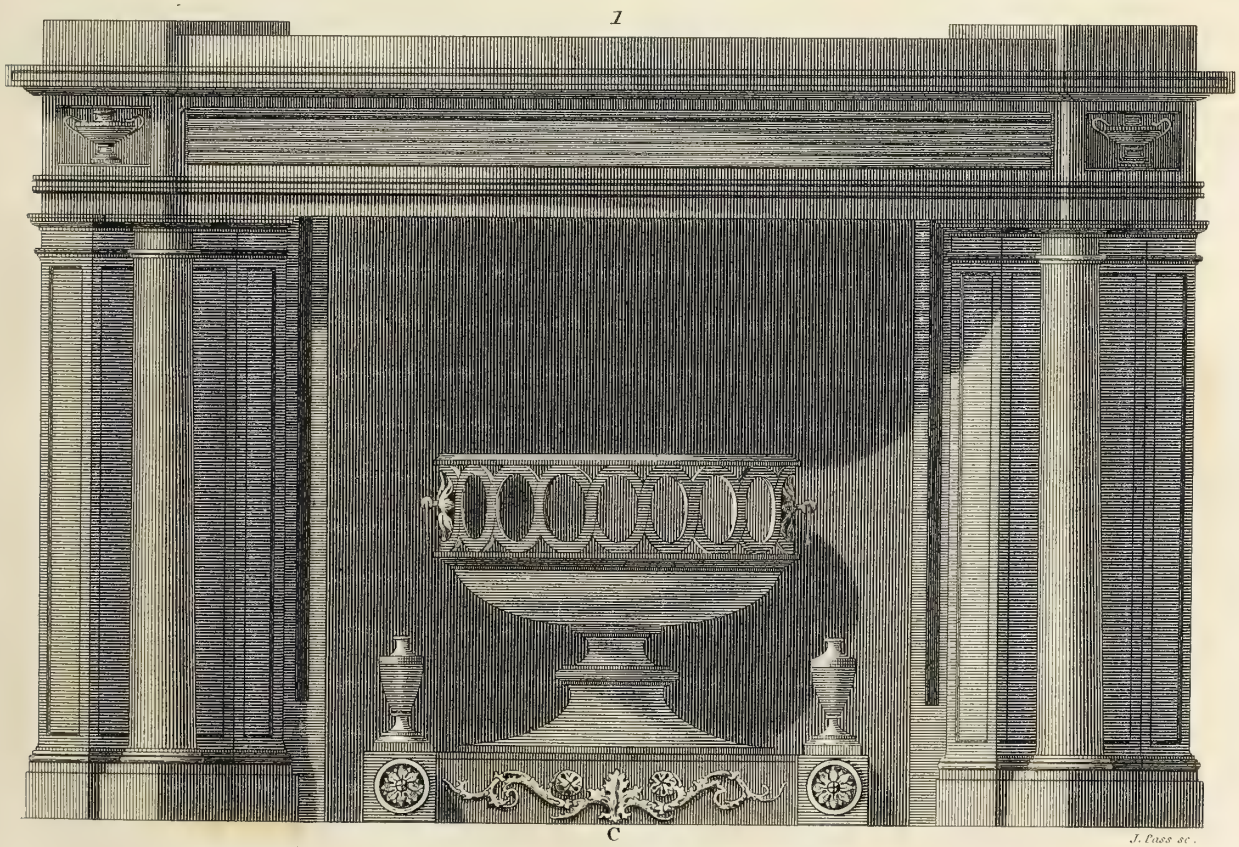
The form of the grates may be varied indefinitely; but the one here deſcribed anſwers the purpoſe ſo well, and is at the ſame time capable of being made, by the aid of a good architect, ſo highly ornamental to any apartment, that the reader will fully comprehend the facility with which it may be accommodated to circumſtances. Fig. 1, in the annexed Engraving, repreſents a grate of the improved conſtruction, and fig. 2, is a ſection of it. The air that maintains the combuſtion is ſupplied through the pipe or tube A, fig. 2 and fig. 4; or from between the under-ceiling and floor before-mentioned, from which it paſſes up by the back or ſide of a drawer, B, fig. 4, according as it is moſt convenient to bring it up by the one or the other; the back however is to be preferred, where convenience admits of it. The front of this drawer, in its place, is ſeen in fig. 1, at C. The intention of this drawer is to receive the aſhes that fall from the bottom bars of the grate, ſections of which are repreſented at DD, fig. 2. The aſhes, as they fall from the bars, ſtrike againſt the ſides of the internal cavity E, and are carried by their own gravity through the narrow part F, and fall into the drawer. This part of the conſtruction may be eaſily

GRATE.









Elevation and Section of Mr. Burns's Improved Grate.

London, Published as the Act directs, Novr 29th 1806, by J. Wilkes.

underſtood by conceiving it to be an hollow vaſe, as it actually is, with a drawer in its pedeſtal or baſement, and having a grate over it, on which the fire reſts. The valve, door, cock, or other contrivance by which the external air is admitted or excluded, may be either in the neck F of the vaſe, or in the air-tube, or in the drawer B, fig. 4, or C, fig. 1, or, which is preferable, in the cavity behind the drawer, the pedeſtal or baſement of the vaſe being made large enough to admit of ſuch cavity. Various conſtructions may be reſorted to; but that repreſented in fig. 3 (which is a ground-plan of a proper chimney for ſuch a grate, and in which a bird's-eye view of one half of the grate may be ſeen in its place, while the other half repreſents an horizontal ſection of the baſement or pedeſtal, which is ſuppoſed to be open, ſhewing the drawer in its place, with the cavity behind it) will be found to anſwer every purpoſe. The cavity G is ſeparated from the place in which the drawer is put, by a partition (beſt made of plate or caſt-iron) paſſing from H to H, in which there is an opening at I, with a cover at K. To the cover K is attached a ſmall bar L, worked by another ſhorter bar M, to which it is attached by any ſimple joint. The bar M is faſtened into an upright pivot, the top of which comes up through the pedeſtal at one of its corners, or any other convenient ſpot, and is furniſhed with a button to be laid hold of by the finger and thumb, or with a top fitted to a key, by the turning of which the cover K is made to ſhut or open the aperture I, and conſequently to prevent or facilitate the paſſage of the air from the hole at G, which repreſents the internal mouth of the air-tube, the other end of which is on the outſide of the houſe, or in any cellar or other apartment, as before deſcribed. When the air has paſſed through the aperture I, it finds no difficulty in paſſing on to the bottom of the grate, that back or ſide of the drawer next which the aperture is placed being made low to allow it to flow in freely.

The grates are recommended to be made of an elliptical form, as ſhewn at fig. 1; or circular, as at fig. 4; theſe being found moſt convenient, where a fence or ſcreen is wiſhed to be applied along with Mr. Burns's other improvements. The fence or ſcreen is intended to prevent thoſe dreadful accidents which too frequently occur, of women's and children's clothes being ſet on fire by ſparks from the grate. When it is wiſhed to be adopted, the inſide of the chimney, where the grate is to ſtand, ſhould be a ſemi-cylinder, or nearly ſo, as repreſented at fig. 3, with a lining or cover *aaa*, beſt made of metal, at ſuch a diſtance from the ſemi-cylindrical wall, NNNN, as to give ſufficient room for allowing the ſafeguard or fence to be ſlid round into it when the fire is wiſhed to be left open, when freſh fuel is to be added, or when the drawer with the aſhes is to be removed.

The fence is a frame-work of metal, which, when filled up with glaſs or with wire-work, forms a portion of a cylinder anſwerable to the curvature of the ſpace between the back of the chimney and the lining abovementioned, made in one or more pieces, and moving in a circular groove, *bb*, in or upon the hearth, which ſerves to conduct it into its place behind the grate, when the fire-place is wiſhed to be left open, as beforementioned. The top of the front of the opening of the chimney projects in a circular form, or is furniſhed with an added projection, made of metal, marble, or any other fit material; but in either caſe the projection is furniſhed with a circular groove on its under ſurface, of the ſame radius with the one in, or planted on, the hearth, for the purpoſe of receiving the upper part of the frame-work of the fence or ſafeguard, which frame-work may be filled up with glaſs, either plain or bent, and either colourleſs or coloured, or ſtained or painted with figures or deſigns of any kind. By this means complete ſafety is obtained againſt any ſuch accidents as have been alluded to, while at the ſame time the comfort ariſing from the view of a cheerful fire is not prevented by the interpoſition of any opake body; but in nurſeries, &c. where convenience and ſafety is more the object than elegance or luxury, the frame-work may be filled up with wire-work.

Where either the glaſs or the wire-work fence, or both of them, are meant to be applied to ſquare or rectangular chimneys, without the trouble of giving them the ſemi-cylindrical form, the lining to receive the fence or fences may be introduced at the ſides or jambs of ſuch chimneys; or the fence may be made to riſe by means of pulleys into the wall above the opening, or ſlide ſideways into the walls at the ſides of the opening. Theſe improvements may be introduced together or ſingly, and may be applied to many of the grates now in common uſe.

Beſides the advantages already pointed out as connected with them, they poſſeſs alſo the following.—Any room or apartment may be heated by their means with a much ſmaller quantity of fuel than by any other method yet in uſe: at the ſame time the advantage of ſeeing the fire is not loſt, as in cloſe ſtoves; for theſe grates have ſide as well as bottom bars, which allow the radiant heat and light to be thrown out into the room without any impediment: and in fact large rooms, halls, and the like, which by the uſual methods can hardly be warmed, or made at all comfortable in cold weather, may, by means of theſe improvements, be heated as effectually as the ſmalleſt apartment; for, when their full effect is wanted to be produced, it is only neceſſary to keep the fence in its receſs, that even that portion of heat which would be kept back by the interpoſed glaſs or wire-work, may be thrown out into the room, and perform its office. They are alſo an effectual cure for ſmoky chimneys, which not only cauſe great waſte and deſtruction of good furniture, but many diſeaſes to the inhabitants of houſes plagued with that evil. They cauſe a clean fire ſide to be eaſily commanded at all times, as hardly any of the duſt or aſhes fall through the ſide bars, almoſt the whole paſſing through the bottom bars down into the drawer; and any fire lighted in ſuch improved grates burns up and becomes lively in a few minutes without the aid of bellows, and that watchful care which common grates or ſtoves require.

Although theſe inventions are new to us in England, the idea perhaps of many of them was borrowed from our neighbours on the continent. The Swedes appear to have been the firſt who diſcovered (in 1766) the method of animating the flame by concealed tubes, which gave alſo the additional advantage of conveying away the noxious vapour with which all materials for domeſtic burning are impregnated. And the improved grate of Mr. Burns appears to ſavour much in its advantages and general utility with the *calorifere* or grate of Meſſrs. Olivier and Guiton, ſome time ſince recommended to public encouragement by the National Inſtitute of Paris. This calorifere poſſeſſes the following advantages: 1. The tube of the chimney is reduced to ſo ſmall a ſize, that the eſcape of the ſmoke into the apartment is impoſſible. 2. The apparatus burns the combuſtibles introduced into it without waſte, to an impalpable powder or perfect aſh. 3. It emits all the heat into the room, without admitting any portion of it uſeleſsly to eſcape. 4. The heat is capable of being regulated to any degree of the thermometer required. 5. A very ſmall quantity of wood is ſufficient to warm a large apartment for twelve hours. 6. The fire is always viſible to every perſon in the room. 7. The chimney is externally preſerved in its uſual form, and is ſtill capable of receiving all thoſe embelliſhments which wealth can ſupply, or art contrive.

To GRATE, *v. a.* [*gratter*, Fr.] To rub or wear any thing by the attrition of a rough body.—Thereat the fiend his gnashing teeth did *grate*. *Spenser.*

Blind oblivion swallow'd cities up,
And mighty states characterless are *grated*
To dusty nothing. *Shakespeare.*

To offend by any thing harsh or vexatious.—They have been partial in the gospel, culled and chosen out those softer and more gentle dictates which would less *grate* and disturb them. *Decay of Piety.*

Just resentment and hard usage coin'd
Th' unwilling word, and *grating* as it is,
Take it, for 'tis thy due. *Dryden.*

To form a sound by collision of asperities or hard bodies.—The *grating* shock of wrathful iron arms. *Shakesp.*

On a sudden open fly,
With impetuous recoil and jarring sound,
'Th' infernal doors, and on their hinges *grate*
Harsh thunder. *Milton.*

To GRATE, *v. n.* To rub hard so as to injure or offend; to offend, as by oppression or importunity.—Paradoxing is of great use; but the faculty must be so tenderly managed as not to *grate* upon the truth and reason of things. *L'Estrange.*

What peer hath been suborn'd to *grate* on you,
That you should seal this lawless bloody book
Of forg'd rebellion with a seal divine? *Shakespeare.*

To make a harsh noise, as that of a rough body drawn over another.—We are not so nice as to cast away a sharp knife, because the edge of it may sometimes *grate*. *Hooker.*

GRA'TE-WORK, *s.* A kind of work formed of bars put near to each other; lattice work.

GRA'TEFUL, *adj.* [*gratus*, Lat.] Having a due sense of benefits; willing to acknowlege and to repay benefits.—When some degree of health was given, he exerted all his strength in a return of *grateful* recognition to the author of it. *Fell.*

Years of service past,
From *grateful* souls exact reward at last. *Dryden.*

Pleasing; acceptable; delightful; delicious.—A man will endure the pain of hunger and thirst, and refuse such meats and drinks as are most *grateful* to his appetite, if he be persuaded that they will endanger his health. *Wilkins.*

Now golden fruits on loaded branches shine,
And *grateful* clusters swell with floods of wine. *Pope.*

GRA'TEFULLY, *adv.* With willingness to acknowledge and repay benefits; with due sense of obligation:

In Cyprus long by men and gods obey'd,
The lover's toil she *gratefully* repaid. *Granville.*

In a pleasing manner.—Study detains the mind by the perpetual occurrence of something new, which may *gratefully* strike the imagination. *Watts.*

GRA'TEFULNESS, *s.* Gratitude; duty to benefactors. *Obsolete:*

Blessings beforehand, ties of *gratefulness*,
The sound of glory ringing in our ears. *Herbert.*

Quality of being acceptable; pleasantness.

GRA'TELEY, an ancient village in Hampshire, on the south-east side of Quarley hill, in the road from Andover to Salisbury, where, in 926, king Athelstan held a grand council of the nobility. Near it are the vestiges of a great Roman camp, and on Quarley hill of a large British camp.

GRATE'OLENT, *adj.* [from the Lat. *gratus*, pleasing, and *oleo*, to smell.] Smelling gratefully.

GRA'TER, *s.* [*gratoir*, Fr.] A kind of coarse file with which soft bodies are rubbed to powder.

So it is with common natures,
Treat them gently they rebel;
But be rough as nutmeg-*graters*,
And the rogues obey you well. *A. Hill.*

GRA'TIAN, a native of Pannonia, father to the emperor Valentinian I. He was raised to the throne, though only eight years old; and after he had reigned for some time conjointly with his father, he became sole emperor of Rome in the sixteenth year of his age. He soon after took, as his imperial colleague, Theodosius, whom he appointed over the eastern parts of the empire. His courage in the field is as remarkable as his love of learning, and fondness of philosophy. He slaughtered thirty thousand Germans in a battle, and supported the tottering state by his prudence and intrepidity. His enmity to the pagan superstition of his subjects proved his ruin; and Maximinus, who undertook the defence of the worship of Jupiter and of all the gods, was joined by an infinite number of discontented Romans, and met Gratian near Paris in Gaul. Gratian was forsaken by his troops in the field of battle, and was murdered by the rebels, A. D. 383, in the 24th year of his age. See the article ROME.

GRA'TIAN, an Italian benedictine monk of the twelfth century, famed for having made the first collection of canons that was ever used as a text-book in the public schools. He was a native of Chiusi in Tuscany, and embraced the monastic life in the convent of St. Felix at Bologna. Before his time there had not been wanting collections of canons, or laws of the church, compiled by different individuals; but they were so destitute of order and method, and so defective both in matter and form, that they could not be conveniently explained in the schools, or made use of as systems of ecclesiastical polity. This circumstance induced Gratian to undertake the task of compiling such a system; and, after a labour of more than twenty-four years, he produced, in 1151, an abridgment of canon law, drawn from the letters of the pontiffs, the decrees of councils, and the writings of the ancient doctors, which in the first edition was entitled, *Concordantia discordantium Canonum*, or The Coalition of jarring Canons; and was afterwards called *Decretum Gratiani*, or Gratian's Decretal. The professors of Bologna were the first who adopted it as their text-book in their public lectures; and their example was soon followed by the professors at Paris. The abbé Fleury, in his excellent Discourse on Ecclesiastical History, has passed a very dispassionate judgment on its merits. The first printed edition of this work was published at Mentz, in 1472, folio; which was followed by impressions at Venice in 1476, and Paris in 1508. In 1580 an edition of it was published at Rome, with the approbation of pope Gregory XIII. in 4 vols. folio, on which much labour had been bestowed during the pontificates of his predecessors, popes Pius IV. and V. with the view of correcting its numerous faults. While the Roman edition was preparing for the press, the celebrated Anthony Augustin, archbishop of Tarragona in Spain, published a valuable treatise, *De Emendatione Gratiani*, of which the most accurate edition is that published at Paris by M. Baluze, in 1672, 8vo. with notes.

GRATICULA'TION, *s.* [from *grate*.] The act of dividing a design into squares in order to divide it. *Scott.*

GRATIFI'CATION, *s.* [*gratificatio*, Lat.] The act of pleasing.—They are incapable of any design above the present *gratification* of their palates. *South.*—Pleasure; delight.—How hardly is his will brought to change all its desires and aversions, and to renounce those *gratifications* in which he has been long used to place his happiness. *Rogers.*—Reward; recompence.

GRATIFICA'TOR, *s.* [from *gratify*.] One that gratifies. *Scott.*

To GRAT'IFY, *v. a.* [*gratificor*, Lat.] To indulge; to grant by compliance:

You ſteer between the country and the court;
Nor *gratify* whate'er the great deſire,
Nor grudging give what public needs require. *Dryden.*

To delight; to pleaſe; to humour; to ſooth.—A palled appetite is humorous, and muſt be *gratified* with ſauces rather than food. *Tatler.*

At once they *gratify* their ſcent and taſte,
While frequent cups prolong the rich repaſt. *Pope.*

To requite with a gratification: as, I'll *gratify* you for this trouble.

GRA'TING, *ſ.* On-board a ſhip, a kind of grate-work on the upper deck. The act of rubbing againſt ſome rough body.

GRA'TINGLY, *adv.* Harſhly; offenſively.

GRATI'OLA, *ſ.* [dimin. from *gratia*, on account of its ſuppoſed medicinal good qualities.] In botany, a genus of the claſs diandria, order monogynia, natural order perſonatæ, (ſcrophulariæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-parted, upright: ſegments awl-ſhaped, permanent. Corolla: monopetalous, unequal; tube longer than the calyx; border four-parted, ſmall; the upper ſegment broader, emarginate, reflex; the reſt ſtraight, equal. Stamina: filaments four, awl-ſhaped, ſhorter than the corolla, the two lower ſhorter than the others, and barren; the two upper faſtened to the tube of the petal; antheræ roundiſh. Piſtillum: germ conic; ſtyle ſtraight, awl-ſhaped; ſtigma two-lipped, after fecundation converging. Pericarpium: capſule ovate, acuminate, two-celled, two-valved. Seeds very many, ſmall. The eſſence of the character conſiſts in the two barren antheræ.—*Eſſential Character.* Calyx, ſeven-leaved, the two outer leaves patulous; corolla, irregular, reverſed; ſtamina, two, barren; capſule, two-celled.

Species. 1. Gratiola officinalis, officinal gratiola, hedge hyſſop, or water hyſſop: leaves lanceolate, ſerrate; flowers peduncled. Root perennial, creeping, thick, fleſhy, with many ſlender fibres; ſtalks ſeveral, upright, a foot or more in height, ſmooth, jointed; leaves oppoſite, ſeſſile, pointed, bright green, ſmooth, two inches long, and two lines or more in breadth, with a few ſmall ſerratures towards the end; flowers ſolitary, axillary, upright, on peduncles half an inch long, appearing in June or July, and continuing to Auguſt: calyx uſually ſeven-cleft; corolla ſhaped like that of the foxglove, but ſmall and of a pale yellowiſh colour, or pale purple with red ſtreaks, ſometimes white; the throat is hairy. Native of the ſouth of Europe in paſtures, uſually ſuch as are moiſt. Common in many parts of Switzerland, Carniola, Auſtria in the palatinate, Sileſia, France, about Turin, Padua, and in other parts of Italy. It has a ſtrong bitter nauſeous taſte, and is much recommended by ſeveral eminent medical writers in dropſical caſes. It is a powerful cathartic, but is ſaid generally to occaſion vomiting. On account of its bitterneſs, cattle reject it; inſomuch that Haller aſſures us there are meadows about Yverdun entirely uſeleſs from the abundance of this plant. It was cultivated in our gardens as early at leaſt as 1568.

2. Gratiola monnieria, or thyme-leaved gratiola: leaves oval-oblong; peduncles one-flowered; ſtalk creeping. This ſmall creeping plant ſticks very cloſe to the ground, and caſts a few ſlender fibres from every joint as it creeps. The whole plant ſeldom exceeds ſeven or eight inches in length, but it generally grows in beds, and ſpreads thick upon the ground, throwing out a few ſimple ſide-branches, which give it a pretty appearance when it flowers, and make it exceedingly remarkable. Native both of the Eaſt and Weſt Indies, and the South-Sea iſlands; in low moiſt ſoils. Flowers from July to September. The name of *monnieria* was given to this plant in honour of Dr. Monier by Juſſieu, who raiſed it in the botanic garden at Paris.

3. Gratiola repens, or creeping gratiola: leaves ovate; ſtem creeping; calyx five-leaved; ſtyle bifid. Native of Jamaica.

4. Gratiola rotundifolia, or round-leaved gratiola: leaves ovate, three-nerved. Stems a finger high, quadrangular, ſmooth, creeping at the baſe. Native of Malabar, in ſandy grounds.

5. Gratiola hyſſopioides, or hyſſop-leaved gratiola: leaves ovate-lanceolate, ſubſerrate, much ſhorter than the internodes. Stem filiform, upright, ſmooth, a foot high. Native of the rice-grounds of Tranquebar in the Eaſt Indies.

6. Gratiola Virginica, or Virginian gratiola: leaves lanceolate, obtuſe, ſomewhat toothed. Stem procumbent, varying much in ſize. The corolla is white, and the flowers are not followed by ſeeds in England. It grows naturally in North America, in moiſt places, where it riſes more than a foot high, but here not more than eight inches. It is alſo native of Malabar.

7. Gratiola Peruviana, or Peruvian gratiola: flowers ſubſeſſile. This plant grew here about nine inches high, with a weak ſtalk; leaves oppoſite, ſerrate, three quarters of an inch long, and half an inch broad; the flowers come out ſingle on each ſide the ſtalk, they are white and much ſmaller than thoſe of the common ſort. Mr. Mi'ler received the ſeeds from Carthagena in New Spain, where it was found in places where there had been ſtanding waters, which were then dried up. He cultivated it in 1759; but the ſeeds not ripening it was ſoon loſt.

8. Gratiola lobelioides, or lobelia gratiola: ſtem almoſt naked, ſtipuled; leaves oblong, quite entire; panicle dichotomous; capſules ſubglobular. Roots numerous, in bundles, ſhort, ſimple; ſtalk ſimple, upright, round, having an obſcure broad furrow on each ſide, ſlightly ſtreaked, ſmooth, with five ſtipuled joints, a foot high; leaves above the ſecond or third pair oppoſite, ſeſſile, upright, with the tips a little bowed back, acute, ſlightly ſtreaked, ſmooth on both ſides, an inch long, ſometimes coloured at the baſe, eſpecially underneath. Very common near Tranquebar, in rice fields.

9. Gratiola grandiflora, or great-flowered gratiola: ſtems decumbent; leaves ovate, ſerrate; peduncles oppoſite; capſules ſubulate. Stems bifid, angular, ſmooth; leaves oppoſite, ſerrate, often crenate, ſmooth; flowers large in proportion to the other parts. Native of Tranquebar, Madras, Siam, Malacca, in moiſt fat ſoils.

10. Gratiola veronicifolia, or veronica-leaved gratiola: ſtem creeping; leaves ovate-lanceolate, ſharply ſerrate; flowers terminating, oppoſite. Stems angular, diffuſed, procumbent; leaves oppoſite, ſeſſile; flowers ſmall, deep blue, bracted and peduncled. Inhabits with the foregoing.

11. Gratiola oppoſitifolia, or oppoſite-leaved gratiola: ſtem aſcending; leaves lanceolate, ſerrate; peduncles oppoſite to the leaves. Native of Tranquebar, in rice-grounds and moiſt places.

12. Gratiola ſtricta, or narrow gratiola: leaves ovate; ſpike long, terminating. Stem ſuffruticoſe, quite ſimple, erect, a foot and half high; flowers white dotted with red. Native of Cochinchina.

Propagation and Culture.—The firſt and fifth ſorts are eaſily propagated by parting the roots in autumn, when the ſtalks decay; the plants ſhould have a moiſt ſoil and a ſhady ſituation, for in dry ground they often decay in ſummer, unleſs they are plentifully watered. The other ſorts are natives of hot climates, and little known in Europe. See HOTTONIA INDICA, LINDERNIA, MIMULUS, CAPRARIA, DIANTHERA, and JUSTICIA.

GRATIO'SA,

GRATIO'SA, one of the ſmaller Canary iſlands, ſituated in the Atlantic. Lat. 29. 15. N. lon. 13. 7. W. Greenwich.

GRATIO'SA, one of Azores iſlands; about ten miles long, and eight broad; taking its name from its beauty and fertility in corn, fruit, paſture, and cattle, ſupplying Tercera and ſeveral of the other iſlands with a great part of its produce. It is well peopled, and has a number of villages, with forts for the defence of the coaſt. The principal place is La Plata. Lat. 39. 2. N. lon. 10. 12. W. Ferro.

GRATIOS'ITY, *ſ.* Grace; favour; civility. *Bailey. Not ſufficiently authoriſed.*

GRATIO'SO, *adj.* [Italian.] In muſic books; pleaſing; grateful.

GRA'TIS, *adv.* [Latin.] For nothing but thanks; without a recompence.—Kindred are no welcome clients, where relation gives them a title to have advice *gratis*. *L'Eſtrange.*

The people cry you mock them; and, of late,
When corn was given them *gratis*, you repin'd. *Shakeſp.*

GRAT'ITUDE, *ſ.* [*gratitudo*, low Latin.] Duty to benefactors:

Suſpicious thoughts his penſive mind employ,
A ſullen *gratitude*, and clouded joy. *Harte.*

Deſire to return benefits.—The debt immenſe of endleſs *gratitude*. *Milton.*—*Gratitude* is properly a virtue, diſpoſing the mind to an inward ſenſe and an outward acknowledgment of a benefit received, together with a promptneſs or readineſs to return the ſame. *South.*

GRA'TIUS, furnamed from the place of his birth FALISCUS, a Roman poet, contemporary with Virgil. His work, entitled *Cynegeticon* or The Art of Hunting with Dogs, lay unknown to the moderns till 1534, in which year it was printed by Paul Manutius, from a manuſcript brought by Sannazaro from France. It is written with a purity not unworthy of the Auguſtan age; but its ſubject does not admit of elegant poetry. The beſt edition is that of Leipſic, 1659, 4to. with the notes of Janus Ulitius. It is alſo printed in the collection of *Rei Venaticæ Scriptores*, *Amſt.* and *Leyd.* 1728, and in Mattaire's *Corpus Poetarum*.

GRATU'ITOUS, *adj.* [*gratuitus*, Lat. *gratuit*, Fr.] Voluntary; granted without claim or merit.—We miſtake the *gratuitous* bleſſings of heaven for the fruits of our own induſtry. *L'Eſtrange.*—Aſſerted without proof.—The ſecond motive they had to introduce this *gratuitous* declination of atoms, the ſame poet gives us. *Ray.*

GRATU'ITOUSLY, *adv.* Without claim or merit. Without proof.—I would know whence came this obliquity of direction, which they *gratuitouſly* tack to matter: this is to aſcribe will and choice to theſe particles. *Cheyne.*

GRATU'ITOUSNESS, *ſ.* The ſtate or quality of being gratuitous. *Scott.*

GRATU'ITY, *ſ.* [*gratuité*, Fr.] A preſent or acknowledgment; a free gift.—He uſed every year to preſent us with his almanac, upon the ſcore of ſome little *gratuity* we gave him. *Swift.*

To GRAT'ULATE, *v. a.* [*gratulor*, Lat.] To congratulate; to ſalute with declarations of joy:

To gratify the good Andronicus,
And *gratulate* his ſafe return to Rome,
The people will accept whom he admires. *Shakeſpeare.*

To declare joy for; to mention with expreſſions of joy:

Yet give thy jealous ſubjects leave to doubt,
Who this thy 'ſcape from rumour *gratulate*,
No leſs than if from peril; and devout,
Do beg thy care unto thy after ſtate. *Ben Jonſon.*

GRATULA'TION, *ſ.* [from *gratulatio*, Lat.] Salutations made by expreſſing joy; expreſſion of joy.—They are the firſt *gratulations* wherewith our Lord and Saviour was joyfully received at his entrance into the world. *Hooker.*

The earth
Gave ſigns of *gratulation*, and each hill. *Milton.*

GRAT'ULATORY, *adj.* Congratulatory; expreſſing congratulation.

GRATZ, or GRAZ, a town of Germany, in the duchy of Stiria, ſituated on the river Muehr. It contains ſeveral churches and convents, an arſenal, a caſtle on a rock, and an univerſity founded in 1585. The aſſembly of the ſtates is held here, and in 1784 it was erected into an archbiſhopric on the ſuppreſſion of that of Goritz. Firſt ſurrounded with walls by Ferdinand IV. which were greatly improved by the archduke Charles and his ſon Ferdinand. It was taken by the French republican army in March 1797. Seventy miles ſouth-ſouth-weſt of Vienna, and twenty ſouth-ſouth-eaſt of Pruck. Lat. 47. 10. N. lon. 33. 22. E. Ferro.

GRATZ, a town of Sileſia, in the principality of Troppau, ſituated on the Mora: four miles ſouth of Troppau.

GRATZARNIT'ZA, a town of Boſnia: thirty miles north-north-eaſt of Serajo.

GRAT'ZEN, a town of Bohemia, in the circle of Bechin: eighteen miles eaſt of Crumau, and ſeventeen north-eaſt of Roſenberg.

GRAU'DENTZ, or GRUDFIANDS, a town of Pruſſia, in the territory of Culm: fourteen miles north-north-eaſt of Culm.

GRA'VA-SE'LE, a town of Italy, in the kingdom of Naples, and province of Baſilicata: fifteen miles eaſt of Venoſa.

GRAVE, a final ſyllable in the names of places, is from the Saxon ȝnæf, a grove or cave. *Gibſon.*

GRAVE, *ſ.* [ȝnæf, Sax.] The place in the ground in which the dead are repoſited.—A flood of waters would overwhelm all thoſe fragments which the earth broke into, and bury in one common *grave* all the inhabitants of the earth. *Burnet.*

Now it is the time of night,
That the *graves*, all gaping wide,
Every one lets forth his ſpright,
In the church-way paths to glide. *Shakeſpeare.*

GRAVE, or GREVE, *ſ.* [ȝeneꝼe, Sax. a governor, *graave*, Germ. a viſcount.] A German title, ſignifying a great lord, count, or governor.

To GRAVE, *v. a.* preter. *graved*; part. paſſ. *graven*; [*graver*, Fr. γραφω, Gr.] To inſculp; to carve a figure or inſcription in any hard ſubſtance:

Thy ſum of duty let two words contain;
O! may they *graven* in thy heart remain!
Be humble, and be juſt. *Prior.*

To carve or form.—What profiteth the *graven* image, that the maker thereof hath *graven* it? *Hab.* ii. 18.—To copy paintings upon wood or metal, in order to be impreſſed on paper.—The *gravers* ought to imitate the bodies of the colours by the degrees of the lights and ſhadows: 'tis impoſſible to give much ſtrength to what they *grave*, without imitating in ſome ſort the colour of the objects. *Dryden.*

[From *grave*.] To entomb. *Not in uſe.*

Do you damn others, and let this damn you:
And ditches *grave* you all! *Shakeſpeare.*

To clean, caulk, and ſheath, a ſhip. *Ainſworth.*

To GRAVE, *v. n.* To write or delineate on hard ſubſtances.—Thou ſhalt make a plate of pure gold, and *grave* upon it. *Ex.* xxviii. 36.

GRAVE, *adj.* [*grave*, Fr. *gravis*, Lat.] Solemn; ſerious; ſober; not gay; not light or trifling.—They have as much reaſon to pretend to, and as much neceſſity

ſity to aſpire after, the higheſt accompliſhments of a Chriſtian and ſolid virtue, as the *graveſt* and wiſeſt among Chriſtian philoſophers. *Law.*

Youth on ſilent wings is flown;
Graver years come rolling on. *Prior.*

To laugh, were want of goodneſs and of grace;
And to be *grave*, exceeds all power of face. *Pope.*

Of weight; not futile; credible.—The Roman ſtate was of all others the moſt celebrated for their virtue, as the *graveſt* of their own writers, and of ſtrangers, do bear them witneſs. *Grew.*—Not ſhowy; not tawdry: as, a *grave* ſuit of clothes. Not ſharp of ſound; not acute.—Accent, in the Greek names and uſage, ſeems to have regarded the tone of the voice; the acute accent raiſing the voice, in ſome ſyllables, to a higher, i.e. more acute, pitch or tone, and the *grave* de preſſing it lower, and both having ſome emphaſis, i.e. more vigorous pronunciation. *Holder.*

GRAVE, a ſtrong town or city of Brabant, belonging to the Dutch, ſituated in a marſhy country, on the ſouth ſide of the Meuſe. Before the year 1323, it was a freehold belonging to Otho, the lord of Cuyck and Heverlé, who delivered it that year into the hands of John III. duke of Brabant, with power to hold as a fief according to the cuſtoms of Brabant. It had a fortreſs more ancient than the town itſelf, where the lords of Cuyck made their ordinary reſidences, but that has been deſtroyed ſome years, and the fortifications of the town much augmented. The Brabanters and the Gueldrians both pretended that this city was in their juriſdiction; and the former ſolicited the duke, their ſovereign, at his inauguration, to take an oath that he would never give up his claims to it; this oath is found in the forty-ninth article of the Joyeuſe Entrée. In 1386, at a congreſs of peace held at Bois-le-Duc, between Philip the Bold duke of Burgundy, and Jane ducheſs of Brabant, on the one part; and William duke of Juliers and Guelders on the other; it was agreed that it ſhould remain to Brabant. The prince of Parma having taken poſſeſſion of it againſt the revolters in 1586, it was beſieged by prince Maurice of Naſſau, the 18th of July 1602; Antoine Gonzales commanded, and the admiral of Aragon made many attempts to ſuccour the place; but not being able to force the prince's camp, he retired; and the place ſurrendered the 19th of September. On the 28th of the ſame month, the prince was proclaimed lord of Cuyck, and the ſigniory was afterwards confirmed to the family of Naſſau by the treaty of Munſter, concluded in 1648. The French made themſelves maſter of it in 1672; but the prince of Orange, afterwards William III. king of England, retook it on the 26th of October 1674, after it had been well defended by the marquis de Chamilli, who had a garriſon of four thouſand men and three hundred and twenty-five pieces of cannon. It was taken by the French republican army in December 1794: twenty miles eaſt of Bois-le-Duc, and thirty-four ſouth-eaſt of Utrecht. Lat. 51. 46. N. lon. 23. 16. E. Ferro.

GRAVE (L.), a town of France, in the department of the Higher Alps, and chief place of a canton, in the diſtrict of Briançon: ſixteen miles north-weſt of Briançon.

GRAVE CREEK, a creek on the Ohio river, about twelve miles down from Wheeling. Here is a mound of earth, obviouſly the work of art, called an Indian grave. It is of a conical form, in height about eighty feet. It aſcends in an angle of about eighty degrees. The diameter at the top is ſixty feet; the margin encloſing a regular concave, ſunk about four feet in the centre. Near the top ſtands an oak, about three feet in diameter. It is ſaid the Indians have no tradition what nation ever buried their dead in this manner. On examination, theſe mounds have been found to contain a calcareous ſubſtance, ſuppoſed to be bones of the human kind.

GRA'VE-CLOTHES, *ſ.* The dreſs of the dead.—And he that was dead came forth, bound hand and foot with *grave-clothes*. *John*, xi. 44.

GRA'VE-DIGGER, *ſ.* One who digs graves.

GRA'VE-MAKER, *ſ.* A grave-digger.—When you are aſked this queſtion next, ſay a *grave-maker*; the houſes that he makes laſt till doomſday. *Shakeſpeare.*

GRAVEDO'NA, or GRAVIDONA, a town of Italy, in the duchy of Milan: forty-two miles north of Milan.

GRAV'EL, *ſ.* [*gravier*, Fr. *graveël*, Dut. *gravel*, Armoric.] Hard ſand; ſand conſiſting of very ſmall pebble ſtones.—*Gravel* conſiſts of flints of all the uſual ſizes and colours, of the ſeveral ſorts of pebbles; ſometimes with a few pyritæ and other mineral bodies, confuſedly intermixed, and common ſand. *Woodward.*

So deep, and yet ſo clear, we might behold
The *gravel* bottom, and that bottom gold. *Dryden.*

[From *gravelle*, Fr.] Sandy matter concreted in the kidneys.—If the ſtone is brittle it will often crumble, and paſs in the form of *gravel*; if the ſtone is too big to paſs, the beſt method is to come to a ſort of compoſition or truce with it. *Arbuthnot.*

To GRAV'EL, *v. a.* To pave or cover with gravel.—Moſs groweth upon alleys, eſpecially ſuch as lie cold and upon the north, as in divers terraſſes; and again, if they be much trodden, or if they were at the firſt *gravelled*. *Bacon.*—To ſtick in the ſand.—William the Conqueror, when he invaded this iſland, chanced at his arrival to be *gravelled*; and one of his feet ſtuck ſo faſt in the ſand that he fell to the ground. *Camden.*—To puzzle; to ſtop; to put to a ſtand; to embarraſs.—What work do our imaginations make with eternity and immenſity! and how are we *gravelled* by their cutting dilemmas! *Glanville.*

Mat, who was here a little *gravell'd*,
Toſt up his noſe, and would have cavill'd. *Prior.*

[In horſemanſhip.] To hurt the foot with gravel confined by the ſhoe.

GRA'VELESS, *adj.* Wanting a tomb; unburied:

My brave Egyptians all,
By the diſcandying of this pelletted ſtorm,
Lie *graveleſs*. *Shakeſpeare.*

GRAVELI'NES, a ſeaport town of France, in the department of the North, and chief place of a canton, in the diſtrict of Bergues, ſituated on the Engliſh Channel, at the mouth of the river Aa, built in the year 1160, by Thierry count of Flanders. It is not large, but well fortified with baſtions, half moons, and horn-work. The country near it is interſected by canals, one of which goes to Dunkirk by Bourbourg, and another directly to Bergues. In 1384 this place was ruined by the Engliſh under the command of Henry Spencer biſhop of Norwich, but was re-eſtabliſhed in 1405, when the ſtates of Flanders intreated John duke of Burgundy to unite it inſeparably to his own dominions. The army of France was defeated the 14th of July 1458, by that of Spain. In 1644 it was taken by the duke of Orleans, uncle to Louis XIV. In 1652 it was retaken by the Spaniards. In 1658 it was attacked by the army of France, and ſurrendered after a ſiege of five days. Since that time it has remained with France, to which it was ceded by the peace of the Pyrenées: three leagues weſt-ſouth-weſt of Dunkirk, and thirteen north-weſt of Liſle. Lat. 50. 59. N. lon. 19. 47. E. Ferro.

GRAV'ELLINESS, *ſ.* [from *gravelly*.] The ſtate or quality of being gravelly. *Scott.*

GRAV'ELLING, *ſ.* The act of covering over with rough ſand; the act of putting any one to a ſtand; the hurt of a horſe's foot by means of gravel under the ſhoe.

GRAV'ELLY, *adj.* [*graveleux*, Fr.] Full of gravel; abounding with gravel; conſiſting of gravel.—If you live in a conſumptive air, make choice of the more open, high, dry, and *gravelly*, part of it. *Harvey.*

GRAVELOT'TE, a town of France, in the department of the Moſelle, and chief place of a canton, in the diſtrict of Metz: one league and a quarter north of Gorze, and two ſouth-weſt of Metz.

GRA'VELY, *adv.* Solemnly; ſeriouſly; ſoberly; without lightneſs or mirth.—A girl longs to tell her confidant that ſhe hopes to be married in a little time, and aſks her very *gravely* what ſhe would have her to do. *Spectator.*

Wiſdom's above ſuſpecting wiles;
The queen of learning *gravely* ſmiles. *Swift.*

Is't not enough, the blockhead ſcarce can read,
But he muſt wiſely look, and *gravely* plead? *Young.*

Without gaudineſs or ſhow.

GRA'VEN, a town of Norway, in the dioceſe of Bergen: forty-two miles ſouth-ſouth-weſt of Bergen.

GRAVENAU', a town of Germany, in the circle of Lower Bavaria: twenty miles north of Paſſau, and fifty-ſix eaſt-ſouth-eaſt of Ratiſbon. Lat. 48. 46. N. lon. 31. 11. E. Ferro.

GRA'VENESS, *ſ.* Serioufneſs; ſolemnity and ſobriety of behaviour:

Youth no leſs becomes
The light and careleſs livery that it wears,
Than ſettled age his ſables and his weeds,
Importing health and *graveneſs*. *Shakeſpeare.*

GRA'VENHORST, a town of Germany, in the circle of Weſtphalia, and biſhopric of Munſter: four miles north-eaſt of Rheine.

GRA'VENMACHEREN, or GREVENMACHEREN, a town of the duchy of Luxemburg, on the Moſelle, ſituated in a pleaſant and fertile country; near it is an ancient monument, erected by two brothers to the memory of their parents, before the reign of Conſtantine the Great. This town was ſacked and burned in 1552, by the marquis of Brandenburg: five leagues eaſt-north-eaſt of Luxemburg, and four ſouth-weſt of Treves.

GRA'VENWERT, a town of Germany, in the circle of Lower Bavaria: forty-two miles eaſt-north-eaſt of Nuremberg, and fifteen north of Amberg.

GRAVE'OLENCE, *ſ.* [*graveolentia*, Lat.] A rank or ſtinking ſmell.

GRAVE'OLENT, *adj.* [*graveolens*, Lat.] Strong ſcented.

GRA'VER, comp. of *grave*. See GRAVE.

GRA'VER, *ſ.* [*graveur*, Fr.] One whoſe buſineſs is to inſcribe or carve upon hard ſubſtances; one who copies pictures upon wood or metal to be impreſſed on paper. The ſtyle or tool uſed in graving.—See the article ENGRAVING, vol. vi. p. 809.

The toilſome hours in diff'rent labour ſlide,
Some work the file, and ſome the *graver* guide. *Gay.*

GRAV'EROL (Francis), a learned civilian, born at Niſmes in 1635. He was an advocate in the parliament of Toulouſe, and in the preſidial chamber of Niſmes. He was extremely well verſed both in the ſtudies belonging to his profeſſion, and in ſubjects of general literature. His writings conſiſt of ſeveral diſſertations on particular medals, and other monuments of antiquity: of, Obſervations on the Arrets of the Parliament of Toulouſe, 4to. much eſteemed: the collection entitled *Sorberiana*: and *Notice ou Abrégé Hiſtoire des 22 Villes Chefs des Dioceſes de la Prov. de Languedoc*, folio; a poſthumous work. He was well known to all the learned in Europe, and was admitted a member of the Ricovrati at Padua. His adherence to the Calviniſt perſuaſion impeded his advancement, and at length involved him in perſecution. He had retired to Orange in 1685, but not thinking himſelf ſafe there, he attempted to paſs into Switzerland. In his way, he was apprehended at Valence, and was committed to priſon in the citadel of Montpellier. He obtained his liberation, and died at Niſmes in 1694, while employed in ſome important literary works.

GRAVES, [of *graave*, Germ. a governor.] A ſurname.

GRAVESAN'DE, a town of Holland, ſituated about four miles from the ſea, where the ancient counts of Holland generally reſided: ſix miles weſt-ſouth-weſt of Delft.

GRAVESAN'DE (William-James le), a celebrated Dutch mathematician, born at Bois-le-Duc, in 1688. He was ſent to the univerſity of Leyden to ſtudy the civil law; but he made the mathematics his favourite purſuit. Soon after he was eighteen years of age he compoſed his excellent Eſſay on Perſpective. In 1707, after having taken his doctor's degree, he quitted the univerſity and ſettled at the Hague, where he practiſed at the bar, and cultivated an acquaintance with learned men. He was one of thoſe who undertook the publication of a periodical Review, entitled *Le Journal Littéraire*, which commenced in 1713, and was continued without interruption to the year 1722. The parts contributed by Graveſande were extracts and original diſſertations, chiefly relating to geometry and phyſics. When, in 1715, the States-general ſent to congratulate George I. on his acceſſion to the throne of Great Britain, Graveſande was appointed ſecretary to the embaſſy; and during his ſtay in England became intimately acquainted with ſir Iſaac Newton, and was admitted a member of the Royal Society. Upon his return to Holland, he was made profeſſor of mathematics and aſtronomy in the univerſity of Leyden. Upon this he commenced an entire new courſe of phyſics, in which he had the honour of firſt teaching the Newtonian philoſophy in that univerſity. His laborious exertions in theſe departments, and in preparing for publication his own mathematical and philoſophical productions, as well as in ſuperintending correct editions of the works of others, proved too powerful for his conſtitution, which ſunk under them in 1742, when he was fifty-four years of age. His principal publications were, 1. *Phyſices Elementa Mathematica, Experimentis confirmata, ſive Introductio ad Philoſophiam Newtonianam*, 1720; which conſiſts of the author's public lectures, and has gone through many editions, of which the moſt valuable is that publiſhed in Engliſh by Dr. Deſagulier, in 1747, in 2 vols. 4to. under the title of, Mathematical Elements of Natural Philoſophy, confirmed by Experiments. 2. *Matheſeos Univerſalis Elementa*, &c. 1727, 8vo. containing a ſyſtem of algebra for the uſe of ſtudents, with a commentary on Newton's univerſal arithmetic, and a new rule for determining the form of an aſſumed infinite ſeries. 3. *Philoſophiæ Newtonianæ Inſtitutiones*, &c. 1744, 8vo. which is an abridgment of his Elements of Phyſics. 4. *Introductio ad Philoſophiam, Metaphyſicam & Logicam continens.* The whole of his mathematical and philoſophical works were collected and publiſhed at Amſterdam, in 2 vols. 4to. with a critical account of his life and writings, by his diſciple profeſſor Allamand.

GRAVESEND', a handſome town in the county of Kent, ſituated on the ſouth ſide of the mouth of the Thames, and is the firſt port on that river. In the time of Richard II. the original town was taken and burnt by the French and Spaniards; on which account perhaps, as a compenſation, the inhabitants, with thoſe of Milton, obtained the excluſive privilege of conveying paſſengers from thence to London, on condition that they ſhould provide boats on purpoſe, and carry all perſons, either at two-pence per head, with his bundle, or the whole boat's fare ſhould be four ſhillings. This charter has been confirmed by ſucceeding princes, and under proper regulations they ſtill enjoy this advantageous privilege. The fare is now advanced to ninepence each paſſenger. The boats are large and commodious, and much improved within a few years paſt: they are obliged to depart on the ringing of a bell a quarter of an hour; they go to London with every flood,

flood, and return from Billingſgate on the like ſignal with every ebb.

To preſerve the town from future depredation, Henry VIII. raiſed a platform of guns to the eaſt of the town, and erected a fort directly oppoſite, at Tilbury, on the Eſſex ſhore, which is a regular fortification, has a battery commanding the river mounted with above one hundred pieces of cannon, carrying balls from twenty-four to forty-ſix pounds weight. Queen Elizabeth made a law, that the lord-mayor of London, the aldermen, and all the companies, ſhould go and receive all eminent ſtrangers and ambaſſadors at Graveſend, in their formalities, and attend them to London in their ſtate barges, if they went by water; if they went by land, they were to meet them on horſeback in their gowns on Blackheath. In 1727, the church and great part of the town was conſumed by fire. Graveſend is a corporation town, and, together with Milton, governed by a mayor, jurats, and common-council men. The town-houſe, where all public buſineſs is tranſacted, was built in 1764; and is a handſome ſtructure. Here are two markets weekly, on Wedneſday and Saturday; and a fiſh-market every Sunday morning. Fairs April 23, October 24 and 25.

All outward-bound ſhips are obliged to caſt anchor before the port of Graveſend, till they have been examined by, and obtained proper clearances from, ſearchers, appointed for that purpoſe, who have an office near the town-quay: a centinel is alſo ſtationed at the block-houſe, below the town, to give notice by the firing of a muſket when ſhips are coming up the river, who are obliged to receive on-board officers from the cuſtoms, a number of whom are conſtantly waiting for that purpoſe. The preſent elegant church, dedicated to St. George, was erected under an act of parliament paſſed in 1731, at the public expence, being conſidered as one of the fifty new churches, for the building of which the legiſlature had made a proviſion in the reign of queen Anne. In the town are a ſet of alms-houſes, the gift of Mr. Henry Penock, in 1624, to the poor of the corporation; being twenty-one dwelling-houſes, and a houſe for a weaver to employ the ſaid poor. There is a ſufficient eſtate to repair and maintain the ſame; and alſo the ground on which a charity-ſchool is built. The gardens round this town are ſo rich, that they not only ſupply the ſhipping with every article of that kind, but ſend great quantities to London; the aſparagus in particular is remarkably fine: nine miles weſt-north-weſt of Rocheſter, and twenty-two and a half eaſt of London. Lat. 51. 23. N.

GRAVESEND', a port ſituated on the ſouth-weſtern ſide of the iſland of Jamaica, in a large bay. It has two channels, the Leeward and the Main Channel; and affords good anchorage for large veſſels.

GRAVESEND', a townſhip of the American States, in King's county, Long Iſland, New York, ſeven miles north by eaſt of that city.

GRA'VESON, a town of France, in the department of the mouths of the Rhône, and chief place of a canton, in the diſtrict of Taraſcon: five miles north-eaſt of Taraſcon.

GRA'VEST, ſuperl. of *grave*. See GRAVE.

GRA'VESTONE, *ſ.* The ſtone that is laid over the grave; the monumental ſtone:

Timon, preſently prepare thy grave;
Lye where the white foam of the ſea may beat
Thy *graveſtone* daily. *Shakeſpeare.*

GRAV'ID, *adj.* [*gravidus*, Lat. heavy, full.] Pregnant; impregnated.

GRAVID'ITY, *ſ.* Pregnancy; ſtate of being with child.—Women, obſtructed, have not always the forementioned ſymptoms: in thoſe the ſigns of *gravidity* and obſtructions are hard to be diſtinguiſhed in the beginning. *Arbuthnot.*

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GRAVIM'ETER, *ſ.* the name given by M. Guyton to an inſtrument of glaſs, conſtructed for the purpoſe of determining the ſpecific gravity of bodies, upon a principle very ſimilar to the HYDROMETER; which ſee.

GRAVI'NA, a town of Italy, in the kingdom of Naples, and province of Bari; the ſee of a biſhop, ſuffragan of Acerenza: nine miles weſt of Matera.

GRAVI'NA (Domenicoda), a writer of hiſtory in the fourteenth century, born at Gravina, in the kingdom of Naples. He was a notary by profeſſion, but was much engaged in the civil wars which agitated his country at that period. He wrote in Latin a Hiſtory of Naples, and alſo a Hiſtory of the tranſactions in that part of Italy during his own times, from 1333 to 1350. Of this work, which is valuable for the apparent fidelity of the narration, the beginning and the end are loſt. The remainder was printed by Muratori, in his collection of Italian hiſtorians.

GRAVI'NA (John-Vincent), an eminent juriſt, born in 1664, at Rogiano in Calabria. He received a very liberal education, compriſing the learned languages, geometry, phyſics, hiſtory, antiquities, and theology. He ſtudied civil and canon law at Naples; and viſiting Rome in 1688, he was domeſticated ſome years with Paul Coardo of Turin. He was one of the original founders of the academy of Arcadi, and had the charge of drawing up their laws in the ſtyle of the Roman tables. In 1698 he was nominated profeſſor of civil law at the college of Sapienza; five years afterwards he ſucceeded to the chair of canon law, and to the expoſition of the decretal. His method of teaching was conformable to that he had purſued in ſtudying the ſcience. Avoiding trifling verbal diſputes and ſcholaſtic ſpeculations, he entered into the ſpirit of the laws, illuſtrating their theory by obſervations drawn from ancient writers, and by a criticiſm founded on his extenſive erudition. In the mean time he was ſpreading his reputation by his writings, which were many, and various in their ſubject. His great profeſſional work, entitled *Origines Juris Civilis*, firſt printed at Leipſic in 1708, afterwards more correctly at Naples, 1713, is reckoned a claſſical performance, lucid in its arrangement, and replete with ſolid learning. His Inſtitutes of Civil and Canon Law were printed againſt his will, as he had deſigned to give them in a more correct and augmented form. Gravina likewiſe undertook to eſtabliſh a poetical code, for which purpoſe he wrote two books, *Della Region Poetica*; a book, *Della Tragedia*; and a treatiſe, *De Inſtitutione Poetarum*. He was more ſucceſsful as a legiſlator than as a practiſer in this art; for his five tragedies, written upon the model of the ancients, were not favourably received by the public; and the author's angry expoſtulation, proving that they *ought* to have been applauded, was totally inefficacious. Gravina reviſited his native country in 1714, but two years afterwards returned to Rome. He was preparing to depart for Turin, whither the duke of Savoy had invited him not only to the chair of law, but to the general direction of learned inſtitutions, when he was ſeized with an illneſs which, in January 1718, carried him off, in the arms of his ſcholar Metaſtaſio, whoſe poetical talents he firſt cheriſhed, and whom he left heir of all his property out of Calabria. All the works of this learned writer have been publiſhed at Naples, in 3 vols. 4to. 1756.

GRA'VING, *ſ.* Carved work.—Skilful to work in gold; alſo to grave any manner of *graving*, and to find out every device which ſhall be put to him. 2 *Chro.* ii. 14.

GRA'VISCÆ, now *Eremo de St. Auguſtino*, a maritime town of Etruria, which aſſiſted Æneas againſt Turnus. The air was unwholeſome, on account of the marſhes and ſtagnant waters in its neighbourhood. *Virgil.*

GRAVIS'ONOUS, *adj.* [of *gravis* and *ſonus*, Lat.] Sounding with a grave air.

To GRAV'ITATE, *v. n.* [from *gravis*, Lat.] To tend to the centre of attraction:

Thoſe

Thoſe who have nature's ſteps with care purſu'd,
That matter is with active force endu'd,
That all its parts magnetic pow'r exert,
And to each other *gravitate*, aſſert. *Blackmore.*

GRAVITA'TION, *ſ.* Act of tending to the centre. —The moſt conſiderable phenomenon belonging to the terreſtrial bodies is the general action of *gravitation*, whereby all known bodies, in the vicinity of the earth, do tend and preſs towards its centre. *Bentley.*

When the looſe mountain trembles from on high,
Shall *gravitation* ceaſe, if you go by? *Pope.*

It is one of the laws of nature, diſcovered by Newton, and now received by all philoſophers, that every particle of matter in nature gravitates towards every other particle; which law is the main principle in the Newtonian philoſophy. But what is called *gravitation* with reſpect to the gravitating body, is uſually called *attraction* with reſpect to the body gravitated to. The planets, both primary and ſecondary, as alſo the comets, do all gravitate towards the ſun, and towards each other; as well as the ſun towards them; and that in proportion to the quantity of matter in each of them. The peripatetics indeed hold, that bodies only gravitate or *weigh*, when out of their natural places, and that gravitation ceaſes when they are reſtored to the ſame, the purpoſe of nature being then fulfilled; and they maintain that the final cauſe of this faculty is only to bring elementary bodies to their proper place, where they may reſt. But the moderns ſhew that bodies exerciſe gravity even when at reſt, and in their proper places. This is particularly ſhewn of fluids; and it is one of the laws of hydroſtatics, that fluids gravitate in proprio loco, the upper parts preſſing on the lower, &c. See the article MECHANICS.

GRAV'ITY, *ſ.* [*gravitas*, Lat. *gravité*, Fr.] Weight; heavineſs; tendency to the centre.—Bodies do ſwim or ſink in different liquors, according to the tenacity or *gravity* of thoſe liquors which are to ſupport them. *Brown.*—Atrociouſneſs; weight of guilt.—No man could ever have thought this reaſonable, that had intended thereby only to puniſh the injury committed, according to the *gravity* of the fact. *Hooker.*—Serioufneſs; ſolemnity.—For the advocates and council that plead, patience and *gravity* of hearing is an eſſential part of juſtice. *Bacon.*

In phyſics, the terms *gravity*, *weight*, *centripetal force*, and *attraction*, denote in effect much the ſame thing, only in different views and relations; all which however it is too common to confound and uſe promiſcuouſly. But, correctly, when a body is conſidered as in the act of tending towards the earth, the force with which it ſo tends is called *force of gravity*, or *gravitating force*: for which ſee MECHANICS. When the body is conſidered as immediately tending to the centre of the earth, it is called *centripetal force*: ſee the article FLUXIONS, vol. vi. p. 516. When we conſider the earth, or maſs, or matter, to which the body tends, it is called *attraction*, or *attractive force*: ſee CHEMISTRY, vol. iv. p. 174. When it is conſidered in reſpect of an obſtacle or another body in the way of the tendency upon which it acts, it is called *weight*: ſee MECHANICS.

Philoſophers have argued very differently on the ſubject of gravity. Newton, though he often calls it a *vis*, power, or property in bodies, yet explains himſelf, that he means nothing more by the word but the effect or phenomenon: he does not conſider the principle the cauſe by which bodies tend downwards, *but the tendency itſelf*, which is no occult quality, but a ſenſible phenomenon, be its cauſes whatever they may; the laws or properties relating to which are as follow:

All bodies which circumſcribe, ſurround, or exiſt upon or above, the earth, tend towards a point, which is either accurately or very nearly the centre of magnitude of the terraqueous globe. Hence, in all places equidiſtant from the centre of the earth, as ſuppoſe in the degrees or minutes of a circle ſurrounding the whole, if perpendiculars or weights were let fall, they would all meet and coaleſce in the centre of the earth. It muſt however be recollected, that all the parts of the earth's ſurface are not at equal diſtances from the centre, becauſe the equatorial parts are higher than the polar parts by about ſeventeen miles; as has been ſhewn under the article ASTRONOMY.

Gravity equally affects all bodies, without regard either to their bulk, figure, or matter: ſo that, abſtracting from the reſiſtance of the medium, the moſt compact and looſe, the greateſt and ſmalleſt, bodies, would all deſcend through an equal ſpace in the ſame time; whence the force of gravity is nearly equal, as appears from the quick deſcent of very light bodies in an exhauſted receiver. The ſpace which bodies do actually fall, in vacuo, is $16\frac{1}{12}$ feet in the firſt ſecond of time, in the latitude of London; and for other times, either greater or leſs than that, the ſpaces deſcended from are directly proportional to the ſquares of the times, while the falling body is not far from the earth's ſurface. This power is the greateſt at the earth's ſurface, from whence it decreaſes both upwards and downwards, but not both ways in the ſame proportion; for upwards the force of gravity is leſs, or decreaſes, as the ſquare of the diſtance from the centre increaſes; ſo that at a double diſtance from the centre, above the ſurface, the force would be only one-fourth of what it is at the ſurface; but below the ſurface, the power decreaſes in ſuch ſort that its intenſity is in the direct ratio of the diſtance from the centre; ſo that at the diſtance of half a ſemidiameter from the centre, the force would be but half what it is at the ſurface; at one-third of a ſemidiameter the force would be one-third, and ſo on.

As all bodies gravitate towards the earth, ſo does the earth equally gravitate towards all bodies; as well as all bodies towards particular parts of the earth, as hills, &c. which has been proved by the attraction a hill has upon a plumb line, inſenſibly drawing it aſide. Hence the gravitating force of entire bodies conſiſts of thoſe of all their parts: for by adding or taking away any part of the matter of a body, its gravity is increaſed or decreaſed in the proportion of the quantity of ſuch portion to the whole maſs. Hence alſo the gravitating powers of bodies, at the ſame diſtance from the centre, are proportional to the quantities of matter in the bodies. But for the doctrine of the *Centre of Gravity*, and *Central Forces*, ſee the articles FLUXIONS, and MECHANICS.

The exiſtence of the ſame principle of gravity in the ſuperior regions of the heavens, as on the earth, is one of the great diſcoveries of Newton. At firſt he only obſerved that all bodies near the earth, and in its atmoſphere, had the property of tending directly towards it; but at length he ſaw no reaſon why it might not extend as far as to the moon, by means of which ſhe might be retained in her orbit as a ſtone in a ſling is retained by the hand; and if ſo, he next inferred, why might not a ſimilar principle exiſt in the other great bodies in the univerſe, the ſun and all the other planets, both primary and ſecondary, which might all be retained in their orbits, and perform their revolutions, by means of the ſame univerſal principle of gravity. Theſe conjectures he ſoon realized and verified by mathematical proofs. Kepler had found out, by contemplating the motions of the planets about the ſun, that the area deſcribed by a line connecting the ſun and planet, as this revolved in its orbit, was always proportional to the time of its deſcription, or that it deſcribed equal areas in equal times, in whatever part of its orbit the planet might be, moving always ſo much the quicker as its diſtance from the ſun was leſs. And it is alſo found that the ſatellites, or ſecondary planets, reſpect the ſame law in revolving about their primaries. It was next proved by Newton, that all bodies moving in any curve line

line described on a plane, and which, by radii drawn to any certain point, describe areas about the point proportional to the times, are impelled or acted on by some power tending towards that point. Consequently the power by which all these planets revolve, and are retained in their orbits, is directed to the centre about which they move, viz. the primary planets to the sun, and the satellites to their several primaries.—See the article ASTRONOMY, vol. ii. p. 341.

Various theories have been advanced by philosophers of different ages, to account for the principles of gravity. The ancients, who were only acquainted with the tendency of sublunar bodies towards the earth, aimed no farther than a system that might answer the more obvious phenomena of it. Yet some hints are found concerning the gravitation of celestial bodies in the account given of the doctrine of Thales and his successors; and it is supposed that Pythagoras had a view to it in what he taught concerning the harmony of the spheres. Kepler, in his preface to the commentaries concerning the planet Mars, speaks of it as of a power that was mutual between bodies; and says that the earth and moon tend towards each other, and would meet in a point so many times nearer to the earth than to the moon, as the earth is greater than the moon, if their motions did not hinder it. He adds, that the tides arise from the gravity of the waters towards the moon. To him we also owe the important discovery of the analogy between the distances of the several planets from the sun, and the periods in which they complete their revolutions, viz. that the squares of their periodic times are always in the same proportion as the cubes of their mean distances from the sun. However, Kepler, Gassendi, Gilbert, and others, ascribe gravity to a certain magnetic attraction of the earth; conceiving the earth to be one great magnet continually emitting effluvia, which take hold of all bodies, and draw them towards the earth. But this is inconsistent with the several phenomena.

Dr. Clarke, from a view of the several properties of gravity, concludes that it is no adventitious effect of any motion, or subtle matter, but an original and general law impressed by the Creator on all matter, and preserved in it by some efficient power penetrating the very solid and intimate substance of it; being found always proportional, not to the surfaces of bodies or corpuscles, but to their solid quantity and content. It should therefore be no more inquired why bodies gravitate, than how they came to be first put in motion. See Annot. in Rohault. Phys. part. i. cap. 11.

Of SPECIFIC GRAVITY.

SPECIFIC gravity is the relative, comparative, or apparent, gravity in any body, in respect of that of an equal bulk or magnitude of another body; denoting that gravity or weight which is peculiar to each species or kind of body, and by which it is distinguished from all other kinds. The specific gravity of solids is determined by weighing them first in the air, and then in water. A body is said to be specifically heavier than another, when under the same bulk it contains a greater weight than that other; and reciprocally the latter is said to be specifically lighter than the former. If there be two equal spheres, each one foot in diameter, the one of lead, and the other of wood, since the leaden one is found heavier than the wooden one, it is said to be specifically, or in specie, *heavier*; and the wooden one specifically *lighter*. The laws by which the specific gravities of bodies appear to be governed, are as follow:

1. If two bodies be equal in bulk, their specific gravities are to each other as their weights, or as their densities. 2. If two bodies be of the same specific gravity or density, their absolute weights will be as their magnitudes or bulks. 3. In bodies of the same weight, the specific gravities are reciprocally as their bulks. 4. The specific gravities of all bodies are in a ratio compounded in the direct ratio of their weights and the reciprocal ratio of their magnitudes. And hence again the specific gravities are as the densities. 5. The absolute gravities or weights of bodies are in the compound ratio of their specific gravities and magnitudes or bulks. 6. The magnitudes of bodies are directly as their weights, and reciprocally as their specific gravities. 7. A body specifically heavier than a fluid, loses as much of its weight when immersed in it, as is equal to the weight of a quantity of the fluid of the same bulk or magnitude. Hence, since the specific gravities are as the absolute gravities under the same bulk; the specific gravity of the fluid, will be to that of the body immerged, as the part of the weight lost by the solid is to the whole weight: and hence the specific gravities of fluids are as the weights lost by the same solid immerged in them. 8. The specific gravities of bodies of equal weight, are reciprocally proportional to the quantities of weight lost in the same fluid. And hence is found the ratio of the specific gravities of solids, by weighing in the same fluids, masses of them that weigh equally in air, and noting the weights lost by each.—See the article MECHANICS.

Much advantage has been, and may still be, derived from a careful investigation of these laws, and their application; since it is very probable, that by an attention to the specific gravities, capacities for heat, fusibilities, volatilities, laws of crystallization, elasticity, hardness, tenacity, malleability, and other obvious specific properties of bodies, we may yet discover a more intimate acquaintance with the mutual actions of their particles, than any that has hitherto been acquired.

From the foregoing data it is easy to construct a general table of specific gravities, by reducing the proportion of the absolute weight to the loss sustained by immersion, into terms of which that expressing water shall be unity. If the solid be so light as to float upon water, it is convenient to attach to it another heavier body sufficient to cause it to sink, but whose weight in water must be added in computing the loss. And since the loss by immersion will accurately shew the weight of the same bulk of the fluid; so, consequently, the proportion of these several quantities to the loss the same solid sustained in water, being reduced as in the other case to the common standard of unity, will exhibit the specific gravity. Other methods are likewise used in experiments with fluids. Thus equal bulks of different fluids may be weighed by filling a small bottle with a ground stopper with each respectively, and from their several weights the weight of the bottle and stopper must be deducted. Or otherwise, the instrument called the hydrometer may be used, which possesses the advantage of portability, speed, and a degree of accuracy not easily obtained by the use of ordinary balances. —See the article HYDROMETER.

The following arrangement will shew the specific gravity of metals and other bodies to rain water, and the weight of a cubic inch of each, in parts of a pound averdupoise.

	Sp. Gravity.	W. lb. Averd.
Pure gold cast	19258	0·71036
Ditto hammered	19362	0·70030
Standard gold cast	17486	0·63250
Ditto hammered	17589	0·63618
Pure silver cast	10474	0·37796
Ditto hammered	10511	0·38017
Standard silver in coin	10391	0·37580
Crude platina in grains	15602	0·56431
Platina purified and fused	19500	0·70530
The same hammered	20377	0·73557
The same drawn into wire	21042	0·76107
The same laminated	22069	0·79821
Mercury	13568	0·49074
Lead fused	11352	0·40965
Copper fused	7788	0·28198
Ditto drawn into wire	8878	0·32111

	Sp. Gravity.	w. lb. Averd.
Braſs caſt	8396	0·30367
Braſs in wire	8544	0·30903
Iron caſt	7207	0·26067
Ditto in bar	7788	0·28168
Steel ſoft, and not hammered	7840	0·28356
Steel hardened	7816	0·28270
Tin, Engliſh, fuſed	7291	0·26371
Ditto hammered	7299	0·26400
Malacca tin fuſed	7296	0·26382
The ſame hammered	7306	0·26486
Biſmuth	9823	0·35529
Nickel	8660	0·31323
Arſenic, the regulus	5763	0·20844
Cobalt	7812	0·28255
Zinc	7191	0·26009
Antimony	6702	0·24240
Manganeſe	6850	0·24776
Wolfran	17600	0·63657
Diamond	3251	0·11759
Ruby	4283	0·15491
Ruby Spinell	3760	0·13600
Topaz, oriental	4011	0·14507
Ditto Braſilian	3536	0·11718
Ditto Saxon	3564	0·12891
Sapphire, oriental	3994	0·14446
Emerald	2775	0·10037
Adamantine ſpar	4180	0·15118
Rock cryſtal from Madagaſcar	2653	0·09596
Quartz	2654	0·09599
Agate	2590	0·09368
Onyx	2376	0·09537
Muſcovy talc	2792	0·10098
Common ſlate	2672	0·09664
Calcareous ſpar	2715	0·09820
Alabaſter	2730	0·09874
White marble	2716	0·09823
Limeſtones, from	1386	0·05113
Ditto, to	2390	0·08644
Ponderous ſpar	4474	0·16182
Fluor ſpar	3180	0·11502
Pumice-ſtone	914	0·03306
Green glaſs	2620	0·09476
Engliſh crown-glaſs	2520	0·09115
White flint-glaſs, Engliſh	3290	0·11900
Another piece	3216	0·11632
White flint lenſes	3437	0·12431
White glaſs, French	2892	0·10460
Glaſs of S. Gobin	2488	0·09000
Brimſtone	1990	0·07198
Phoſphorus	1714	0·06199
Yellow amber	1078	0·03899
Diſtilled or rain water	1000	0·03617
Sea water	1026	0·03711
Common ſpirit of wine	837	0·03027
Alcohol	820	0·02960
Vitriolic ether	739	0·02673
Nitrous	909	0·03288
Marine	730	0·02640
Acetous	866	0·03132
Concentrated vitriolic acid	2125	0·07686
Ditto nitrous acid	1580	0·05714
Ditto marine acid	1194	0·04319
Fluor acid	1500	0·05425
Oil of olives	915	0·03309
Ditto of ſweet almonds	917	0·03316
Linſeed oil	940	0·03400
Naptha	708	0·02561
Gum elaſtic	393	0·03375
Camphor	989	0·03577
Yellow wax	965	0·03490
White ditto	969	0·03505
Spermaceti	943	0·03411
Tallow	942	0·03407
Heart of oak	1170	0·04232
Cork	240	0.01868

GRAUL'HET, a town of France, in the department of the Tarn, and chief place of a canton, in the diſtrict of Lavaur: three leagues north-eaſt of Lavaur, and five north-weſt of Caſtres.

GRAUNT (John), famous for introducing the ſcience of political arithmetic, born in London in 1620. The bills of mortality of the city of London afforded him a ſubject of ſpeculation, from which he was convinced that ſeveral inferences might be drawn of moral and political importance. He employed much induſtry in collecting the proper materials, from which he compoſed a work entitled Natural and Political Obſervations made upon the Bills of Mortality, &c. Lond. 1661, 4to. This was ſo well received that it paſſed through five editions in fifteen years, and it obtained for the author admiſſion into the Royal Society, upon the particular recommendation of the king. It is probable that his friend ſir William Petty, ſo well known for his calculations, aſſiſted him in this work. He continued to make additions to his obſervations, as well as to purſue his ſtudies on other topics, till his death in 1674.

GRAUSZYSZ'KI, a town of Poland, in the palatinate of Wilna: twenty-eight miles ſouth-eaſt of Wilna.

GRA'VY, *ſ.* The ſerous juice that runs from fleſh not much dried by the fire.—Meat we love half raw, with the blood trickling down from it, delicately terming it the *gravy*, which in truth looks more like an ichorous or raw bloody matter. *Harvey.*

GRAY, *adj.* [ȝɲæȝ, Sax. *grau*, Dan. *graau*, Dutch.] White with a mixture of black.—Theſe *gray* and dun colours may be produced by mixing whites and blacks. *Newton.*

They left me then, when the *gray*-headed even,
Like a ſad votariſt in palmer's weed,
Roſe from the hindmoſt wheels of Phœbus' wain. *Milton.*

White or hoary with old age.—Living creatures generally do change their hair with age, turning to be *gray*; as is ſeen in men, though ſome earlier and ſome later; in horſes, that are dappled and turned white; in old ſquirrels that turn griſly, and many others. *Bacon.*

Gray-headed men and grave, with warriors mix'd,
Aſſemble. *Milton.*

Dark, like the opening or cloſe of day; of the colour of aſhes.—Our women's names are more gracious than their Cæcilia, that is, *gray* eyed. *Camden.*

The *gray*-ey'd morn ſmiles on the frowning night,
Cheq'ring the eaſtern clouds with ſtreaks of light. *Shak.*

GRAY, *ſ.* A gray colour:

Down ſunk the ſun, the cloſing hour of day
Came onward, mantled o'er with duſky *gray*. *Parnel.*

GRAY, *ſ.* A badger. *Ainſworth.*

GRAY, a town of France, and principal place of a diſtrict, in the department of the Upper Saône, on the Saône, navigable for boats to Lyons, whither the inhabitants ſend grain and iron, which form the chief articles of commerce. The fortifications have been deſtroyed: ſeven poſts ſouth-ſouth-eaſt of Langres, and forty-one ſouth-ſouth-eaſt of Paris. Lat. 47. 27. N. lon. 23. 15. E. Ferro.

GRAY, a poſt town of the American States, in the diſtrict of Maine, in Cumberland county, fifteen miles north by weſt of Portland, incorporated in 1778.

GRAY (Jane). See GREY.

GRAY (Thomas), an admired Engliſh poet, born in London in 1716. He was ſent by his parents to lay in the fundamental ſtock of claſſical literature at Eton ſchool. In 1734 he removed to the univerſity of Cambridge, and entered as a penſioner in St. Peter's college. He firſt appeared as a poet among the univerſity-congratulators of the marriage of the prince of Wales, and his verſes were eſteemed the beſt of the academical collection. He quitted college in 1738, and occupied a

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ſet of chambers in the Inner Temple, for the purpoſe of ſtudying the law; when he gladly embraced an invitation to accompany Mr. Walpole in the tour of Europe. They ſet out together in the enſuing ſpring; and travelled through France, croſſed the Alps, viſited the principal towns of Italy as far as Naples, returned to Florence, and in the ſpring of 1741 proceeded to Venice. Upon the way thither the two companions fell into a diſagreement, which occaſioned their ſeparation. Of this unfortunate incident Mr. Walpole has generouſly taken all the blame to himſelf. Gray, with his own moderate reſources, finiſhed the reſt of his tour, and arrived in England in September 1741. His reſidence from this time was chiefly at Cambridge, to which he was probably attached by an inſatiable love of books, which his fortune would not permit him to indulge from his own ſtores. It was not till 1747 that his Ode on a diſtant Proſpect of Eton College made its appearance before the public. What degree of popularity it obtained we are not told; but the love of fame could not be very active in his mind, ſince it was only in conſequence of the printing of a ſurreptitious copy that he publiſhed, in 1751, his celebrated Elegy written in a Country Church-yard, chiefly compoſed ſome years before, and even now ſent into the world without the author's name. Few poems were ever ſo popular: it ſoon ran through eleven editions, was tranſlated into Latin verſe, and has ever ſince borne all the marks of being one of the moſt favourite productions of the Britiſh muſe. The death of Cibber, in 1757, gave occaſion to a deſign of retrieving the character of the laureate from the contempt it had undergone, by conferring the office upon ſome real poet, and it was offered to Gray. He declined the appointment, which was accepted by Whitehead. What he was capable of doing as a lyric poet was ſhewn in the ſame year by the publication of his two principal odes, On the Progreſs of Poeſy, and The Bard. As theſe were expreſsly meant to be "vocal to the intelligent alone," it is not ſurpriſing that they were leſs popular than his elegy had been. Many could not underſtand them; ſome ridiculed them; and in general they were more gazed at than taſted: but with particular readers they raiſed the author's poetical talent to a level with that of the firſt poets of his country. The uniformity of his life was varied by a reſidence of three years, commencing in 1759, in lodgings near the Britiſh Muſeum, chiefly for the purpoſe of conſulting curious books and manuſcripts in that great national repoſitory. A journey into Scotland for his health, in 1765, introduced him to the moſt eminent literati in that country, and fed his imagination with thoſe ſcenes of natural ſublimity and beauty which no man was better qualified to taſte. The profeſſorſhip of modern hiſtory at Cambridge, a place worth four hundred pounds per annum, which had fallen vacant in 1762, was modeſtly aſked by him of lord Bute, but had before been promiſed to another. On a ſecond vacancy, in 1768, it was conferred upon him "unſolicited and unexpected," in the moſt handſome manner, by the duke of Grafton. He made a voluntary return for the favour, by an Ode for Muſic, for the inſtallation of that nobleman as chancellor of the univerſity, in 1769. His new profeſſorſhip, while it made an important addition to his income and his academical dignity, laid him under an obligation to exertion, which cauſed him conſiderable anxiety. Though founded in 1724, it had hitherto remained a perfect ſinecure. The example of his predeceſſors, however, did not ſatisfy him, and he prepared himſelf to execute the duties of the office. The baneful effects of habitual indolence, and a life paſſed without any determinate objects, were in his caſe ſingularly conſpicuous; for, with a mind replete with the ſtores of knowledge ancient and modern, he was unable to bring his acquiſitions to uſe on demand; and, after many uneaſy ſtruggles, he proceeded no further than to ſketch out a plan for his inauguration ſpeech. But his health was now declining; low ſpirits, the indolent ſcholar's familiar malady, ſeized upon him; and he died July 30, 1771, in the fifty-fifth year of his age. It is excluſively as a poet that the name of Gray deſerves to be tranſmitted to poſterity. In this capacity, the ſmall number of his compoſitions, compared with the high rank he has attained, muſt be conſidered as indicative of an uncommon degree of excellence. In pure invention, perhaps, Gray cannot be ſaid to excel, neither is he highly pathetic or ſublime; but he is ſplendid, lofty, and energetic; generally correct, and richly harmonious. Though lyric poetry is that in which he has chiefly exerciſed himſelf, he was capable of varying his manner to ſuit any ſpecies of compoſition. Perhaps he was beſt of all qualified for the moral and didactic, if we may judge from his noble fragment of An Eſſay on the Alliance of Education and Government. But the number of his fragments indicates a want of energy to ſupport a long-continued flight; and it would be too indulgent to ſuppoſe that he could have performed all that he planned. As a writer of Latin verſe he is perhaps ſurpaſſed by few in claſſic propriety, and certainly excels the ordinary tribe of Latin verſifiers in novelty and dignity. The familiar letters of Gray are entertaining and inſtructive. They are free from all parade, and poſſeſs a fund of pleaſantry, ſometimes bordering upon quaintneſs.

GRAY'BEARD, *ſ.* An old man: in contempt:

Youngling, thou can'ſt not love ſo dear as I.
Graybeard, thy love doth freeze. *Shakeſpeare.*

GRAY'LING, *ſ.* In ichthyology, the umber. See the article SALMO.

GRAY'NESS, *ſ.* The quality of being gray.

GRAY'-EYED, *adj.* Having gray eyes.—The *gray-ey'd* morn ſmiles on the frowning night. *Shakeſpeare.*

GRAY-HAIRED, *adj.* Having gray hairs:

In *gray-hair'd* Cælia's wither'd arms
As mighty Louis lay,
She cry'd, If I have any charms,
My deareſt, let's away. *Dorſet.*

GRAY'-HEADED, *adj.* With a gray head of hair:

Gray-headed men and grave, with warriors mix'd,
Aſſemble. *Milton.*

GRAYS, or GRAYS-THURROCK, a ſmall neat town in the county of Eſſex, diſtant twenty five miles from London, beautifully ſituated on the banks of the Thames, oppoſite Dartford in Kent. Its trade is inconſiderable. It has a fair yearly on the 23d of May, for pedlary; and a market on Thurſdays, at which a conſiderable quantity of grain is ſold to the London factors. A veſſel for goods and paſſengers ſails every Sunday and Thurſday to Wheelers wharf, St. Catharine's, London; and returns on Mondays and Thurſdays: fare nine-pence. The town ſtands on the ſide of a hill; and has a good market-place, and market-houſe, over which is a handſome ſeſſions-room. Here is alſo a large wharf, whoſe ſituation on the river is about half way between Purfleet-magazines and Tilbury-fort.

GRAZALE'MA, a town of Spain, in the province of Grenada: eight miles weſt of Ronda.

GRAZAY-LE-BOI'S, a town of France, in the department of the Mayenne, and chief place of a canton, in the diſtrict of Mayenne: one league and three quarters eaſt of Mayenne, and two and three quarters north of Evron.

To GRAZE, *v. n.* [from *graſs.*] To eat graſs; to feed on graſs.—The greateſt of my pride is to ſee my ewes *graze*, and my lambs ſuck. *Shakeſpeare.*

The more ignoble throng
Attend their ſtately ſteps, and ſlowly *graze* along. *Dryd.*

To

To ſupply graſs.—A third ſort of *grazing* ground is that near the ſea, which is commonly very rich land. *Mortimer.*—To move on devouring.—As every ſtate lay next to the other that was oppreſſed, ſo the fire perpetually *grazed. Bacon.*

[From *raſer*, Fr.] To touch lightly:

Mark then a bounding valour in our Engliſh,
That being dead, like to the bullets *grazing*,
Breaks out into a ſecond courſe of miſchief,
Killing in relapſe of mortality. *Shakeſpeare.*

To GRAZE, *v. a.* To tend grazing cattle; to ſet cattle, to feed on graſs.—Jacob *graz'd* his uncle Laban's ſheep. *Shakeſpeare.*

O happy man, ſaith he, that, lo! I ſee
Grazing his cattle in thoſe pleaſant fields. *Daniel.*

To feed upon.—Some *graze* their land 'till Chriſtmas, and ſome longer. *Mortimer.*

I was at firſt as other beaſts, that *graze*
The trodden herb, of abject thoughts and low. *Milton.*

To ſupply with graſs.—He hath a houſe and a barn in repair, and a field or two to *graze* his cows. *Swift.*

GRAZIA'NI (Anton-Maria), a learned and elegant writer, born of a diſtinguiſhed family at Borgo-ſan-Sepolcro, in Tuſcany, in 1537. After he had acquired the knowledge of Latin under Abſtemio, a celebrated maſter at Friuli, he was ſent to Padua to ſtudy the law. In 1560 he viſited Rome, where he was received into the houſe of cardinal Commendone, who treated him with a kindneſs which laid the foundation of an unalterable attachment. He accompanied this patron in all his journeys into Germany and Poland; and refuſed to quit him, though ſolicited with great promiſes by Henry of Valois, at that time king of the latter country. After the death of Commendone in 1584, he was made ſecretary to pope Sixtus V. He had a conſiderable ſhare in the election of Clement VIII. who, in 1592, created him biſhop of Amelia, and ſent him as his nuncio to the Italian princes and ſtates, in order to unite them in a league againſt the Turks. After the cloſe of his nunciature in 1598, he retired to his ſee, where he aſſiduouſly employed himſelf in the duties of his function till his death in 1611. His writings are, 1. *De Bello Cyprio, Lib. V.* 4to. *Rome*, 1624. A Hiſtory of the War of Cyprus, in elegant Latin. 2. *De Vita Joannis Franciſci, Commendoni, Cardinalis*, 4to. *Par.* 1669. 3. *De Caſibus Adverſis Virorum illuſtrium*, 4to. *Par.* 1680: and a collection of Synodal Ordinances, 1595, folio. A poſthumous work of his was publiſhed at Florence in 1745, entitled *De Scriptis Invita Minerva, ad Aloyſium Fratrem, Lib. XX.* 4to. in which he not only gives an account of his own life and writings, but of the public affairs in which he was engaged, eſpecially thoſe of Poland. This is eſteemed as a very curious and intereſting performance.

GRA'ZER, *ſ.* One that grazes or feeds on graſs:

His flock daily crops
Their verdant dinner from the moſſy turf
Sufficient: after them the cackling gooſe,
Cloſe *grazer*, finds wherewith to eaſe her want. *Philips.*

GRA'ZIER, *ſ.* One who feeds cattle.—Gentle peace, which filleſt the huſbandman's barns, the *grazier's* folds, and the tradeſman's ſhop. *Howel.*

GRA'ZING, *ſ.* The trade of feeding cattle for ſlaughter; the act of feeding on graſs.

GRAZZI'NI (Antony-Francis, ſurnamed Il Laſca), an Italian writer, born of an ancient family at Florence in 1503, and died in 1583. He wrote a volume of poems, publiſhed at Florence in 1559. His other works are, 1. *La Guerra de Moſtri, Poema giocoſo*, 1584. 2. *Stanze, &c.* 3. *Comedie VII.* 4. *Il Laſca, Dialogolo, &c.* 1583. 5. *Letiere.* 6. *Orazione.* 7. *Rime.* 8. *Novelle XI.* As a noveliſt he was thought to be a rival of Boccace in the elegance of his narration, and purity of his ſtyle. Grazzini was one of the founders of the academy *Della Cruſca.*

GREASE, *ſ.* [*graiſſe*, Fr.] The ſoft part of the fat; the oily or unctuous part of animals.—To take out a ſpot of *greaſe*, they uſe a coal upon brown paper. *Bacon.*

Thou hop'ſt, with ſacrifice of oxen ſlain,
To compaſs wealth, and bribe the god of gain
To give thee flocks and herds, with large encreaſe:
Fool! to expect them from a bullock's *greaſe. Dryden.*

M. Deſchamps, of the Philoſophical Society at Lyons, recommends the following proceſs for removing ſpots of greaſe from paper, printed books, or copper-plate engravings:—After having gently warmed the paper or print ſtained with greaſe, wax, oil, or any fat body whatever, take out as much as poſſible of it, by means of blotting-paper preſſed down by a hot iron. Then dip a ſmall bruſh in the eſſential oil of well-rectified ſpirit of turpentine, heated almoſt to ebullition (for when cold it acts very weakly), and draw it gently over both ſides of the paper or print, which muſt be carefully kept warm. This operation muſt be repeated as many times as the quantity of the fat body imbibed by the paper, or the thickneſs of the paper, may render neceſſary. When the greaſy ſubſtance is entirely removed, recourſe may be had to the following method to reſtore the paper to its former whiteneſs, if not completely reſtored by the firſt proceſs: Dip another bruſh in highly-rectified ſpirit of wine, and draw it in like manner over the place which was ſtained, and particularly round the edges to remove the border that would ſtill preſent a ſtain. By employing theſe means, with proper caution, the ſpot will totally diſappear; the paper or print will reſume its original ſplendour; and if the proceſs has been employed on a part written on with common ink, or printed with printers ink, it will experience no alteration.

To remove Spots of Greaſe from Cloth or Silk.—Greaſy ſubſtances are removed from cloths or ſilks by alkalies, ſoaps, the yolk of eggs, fat earths; oxyds of iron, by the nitric and oxalic acids; acids by alkalies, and reciprocally. But when the ſpots are of a complex kind, it will be neceſſary to employ ſeveral means in ſucceſſion. Thus: to deſtroy the ſtain of coom from carriage-wheels, after the greaſe has been diſſolved, the oxyd of iron muſt be removed by the oxalic acid.—The following may be conſidered as one of the moſt valuable receipts: Diſſolve white ſoap in alcohol, and mix this ſolution with the yolks of from four to five eggs: add gradually eſſence of turpentine; and incorporate with the whole ſome fuller's earth, in ſuch a manner as to form balls of a ſuitable conſiſtence. Moiſten the ſpot; and, having rubbed it with theſe balls, the ſpot will be removed by waſhing the ſtuff. All ſpots, except iron-mould and ink, may be removed in this manner. Waſhing deſtroys the luſtre of the ſtuff, and leaves a tarniſhed place diſagreeable to the eye; but the luſtre may be reſtored by drawing over the waſhed place, and in the direction of the pile, a bruſh moiſtened in water impregnated with a little gum. You may then apply a ſheet of paper, or a piece of cloth, and a conſiderable weight, under which the cloth muſt be left to dry.

GREASE, *ſ.* In farriery, a ſwelling and gourdineſs of the legs, which ſometimes happens to a horſe by ſtanding long in the ſtable.—See the article FARRIERY, vol. vii. p. 252.

To GREASE, *v. a.* To ſmear or anoint with greaſe. To bribe; to corrupt with preſents:

Envy not the ſtore
Of the *greas'd* advocate that grinds the poor. *Dryden.*

GREA'SINESS, *ſ.* Oilineſs; fatneſs.—Upon the moſt of theſe ſtones, after they are cut, there appears always, as it were, a kind of *greaſineſs* or unctuoſity. *Boyle.*

GREA'SY, *adj.* Oily; fat; unctuous:

The fragments, ſcraps, the bits and *greaſy* reliques,
Of her o'ereaten faith. *Shakeſpeare.*

Smeared with greaſe.—Buy ſheep, and ſee that they be big-boned, and have a ſoft, *greaſy*, well curled, cloſe, wool. *Mortimer.*—Fat of body; bulky: in reproach.—Let's conſult together againſt this *greaſy* knight. *Shakeſpeare.*

GREAT, *adj.* [ȝreat, Sax. *groot*, Dut.] Large in bulk or number.—Judas one of the twelve came, and with him a *great* multitude with ſwords and ſtaves. *Mat.* xxvi.

A dungeon horrible, on all ſides round,
As one *great* furnace flam'd. *Milton.*

Having any quality in a high degree.—There were they in *great* fear. *Pſ.* xiv. 5.—*Great* triumph and rejoicing was in heav'n. *Milton.*

Charms ſuch as thine, inimitably *great*
He only could expreſs. *Broome.*

Having number or bulk, relative or comparative.—The idea of ſo much is poſitive and clear: the idea of *greater* is alſo clear, but it is but a comparative idea. *Locke.*—Conſiderable in extent or duration.—Thou haſt ſpoken of thy ſervant's houſe for a *great* while to come. 2 *Sam.* vii. 19.—Important; weighty.—Though this be a *great* truth, if it be impartially conſidered, yet it is alſo a great paradox to men of corrupt minds and vicious practices. *Tillotſon.*

What is low raiſe and ſupport,
That to the height of this *great* argument
I may aſſert eternal Providence,
And vindicate the ways of God to man. *Milton.*

Chief; principal:

Hear the king's pleaſure, cardinal, who commands you
To render up the *great* ſeal. *Shakeſpeare.*

Venerable; adorable; awful:

Thou firſt art wont God's *great* authentic will,
Interpreter, through higheſt heav'n to bring. *Milton.*

Wonderful; marvellous.—*Great* things and full of wonder. *Milton.*—Of high rank; of large power:

Of all the *great*, how few
Are juſt to heav'n, and to their promiſe true! *Pope.*

Misfortune made the throne her ſeat,
And none could be unhappy but the *great*. *Rowe.*

General; extenſive in conſequence or influence:

Prolific humour ſoft'ning all her globe,
Fermented the *great* mother to conceive. *Milton.*

Illuſtrious; eminent; noble; excellent.—O Lord, thou art *great*, and thy name is *great* in might. *Jer.* x. 6.

Great are thy works Jehovah, infinite
Thy pow'r! what thought can meaſure thee, or tongue
Relate thee! *greater* now in thy return,
Than from the giant angels: thee that day
Thy thunders magnified, but to create
Is *greater* than created to deſtroy. *Milton.*

Grand of aſpect; of elevated mien:

Such Dido was; with ſuch becoming ſtate,
Amidſt the crowd, ſhe walks ſerenely *great*. *Dryden.*

Magnanimous; generous; high-minded.—In her every thing was goodly and ſtately; yet ſo, that it might ſeem that *great*-mindedneſs was but the ancient-bearer to the humbleneſs. *Sidney.*—Opulent; ſumptuous; magnificent:

Not Babylon,
Nor *great* Alcairo, ſuch magnificence
Equall'd in all their glories. *Milton.*

Intellectually great; ſublime:

This new-created world, how good, how fair,
Anſwering his *great* idea! *Milton.*

Swelling; proud.—Solyman perceived that Vienna was not to be won with words, nor the defendants to be diſcouraged with *great* looks. *Knolles.*—Familiar; much acquainted. *A low word.*—Thoſe that would not cenſure, or ſpeak ill of a man immediately, will talk more boldly of thoſe that are *great* with them. *Bacon.*—Pregnant; teeming:

Their bellies *great*
With ſwelling vanity, bring forth deceit. *Sandys.*

This fly, for moſt he ſtings in heat of day,
From cattle *great* with young keep thou away. *May.*

It is added in every ſtep of aſcending or deſcending conſanguinity; *great* grandſon is the ſon of the grandſon.—I dare not yet affirm for the antiquity of our language, that our *great-great-great* grandſires tongue came out of Perſia. *Camden.*—Hard; difficult: grievous. A proverbial expreſſion.—It is no *great* matter to live lovingly with good-natured and meek perſons. *Taylor.*

GREAT, *ſ.* The whole; the groſs; the whole in a lump.—Carpenters build an houſe by the *great*, and are agreed for the ſum of money. *Moxon.*

To let out thy harveſt by *great* or by day,
Let this by experience lead thee the way:
By *great* will deceive thee with ling'ring it out. *Tuſſer.*

GREAT, a river of Canada, which runs into the river St. Laurence: ſeven leagues below Quebec.

GREAT BAR'RINGTON, a townſhip of the American States, in the ſouth-weſtern part of the State of Maſſachuſetts, in Berkſhire county, lying ſouth of Stockbridge, 150 miles weſt of Boſton, and twenty-ſix eaſt-by-ſouth of Hudſon city, New-York.

GREAT BAY', a bay of North America, at the mouth of the Piſcataqua river, between Portſmouth and Exeter, in the ſtate of New Hampſhire.

GREAT BEAR', one of the conſtellations in the northern hemiſphere. See URSA MAJOR.

GREAT BEAR LA'KE, a water which runs weſtward, and flows into M'Kenzie's river in the north-weſt part of North America; not far from the arctic circle. Its mouth is 250 yards wide.

GREAT BRI'TAIN, the largeſt, richeſt, and moſt populous, iſland in Europe, comprehending South and North Britain, now called England and Scotland, with the principality of Wales; extending from the Lizard point, in north latitude 50°, to Dungſby-head, in north latitude 58° 30′ nearly. Its form approaches ſomewhat to the ſhape of an irregular triangle, the extremities of which are terminated by three promontories, projecting in different directions, viz. the Land's End, in Cornwall, towards the weſt; the North Foreland, in Kent, towards the eaſt; and Dungſby-head, in Caithneſs, towards the north; and the circuit of its three ſides, allowing for the windings of the coaſt, contains, by a general eſtimate, about 1800 miles; but, if it were a perfect triangle, the length of its three ſides would meaſure about 1520 Britiſh miles. It is bounded on the north by the Northern Ocean; on the weſt by the Atlantic and the Iriſh Sea, which ſeparates it from Ireland; on the ſouth by the Britiſh Channel, which divides it from France; and on the eaſt, towards Germany, by the North Sea and German Ocean.

It has been aſſerted, that Great Britain, in times of remote antiquity, was united with the continent. The entire ſeparation of Great Britain from the continent muſt have happened, according to the conjectures of Mr. Kirwan, as ſtated in the Iriſh Tranſ. vol. vi. p. 301, long after the deluge; and that of Ireland from Great Britain at a ſtill later period: for wolves and bears were

anciently found in both, and these must have passed from the continent into Britain, and hence into Ireland, as their importation could never have happened. The convulsion that separated Britain from Germany seems, according to this writer, to have been directed from north to south, but gradually weakened in its progress. Hence that island is sharpened to the northward; but the impression must have been considerably enfeebled by the opposition of the granitic mountains that form the Shetland and Orkney isles. The broken fragments of the calcareous or argillaceous materials of the more southern parts, presented less resistance, were more easily preyed upon, and gave way to what is now called the German Ocean; while these materials themselves were spread over Westphalia, or formed the subsoil of Flanders, Holland, and the sand-banks on its coast. The rupture of the isthmus that joined Calais and Dover was probably effected by an earthquake at a later period, and became gradually widened by tides and currents. Ireland was shielded by Scotland from the violence of the northern shock; and hence its separation from Scotland appears to have been late and gradual. That from England was probably diluvial, and effected by a southern shock. These changes, says Mr. Kirwan, happened at least 3600 years ago.

The division of this island into North Britain and South Britain, is evidently of the most remote antiquity; and the jealousy and perpetual warfare which continually disturbed and disgraced the sister kingdoms, were, for the sake of peace and harmony, above all other considerations, the principal, if not the most desirable, motives for an union. But the amelioration of mankind seems to have taken place only in proportion to the progress of civilization; whilst the happiness of individuals has depended on the security given to their civil and religious liberties. Happily for the people of Great Britain, these seeds were early sown in a congenial soil, and guarded with the jealous eye and fostering care of our ancestors. Yet though the people were jealous of their liberties, they were no less sedulous to maintain the rights of their kings, even in the earliest state of the monarchy. All the prerogatives and rights of the Anglo-Saxon kings were definite and ascertained. They were such as had become established by law or custom, and could be as little exceeded by the sovereign as withheld by his people. They were not arbitrary privileges of an unknown extent. Even William the Conqueror found it necessary to have an official survey of the royal rights taken in every part of South Britain; and we find the hundred, or similar bodies in every county, making the inquisition to the king's commissioners, who returned to the sovereign that minute record of his claims upon his subjects, which constitutes the Doomsday-book. The royal claims in Doomsday-book were, therefore, not the arbitrary impositions of the throne, but were those which the people themselves testified to their king to have been his legal rights. Perhaps no country in Europe can exhibit such an ancient record of the freedom of its people, and the limited prerogatives of its ruler.

It is curious to remark, that the local denominations by which the various places in England are still known, were fixed and ascertained by the same record: for whoever will take the trouble to compare the names in Doomsday-book, which prevailed in the island during the time of the Confessor, with the present appellations of the same places, will find that the greatest number of them correspond. The hundreds in the county of Suffex were sixty-three, and still remain so: of these thirty-eight bore the same names as now; and of the villæ or maneria, which are about three hundred and forty-five, there are two hundred and thirty with appellations like their present. The following list will shew the correspondencies between the ancient and modern names of the counties which occur in Doomsday-book:

Chenth.	Warwicscire.	Herefordscire.
Sudsexe.	Staffordscire.	Grentebrigescire.
Sudrie.	Sciropscire.	Huntedunscire.
Hantescire.	Ceastrescire.	Bedefordscire.
Berrochescire, or Bercheſcire.	Derbyscire.	Northantonescire.
	Snotinghamscire.	Ledescestrescire.
	Midelsexe.	Roteland.
Wiltescire.	Hertfordscire.	Eurvicscire.
Dorsete.	Bockinghamscire.	Lincolescire.
Sumersete.	Oxenfordscire.	Exsessa.
Devenescire.	Gloweceſterscire.	Nordfolc.
Cornvalgie.	Wirecestrescire.	Sudfolc.

London is mentioned in Bede as the metropolis of the East Saxons in the year 604, lying on the banks of the Thames, "the emporium of many people coming by sea and land."

All the probable facts and conjectures relative to the first settlement and population of this island, have been already stated under the article ENGLAND. With respect to the present population of Great Britain, it has been variously estimated; some reckoning it at 7,000,000, and others at more than 12,000,000. But in the year 1800 an act was passed, for taking an account of the population of Great Britain, and of the increase or diminution thereof. From an abstract of the returns made to parliament in consequence of this act, the following result was deduced:

POPULATION OF ENGLAND.

Inhabited Houses.	*Families.*	*Uninhabited Houses.*	*Males.*	*Females.*	*Total of Persons.*
1,467,870	1,778,420	53,965	3,987,935	4,343,409	8,331,434
WALES.					
108,053	118,503	3,511	257,178	284,368	541,546
Army					198,331
Navy					126,279
Seamen in registered vessels					144,558
Convicts					1,410
GRAND TOTAL.					
1,575,923	1,896,723	57,476	4,715,711	4,627,867	9,343,578

It is ascertained, that Scotland contains nearly 1,700,000 inhabitants, and it is known, with sufficient accuracy, that the population of Ireland rather exceeds 4,000,000. We may therefore safely affirm, that the population of the United Kingdom exceeds fifteen millions; and it appears from the collection of all the parish registers of England and Wales, throughout the last century (under the population act), that our population has increased with very accelerated rapidity the nearer we approach the present time. If to the population of the metropolis (864,000) the regiments of guards, and militia in London, and the seamen on-board the registered vessels in the river Thames, were added, it would undoubtedly exceed 900,000 souls; almost a tenth part of the population of England and Wales.

CITIES AND TOWNS.

	Males.	*Females.*	*Total.*
London	393,369	471,476	864,845
Manchester	39,110	44,910	84,020
Liverpool	34,367	43,286	77,653
Birmingham	34,716	38,954	73,670
Bristol	26,943	36,702	63,645
Leeds	25,504	27,658	53,162
Plymouth	18,016	25,178	43,194
Newcastle on Tyne, with Gateshead, in the County of Durham	16,343	20,620	36,963
Norwich	15,810	21,044	36,854
Bath	11,441	19,759	32,200
Portsmouth	14,309	17,857	32,166
Sheffield	15,483	15,831	31,314
Hull	13,051	16,465	29,516
Exeter	7,314	10,084	17,398
York	7,018	9,127	16,145

AREA

NORTH SEA
ATLANTIC OCEAN
IRISH SEA
ENGLISH CHANNEL
BRISTOL CHANNEL
St GEORGES CHANNEL
NORTH CHANNEL
SCOTLAND
IRELAND
WALES
ENGLAND
HEBRIDES or WESTERN ISLES
ISLES of ORKNEY
FIRTH of MURRAY
Firth of Clyde
Firth of Forth
Solway Firth
Mainland
Pentland Firth
C. Wrath
Butt of Lewis
Harris
St Kilda
Skye
Mull
Iona
Tiree
Coll
Rum
Canay
Barra Hd
Flannen Is
Lewis I.
N. Uist
S. Uist
Benbecula
Dunbeath
Wick
Thurso
Cromarty
Inverness
Nairn
Elgin
Banff
Kinnairds Hd
Aberdeen
Stonehaven
Montrose
Arbroath
Dundee
Perth
St Andrews
Cupar
Kinross
Stirling
Clackmannan
Dunbar
Haddington
EDINBURGH
Glasgow
Greenock
Berwick
Dunse
Peebles
Lanark
Ayr
Douglas
Moffat
Jedburgh
Selkirk
Hawick
Kelso
Belford
Holy Hd
Aln
Morpeth
Tynemouth
Newcastle
Sunderland
Hartlepool
Durham
Stockton
Tees R.
Whitby
Scarborough
Flamborough Hd
Spurn Hd
Humber Mouth
Hull
Beverley
Grimsby
Gainsboro
Lincoln
Louth
Alford
Boston
Wash
Yarmouth
Norwich
Lowestoft
Harwich
Ipswich
Aldborough
Sudbury
Bury
Eye
Thetford
Bungay
Loddon
Swaffham
Wisbeach
Ely
Cambridge
Huntingdon
Peterboro
Stamford
Spalding
Grantham
Newark
Nottingham
Derby
Leicester
Rutland
Okeham
Rockingham
Northampton
Bedford
Newport Pagnel
Buckingham
Aylesbury
Hartford
Epping
Chelmsford
Blackwater R.
Colchester
Maldon
Rumford
Mouth of the Thames
Margate
Sheerness
Rochester
Canterbury
Deal
Dover
Sandwich
Ramsgate
Goodwin Sands
Sts of Dover
Calais
Gravelines
Ostend
Brighton
Shoreham
Hastings
Rye
Winchelsea
Tenterden
Uckfield
Lewes
Chichester
Arundel
Petersfield
Winchester
Andover
Salisbury
Southampton
Ringwood
Fordingbridge
Portsmouth
I. of Wight
Newport
Cowes
St Albans Hd
Weymouth
Portland Pt
Dorchester
Bridport
Blandford
Pool
Wimborne
Shaftesbury
Sherborne
Yeovil
Ilminster
Taunton
Wellington
Wellington
Exeter
Lamerton
Bossiney
Padstow
Bodmin
Launceston
Chudleigh
Teignmouth
Torbay
Dartmouth
Start Pt
Plymouth
St Germains
St Michael
Truro
Falmouth
Eddystone
Lands End
Scilly Is
Lizard Pt
Barnstaple
Bideford
Ilfracombe
Tiverton
Wellington
Wells
Bridgewater
Minehead
Frome
Trowbridge
Devizes
Warminster
Chippenham
Malmsbury
Cirencester
Tetbury
Gloucester
Berkeley
Thornbury
Bristol
Bath
Abingdon
Oxford
Reading
Newbury
Windsor
Chertsey
Farnham
Godalming
Guildford
Andover
Basingstoke
Odiham
Alton
Farnham
Petersfield
Midhurst
Arundel
Chichester
Ringwood
Fordingbridge
Salisbury
Wilton
Shaftesbury
Blandford
Sherborne
Yeovil
Crewkerne
Ilminster
Chard
Honiton
Axminster
Lyme
Bridport
Dorchester
Weymouth
Portland Pt
Swanage
Poole
Christchurch
Lymington
Newport
Cowes
I. of Wight
Portsmouth
Gosport
Fareham
Southampton
Winchester
Andover
Basingstoke
Reading
Henley
Wallingford
Abingdon
Oxford
Woodstock
Chipping Norton
Banbury
Daventry
Warwick
Coventry
Kenilworth
Leamington
Stratford
Evesham
Tewkesbury
Cheltenham
Gloucester
Berkeley
Thornbury
Chepstow
Monmouth
Ross
Hereford
Leominster
Tenbury
Bromyard
Worcester
Droitwich
Kidderminster
Bewdley
Stourbridge
Dudley
Wolverhampton
Walsall
Birmingham
Sutton Coldfield
Tamworth
Lichfield
Rugeley
Stafford
Eccleshall
Newport
Wellington
Shrewsbury
Bridgnorth
Wenlock
Ludlow
Knighton
Presteigne
Montgomery
Welshpool
Oswestry
Whitchurch
Ellesmere
Wrexham
Chirk
Llangollen
Ruthin
Denbigh
Rhyl
St Asaph
Flint
Chester
Northwich
Nantwich
Crewe
Newcastle
Leek
Buxton
Macclesfield
Stockport
Manchester
Bolton
Wigan
Warrington
Prescot
Liverpool
Ormskirk
Preston
Lancaster
Garstang
Clitheroe
Settle
Skipton
Otley
Ilkley
Keighley
Bradford
Halifax
Huddersfield
Wakefield
Leeds
Rochdale
Burnley
Blackburn
Chorley
Wigan
Ashton
Oldham
Bury
Manchester
Sheffield
Doncaster
Barnsley
Rotherham
Chesterfield
Mansfield
Worksop
Retford
Gainsboro
Lincoln
Grantham
Sleaford
Boston
Alford
Louth
Grimsby
Barton
Hull
Beverley
Driffield
Malton
Pickering
Whitby
Scarborough
Flamborough Hd
Bridlington
Filey
Scarborough
Thirsk
Northallerton
Richmond
Darlington
Durham
Stockton
Hartlepool
Sunderland
Tynemouth
Newcastle
Morpeth
Alnwick
Belford
Holy Hd
Berwick
Dunse
Haddington
Dunbar
Musselburgh
Edinburgh
Linlithgow
Falkirk
Stirling
Alloa
Kinross
Cupar
St Andrews
Dundee
Arbroath
Montrose
Brechin
Forfar
Aberbrothick
Stonehaven
Aberdeen
Peterhead
Fraserburgh
Banff
Cullen
Elgin
Nairn
Inverness
Cromarty
Dingwall
Tain
Dornoch
Firth of Dornoch
Brora
Dunbeath
Wick
Thurso
Pentland Firth
Hoy
Stronsa
Sunda
N. Ronaldsha
Westra
Mainland
ISLES of ORKNEY
Lewis I.
Harris
St Kilda
Barra Hd
Flannen Is
Butt of Lewis
C. Wrath
Durness
L. Eriboll
L. Loyal
L. Naver
L. Shin
Loch Ness
L. Lochy
L. Linnhe
L. Leven
L. Etive
L. Awe
L. Fyne
L. Long
L. Gare
L. Lomond
L. Katrine
L. Voil
L. Tay
L. Earn
L. Tummel
L. Rannoch
L. Garry
L. Ness
L. Oich
L. Lochy
L. Arkaig
L. Eil
L. Morar
L. Hourn
L. Nevis
L. Garron
L. Duich
L. Alsh
L. Carron
L. Broom
L. Maree
L. Ewe
L. Torridon
L. Shiel
L. Moidart
L. Sunart
L. Aline
L. Leven
L. Etive
L. Awe
L. Fyne
L. Long
L. Gare
L. Lomond
L. Katrine
L. Voil
L. Tay
L. Earn
L. Tummel
L. Rannoch
L. Garry
L. Ness
L. Oich
L. Lochy
L. Arkaig
L. Eil
L. Morar
L. Hourn
L. Nevis
L. Garron
L. Duich
L. Alsh
L. Carron
L. Broom
L. Maree
L. Ewe
L. Torridon
L. Shiel
L. Moidart
L. Sunart
L. Aline
Dublin
Dublin Bay
Howth
Ireland's Eye
Malahide
Swords
Balbriggan
Skerries
Rush
Lusk
Donabate
Portrane
Drogheda
Boyne R.
Mouth of the Boyne
Dundalk
Dundalk Bay
Carlingford B.
Carlingford
Newry
Warrenpoint
Rostrevor
Kilkeel
Dundrum
Dundrum Bay
Strangford
Strangford L.
Portaferry
Ardglass
Downpatrick
Down Patrick
Killyleagh
Comber
Newtownards
Belfast
Belfast L.
Carrickfergus
Larne
Islandmagee
Glenarm
Carnlough
Glenarm Bay
Red Bay
Cushendall
Cushendun
Ballycastle
Fair Hd
Rathlin
Rathlin I.
Sheep Haven
Malin R.
Malin
Tory I.
Inishtrahull
Inishtrahull Sd
Lough Swilly
Fanad Hd
Fanad
Rathmullan
Lough Foyle
Moville
Greencastle
Inishowen Hd
Inishowen
Lough Foyle
Londonderry
Derry
Culmore
Culmore Pt
Magilligan Pt
Coleraine
Portrush
Portstewart
Newtown
Dunaghy
Ballycastle
Ballintoy
Ballintoy Hbr
Bengore Hd
Giant's Causeway
Port Rush
Portrush
Portstewart
Coleraine

AREA and POPULATION of the ſeveral COUNTIES of ENGLAND and WALES, in Square Statute Miles and Acres, as meaſured on the Maps publiſhed by C. SMITH.

Counties.	*Sq. Stat. Miles.*	*Acres.*	*Population, 1801.*	*No. of Perſons in ſq. m.*
Bedford	430	275,200	93,393	147
Berks	744	476,160	109,215	147
Bucks	748	478,720	107,444	144
Cambridge	686	439,040	89,346	130
Cheſter	1,017	650,880	191,751	189
Cornwall	1,407	900,480	188,269	134
Cumberland	1,497	958,080	117,230	78
Derby	1,077	689,280	161,142	149
Devon	2,488	1,592,320	343,001	138
Dorſet	1,129	722,560	143,319	102
Durham	1,040	665,600	160,361	154
Eſſex	1,525	976,000	226,437	148
Glouceſter	1,122	718,080	250,809	224
Hereford	971	621,440	89,191	92
Hertford	602	385,280	97,577	162
Huntingdon	345	220,800	37,568	110
Kent	1,462	935,680	307,624	210
Lancaſhire	1,806	1,155,840	672,731	372
Leiceſter	816	522,240	130,081	159
Lincoln	2,787	1,783,680	208,557	75
Middleſex	297	190,080	818,125	2,754
Monmouth	516	330,240	45,582	88
Norfolk	2,013	1,288,320	273,371	136
Northampton	965	617,600	131,757	137
Northumberland	1,809	1,157,760	157,101	87
Nottingham	774	495,360	140,350	181
Oxford	743	474,880	109,620	148
Rutland	200	128,000	16,356	82
Salop	1,403	897,920	167,639	119
Somerſet	1,549	991,360	273,750	177
Southampton	1,533	981,120	219,656	143
Stafford	1,196	765,440	239,153	199
Suffolk	1,566	1,002,240	210,431	134
Surry	811	519,040	269,043	332
Suſſex	1,461	935,040	159,311	109
Warwick	934	629,760	208,190	212
Weſtmorland	772	462,080	41,617	57
Wilts	1,283	821,120	185,107	144
Worceſter	674	431,360	139,333	207
York, E. Riding	1,268	811,520	139,433	143
—— N. Riding	2,112	1,351,680	155,506	
—— W. Riding	2,633	1,685,120	563,953	
England	50,320	32,154,800	8,331,434	166
Angleſey	402	257,280	33,806	84
Brecon	731	467,840	31,633	43
Cardigan	726	464,640	42,956	59
Carmarthen	926	592,640	67,317	73
Carnarvon	775	496,000	41,521	54
Denbigh	731	467,640	60,352	83
Flint	309	197,760	39,622	128
Glamorgan	822	526,080	74,525	87
Merioneth	691	442,240	29,506	43
Montgomery	982	628,480	47,978	49
Pembroke	575	368,000	56,280	98
Radnor	455	291,200	19,050	42
Wales	8,125	5,200,000	541,546	67
England and Wales	58,335	37,334,400	8,872,980	152

Scotland and Ireland are nearly equal to each other in area, and together are equal to England and Wales: wherefore the population of Scotland being 1,600,000, averages at 55 to a ſquare mile; and the population of Ireland being about 4,250,000, averages at 146 to a ſquare Britiſh mile. The United Kingdom averages at 130 to a ſquare mile, including about 470,000 ſoldiers and ſailors.

With regard to the whole population of the widely-extended dominions of Great Britain, M. Mentelle, in his "Geographie Statiſtque," has very ingeniouſly contraſted it with that of France, in the following manner: The French Republic is ſaid at this time, (1807,) to have an extent nearly equal to that of Gaul in the time of the Romans, the empire compriſing all the countries which formed monarchical France, with the following additions, viz. the comptât of Avignon, the duchy of Bouillon, the republic of Mulhauſen, the principalities of Montbeliard, Porentruy, and Salm, the republic of Geneva, the comté of Nice, Savoy, Piedmont, Belgium, Dutch Flanders, Dutch Brabant, with all the territory on the left bank of the Rhine, Maeſtricht, Venloo, and their dependencies, and the iſle of Elbe. In this general view of modern France, the admeaſurement of her ſurface is ſtated at 31,385 ſquare leagues, and her population at 34,468,312; but we infer that Genoa is not included in either, as Leghorn is not mentioned among the ports of France; nor are either of the three Genoeſe departments inſerted in the liſt of the departments compoſing the French republic. The population of the iſle of Elbe is alſo expreſsly excluded from the above ſtatement.

Great, however, as this number appears, the author has repreſented the population belonging to the Britiſh monarchy as far exceeding it: but, in order to effect this object, the electorate of Hanover is joined to Great Britain and Ireland, with all the dependent iſles, as conſtituting our European poſſeſſions; to which part of our empire in the eaſt, and our colonies, are added. The account ſtands thus:

The extent of the territory in Europe belonging to the Britiſh monarchy contains 17,160 ſquare leagues.

The European population is	14,303,087
Poſſeſſions in Canada 38,000 ſquare leagues; population	23,000,000
In America	1,000,000
In 1801, by the treaty of Amiens, the iſland of Ceylon was ceded to the Engliſh, containing 4,800 ſquare leagues; population	4,000,000
Conquered in 1779, chiefly from Tippoo Saib, 5,730 ſquare leagues; population about	4,000,000
Total of the population	46,303,087

It is not difficult to penetrate the motive of this French writer, for his wonderful diſplay of Britiſh population. England, perhaps, is to be told that, with a population at command of 46,303,087, ſhe ought not to be alarmed at the aggrandizements of France; which, including the conquered countries, counts her inhabitants at only thirty-four millions and a half. On the contrary, we know that our diſtant poſſeſſions drain our population; and that, though they add to the riches, they do not augment the phyſical ſtrength, of the ſtate.

This fact may probably not be believed by thoſe who are advocates for foreign conqueſts; nor the evil ſufficiently guarded againſt, until dear-bought experience convinces us of the miſtake. Perhaps the diſcomfiture of the whole imperial army, in the late German war, was alone owing to the miſtaken policy of dividing the forces and marching them to diſtant and disjoined operations, inſtead of connecting their poſitions and concentrating their ſtrength. Let us hope that a ſimilar policy may not be the error of the rulers of Great Britain. The Engliſh forces are undoubtedly formidable; and when acting in concert with our invincible navy, their combined ſtrength will probably for ever be found an overmatch for the united machinations of all the enemies of Great Britain; but when this force is broken into parts, and large portions thereof, employed in diſtant foreign conqueſts, the means of ſelf-defence muſt neceſſarily be weakened. Thus while one diviſion of our army is engaged in ſecuring the Cape of Good Hope, and ameliorating and ſubjugating ſouthern Africa; while another armament

armament is employed in the re-conqueſt of Egypt; a third deſtined to ſeize upon the Spaniſh ſettlements and gold-mines in South America; and a fourth employed in the conqueſt of Turkey in Europe; beſides the number of men requiſite to protect our dominions in Aſia and the Weſt Indies; it becomes evident that our united ſtrength muſt be impaired at home, while a temptation is held out to our implacable enemy to riſk the perils of an invaſion. Better and wiſer would it be for us, perhaps, to let theſe viſionary conqueſts alone; remembering that the acquiſition of the gold-mines of South America was the ruin of Spain; while induſtry, commerce, and the encouragement of our extenſive manufactures, have proved the aggrandiſement and ſinews of Great Britain.

Concerning the SOVEREIGNTY OF THE SEAS, ſo long claimed by Great Britain, and ſo loudly oppoſed by the court of France; it may here be proper to ſtate the facts relative to its origin, and the ſpirit and perſeverance with which it has been maintained by our forefathers. With reſpect to the *right*, as founded in nature, it ſeems reaſonable to admit, that ſince geographers have demonſtrated that more than two thirds of this globe is covered with water, and that the principal part thereof conſiſts in immenſe tracts of an unbounded ocean, over which no private claim or individual authority could have been originally ſet up, it follows, that he who ſhould *firſt* poſſeſs, and occupy, and defend, and make ſubſervient to his uſes, any particular parts of theſe immenſe ſeas, would be clearly entitled to the occupancy of them, to the utmoſt limit that ſuch occupancy could be maintained, exerciſed, and defended. With reſpect to the *juſtice* of the thing, we need only refer to thoſe diſtricts of the ſea which are claimed as fiſheries, by different ſovereigns; for on the right above laid down, can the claim to thoſe fiſheries alone be maintained. And with reſpect to the *law of nations*, it is abundantly evident that every maritime power on the ſurface of the globe has from time to time endeavoured to poſſeſs, and that *excluſively*, as much of the contiguous ſea as their nautical abilities would enable them to occupy and defend, even from the remote era of the Phœnicians, to the period of the importunate ſolicitation of Napoleon I. to poſſeſs "fleets, and ſhips, and commerce, and a large portion of the dominion of the ocean," in common with the Engliſh. The charge, therefore, that Great Britain has unjuſtly monopolized the ſovereignty of the ſeas, appears to be founded in error and in envy; inaſmuch as every other maritime power has endeavoured to avail itſelf of the ſame advantage; and as it has been ſolely owing to the ſuperior induſtry, policy, and bravery, of the Engliſh people, that they have ſucceeded in this grand eſtabliſhment of their authority, and left all their competitors at a vaſt diſtance behind them. How this came ſo fortunately to happen, we ſhall next endeavour to point out.

The early eſtabliſhment of a defenſive and offenſive fleet, was a regulation which our anceſtors, who were more verſed in the practical philoſophy of life than the ſpeculative one of the cloſet, thought neceſſary for the welfare and ſafety of the kingdom. Reaſoning from the ſelf-preſervation of an individual to the ſelf-preſervation of a people, they conſidered the defence of this iſland from foreign invaſion, as the firſt law in national policy; and judging that the dominion of the land could not be preſerved without poſſeſſing that of the ſea, they made every effort to procure to the nation a maritime power fully adequate to this moſt ſalutary purpoſe. Thus, in proceſs of time, the navy of England was univerſally allowed to excel all others for three things, viz. beauty, ſtrength, and ſafety; for beauty, our ſhips of war became ſo many floating palaces; for their ſtrength, ſo many moving caſtles; and for ſafety, they are unqueſtionably the moſt defenſive walls of the land; and as our naval power gained us authority in the moſt diſtant climates, ſo the ſuperiority of our fleet above other nations, for ages rendered the Britiſh monarch the arbiter of Europe.

The kings of England in ancient times commanded their fleets in perſon; and king Arthur vindicated the dominion of the ſeas, making ſhips of all nations ſalute our ſhips of war by lowering the topſail, and ſtriking the flag, as in like manner they were accuſtomed to do to the forts upon land; by which ſubmiſſion they were put in mind that they were come into a territory, wherein they had to own a ſovereign power and juriſdiction, and receive protection from it: and this duty of the flag, which was conſtantly paid to our anceſtors, ſerved to imprint a reverence in foreigners, and added new courage to the Britiſh ſeamen; for it was contended, that reputation abroad is the principal ſupport of the government at home.

King Edgar, ſucceſſor to Arthur, firſt ſtiled himſelf *Sovereign of the narrow ſeas*; and having fitted out a fleet of four hundred ſail of ſhips, in the year 937, ſailing about Britain with his mighty navy, and arriving at Cheſter, was there met by eight kings and princes of foreign nations come to do him homage; who, as an acknowledgment of his ſovereignty, rowed this monarch in a boat down the river Dee, himſelf ſteering the boat; a marine triumph which is not to be paralleled in the hiſtories of nations.

Canute (Edgar's ſucceſſor) laid the ancient tribute called *Danegeld*, for guarding the ſeas, and maintaining the ſovereignty of them; with the following emblem expreſſed, viz. Himſelf ſitting on the ſhore in his royal chair while the ſea was flowing, ſpeaking, *Tu meæ ditionis es, & terra in qua ſedeo eſt, &c.* Egbert, Alfred, and Ethred, kept up the dominion and ſovereignty of their predeceſſors; nor did the ſucceeding princes, of the Norman race, waive this great prerogative, but maintained the right to the four adjacent ſeas ſurrounding the Britiſh ſhore: the honour of the flag king John challenged, not barely as a civility, but a right to be paid *cum debitâ reverentiâ*, and the perſons refuſing he commanded to be taken as enemies: and the ſame ſubmiſſion was ordained not only to be paid to whole fleets, bearing the royal ſtandard, but to thoſe ſhips of privilege that wore the prince's enſigns or colours of ſervice: this decree was confirmed and bravely aſſerted by a fleet of five hundred ſail, in a royal voyage to Ireland, wherein he made all the veſſels which he met with in his way, in the eight circumfluent ſeas, to pay that duty and acknowledgment, which has been ever ſince maintained by our kings, and was never conteſted by any nation, unleſs by thoſe who occaſionally threatened the conqueſt of the whole empire.

Trade gave occaſion to the bringing mighty fleets to ſea; and on the increaſe of trade, ſhips of war were neceſſary in all countries for the preſervation of it in the hands of the juſt proprietors. In ancient times the ſeveral counties of England were liable to a particular taxation for building ſhips of war, and fitting out fleets, every one in proportion to their extent and riches; ſo that the largeſt counties were each of them to furniſh a firſt-rate man of war, and the others every one to build one in proportion; but this method has been long diſuſed, and the fitting out our navy for many ages has been thrown into the public charge. King Edward III. in his wars with France, had a fleet of ſhips before Calais, ſo numerous, that they amounted to ſeven hundred ſail; but theſe were only ſmall veſſels.

Notwithſtanding that the fleets of Great Britain have been remarkable for ſeveral ages paſt, for the great and ſignal victories obtained from time to time over their enemies, and that in the reigns of ſome of our ancient kings, there have been greater numbers of ſhips fitted out at different times, upon certain expeditions, than have been of late years, yet that of a royal navy was never properly eſtabliſhed, until by Henry VIII. in the

fourth year of his reign, anno 1512; at which time, that king, taking umbrage at the mighty naval preparations of France, made an augmentation of twenty-five large ſhips of war to thoſe already in being; he likewiſe erected an office for the navy, and eſtabliſhed a certain number of commiſſioners, to whom the charge of the navy was committed, and whoſe duty it was to inſpect into the ſtate and condition of the king's ſhips, and to make a report thereof to the lord high admiral, in order to their being repaired or rebuilt, and ſupplied with every thing neceſſary for the public ſervice, according as the caſe required it; for till that time, the eſtabliſhment of the naval forces of this kingdom ſeems to have been upon an auxiliary dependency of the ſea-ports and maritime towns, who were under certain conditions of furniſhing their reſpective quotas of ſhips, for the king's uſe, upon previous notice given to them in that behalf; after which, they all came to the appointed rendezvous, and were then diſpoſed of by the king's order upon the ſervices intended. Upon this augmentation, the king's fleet at that time conſiſted of no more than forty-five ſhips, with which that of the French was ſoon overcome. Of thoſe towns which furniſhed ſhips for the public ſervice, the Cinque-ports were the moſt noted, and whoſe privileges ſtill ſubſiſt, on account of the ſervices which they obliged themſelves in particular to perform to the crown.

There are liſts of the fleet of queen Elizabeth, which make it appear, that there was but one private gentleman a captain, all the reſt being lords and knights: ſo high was the eſteem for ſervice at ſea in thoſe days, when our princes ruled with the moſt conſummate glory: but the opinion of ſerving at ſea in later times having been very much leſſened, it has ſince been too much declined by the nobility.

A memorable inſtance, however, of the bravery of one of our noblemen, the duke of Albemarle, who commanded one diviſion of the Engliſh ſquadron in the Dutch war of 1666, ought for ever to ſtand upon record. On the 2d of June in that year, in a council of war, held for the purpoſe of conſidering how far it would be prudent to renew the action on that day, after having loſt two ſhips in the action of the preceding, namely, the Swiftſure and the Eſſex, which were taken by the Dutch fleet commanded by Van Tromp and De Ruyter in the Engliſh channel, the duke of Albemarle delivered his opinion as follows: "That if we had dreaded the numbers of our enemies, we ſhould have fled yeſterday; but though we are inferior to them in ſhips, we are in all things elſe ſuperior. Force gives them courage. Let us, if we need it, borrow reſolution from the thoughts of what we have formerly performed. Let the enemy feel, that, though our fleet be divided, our ſpirit is entire. At the worſt it will be more honourable to die bravely here on our own element, than to be made ſpectacles to the Dutch. To be overcome is the fortune of war, but to fly is the faſhion of cowards. Let us teach the world, THAT ENGLISHMEN WOULD RATHER BE ACQUAINTED WITH DEATH THAN WITH FEAR."

The maritime ſtate, ſays Blackſtone, though nearly related to the military, is much more agreeable to the principles of our free conſtitution. The royal navy of Great Britain hath ever been its greateſt defence and ornament; it is its ancient and natural ſtrength, the floating bulwark of the iſland: an army from which, however ſtrong and powerful, no danger can ever be apprehended to liberty: and accordingly it has been aſſiduouſly cultivated, even from the earlieſt ages. To ſo much perfection was our naval reputation arrived in the twelfth century, that the code of maritime laws, which are called the Laws of Oleron, and are received by all nations in Europe as the ground of their marine conſtitutions, was confeſſedly compiled by our king Richard I. at the iſle of Oleron, on the coaſt of France, then part of the poſſeſſions of the crown of England.

And yet ſo vaſtly inferior were our anceſtors in this point, to the preſent age, that, even in the maritime reign of queen Elizabeth, ſir Edward Coke thinks it matter of boaſt, that the royal navy of England then conſiſted of thirty-three ſhips. The preſent condition of our marine is in a great meaſure owing to the ſalutary proviſions of the ſtatutes called the Navigation Acts; whereby the conſtant increaſe of Engliſh ſhipping and ſeamen was not only encouraged, but rendered unavoidably neceſſary.

At the ſame time that the good economy of the royal navy is diſplayed, it ſeems neceſſary to take ſome notice of that, which affords it an opportunity of appearing in more magnificent grandeur than can be repreſented by the ableſt writer in the world; namely, the *ocean* on which it is borne; eſpecially as there is a peculiar ſovereignty and property inherent therein, to the monarchs of Great Britain; the preſervation of which, for ages paſt, has ſo much conduced to increaſe the glory of the nation. This right is ſo ancient and undeniable, that even the moſt haughty of our neighbours dare not controul it, however they may preſume to contradict it by vaunting words; neither was any thing ever written againſt it until it was undertaken by Hugo Grotius, in his book called *Mare liberum*.

The boundaries properly ſaid to encompaſs what are called the Britiſh Seas, are thus accounted, under the diſtinction of the four cardinal points of the compaſs; taking it for granted in general, that all the ſeas which ſurround Great Britain, Ireland, and the other iſlands appertaining to the crown, are called the Britiſh Seas; but as to particulars they ſtand thus: On the ſouth is the Britiſh Channel, which ſeparates England from France, the boundaries of which extend to the oppoſite ſhores of France, and to thoſe of Spain, as far as Cape Finiſterre. From that Cape it extends on the weſt in an imaginary line running in twenty-three degrees of weſt longitude from London, to the latitude of ſixty-three degrees north, which laſt is called the Weſtern Ocean of Britain. From the aforeſaid latitude of ſixty-three degrees, it extends in a line (ſuppoſed to be drawn) in that parallel of latitude, to the middle point of the land, Van Staten, on the coaſt of Norway, which is the northern boundary, and from that point it extends along the ſhores of Norway, Denmark, Germany, and the Netherlands, to the channel firſt mentioned; which laſt boundary comprehends what is called the Eaſtern Ocean of Britain.

There being no lands lying on the weſt and north ſides of the Britiſh dominions, nearer than the continent of America, the iſland of Newfoundland, and Greenland; and the king of Great Britain having poſſeſſions in the two firſt places, the boundaries of his maritime empire cannot be ſaid to be ſtrictly limited on that ſide. Moreover, as to Greenland, it was at firſt diſcovered in the reign of Edward VI. by ſir Hugh Willoughby, for the uſe of the crown of England; and ſtill again to the northward there is ſome foundation for extending this ſovereignty a great deal farther, on account of the acquiſitions of king Arthur, a record of which is to be found in Hackluyt, p. 245, tranſlated from the Latin original there quoted from Geoffrey of Monmouth's Hiſtory.

According to this ancient right, the Britiſh dominion on the North Sea is very extenſive; and ſo far from being queſtioned, or the trade of the Britiſh ſubjects in thoſe parts obſtructed, that on the contrary, (without regard to the above relation concerning king Arthur,) Britain has a prior right even to Denmark and Norway in the Greenland fiſhery, and in Davis's Streights; theſe places being unknown to them, and the reſt of Europe, till John Davis's voyage for diſcovery of the north-weſt paſſage in the year 1585; though it ſeems that the Danes afterwards demanded toll for our fiſhing at Greenland, but it was refuſed to them.

In the eſtabliſhment of fiſheries, as well as in all the relative incitements to commerce, it has been the wiſdom of the legiſlature to provide a nurſery for ſeamen, and ſeems at all times to have been the object of our government, that the merchants ſhould own as many ſhips, and employ as many *native* mariners, as poſſible. To induce, and ſometimes to *force* them to this application of their capital, reſtrictions and prohibitions were deviſed. Theſe affected not only foreigners but natives. The intereſts of commerce were often ſacrificed to this object. Trade was conſidered principally as the means of promoting the employment of ſhips, and was encouraged chiefly as it conduced to the one great national object, *the naval ſtrength of the country*. This policy was purſued by thoſe who came after them in directing the public councils; and in the ſeventeenth century, when many inſtitutions of our anceſtors fell a ſacrifice to the rage of reformation, the wiſdom of the Navigation Syſtem, or Sovereignty of the Seas, was again reſpected.

If the wiſdom of any ſcheme of policy is to be meaſured by its effects and conſequences, this navigation ſyſtem is entitled to the praiſe of having attained the end for which it was deſigned. Whether we regard the primary or inferior objects in this ſyſtem, whether it is the increaſe of ſhipping, the extenſion of our foreign trade, or the ſtrength of our navy, they have all advanced to a degree of conſideration unexampled; and they owe that advancement entirely to our ability in preſerving the Sovereignty of the Seas.

The increaſe of our trade and naval ſtrength has kept pace with that of our ſhipping and navigation. We can reflect with pride, that our foreign trade, combined with our manufactures and domeſtic induſtry, enables us to raiſe annually *ſixteen millions* of money with more eaſe, than four millions were raiſed during the reign of king William: and this upon a people, who, in their different ranks, enjoy more riches, more competency, and more comfort, than any people in Europe; and who are more induſtrious, becauſe they are better protected by a conſtitution, which has been progreſſively improving, both in theory and practice, ever ſince the ſuperiority of our naval tactics enabled us to reſcue the carrying trade from the Dutch.

The Sovereignty of the Seas has at no period of our hiſtory been more completely defended and maintained than in our own time, by that able and invincible hero Horatio lord viſcount Nelſon. His victories of Aboukir Bay, Copenhagen Sound, and Trafalgar, have immortaliſed his name. The two former of theſe celebrated engagements have already been detailed under the article ENGLAND, vol. vi. p. 790–794; but that of Trafalgar, having occurred ſince that article was ſent to the preſs, and being the moſt complete and deciſive victory ever gained on the open ſeas, we conſider it of national importance to record it in this place. And ſince there the brave Nelſon glorioufly fell, and enviably died in the bed of honour in the midſt of this engagement, we cannot adhere more to truth and fact, than by ſtating the intereſting particulars from the official diſpatch of him who ſo meritorioufly ſucceeded to the chief command, namely admiral lord Collingwood.

On Monday the 21ſt of October 1805, at day-light, when Cape Trafalgar bore eaſt by ſouth about ſeven leagues, the enemy was diſcovered ſix or ſeven miles to the eaſtward, the wind about weſt, and very light; the commander in chief immediately made the ſignal for the fleet to bear up in two columns, as they are formed in order of ſailing; a mode of attack which lord Nelſon had previouſly directed, to avoid the inconvenience and delay in forming a line of battle in the uſual manner. The enemy's line conſiſted of thirty-three ſhips, (of which eighteen were French and fifteen Spaniſh,) commanded in chief by admiral Villeneuve. The Engliſh conſiſted of only twenty-ſeven ſhips of the line. The Spaniards, under the direction of Gravina, wore with their heads to the northward, and formed the line of battle with great cloſeneſs and correctneſs; but as the mode of attack was unuſual, ſo the ſtructure of their line was new; it formed a creſcent, convexing to leeward; ſo that, in leading down to their centre, I had both their van and rear abaft the beam: before the fire opened, every alternate ſhip was about a cable's length to windward of her ſecond a-head and a-ſtern, forming a kind of double line, and appeared, when on their beam, to leave a very little interval between them; and this without crowding their ſhips. Admiral Villeneuve was in the Bucentaur in the centre, and the prince of Aſturias bore Gravina's flag in the rear; but the French and Spaniſh ſhips were mixed without any apparent regard to order of national ſquadron.

As the mode of our attack had been previouſly determined on, and communicated to the flag officers and captains, few ſignals were neceſſary, and none were made, except to direct cloſe order as the lines bore down. The commander in chief in the Victory led the weather column, and the Royal Sovereign, which bore my flag, the lee. The action began at twelve o'clock, by the leading ſhips of the columns breaking through the enemy's line, the commander in chief about the tenth ſhip from the van, the ſecond in command about the twelfth from the rear, leaving the van of the enemy unoccupied; the ſucceeding ſhips breaking through, in all parts, aſtern of their leaders, and engaging the enemy at the muzzles of their guns: the conflict was ſevere; the enemy's ſhips were fought with a gallantry highly honourable to their officers, but the attack on them was irreſiſtible, and it pleaſed the Almighty Diſpoſer of all Events to grant his majeſty's arms a complete and glorious victory. About three P. M. many of the enemy's ſhips having ſtruck their colours, their line gave way: admiral Gravina, with ten ſhips, joining their frigates to leeward, ſtood towards Cadiz. The five headmoſt ſhips in their van tacked, and ſtanding to the ſouthward, to windward of the Britiſh line, were engaged, and the ſternmoſt of them taken; the other four went off, leaving to his majeſty's ſquadron nineteen ſhips of the line, (of which two are firſt-rates, the Santiſſima Trinidad and the Santa Anna,) with three flag officers, viz. admiral Villeneuve, the commander in chief; don Ignatio Maria d'Alava, vice admiral; and the Spaniſh rear-admiral don Baltazar Hidalgo Ciſneros.

After ſuch a victory it may appear unneceſſary to enter into encomiums on the particular parts taken by the ſeveral commanders; the concluſion ſays more on the ſubject than I have language to expreſs; the ſpirit which animated all was the ſame; when all exerted themſelves zealouſly in their country's ſervice, all deſerve that their high merits ſhould ſtand recorded; and never was high merit more conſpicuous than in the battle I have deſcribed.—The Achille (a French 74), after having ſurrendered, by ſome miſmanagement of the Frenchmen took fire and blew up; two hundred of her men were ſaved by our tenders.

A circumſtance occurred during the action, which ſo ſtrongly marks the invincible ſpirit of Britiſh ſeamen when engaging the enemies of their country, that I cannot reſiſt the pleaſure I have in making it known to their lordſhips; the Temeraire was boarded at once by a French ſhip on one ſide, and a Spaniard on the other; the conteſt was vigorous; but, in the end, the combined enſigns were torn from the poop, and the Britiſh hoiſted in their places.

Such a battle could not be fought without ſuſtaining a great loſs of men. I have not only to lament, in common with the Britiſh navy and the Britiſh nation, in the fall of the commander in chief, the loſs of a hero, whoſe name will be immortal, and his memory ever dear to his country; but my heart is rent with the moſt poignant grief for the death of a friend, to whom, by many years intimacy, and a perfect knowledge of the virtues

of his mind, which inſpired ideas ſuperior to the common race of men, I was bound by the ſtrongeſt ties of affection; a grief to which even the glorious occaſion in which he fell, does not bring the conſolation which perhaps it ought; his lordſhip received a muſket ball in his left breaſt, about the middle of the action; he ſent an officer to me immediately with his laſt farewell, and ſoon after expired.—Having thus detailed the proceedings of the fleet on this occaſion, I beg to congratulate their lordſhips on a victory, which, I hope, will add a ray to the glory of his majeſty's crown, and be attended with public benefit to our country. I am, &c.

C. COLLINGWOOD.

Of the ten ſhips which ſtood for Cadiz, nine, with the utmoſt difficulty, got into port; but the four headmoſt ſhips of the enemy's van, which went off to ſea, fell in with ſir Richard Strachan's ſquadron on the 4th of November, and were all captured. The following is an official ſtatement of the names of the ſhips and commanders in the enemy's line of battle, ſhewing how they were diſpoſed of:

1. Spaniſh ſhip San Ildefonſo, of 74 guns, brigadier don Joſeph de Vargas; ſent to Gibraltar.

2. Spaniſh ſhip San Juan Nepomuceno, of 74 guns, brigadier don Coſme Churruca; ſent to Gibraltar.

3. Spaniſh ſhip Bahama, of 74 guns, brigadier don A. D. Galiana; ſent to Gibraltar.

4. French ſhip Swiftſure, of 74 guns, monſieur Villemadrin; ſent to Gibraltar.

5. Spaniſh ſhip Monarca, of 74 guns, don Jeodoro Argumoſa; wrecked off San Lucar.

6. French ſhip Fougueux, of 74 guns, Monſ. Brandouin; wrecked off Trafalgar, all periſhed, and thirty of the Temeraire's men.

7. French ſhip Indomptable, of 84 guns, Monſ. Hubert; wrecked off Rota, all periſhed.

8. French ſhip Bucentaur, of 80 guns, admiral Villeneuve, commander in chief; captains Prigny and Magendle; wrecked on the Porques, ſome of the crew ſaved.

9. Spaniſh ſhip San Franciſco de Aſis, of 74 guns, don Luis de Flores; wrecked near Rota.

10. Spaniſh ſhip El Rayo, of 100 guns, brigadier don Henrique Macdonel; wrecked near San Lucar.

11. Spaniſh ſhip Neptuno, of 80 guns, brigadier don Cayetano Valdes; wrecked between Rota and Catolina.

12. French ſhip Argonaute, of 74 guns, monſieur Epron; on-ſhore in the port of Cadiz.

13. French ſhip Berwick, of 74 guns, Monſ. Camas; wrecked to the northward of San Lucar.

14. French ſhip Aigle, of 74 guns, Monſ. Courrege; wrecked near Rota.

15. French ſhip Achille, of 74 guns, Monſ. de Nieuport; burnt during the action.

16. French ſhip Intrepide, of 74 guns, monſieur Infornet; burnt by the Britannia.

17. Spaniſh ſhip San Auguſtin, of 74 guns, brigadier don Felipe X. Cagigal; burnt by the Leviathan.

18. Spaniſh ſhip Santiſſima Trinidad, of 140 guns, rear admiral don Baltazar H. Ciſneros; brigadier don F. Uriante; ſunk by the Prince, Neptune, &c.

19. French ſhip Redoutable, of 74 guns, monſieur Lucas; ſunk aſtern of the Swiftſure; Temeraire loſt thirteen, and Swiftſure five, men.

20. Spaniſh ſhip Argonauta, of 80 guns, don Antonio Parejo; ſunk by the Ajax.

21. Spaniſh ſhip Santa Anna, of 112 guns, vice-admiral don Ignacio D'Alava; captain don Joſeph de Gardoqui; taken, but got into Cadiz in the gale, diſmaſted.

22. French ſhip Algeziras, of 74 guns, rear-admiral Magon (killed); captain Monſ. Bruaro; taken, but got into Cadiz in the gale, diſmaſted.

23. French ſhip Pluton, of 74 guns, Monſ. Coſman; returned to Cadiz in a ſinking ſtate.

24. Spaniſh ſhip San Juſte, of 74 guns, don Miguel Gaſton; returned to Cadiz, has a foremaſt only.

25. Spaniſh ſhip San Leandro, of 64 guns, don Joſeph de Quevedo; returned to Cadiz, diſmaſted.

26. French ſhip Neptune, of 84 guns, Monſ. Maiſtral; returned to Cadiz.

27. French ſhip Heros, of 74 guns, Monſ. Poulain; returned to Cadiz, lower maſts in, and admiral Rotelle's flag on-board.

28. Spaniſh ſhip Principe de Aſturias, of 112 guns, admiral don F. Gravina; don Antonio Eſcano, &c. returned to Cadiz, diſmaſted.

29. Spaniſh ſhip Montanez, of 74 guns, don Franciſco Alcedo; returned to Cadiz.

30. French ſhip Formidable, of 80 guns, rear-admiral Dumanoir; hauled to the ſouthward, and eſcaped.

31. French ſhip Mont Blanc, of 74 guns, Monſ. Le Villegries; hauled to the ſouthward, and eſcaped.

32. French ſhip Scipion, of 74 guns, Monſ. Berenger; hauled to the ſouthward, and eſcaped.

33. French ſhip Duguay Trouin, of 74 guns, Monſ. Touffet; hauled to the ſouthward, and eſcaped. Theſe laſt four ſhips were captured by ſir Richard Strachan. The total ſtands thus:

Sent into Gibraltar	- - -	4
Deſtroyed and broken up	- - -	16
In Cadiz, mere wrecks	- - -	6
In Cadiz, ſerviceable	- - -	3 } 9
Taken by ſir Richard Strachan	- -	4
	Total -	33

SHIPS OF THE BRITISH SQUADRON, *with the Number of Killed and Wounded on-board of each.*

1. Victory—4 officers, 3 petty officers, 32 ſeamen, and 18 marines, killed; 4 officers, 3 petty officers, 59 ſeamen, and 9 marines, wounded. Total, 132.

2. Royal Sovereign—3 officers, 2 petty officers, 29 ſeamen, and 13 marines, killed; 3 officers, 5 petty officers, 70 ſeamen, and 16 marines, wounded. Total, 141.

3. Britannia—1 officer, 8 ſeamen, and 1 marine, killed; 1 officer, 1 petty officer, 33 ſeamen, and 7 marines, wounded. Total, 52.

4. Temeraire—3 officers, 1 petty officer, 35 ſeamen, and 8 marines, killed; 3 officers, 2 petty officers, 59 ſeamen, and 12 marines, wounded. Total, 123.

5. Prince. None.

6. Neptune—10 ſeamen, killed; 1 petty officer, 30 ſeamen, and 3 marines, wounded. Total, 44.

7. Dreadnought—6 ſeamen, and 1 marine, killed; 1 officer, 2 petty officers, 19 ſeamen, and 4 marines, wounded. Total, 33.

8. Tonnant—26 killed, 50 wounded. Total, 76.

9. Mars, captain Duff, (killed.)—1 officer, 3 petty officers, 17 ſeamen, and 8 marines, killed; 4 officers, 5 petty officers, 44 ſeamen, and 16 marines, wounded. Total, 98.

10. Bellerophon, captain Cooke, (killed.)—2 officers, 1 petty officer, 20 ſeamen, and 4 marines, killed; 2 officers, 4 petty officers, 97 ſeamen, and 20 marines, wounded. Total, 150.

11. Minotaur—3 ſeamen, killed; 1 officer, 1 petty officer, 17 ſeamen, and 3 marines, wounded. Total, 25.

12. Revenge—2 petty officers, 18 ſeamen, and 8 marines, killed; 4 officers, 38 ſeamen, and 9 marines, wounded. Total, 79.

13. Conqueror—2 officers, and 1 ſeaman, killed; 2 officers, and 7 ſeamen, wounded. Total, 12.

14. Leviathan—2 ſeamen, and 2 marines, killed; 1 petty officer, 17 ſeamen, and 4 marines, wounded. Total, 26.

15. Ajax—2 ſeamen, killed; 9 ſeamen, wounded. Total, 11.

16. Orion—1 ſeaman, killed; 2 petty officers, 17 ſeamen, and 4 marines, wounded. Total, 24.

17. Agamemnon—2 ſeamen killed; 7 ſeamen wounded. Total, 9.

18. Spar-

18. Spartiate—3 ſeamen killed; 1 officer, 2 petty officers, 16 ſeamen, and 1 marine, wounded. Total, 23.

19. Africa—12 ſeamen, and 6 marines, killed; 2 officers, 5 petty officers, 30 ſeamen, and 7 marines, wounded. Total, 62.

20. Belleiſle—2 officers, 1 petty officer, 22 ſeamen, and 8 marines, killed; 3 officers, 3 petty officers, 63 ſeamen, and 19 marines, wounded. Total, 126.

21. Coloſſus—1 officer, 31 ſeamen, and 8 marines, killed; 5 officers, 9 petty officers, 115 ſeamen, and 31 marines, wounded. Total, 200.

22. Achille—1 petty officer, 6 ſeamen, and 6 marines, killed; 4 officers, 4 petty officers, 37 ſeamen, and 14 marines, wounded. Total, 72.

23. Polyphemus—2 ſeamen killed; 4 ſeamen wounded. Total, 6.

24. Swiftſure—7 ſeamen, and 2 marines, killed; 1 petty officer, 6 ſeamen, and 1 marine, wounded. Total, 17.

25. Defence—4 ſeamen, and 3 marines, killed; 23 ſeamen, and 6 marines, wounded. Total, 36.

26. Thunderer—2 ſeamen, and 2 marines, killed; 2 petty officers, 9 ſeamen, and 1 marine, wounded. Total, 16.

27. Defiance—2 officers, 1 petty officer, 8 ſeamen, and 6 marines, killed; 1 officer, 4 petty officers, 39 ſeamen, and 9 marines, wounded. Total, 70.

Total—21 officers, 15 petty officers, 309 ſeamen, and 104 marines, killed; 41 officers, 57 petty officers, 912 ſeamen, and 196 marines, wounded.—Grand Total, 1589.

This ſignal deſtruction of the enemy's marine was quickly followed up by other actions, which tended ſtill more to reduce their navy. On the 6th of February 1806, admiral ſir J. T. Duckworth fell in with a French ſquadron, off St. Domingo in the Weſt Indies, which he engaged; when the following was the reſult:

FRENCH LINE.

L'Alexandre, of 84 guns, capitaine Garreau, 300 killed and wounded.—Taken.

L'Imperiale, of 120 guns, contre-amiral Le Siegle, capitaine Le Pigott; number killed and wounded not known, but certainly many.—On-ſhore, and completely wrecked.

Le Diomede, of 84 guns, capitaine Henry; number of killed and wounded not known, but certainly many.—On-ſhore, and completely wrecked.

Le Jupitre, of 74 guns, capitaine Laiguel; 200 killed and wounded.—Taken.

Le Brave, of 74 guns, capitaine Coude, 260 killed and wounded.—Taken.

Frigates—La Felicité and La Comete.—Eſcaped.

Corvette—La Diligence.—Eſcaped.

BRITISH LINE.

Superb, 74 guns—6 killed and 56 wounded.—62.

Northumberland, 84 guns—21 killed and 79 wounded.—100.

Canopus, 74 guns—8 killed and 22 wounded.—30.

Spencer, 74 guns—18 killed and 50 wounded.—68.

Donegal, 74 guns—12 killed and 33 wounded.—45.

Atlas, 74 guns—8 killed and 11 wounded.—19.

Agamemnon, 74 guns—1 killed and 13 wounded.—14.

Acaſta, Magicienne, Kingfiſher, and Epervier, frigates; not engaged.

Total—74 killed and 264 wounded. In all, 338.

Signed, J. T. DUCKWORTH.

If to the above we add the St. Rafael of 84 guns, and La Firm of 74, taken by ſir Robert Calder in the month of July preceding, and which were part of the combined fleet, we ſhall find that no leſs than THIRTY-SEVEN of the largeſt and fineſt ſhips which formed the enemy's navy were either taken or deſtroyed in the ſhort ſpace of only eight months: an event unparalleled in the hiſtory of nations! And thus has the maritime ſtrength of France and Spain been almoſt annihilated, and the ſovereignty of the ſeas aſſerted and maintained by the navy of Great Britain, from the early period of the reign of king Arthur, quite up to the ſeventh year of the nineteenth century, in which the Britiſh flag ſtill rides triumphantly from pole to pole.

But it is not on the ſeas alone, at this important era, that the Britiſh arms have been diſtinguiſhed. In January 1806, the Cape of Good Hope, with all the extenſive ſettlements of the Dutch in Southern Africa, ſurrendered to major-general ſir David Baird, and commodore ſir Home Popham, after an action on the heights before Cape-town, fought on the 8th of January, in which the enemy loſt upwards of ſeven hundred men in killed and wounded; while that of the Engliſh amounted only to about two hundred. See the article GOOD HOPE, in this volume.

About the ſame period diſpatches were tranſmitted to this country from ſir George Barlow, Bart. in India, with the pleaſing information of the total defeat of Jeſwunt Rao Holkar; and of a treaty of peace having in conſequence been concluded, highly to the advantage of the Britiſh Eaſt-India Company. See the article HINDOOSTAN.

Soon after the conqueſt of the Cape of Good Hope had been effected, and the garriſon of Cape-town made ſecure, ſir Home Popham with the ſquadron under his command, and major-general Beresford with all the troops that could be ſpared by ſir David Baird, ſet ſail for the river La Plata in South America, on an expedition againſt the Spaniſh ſettlement of Buenos Ayres. They touched at St. Helena, and "ſailed thence (ſays general Beresford in his official diſpatch) on the 2d of May, (1806;) and, after a moſt unexpected long paſſage, made Cape St. Mary on the 8th of June. His majeſty's ſhip Narciſſus had been diſpatched from the fleet on the 27th of May, and ſir H. Popham thought it right to proceed in her for the purpoſe of making himſelf acquainted with the navigation of the river, that no delay might occur in proceeding immediately on the arrival of the troops to ſuch a place as our information ſhould firſt induce us to attack. Sir H. Popham and I conſulted whether it would be better firſt to attack the town of St. Philip of Monte Video, or Buenos Ayres, the capital of the provinces; and after much reaſoning, we determined to proceed againſt Buenos Ayres. As ſoon as the wind would permit, June 25th, ſir H. Popham took the ſhipping as near as it was poſſible for them to go, and at a convenient diſtance for diſembarking, which was effected in the courſe of the afternoon and night, and without any oppoſition; the enemy remaining at the village of Reduction, on a height about two miles from us in front: the whole intermediate ſpace, as well as to the right and left, being a perfect flat; but my guide informed me, that though in winter it was impaſſable, it was then very practicable, and eaſy for guns to paſs.

"It was eleven o'clock in the morning of the 26th, before I could move off my ground, and the enemy could, from his poſition, have counted every man I had, the number 1500. He was drawn up along the brow of a hill, on which was the village of Reduction, which covered his right flank, and his force conſiſted principally of cavalry, (I have been ſince informed two thouſand,) with eight field-pieces. The nature of the ground was ſuch, that I was under the neceſſity of going directly to his front; and, to make my line as much as I could equal to his, I formed all the troops into one line, except the St. Helena infantry of one hundred and fifty men, which I formed one hundred and twenty yards in the rear, with two field-pieces, with orders to make face to the right or left, as either of our flanks ſhould be threatened by his cavalry. I had two ſix-pounders on each flank, and two howitzers in the centre of the firſt line. In this order, I advanced againſt the enemy, and after we had got within range of his guns, a tongue of ſwamp croſſed our front, and obliged me to halt whilſt the guns took a ſmall circuit to croſs, and which

which was ſcarcely performed when the enemy opened their field-pieces on us, at firſt well pointed, but as we advanced at a very quick rate, in ſpite of the boggy ground that very ſoon obliged us to leave all our guns behind, his fire did us but little injury. The 71ſt regiment, reaching the bottom of the heights in a pretty good line, ſeconded by the marine battalion, the enemy would not wait their nearer approach, but retired from the brow of the hill, which our troops gaining, and commencing a fire of ſmall arms, he fled with precipitation, leaving to us four field-pieces and one tumbril; and we ſaw nothing more of him that day.

"As ſoon as it was light I ſent captain Kennet, of the engineers, to reconnoitre the ſides of the river, and found that on our ſide we had little or no cover to protect us, whilſt the enemy were drawn up behind hedges, houſes, and in the ſhipping on the oppoſite bank, the river not thirty yards wide. As our guns approached, the enemy opened a very ill-directed fire from great guns and muſquetry; the former ſoon ceaſed after our fire opened; the latter was kept up for more than half an hour, but, though cloſe to us, did us but little or no injury, ſo ill was it directed. We then found means, by boats and rafts, to croſs a few men over the Rio Chuelo; and on ordering all fire to ceaſe, the little of them that remained ceaſed alſo.

"By eleven o'clock, A.M. I had got ſome guns and the greateſt part of the troops acroſs the river; and, ſeeing no ſymptoms of further oppoſition, and learning that the troops in general had deſerted the city, motives of humanity induced me to ſend, by the hon. enſign Gordon, a ſummons to the governor to deliver to me the city and fortreſs, that the exceſſes and calamities which would moſt probably occur if the troops entered in a hoſtile manner, might be avoided, informing him that the Britiſh character would inſure to them the exerciſe of their religion, and protection to their perſons and all private property. He returned to me an officer to aſk ſome hours to draw up conditions; but I could not conſent to delay my march, which I commenced as ſoon as the whole had croſſed the Rio Chuelo; and on arriving near the city, an officer from the governor again met me with a number of conditions, to which I had not then time to attend; but ſaid I would confirm by writing what I had promiſed, when in poſſeſſion of the city; and the terms, granted and ſigned by ſir Home Popham and myſelf, I have the honour to annex." The terms of capitulation were:—The troops to be priſoners of war; but officers, natives, or domiciliated, to be at liberty to remain in the country, or proceed to Great Britain on their parole, not to ſerve till exchanged. All property belonging to individuals, or to public inſtitutions, to be unmoleſted; the inhabitants to preſerve their rights, liberties, and religion, with the exerciſe of their legal functions; but all public property to be delivered up to the captors.—In this whole ſervice, only one man was killed, twelve wounded, and one miſſing.

Unfortunately, in no great time after the event of this ſucceſsful expedition, the military and inhabitants of Buenos Ayres, amounting to about 12,000 men, having organized themſelves into a military body, attacked the force under major-general Beresford, conſiſting of about 1450 men, on the 10th, 11th, and 12th, days of Auguſt. The actions fought on theſe days were bravely and obſtinately conteſted; the Spaniards fought approaching to a ſtate of fury; many of our brave men were killed and beat down by ſuperior numbers at the muzzle of their guns. This glorious defence was attended with the loſs on our part of 144 men and officers killed and wounded, and of 1300 men taken priſoners and detained, general Beresford was detained; captain Kennet of the engineers, and lieutenants Mitchell and Lucas of the 71ſt regiment, were killed. The Spaniards loſt about ſix hundred men. The inhabitants of Buenos Ayres are computed at ſeventy thouſand perſons; many of theſe fired from the tops of their houſes upon our troops as they were marching out of the town. The diſhonourable conduct of the governor of Buenos Ayres, in detaining our troops, and marching them into the interior of the country, after he had ſigned the articles of capitulation, by which they were to embark on-board of tranſports for Europe or the Cape, is a new diſgrace to their nation.

ARTICLES OF CAPITULATION.

Fort Buenos Ayres, 12th Auguſt, 1806.

The Britiſh general, having no further object for remaining in Buenos Ayres, and to avoid an unneceſſary effuſion of blood, as alſo the deſtruction of the property of the inhabitants of this city, conſents to deliver up the fort of Buenos Ayres to the commander of his catholic majeſty's forces, on the following conditions:

1. The Britiſh troops to march out with all the honours of war, to be conſidered as priſoners of war; but to be embarked as ſoon as poſſible on-board the Britiſh tranſports now in the river, to be conveyed to England, or the ſtation whence they came.

2. The Britiſh, on their entrance into this place, made many Spaniſh priſoners of war, which remained on their parole; and, as the number of officers is much greater on one ſide, and of men on the other, it is agreed that the whole ſhall be exchanged for the whole; the Engliſh tranſports returning to the place of their deſtination as cartels, and to be guaranteed as ſuch by the Spaniſh government from capture on the voyage.

3. Proviſions, &c. will be furniſhed for the paſſage of the Engliſh troops, according to the uſual cuſtom in like caſes.

4. Such wounded of the Britiſh troops as cannot be removed on-board of ſhips, ſhall remain in the hoſpitals at Buenos Ayres, either under charge of Spaniſh or Britiſh ſurgeons, at the option of the Britiſh general, and ſhall be furniſhed with every thing neceſſary, and on their recovery ſent to Great Britain.

5. The property of all Engliſh ſubjects in Buenos Ayres to be reſpected.

W. C. BERESFORD,
SANTIAGO CONSIDIDO LINIERS.

The Britiſh ſhips now dropped down the river, except the Juſtinia, bound to Botany-bay, which having ſailed from St. Helena under the protection of ſir Home Popham's ſquadron, had come to anchor ſo high up the river Plata, that ſhe was taken. On the 2d of October, a reinforcement of between two and three thouſand men arrived from the Cape of Good Hope, conſiſting of the 38th and 47th regiments, and three hundred and fifty of the 21ſt dragoons. On the 28th of that month, an attack was made on Monte Video. It however ſoon appeared, that the men of war could not enter near enough to bombard the town, with ſufficient effect to cover the landing of the troops, although they ſucceeded in ſilencing the batteries; therefore the attack was given up. The troops were taken to Maldonado, a ſtrong poſt near the mouth of La Plata, rendered impregnable by nature; the iſland of Gotiti, which is ſtrongly fortified by art, protects it. On this peninſula our troops were ſecurely and comfortably ſituated; the men of war flanking them on each ſide. The Spaniards, ſoon after they landed there, meditated an attack on them; but they were ſo convinced of their ſecure ſituation, that the Spaniſh troops refuſed to march againſt them. The enemy ſuffered a loſs of about ſixty perſons killed and wounded at the bombardment of Monte Video; but we had none either killed or wounded.

On the 5th of January 1807, a further ſupply of troops, under brigadier-general Auchmuty, arrived at Maldonado from England, with the Ardent man-of-war and tranſports, under rear-admiral Stirling; ſir Home Popham having been re-called, to take his trial for having

ing failed upon the expedition againſt Buenos Ayres, without the *expreſs* orders of the government: he was brought to trial on Friday, March 6, 1807, on-board the Gladiator, at Portſmouth. The following is the ſubſtance of the charge made againſt him by the lords of the admiralty.—"Whereas, by our order, dated 29th July 1805, ſir Home Popham, then captain of his majeſty's ſhip Diadem, was directed to take under his command his majeſty's ſhips Belliqueux, Raiſonable, Diomede, Narciſſus, and Leda, the Eſpoir ſloop, and Encounter gun-brig, for the purpoſe of capturing the enemy's ſettlements at the Cape of Good Hope, in conjunction with the troops under the command of major-general ſir David Baird, which ſettlement was ſurrendered to the ſhips and troops afore-mentioned, in the month of January 1806; and whereas, it appears by letters from the ſaid ſir Home Popham to our ſecretary, dated the 13th and 30th April following, that, with the view to attack the Spaniſh ſettlements in the Rio de la Plata, *for which attack he had no direction or authority whatever*, he did withdraw from the Cape the whole of the naval force, which had been placed under his command for the ſole purpoſe of protecting it, thereby leaving the Cape, which it was his duty to guard, not only expoſed to attack and inſult, but even without the means of affording protection to the trade of his majeſty's ſubjects, or of taking poſſeſſion of any ſhips of the enemy which might have put into any of the bays or harbours of the Cape, or parts adjacent; all which he, the ſaid ſir Home Popham, did, notwithſtanding that he had received previous information of detachments of the enemy's ſhips being at ſea, and in the neighbourhood of the Cape; and notwithſtanding he had been apprized that a French ſquadron was expected at the Mauritius, of which he informed us by his letter to our ſecretary, dated the 9th of April, 1806, only four days prior to his departure from the Cape for the Rio de la Plata."—The trial did not excite much intereſt. Many people thought it ill-judged to bring a man to trial who had done ſome good to his country. Sir Home's defence was very long, but moſtly irrelevant, conſiſting of political reflections and declamation, more likely to recommend him to the favour of the miniſtry which has ſince been formed than to that then exiſting, or to the court aſſembled. But the fact of having acted without authority could not be got over; he was therefore found guilty, but his only puniſhment was a *ſevere reprimand*.

General Auchmuty and admiral Stirling renewed the attack upon Monte Video. They landed the troops on the 18th of January, from a ſmall bay about nine miles from the city; and on the 19th they were oppoſed on their march by four thouſand of the enemy's horſe, which were driven back and diſperſed. But on the 20th the Spaniards marched out with nearly their whole force, amounting to about ſix thouſand men, when an action commenced in which a great number fell on both ſides. At length the Spaniards gave way, when they were impetuouſly attacked in flank by the rifle corps and light infantry, and the ſuburbs were ſeized by the Engliſh. On the 25th batteries were opened againſt the citadel, and all the frigates and ſmaller veſſels were anchored as cloſe as could be done with ſafety, to cannonade the town. On the 2d of February a practicable breach was made near the ſouth gate, which joins the works to the ſea. Orders were iſſued to begin the aſſault an hour before day-break the next morning, and ſtorm the city.

The troops deſtined for the aſſault conſiſted of the rifle corps under major Gardner, the light infantry under lieutenant-colonel Brownrigg and major Trotter, the grenadiers under majors Campbell and Tucker, and the 38th regiment under lieutenant-colonel Vaſſal and major Nugent. They were ſupported by the 40th regiment under major Dalrymple, and the 87th under lieutenant-colonel Butler and major Miller. The whole were commanded by colonel Browne. The remainder of the troops, conſiſting of the 17th light dragoons, detachments of the 20th and 21ſt light dragoons, the 47th regiment, a company of the 71ſt, and a corps of ſeven hundred marines and ſeamen, were encamped under brigadier-general Lumley, to protect our rear. At the appointed hour the troops marched to the aſſault. They approached near the breach before they were diſcovered, when a deſtructive fire from every gun that could bear upon it, and from the muſketry of the garriſon, opened upon them. Heavy as it was, our loſs would have been comparatively trifling, if the breach had been open; but during the night the enemy had barricadoed it with hides, ſo as to render it nearly impracticable. The night was extremely dark. The head of the column miſſed the breach, and when it was approached it was ſo ſhut up, that it was miſtaken for the untouched wall. In this ſituation the troops remained under a heavy fire for a quarter of an hour, when the breach was diſcerned by captain Renny of the 40th light infantry, who pointed it out, and gloriouſly fell as he mounted it. Our gallant ſoldiers ruſhed to it, and, difficult as it was of acceſs, forced their way into the town. Cannon were placed at the head of the principal ſtreets, and their fire, for a ſhort time, was deſtructive; but the troops advanced in all directions, clearing the ſtreet and batteries with their bayonets, and overturning their cannon. The 40th regiment, with colonel Browne, followed. They alſo miſſed the breach, and twice paſſed through the fire of the batteries, before they found it. The 87th regiment was poſted near the North gate, which the troops who entered at the breach were to open for them, but their ardour was ſo great that they could not wait. They ſcaled the walls and entered the town as the troops within approached it. At day-light every thing was in our poſſeſſion except the citadel, which made a ſhow of reſiſtance, but ſoon ſurrendered, and early in the morning the town was quiet, and the women were peaceably walking the ſtreets.

During the ſiege the loſs of the Engliſh was trifling; but it was dreadful at the aſſault. Many moſt valuable officers were among the killed and wounded. The enemy's loſs was very great, about eight hundred killed, five hundred wounded, and the governor Don Paſquil Ruis Huidobro, with upwards of two thouſand officers and men, were made priſoners. About fifteen hundred contrived to eſcape in boats.—The following is the total of our killed and wounded in this ſervice: 1 major, 4 captains, 8 lieutenants, 2 ſerjeants, 6 drummers, 126 rank and file, killed; 2 lieutenant-colonels, 2 majors, 6 captains, 10 lieutenants, 5 enſigns, 4 ſtaff, 20 ſerjeants, 6 drummers, 366 rank and file, wounded; 8 rank and file miſſing.

Fifty-ſeven veſſels of different deſcriptions were taken in the harbour of Monte Video, among which were ſeveral frigates, and a number of veſſels laden with the produce of the country; alſo 15 ſloop-rigged gun boats and 6 row boats with guns.

The ſucceſs with which the Britiſh forces were employed, both by ſea and land, during the year 1806, is highly deſerving of our admiration; and the new year 1807 was uſhered in with the complete conqueſt of the rich and valuable iſland of Curaçoa, a ſettlement belonging to the Dutch, in the Weſt Indies.—See the article CURAÇOA, vol. v. p. 477.—This brilliant atchievement was performed by captain Briſbane, with a ſquadron of only four frigates, viz. the Arethuſa, Latona, Anſon, and Fiſguard. The harbour was defended by regular fortifications of two tier of guns; Fort Amſterdam alone conſiſting of ſixty-ſix pieces of cannon; the entrance only fifty yards wide, athwart which was the Dutch frigate Hatſlar of thirty-ſix guns, and Surinam of twenty-two, with two large ſchooners of war, one commanded by a Dutch commander; a chain of forts

was on Miſelburgh commanding height; and that almoſt impregnable fortreſs, Fort Republique, within the diſtance of grape-ſhot, enfilading the whole harbour. At a quarter paſt ſix in the morning, captain Briſbane, in the Arethuſa, advanced with his ſquadron cloſely drawn up into the port; a ſevere and deſtructive cannonade enſued; the frigate, ſloop, and ſchooners, were carried by boarding; the lower forts, the citadel and town of Amſterdam, by ſtorm; all of which, by ſeven o'clock, were in our poſſeſſion; and at ten o'clock, the Britiſh flag was hoiſted on Fort Republique. The Dutch priſoners were to be conveyed to a port in Holland; and on the 5th of January the inhabitants of Curaçoa took the oath of allegiance to the king of Great Britain.

While theſe ſucceſsful operations were going on in the Weſt-Indies, a ſecret expedition was ſent out to Egypt. On the memorable 21ſt of March, the very day ſix years in which the French were routed at Alexandria, major-general Fraſer, at the head of another Engliſh army, again took poſſeſſion of that noble city, in the name of his Britannic majeſty. Very little reſiſtance was made; and after a ſlight affair, in which ſeven of our men were killed and ten wounded, the governor agreed to articles of capitulation, by which the Turkiſh ſoldiers were to be ſent to ſome port in Turkey, and all private property was protected. Two fine Turkiſh frigates, and a corvette, were taken in the harbour. The inhabitants of Alexandria appeared highly pleaſed at the return of the Engliſh, and ſhewed them every civility. Yet this flattering circumſtance was perhaps the means of lulling the Engliſh into a fatal ſecurity. General Fraſer, with a view to ſecure proviſions for Alexandria, ordered a corps commanded by major-general Wauchope, to attack, and obtain poſſeſſion of, Roſetta. General Wauchope accordingly proceeded thither, with about fifteen hundred men; and having taken the heights above the town, without loſs, attempted to enter the place, without having taken the neceſſary precautions. Upon his entering the town, he was aſſailed by a ſevere fire from the roofs and windows of the houſes; and after a ſharp conflict, the Britiſh troops were obliged to retire, with the loſs of nearly three hundred men, killed and wounded. General Wauchope himſelf was killed, and brigadier-general Meade wounded. As, however, the poſſeſſion of Roſetta was neceſſary for facilitating the required ſupplies of proviſions for Alexandria, a ſecond attack was determined upon; and for this purpoſe, a diviſion of two thouſand five hundred men, under the orders of general Stewart, was ſent from Alexandria by general Fraſer. In the mean time a force of Albanians had marched from Cairo to Roſetta. Between theſe and the Britiſh diviſion a battle took place in the neighbourhood of that town. The conflict was ſanguinary, but moſt unequal. The vaſt ſuperiority of the enemy ultimately prevailed, and the Engliſh were again forced to retire, with the additional loſs of upwards of one thouſand men, killed and wounded. Among the officers wounded were colonel M'Leod, major Mohr, and major Fogelſang. The reſt of the diviſion were obliged to retreat to Alexandria.—Here the above obſervation relative to the impolicy of waſting our ſtrength in diſtant and disjoined operations, cannot but ſtrike every thinking mind.

To compenſate in ſome meaſure this misfortune, a ſquadron under the command of ſir Edward Pellew effected the deſtruction of the whole of the Dutch marine in the harbour of Batavia, amounting to twenty-ſix veſſels. The epocha of theſe events was marked by a change of the adminiſtration in England, and the calling of a new parliament.

The offenſive operations of Great Britain have been as much as poſſible directed towards the ſupport of our allies; in the proſecution of which, it is pretty evident, from the prodigious reſources of national ſtrength and treaſure, of occaſional aids by land, and perpetual victories at ſea, that the interpoſition and influence of Great Britain ſtill keeps the balance of power from any fatal preponderance, and has probably been the means of preſerving the four quarters of the globe from the inſatiate graſp of France.—For the political relations of Great Britain to other countries, and the principal events of peace and war, ſee the articles ENGLAND, FRANCE, GERMANY, HOLLAND, PRUSSIA, RUSSIA, TURKEY, &c.

With reſpect to the principal ſources of the wealth and proſperity of Great Britain, as theſe are chiefly drawn from her commerce and extenſive manufactures, a brief ſtatement of them here cannot prove unacceptable. The wool-trade ought ſtill to be conſidered as the grand ſtaple of the country. In a recent examination of the principal woollen manufactures of Great Britain, by a committee of the houſe of commons, the quantity of wool grown in this country was eſtimated at 600,000 packs of 240lbs. each, which, valued at 11l. per pack, amount to 6,600,000l. and, though the increaſe of value of manufactured wool is various, and depends on its quality, yet it was ſtated, that the total value of the wool manufacture in this country amounts to 19,800,000l. But this calculation was formed upon an unuſually high price of wool. We ſhall come nearer the truth if we form the calculation on 500,000 packs, at 10l. 10s. per pack; and thus the value of the wool will be 5,250,000l. and its manufactured value will be 15,750,000l. The average value of woollen goods exported for 1797, 1798, and 1799, is 6,104,211l. which, as the cuſtom-houſe values of goods exported are much below their real value, requires an addition of about twenty-five per cent. and thus it becomes 7,630,263l. The value of goods retained for home conſumption will be nearly equal to that of ſuch as are exported; and, therefore, the whole value of the manufacture appears to be about 15,260,000l. and may be taken, at a medium, between this ſum and that before ſtated, at 15,500,000l. Deducting 10 per cent. on the coſt of goods, for the profits of the manufacturer, with intereſt of his capital, there will remain 14,090,909l. for the coſt of materials and wages of labour: and as the value of the wool is about 5,250,000l. the amount of workmanſhip, or the wages of all the perſons employed in this manufacture, is 8,840,909l. and the whole number of perſons employed, averaging their wages at eight ſhillings each per week, does not exceed 425,043.

The value of the leather manufacture may be ſtated at 10,500,000l. from which deducting 954,545l. for the profits of the capital, and 3,500,000l. for the coſt of the raw hides, there will remain 6,045,455l. for the wages of perſons employed in it, which, allowing to each 25l. a year at an average, makes the number employed 241,818.

The cotton manufacture was formerly inconſiderable, in compariſon with its preſent ſtate. The total quantity of cotton wool imported into England, on an average of five years, ending with 1705, was 1,170,881lbs. and ſo late as the year 1781, it amounted to only 5,101,920lbs. But this manufacture has been ſo much extended, that before the commencement of the war the conſumption of cotton wool amounted to upwards of 30,000,000lbs. per annum. During the years 1796, 1797, 1798, and 1799, the annual import, at an average, was 30,434,000lbs. the value of which, when manufactured, cannot be leſs than 9,500,000l. and if we deduct from this ſum 863,636l. for profits of capital, at 10 per cent. and 3,804,250l. for coſt of the raw material at 2s. 6d. per pound, there will remain 4,832,114l. for wages, which, divided at the rate of 15l. per annum for each perſon, on account of the number of women and children employed, makes the whole number 322,140 perſons.

The ſilk manufacture has of late years experienced little fluctuation; the average of raw and thrown ſilk imported for three years preceding the 5th of January,

1797,

1797, was 883,438lbs. and the uſual quantity cannot be ſtated at leſs than 900,000lbs. the value of which, when manufactured, is about 2,700,000l. The coſt of the ſilk, averaging that of the raw and thrown at 28s. per pound, amounts to 1,260,000l. and the profits of the manufacturer to 245,454l. at the rate of 10 per cent. on the coſt when manufactured. The number of perſons employed in this manufacture has been ſtated at 200,000 and upwards; but there is reaſon, ſays Mr. Grellier, to believe that it does not exceed 60,000 of all deſcriptions.

The linen manufacture of Great Britain is chiefly confined to Scotland, though conſiderable branches of it are carried on in Manchester and other parts of England. The total quantity of Britiſh linen exported during the years 1797, 1798, 1799, was 56,481,000 yards; and if the quantity retained for home conſumption is not greater than the export, the value of the whole muſt be at leaſt 1,600,000l. and that this does not exceed the truth is probable, if the yearly value of the whole manufacture in Great Britain, with the thread and other branches of the flax trade, is ſtated at 2,000,000l. and the number of perſons employed at 60,000. The hemp manufacture at preſent exceeds 1,500,000l. but it is leſs in time of peace; and the number of perſons employed is probably not leſs than 35,000.

The paper manufacture has of late greatly advanced. About one hundred years ago, the paper made in this country was almoſt wholly the coarſe wrapping paper, and for a long time the ſuperior kinds were imported; but the export is now conſiderable. The annual value of the manufacture, at the preſent high prices of the article, cannot be leſs than 900,000l. and the number of perſons employed is 30,000.

The glaſs manufacture has of late very much improved and increaſed; ſo that it may now amount to 1,500,000l. and the perſons employed in it are about 36,000. The potteries and manufactures of porcelain have alſo rapidly advanced during the preſent century, in conſequence of the improvement they have received, and the introduction of many new and beautiful wares both for our own uſe and foreign markets. This country is particularly indebted to Mr. Wedgwood, "for converting clay into gold." The annual value will probably not be over-rated at 2,000,000l. and the number of perſons employed at 45,000.

The iron manufacture is ſupplied partly by the produce of our own mines, and partly by thoſe of other countries. With reſpect to the firſt, it is ſaid the total produce of pig-iron in Britain does not at preſent exceed 100,000 tons; and reckoning on an average, that 33 cwt. of crude iron produces one ton of bars, and that the manufacture of malleable iron amounts to 35,000 tons per annum, this branch will require 57,750 tons of crude iron; and the value in bars at 20l. a ton is 700,000l. the remaining 42,250 tons, caſt into cannon, cylinders, machinery, &c. at 14l. a ton, is worth 591,500l. The ſupply of foreign bar-iron is chiefly obtained from Ruſſia and Sweden; and the quantity imported, on an average of twelve years, has been 44,135 tons, worth, at 22l. per ton, 970,970l. which, together with the former ſums, amounts to 2,262,470l. Some years ago, the value of the iron manufacture was eſtimated at 8,700,000l. but if this ſum ſhould appear too high, we may include tin and lead, and the value of the whole will probably amount to 10,000,000l. and the number of perſons employed to 200,000.

The copper and braſs manufactures are now eſtabliſhed in conſiderable perfection. Till about the years 1720 or 1730, moſt of the copper and braſs utenſils uſed for culinary and other purpoſes in this country were imported from Hamburg and Holland, being procured from the manufactories of Germany: and even ſo late as 1745 and 1750, copper tea-kettles, ſaucepans, and pots of all ſizes, were imported in large quantities. But by the perſevering induſtry and enterpriſing ſpirit of our miners and manufacturers, theſe imports have become totally unneceſſary; ſo that the articles are now all made here, and far better than any other country can produce. The diſcovery of new copper-mines in Derbyſhire and Wales, in 1773, contributed to the extenſion of the manufacture in this country; and it appears to be ſtill increaſing, notwithſtanding the late great advance in the price of copper. The value of wrought copper and braſs, exported during the year 1799, was 1,222,187l. and there is reaſon to believe, that the whole value of theſe manufactures at preſent is at leaſt 3,500,000l. and the number of perſons employed 60,000l.

The ſteel, plating, and hard-ware, manufactures, including the toy-trade, have been of late much extended, and may probably amount in value to 4,000,000l. and the perſons employed to at leaſt 70,000.—Though theſe eſtimates muſt in ſome meaſure be defective, from the want of more authentic documents, they may nevertheleſs ſerve to ſhew the relative extent of our principal manufactures, as in the following ſummary:

	Annual Value.	Perſons employed.
Woollen	£15,500,000	425,043
Leather	10,500,000	241,818
Cotton	9,500,000	322,140
Silk	2,700,000	60,000
Linen and Flax	2,000,000	60,000
Hemp	1,500,000	35,000
Paper	900,000	30,000
Glaſs	1,500,000	36,000
Potteries	2,000,000	45,000
Iron, tin, and lead	10,000,000	200,000
Copper and braſs	3,500,000	60,000
Steel, plating, &c.	4,000,000	70,000
	£63,600,000	1,585,000

Though theſe manufactures are principally carried on through the medium of paper currency, this in reality takes nothing from the genuine riches of the country, nor contributes, in the ſlighteſt degree, to the enhancement of the prices of proviſions. It may be prudent, however, to limit the total amount of paper iſſued, and to reſort for this purpoſe, whenever the temptation to borrow is too ſtrong, to ſome effectual principle of reſtriction; in no caſe, however, materially to diminiſh the ſum in circulation, but to let it vibrate only within certain limits; to afford a ſlow and cautious extenſion of it, as the general trade of the kingdom enlarges itſelf; to allow of ſome ſpecial, though temporary, increaſe in the event of any extraordinary alarm or difficulty, as the beſt means of preventing a great demand at home for guineas; and to lean to the ſide of diminution, in the caſe of gold going abroad, and of the general exchanges continuing long unfavourable; this ſeems to be the true policy of the directors of an inſtitution circumſtanced like that of the Bank of England. To ſuffer either the ſolicitations of merchants, or the wiſhes of government, to determine the meaſure of the bank iſſues, is unqueſtionably to adopt a very dangerous principle. See BANK OF ENGLAND, vol. ii. p. 672.

That the popular opinion which has been entertained of the great influence of paper credit in raiſing the price not only of commodities in general, but of proviſions in particular, is without foundation, admits of an eaſy proof:—By the account which the Bank rendered to parliament, it appears, that the amount of Bank of England notes was, on the 25th of February, 1795, 13,539,160l. In the three months immediately following the 25th of February, 1795, the average price of wheat, in the London corn-market, was about 57s. per quarter.—By the ſame Bank account, it appears, that the amount of Bank of England notes was, on the 25th of February, 1796, 11,030,116l. In the three months immediately

immediately following the 25th of February, 1796, the average price of wheat, in the London corn-market, was about 94s. per quarter.—Thus wheat bore a comparatively low price when the amount of Bank notes in circulation was greater; and a comparatively high price when their amount was ſmaller. It bore the moderate price 57s. per quarter, at a time when the amount of Bank of England notes was very conſiderable; and in 1803, when the total iſſue of Bank notes amounted to the prodigious ſum of 17,931,930l. the price of bread-corn experienced no advance.

The commerce of Great Britain extends through the eaſtern and weſtern hemiſpheres of the globe, by means of the capital and credit of the country, the ſkill and induſtry of its artizans and manufacturers, the number of its ſhips and the character of its ſeamen, and the enterpriſing ſpirit as well as eſtabliſhed reputation of its merchants. The number of regiſtered veſſels belonging to the Britiſh dominions, and employed in trade, in 1802, was 20,568, their tonnage 2,128,055, and the number of ſeamen navigating the ſame, 154,530. In 1803, the number of veſſels was 21,445; their tonnage 2,238,249; and the number of men 155,445; being an increaſe of 877 ſhips, of 110,194 tons, and of 915 men.—For particulars of the annual amount of Exports and Imports; value of the Landed Property or Rental of Great Britain; general amount of Taxes, or public Income and Expenditure; the military and maritime ſtate of the country, laws, religion, cuſtoms, manners, &c. ſee the article ENGLAND, vol. vi. p. 796–808; and for the principles of its GLORIOUS CONSTITUTION, ſee the article GOVERNMENT, in this volume.

GREAT FAM'INE, a river of North America, which riſes in the mountains near the ſource of Oneida river, and flows north-weſt-by-weſt to Lake Ontario. Its mouth is ten miles ſouth-weſterly from the mouth of Black River.

GREAT HARE, *ſ.* With hunters, a hare in the third year of her age.

GREAT HOUSE, *ſ.* A cant term among country folks for the principal houſe in the pariſh:

That, will he, nill he, to the *great houſe*
He went, as if the devil drove him. *Gray's Long Story.*

GREAT I'SLAND, an iſland of Ireland, ſituated in the river Lee; five miles long, and from one to three wide: eight miles eaſt of Cork.

GREAT KAN'HAWAY, a river of North America, which flows through the eaſtern bank of the Ohio, in lat. 39. 5. N. nearly five hundred yards wide at its mouth. The current is gentle for about twelve miles, when it becomes conſiderably rapid for upwards of ſixty miles farther, where commence the firſt falls, when it becomes impoſſible to navigate it from the great number of its cataracts.

GREAT RIDGE, one of the ridges of the Alleghany Mountains, in North America, which ſeparate the waters of the Savannah and Alatamaha. At the ſouth-eaſt promontory of the Great Ridge is that extraordinary place called Buffaloe Lick, diſtant about eighty miles from Auguſta. It occupies ſeveral acres of ground. A large cane ſwamp and meadows, forming an immenſe plain, lie ſouth-eaſt from it; in this ſwamp Mr. Bartram thinks the branches of the Great Ogeechee take their riſe. The Lick is nearly level, and lies between the head of the cane ſwamp and the aſcent of the Ridge. The earth, from the ſuperficies to an unknown depth, is an almoſt white or cinereous coloured, tenacious, fattiſh, clay, which all kinds of cattle lick into great caves, purſuing the delicious vein. Mr. Bartram could not diſcover any thing ſaline in its taſte, but an inſipid ſweetneſs. Horned cattle, horſes, and deer, are immoderately fond of it; inſomuch that their excrement, which almoſt totally covers the earth to ſome diſtance round this place, appears to be perfect clay; which when dried by the ſun and air, is almoſt as hard as brick.

GREAT SI'ZED, *adj.* Of a great ſize:

Thou *great-ſized* coward,
No ſpace of earth ſhall ſunder our two hates. *Shakeſpeare.*

GREAT SPRINGS, is an amazing fountain of tranſparent cool water, ſituated near the road, about midway between Auguſta and Savannah, in North America. It breaks ſuddenly out of the earth at the baſis of a moderately elevated hill or bank, forming at once a baſon near twenty yards over, aſcending through a horizontal bed of ſoft rocks, chiefly a teſtaceous concretion of broken, entire, and pulverized, ſea-ſhells, ſand, &c. conſtituting a coarſe kind of lime-ſtone. The ebullition is copious, active, and continual, over the ragged apertures in the rocks, which lie ſeven or eight feet below, ſwelling the ſurface conſiderably, immediately above it; the waters deſcend ſwiftly from the fountain, forming at once a large brook, ſix or eight yards over, and five or ſix feet deep. There are multitudes of fiſh in the fountain of various tribes; chiefly the ſeveral ſpecies of bream, trout, cat-fiſh, and garr, which are beheld continually aſcending and deſcending through the rocky apertures. Bartram, from whoſe travels the above is taken, obſerves, that he croſſed no ſtream or brook of water within twelve or fifteen miles of this fountain, but had in view vaſt ſavannahs, ſwamps, and cane-meadows, which he conjectures are the reſervoirs which feed this delightful grotto.

To GREAT'EN, *v. a.* To aggrandize; to enlarge; to magnify. *A word little uſed.*—A favourite's buſineſs is to pleaſe his king; a miniſter's to *greaten* and exalt him. *Ken.*

GREAT'LY, *adv.* In a great degree.—Thy ſorrow I will *greatly* multiply. *Milton.*—Nobly; illuſtriouſly:

Yet London, empreſs of the northern clime,
By an high fate thou *greatly* didſt expire. *Dryden.*

Magnanimouſly; generouſly; bravely:

Where are theſe bold intrepid ſons of war,
That *greatly* turn their backs upon the foe,
And to their general ſend a brave defiance. *Addiſon.*

GREAT'MAN's BAY, a bay of Ireland, on the north coaſt of Galway Bay: ſix miles north from the South Arran Iſlands.

GREAT'NESS, *ſ.* Largeneſs of quantity or number. Comparative quantity.—We can have no poſitive idea of any ſpace or duration, which is not made up of and commenſurate to repeated numbers of feet or yards, or days or years, and whereby we judge of the *greatneſs* of theſe ſort of quantities. *Locke.*—High degree of any quality.—Zeal in duties ſhould be proportioned to the *greatneſs* of the reward and the certainty. *Rogers.*—High place; dignity; power; influence; empire.—Farewell, a long farewell, to all my *greatneſs*. *Shakeſpeare.*

Approaching *greatneſs* met him with her charms
Of pow'r and future ſtate;
He ſhook her from his arms. *Dryden.*

Swelling pride; affected ſtate.—My lord would have you know, that it is not of pride or *greatneſs* that he cometh not aboard your ſhips. *Bacon.*—Merit; magnanimity; nobleneſs of mind:

Greatneſs of mind and nobleneſs their ſeat
Build in her loveliеſt. *Milton.*

Grandeur; ſtate; magnificence:

Greatneſs with Timon dwells in ſuch a draught,
As brings all Brobdignag before your thought. *Pope.*

GREAVE, *ſ.* [ȝnæp, Sax.] A grove:

Yet, when ſhe fled into that covert *greave*,
He, her not finding, both them thus nigh dead did leave. *Spenſer.*

GREAVES, *f.* [from *greves*, Fr.] Armour for the legs; a ſort of boots. It wants the ſingular number.—He had *greaves* of braſs upon his legs. 1 *Sam.* xvii.

A ſhield make for him, and a helm, fair *greaves*, and curets ſuch
As may renown thy workmanſhip, and honour him as much. *Chapman.*

The refuſe or dregs of a ſoap-boiler's copper; now diſcovered to be a rich and valuable manure.

GREAVES (John), an eminent Engliſh mathematician and antiquary, born at Colmore, in Hampſhire, in 1602. His claſſical education he received under the inſtructions of his father, who was rector of that pariſh. When fifteen years of age, he was ſent to Baliol college, Oxford, where he applied with great aſſiduity to his academic ſtudies, and commenced bachelor of arts in 1621. Three years after this he ſtood candidate for a fellowſhip of Merton college, when he was the firſt on the liſt of five who were then elected; on which occaſion he diſcovered an uncommon proficiency in claſſical literature, and alſo in philoſophy. In 1628 he took his degree of maſter of arts; upon which he more particularly directed his attention to the ſtudy of the mathematics and oriental learning, and made himſelf familiar with the ancient Greek, Arabian, and Perſian authors. In 1630 he was elected profeſſor of geometry in Greſham college; but Mr. Greaves rather choſe to travel abroad for farther improvement. Accordingly, in 1635, he went to Holland, and, after he had attended for ſome time on the lectures of the celebrated James Golius, profeſſor of Arabic at Leyden, he proceeded thence to Paris, where he conferred with the learned Claudius Hardy on the ſubject of Perſian literature. From Paris he extended his tour to Rome, in order to view the antiquities of that city; whence he afterwards went to Florence, Padua, and other parts of Italy. During this tour, he had very advantageous offers from the earl of Arundel, then in Italy, to accompany him on his travels into Greece; but he had come to a determination to take a voyage into Egypt, which obliged him to return to England, to make the neceſſary preparations for viſiting that country. As it was his deſign not only to make himſelf acquainted with ſuch remains of antiquity in Egypt as are intereſting to curioſity, and ſerve to illuſtrate ancient literature, but alſo to make aſtronomical and geographical obſervations, he furniſhed himſelf with inſtruments of every kind proper for that purpoſe.

Mr. Greaves embarked in 1637 for Leghorn, accompanied by his friend Mr. Edward Pococke, and after a ſhort ſtay in Italy, arrived at Conſtantinople in the ſame year. Here he was received with great kindneſs by the Engliſh ambaſſador ſir Peter Wyche, and became acquainted with the venerable Cyril Lucar, the Greek patriarch, who afforded him much aſſiſtance in purchaſing Greek manuſcripts. Mr. Greaves's ſtay at Conſtantinople was prolonged by his anxiety for the improvement of aſtronomical ſcience. Knowing that within a few months there would be a large viſible eclipſe of the moon, he furniſhed proper perſons with convenient inſtruments for obſerving it at Conſtantinople, Bagdat, Smyrna, and Alexandria, and alſo gave them the neceſſary inſtructions for that purpoſe. Dr. Halley obſerves, that a greater ſervice could not be rendered to the ſcience of aſtronomy, than by taking the phaſes of the moon's eclipſes at thoſe places, in order to determine their longitudes. Mr. Greaves having effected this buſineſs, he took leave of his fellow-traveller Mr. Pococke, and embraced an opportunity which offered of paſſing in company with the annual Turkiſh fleet to Alexandria, where, after touching at Rhodes, he arrived in September 1638. He had now reached the ſcene which opened a large field for the exerciſe of his curious and inquiſitive genius. Nor did he omit any opportunity of remarking whatever ſeemed any way uſeful and worthy of notice; and for the extenſion of his enquiries he went twice from Alexandria to Grand Cairo, and from thence explored the deſerts. Having thus highly gratified his curioſity, furniſhed his mind with a large ſtock of uſeful knowledge, and collected ſome Greek, Arabic, and Perſian, manuſcripts, as well as ancient coins, and other rarities, he embarked at Alexandria in April 1639, and arrived at Leghorn in June following. He now ſpent nine months in making a ſecond tour of Italy, in order again to view the principal remains of ancient art, and to examine more accurately into the true ſtate of the Roman weights and meaſures. At Florence he was received with particular marks of reſpect by the grand-duke of Tuſcany, Ferdinand II. to whom he had addreſſed a Latin poem ſent from Alexandria; and he alſo was permitted free acceſs to the Medicean library, which had been refuſed to him as a ſtranger when on his former tour. From Florence he went to Rome; whence he returned to Leghorn, and embarked on-board a veſſel for London, with a rich cargo of manuſcripts, gems, coins, and other valuable antiquities.

Upon his arrival in his native country in 1640, Mr. Greaves found the kingdom diſtracted by the conteſts between the king and the parliament, and he joined the party which ſupported the king and the epiſcopal conſtitution. Having made a ſhort ſtay at Greſham-college, he went to Oxford, in order to digeſt his papers, and to prepare for public inſpection ſuch as might be uſeful to the world. In this deſign he was aſſiſted by archbiſhop Uſher, who had long known and eſteemed him; and he now drew a map of the Leſſer Aſia, at his grace's requeſt, who was writing his diſſertation on that country, which was printed in 1641. In that year, archbiſhop Laud having preſented a ſecond collection of medals to the univerſity, the taſk of arranging them was confided to Mr. Greaves, which he performed to the ſatisfaction of that celebrated prelate. He was now choſen Savilian profeſſor of aſtronomy at Oxford, on the death of his friend Dr. Bainbridge, and alſo obtained a royal diſpenſation to hold his fellowſhip at Merton-college, on account of the diminution of his ſtipend as profeſſor, ariſing from the circumſtances of the civil war. As in theſe circumſtances his attention to the duties of his profeſſorſhip was neceſſarily ſuſpended, he proceeded in his labours on his papers; and in 1644 tranſlated into Latin The Lemmata of Archimedes, correcting the diagrams, and ſupplying what was found defective in the demonſtration itſelf. This piece was publiſhed by Samuel Foſter, in his Miſcellanies, or Mathematical Lucubrations, 1659, folio. At the ſame time he had compiled A Perſian Lexicon, out of ſuch words as could be met with in the Evangeliſts, the Pſalms, and two or three Arabian and Perſian nomenclators. In 1645, at the inſtance of ſome perſons of rank and fortune, he drew up a ſcheme for gradually introducing the new or Gregorian ſtyle, by omitting the intercalary days of the leap-year for forty years; which was approved of by the king and council, and would probably have been carried into execution, had the ſtate of the times permitted it. In 1646 he publiſhed *Pyramidographia*, or, a Deſcription of the Pyramids in Egypt, 8vo. which does honour to his accuracy of obſervation; and in the following year he publiſhed his very valuable and learned Diſcourſe on the Roman Foot and Denarius; from whence, as from two Principles, the Meaſures and Weights uſed by the Ancients may be reduced, 8vo. In 1648 he publiſhed *Johannis Bainbriggii Canicularia*; to which he added *Demonſtratio Ortus Syrii heliaci pro Paralleło Inferioris Ægypti*; and alſo, *Inſigniorum aliquot Stellarum Longitudines & Latitudines ex aſtronomicis Obſervationibus Ulug Beigi, Tamerlanis Magni Nepotis*, 8vo.

About this time charges were preferred againſt him by the parliamentary viſitors; among which were accuſations of having betrayed the intereſts of the college, by making a diſcovery to the king's agents of the money that

that was in the treaſury, and of having exerciſed his influence to the prejudice and injury of individual members on account of their adhering to the cauſe of the parliament; and the reſult was his ejectment both from his profeſſorſhip and fellowſhip, and his baniſhment from the univerſity. After his departure, ſome cheſts in which he had packed up his papers, &c. were broken open by the ſoldiers, and his manuſcripts taken out, part of which were loſt, and the reſt recovered by means of his friend Mr. Selden. When Mr. Greaves was aware that it would be impoſſible for him to keep his profeſſorſhip, his regard for the intereſts of ſcience led him to form a plan for introducing a worthy and able ſucceſſor; which he was enabled to accompliſh by means of ſir John Trevor, who procured that appointment for Mr. Seth Ward, afterwards biſhop of Saliſbury. This proved a fortunate circumſtance for Mr. Greaves, as his ſucceſſor had intereſt to procure for him the full arrears of his ſalary, amounting to five hundred pounds. After his baniſhment from Oxford, Mr. Greaves retired to London, where he married, and, living upon his patrimony, devoted his time to literary purſuits. He now publiſhed *Binæ Tabulæ Geographicæ, una Naſſir Eddini Perſæ, altera Ulug Beigi Tartari, Commentariis ex Abulfeda aliiſque Arabum Geographis illuſtratæ*, 1648, 4to. This was followed by *Elementa Linguæ Perſicæ*, 4to. to which the author ſubjoined *Anonymus Perſa de Siglis Arabum & Perſarum Aſtronomicis*. At the ſame time he was engaged, in concert with Mr. William Seaman, author of a Turkiſh Grammar, in preparing a Turkiſh Dictionary; but which was never finiſhed. In 1650 he publiſhed, in quarto, his *Epochæ celebriores, Aſtronomicis, Hiſtoricis, Chronologis, Chataiorum, Syrogræcorum, Arabum, Perſarum, Choraſmiorum, uſitatæ, ex Traditione Ulug Beigi, Arabice & Latine, cum Commentariis*; which were found of ſingular ſervice in correcting a vaſt number of errors in our books of chronology. In the ſame year he produced *Choraſmiæ & Mawaralnahræ, hoc eſt Regionum extra Fluvium Oxum Deſcriptio, ex Tabulis Abulfedæ Iſmaelis Principis Hamah*, 4to. and A Deſcription of the Grand Signior's Seraglio, or Turkiſh Emperor's Court, written by Mr. Robert Withers, 8vo. which had been already printed in Purchas's Pilgrims, of which circumſtance it appears that Mr. Greaves was not appriſed. In 1652 he publiſhed *Aſtronomica quædam ex Traditione Shah Cholgii Perſæ, una cum Hypotheſibus Planetarum: item excerpta quædam ex Alfergani Elementis Aſtronomicis, & Ali Kuſtigii de Terræ Magnitudine & Sphærarum Cœleſtium a Terra Diſtantiis, cum Interpretatione Latina*, 4to. to which he prefixed A ſhort Hiſtory of the Riſe and Progreſs of Aſtronomy among the Arabians, and ſubjoined his *Binæ Tabulæ*, already mentioned. He had prepared ſeveral other works for the preſs, and was meditating more, when he was attacked by a diſorder that proved fatal to him, towards the latter end of the year laſt mentioned, when he was in the fiftieth year of his age. Of his learning, ingenuity, diligence, and perſeverance in any deſign in which he embarked, his works afford abundant evidence. He was much eſteemed by many of the moſt eminent of his contemporaries, both at home and abroad; ſteady in his principles, and in his friendſhips; and his death was deſervedly lamented, as occaſioning a real loſs to the intereſts of literature and uſeful knowledge.

GREBE, *ſ.* in ornithology. See COLYMBUS, vol. iv. p. 840.

GRE'BENSTEIN, a town of Germany, in the circle of the Upper Rhine, and principality of Heſſe Caſſel: twelve miles north-weſt of Caſſel, and ſixteen north-north-eaſt of Naumberg. Lat. 51. 16. N. lon. 26. 46. E. Ferro.

GRE'BIN, a town of Pruſſia, in Pomerelia: ſix miles ſouth-eaſt of Dantzig.

GRE'CIA, [Latin.] Greece. *Dan.* viii. 21. *Zech.* ix. 13.

GRE'CIAN, *adj.* Belonging to Greece; produced in Greece.

GRE'CIAN, *ſ.* A native of Greece; one ſkilled in the Greek language.

GRE'CISM, *ſ.* [*græciſmus*, Lat.] An idiom of the Greek language.—A violent *Greciſm*, that would ſtartle a Roman at the reading of it, ſounds more natural to us. *Addiſon.*

GRE'COURT (John-Baptiſt Joſeph Villart de), a French poet, born at Tours in 1683. He was brought up to the church, and had a canonry in the church of St. Martin, in his native city, when he was only about fourteen. He firſt made himſelf known as a preacher; but his ſermons were rather ſatirical than moral, and in one of them he is ſaid to have lampooned moſt of the ladies of Tours. Quitting an occupation for which he was ſo little fitted, he became a man of the world, and made his way into company by his convivial talents, and his faculty of writing burleſque and licentious verſes. He was patroniſed by the marſhal duke d'Etrees, who often carried him to his ſeat, which the poet called his earthly paradiſe. He read in company his verſes, which received great advantage from his admirable powers of recitation. His converſation abounded with pleaſant fallies and ſarcaſms, with which he paſſed through a joyous life, which cloſed in 1743. The writings of the abbé Grecourt were Tales, Epigrams, Songs, Fables, and light pieces, not riſing above mediocrity in the poetry, but lively and pleaſant, and often indecent. His poem entitled *Philotanus* had prodigious ſucceſs, which is imputed to its ſubject rather than its merit. It is a ſatirical hiſtory of the bull Unigenitus, in burleſque verſes, ſome of which are extremely humourous.

GRE'DING, a town of Germany, in the circle of Franconia, and biſhopric of Aichſtat: thirteen miles north-eaſt of Aichſtat.

GREE, *ſ.* [*gré*, Fr. probably from *gratia*, Lat.] Good will; favour; good grace:

And falling her before on lowly knee,
To her makes preſent of his ſervice ſeen,
Which ſhe accepts with thanks and goodly *gree*. *Spenſer.*

GREE, *ſ.* in law, ſatisfaction for an offence committed or injury done. And where it is ſaid in our ſtatutes, that judgment ſhall be put in ſuſpence till gree is made to the king of his debt; it is taken for ſatisfaction. Stats. 1 *Rich.* II. c. 15. 25 *Edw.* III. c. 19.

GREECE, *ſ.* [corrupted from *degrees*. It is written likewiſe *greeze* or *grice*.] A flight of ſteps. *Obſolete.*—After the proceſſion, the king himſelf remaining ſeated in the quire, the lord archbiſhop, upon the *greece* of the quire, made a long oration. *Bacon.*

Every *greece* of fortune
Is ſmother'd by that below. *Shakeſpeare.*

GREECE, the moſt celebrated country of Europe, dignified by claſſical writers with the epithets of Mother of the Arts;—the Luminary of Science;—the Fountain of Literature.

Ancient Greece comprehended that country which at preſent conſtitutes the ſouthern part of Turkey in Europe. It was bounded on the eaſt by the Ægean Sea, now called the Archipelago; on the ſouth by the Cretan Sea; on the weſt by the Ionian Sea, or Adriatic Gulf; and on the north by Illyria and Thrace. Its length, from north to ſouth, was about three hundred and fifty miles; and its breadth, at a medium, might be reckoned about two hundred and fifty miles: ſituated nearly in the middle of the northern temperate zone. It may be properly diſtinguiſhed into ſix principal diviſions. Of theſe the moſt northern was *Macedonia*; immediately ſouth of Macedonia lay *Theſſaly*; *Epirus* ſtretched along the coaſt of the Ionian Sea, and was the moſt weſtern diviſion; *Achaia*, or Greece properly ſo called, occupied the middle ſpace: and the moſt ſouthern diviſion was *Peloponneſus*, known at preſent by the name of the *Morea*, which, as the ancient name imports, formed a peninſula,

peninſula, communicating with Achaia by the iſthmus of Corinth, a neck of land about ſix miles broad; the *Iſlands* made the ſixth diviſion.—See the article GEOGRAPHY, p. 376 of this volume, and the correſpondent Map of GRÆCIA ANTIQUA.

The climate of Greece was peculiarly favourable. Equally exempted from the rigorous cold which afflicts the inhabitants nearer to the poles, and from the ſultry heat by which thoſe within the torrid zone are oppreſſed, it abounded with every influence propitious to the human race. The air was ſalubrious, healthful, and uniformly temperate; invigorating without chilneſs, and mild without effeminacy. The ſoil correſponded with the climate. It produced, in extraordinary plenty, not only all the neceſſaries, but likewiſe moſt of the luxuries, of life. The ſoftneſs, purity, and happy temperature, of this climate, muſt, without queſtion, have had a powerful influence upon thoſe who were there born and educated. In fact, no country on earth ever exhibited the human form adorned with more exquiſite beauty, nor the human mind animated with feelings at once more juſt, more delicate, or more benign.

PRIMITIVE HISTORY.

It is extremely to be lamented, that the origin of ſo refined a people, in that remote age of the world, ſhould be involved in ſo much obſcurity and doubt. It may be remarked, in Thucydides's introduction to his hiſtory of the Peloponneſian war, how little correct information could be obtained by that diligent inquirer into the antiquities of his own country. If we admit the common chronology, there is reaſon to believe that the ſcattered fragments of Grecian hiſtory were preſerved during thirteen centuries by oral tradition. The tales or rhapſodies of the ἀοιδοὶ, or bards, were ſucceeded by thoſe of the Cyclic poets, of whom an account is given in Caſaubon ad Athenæum, l. vii. c. 4. Yet the traditions of the Greeks agree with the authentic records of ſacred hiſtory, in repreſenting the countries afterwards known by the names of Thrace, Macedon, and Greece, as peopled at an earlier period than any other portion of the weſtern world. The ſouthern corner of Europe, comprehended between the thirty-ſixth and forty-firſt degrees of latitude, bordering on Epirus and Macedonia towards the north, and on other ſides ſurrounded by the ſea, was inhabited, above eighteen centuries before the Chriſtian era, by many ſmall tribes of hunters and ſhepherds, among whom the Pelaſgi and Hellenes were the moſt numerous and powerful. The barbarous Pelaſgi venerated Inachus as their founder; the humane Hellenes reſpected Deucalion. From his ſon Hellen, they derived their general appellation, which originally denoted a ſmall tribe in Theſſaly; and from Dorus, Æolus, and Ion, his more remote deſcendants, they were diſcriminated by the names of Dorians, Æolians, and Ionians. The Dorians took poſſeſſion of that mountainous diſtrict of Greece, afterwards called Doris; the Ionians, whoſe name was finally loſt in the more illuſtrious appellation of Athenians, ſettled in Attica; and the Æolians peopled Elis and Arcadia, the weſtern and inland regions of the Peloponneſus. At the diſtance of twelve centuries, obſcure traces of the Pelaſgi occurred in ſeveral Grecian cities; a diſtrict of Theſſaly always retained their name; their colonies continued, in the fifth century before Chriſt, to inhabit the ſouthern coaſt of Italy and the ſhores of the Helleſpont: and in thoſe widely ſeparated countries, their ancient affinity was recognized in the uniformity of their rude dialect and barbarous manners, extremely diſſimilar to the cuſtoms and language of their Grecian neighbours.

Greece, even in this early ſtate, was not left to be ſlowly civilized by the progreſſive ingenuity of the Hellenic tribes. The happy poſition of a country, which, forming as it were the frontier of Europe with Aſia, is divided only by a narrow extent of ſea from Egypt and Syria, and ſituate within reach of thoſe parts of the eaſt which were anciently moſt flouriſhing and populous, naturally invited the viſits of travellers, and attracted the eſtabliſhment of foreign colonies. Theſe foreign colonies were conducted by Cecrops and Danaus, Egyptians who, about 1556 years before Chriſt, reſpectively ſettled in Athens and Argos; Cadmus, a Phenician, who founded Thebes in Bœotia; and Pelops, a Phrygian, whoſe deſcendants, intermarrying with thoſe of Danaus king of Argos, and Tyndareus king of Lacedæmon or Sparta, acquired in the perſon of Agamemnon ſo powerful an aſcendancy over the Peloponneſus. The family of Deucalion ſtill reigned in Theſſaly; but Thebes, Athens, Argos, and Sparta, which were long regarded as the principal cities of Greece, thus fell under the dominion of four foreign lines of princes, whoſe exploits and misfortunes are immortalized by the firſt and nobleſt productions of Grecian literature; the writings of Homer and Pindar.

The Phenicians being conſidered as the principal navigators and merchants of the ancient world, it is commonly believed that the example of the Phenician colonies firſt taught the Greeks to brave the dangers of the ſea, and to maintain a commercial intercourſe with each other, as well as with foreign nations. But it is ſufficient to throw a glance on the geography of Greece, to perceive how naturally commerce, without foreign aid, might have ariſen ſpontaneouſly in that highly-favoured country. The continent *itſelf*, waſhed on three ſides by the ſea, is ſurrounded by innumerable iſlands, abounding in excellent harbours. The variety of ſoils and productions is greater, perhaps, than in any other part of the world of an equal extent. All the ſhores of the Mediterranean, comprehending the moſt beautiful, and anciently the moſt flouriſhing, part of the earth, are more acceſſible to Greece than to any neighbouring country. Yet it appears from the light of hiſtory, that the Greeks did not early avail themſelves of their fortunate ſituation, or of the ſuppoſed leſſons of their Phenician inſtructors. At length, however, the northern diſtricts of Theſſaly having greatly ſuffered by invaſion, the petty princes of that province entered into a confederacy for their mutual defence. They aſſembled at Thermopylæ, a place then governed by Amphictyon; whence aroſe the *Amphictyonic* council. The advantages which the confederates derived from this meaſure, were ſoon perceived by their neighbours. The central ſtates gradually acceded to their alliance; and, about the middle of the fourteenth century before Chriſt, Acriſius king of Argos, and other princes of the Peloponneſus, were admitted to ſhare the benefits and ſecurity of ſo uſeful an aſſociation. This eſtabliſhment of the Amphictyons naturally brought together the chiefs moſt diſtinguiſhed by birth and bravery. Glory and emulation prompted them to arms, and revenge directed thoſe arms againſt the barbarians. Jaſon, Admetus, and other chieftains of Theſſaly, having equipped a ſmall fleet in the neighbouring harbour of Iolcus, and particularly the ſhip Argo, of ſuperior ſize to any before known, were animated with a deſire to viſit foreign lands, and to plant colonies in thoſe parts that appeared moſt delightful, in order to retort on their inhabitants the injuries which Greece had ſuffered from ſtrangers. The princes of the north having proclaimed this ſpirited deſign, the ſtandard of enterpriſe was ſpeedily ſurrounded by the flower of the Grecian youth, who eagerly embraced this opportunity to ſignalize their valour. Peleus, Tydeus, Telamon, and the fathers of thoſe heroic chiefs, who, in the ſucceeding age, ſhone with diſtinguiſhed luſtre in the plains of Troy, are numbered among the leaders of the Argonautic expedition, which took place in the year 1263 before Chriſt.

Theſe adventures, however, have been over-much adorned by the fictions of poetry, to be the proper ſubjects

jects of hiſtorical detail. The deſigns of the Argonauts are veiled under the allegorical phraſe, "of carrying off the golden fleece;" which, though eaſily explained, if we admit the report that the inhabitants of the eaſtern banks of the Euxine extended fleeces of wool, in order to collect the golden particles which were carried down by the torrents from Mount Caucaſus, is yet deſcribed in ſuch various language by ancient writers, that almoſt every modern who examines the ſubject, thinks himſelf entitled to offer, by way of explanation, ſome new conjecture of his own. But in oppoſition to the moſt approved of theſe conjectures, we may venture to affirm, that the voyage to Colchis was not undertaken with a view to eſtabliſh plans of commerce, or to ſearch for mines of gold. The real object of the expedition may be diſcerned in its effects. The Argonauts fought, conquered, and plundered; they ſettled a colony on the ſhores of the Euxine; and carried into Greece a daughter of the king of Colchis, the celebrated Medea, a princeſs of Egyptian extraction, whoſe crimes and enchantments are condemned to infamy in the claſſic lines of Euripides.

Notwithſtanding the romantic fictions which diſfigure the ſtory of the Argonauts, their undertaking appears to have been attended with a happy effect on the manners and character of the Greeks. From the era of this celebrated expedition, we may diſcover not only a more daring and more enlarged ſpirit of enterpriſe, but a more deciſive and rapid progreſs towards civilization and humanity. When this new field firſt opened to the ambition of the Greeks, they cultivated it with a degree of induſtry equally ardent and ſucceſsful. Innumerable were the exploits of Hercules, of Theſeus, and of the ſons of Leda, to promote the intereſt and ſafety, not of their particular tribes, but of the general confederacy. The Grecian woods and mountains abounded in lions, boars, and other fierce animals, that often roamed from their haunts, and ſpread terror and deſolation through the adjoining vallies. The vallies themſelves teemed with men of brutal ſtrength and courage, who availed themſelves of the weakneſs of the government to perpetrate horrid deeds of violence and cruelty. The firſt heroes of Greece, animated rather with the daring and uſeful, than with the romantic, ſpirit of chivalry, ſet themſelves with one accord to remedy evils which threatened the very exiſtence of ſociety. Their adventures have, doubtleſs, been embelliſhed by the fancy of poets and orators; but, nevertheleſs, they will remain eternal monuments of that generous magnanimity, which ſacrifices the love of eaſe and pleaſure to a thirſt for glory and renown.

The firſt grand enterpriſe which ſucceeded the expedition of the Argonauts, proves that whole communities, as well as individuals, had begun to reſpect the virtues moſt eſſential to public happineſs. The war of Thebes has deſerved, therefore, to be recorded; while the more ancient hoſtilities between the Hellenic tribes, of which juſtice was not even the pretence, but luſt or avarice the only cauſe, are univerſally condemned to oblivion. Contempt of an ancient oracle, the involuntary crimes of Oedipus, and the unnatural cruelty of his ſons, involved the royal family of Thebes in thoſe calamities, which were choſen by Sophocles as important hiſtorical ſubjects for the tragic muſe. Eteocles and Polynices, ſons of Oedipus, having haſtened the death, and drawn down the maledictions, of their unhappy father, agreed to ſway, by turns, the Theban ſceptre. Eteocles the elder, reigned during the firſt year; but his ambitious temper, corrupted by a luſt for royalty, refuſed to reſign the throne at the appointed time. His rival, Polynices, married the daughter of Adraſtus king of Argos, who enabled his ſon-in-law to aſſert, by force of arms, his claim of alternate inheritance. The allied princes, reinforced by Tydeus, Capaneus, and three other chiefs, marched to Thebes, and inveſted the ſeven gates of the city, in the year before Chriſt 1225. The Thebans, impatient of confinement, yielded to the martial ardour of Eteocles, and repelled the aſſailants by a vigorous ſally, in which the moſt illuſtrious combatants fell on both ſides, and the wretched brothers periſhed by mutual wounds. The cauſe of the war being removed by this fatal cataſtrophe, the Argives begged leave to bury their dead; but the Thebans, exaſperated againſt the invaders of their country, refuſed them even ſo natural an indulgence. In this extremity, Adraſtus, the only chief who ſurvived the battle, had recourſe to the Athenians, who, uninfluenced by motives of ambition or intereſt, took arms in defence of public juſtice, and compelled the cruel obſtinacy of the Thebans to grant the laſt melancholy honours to the aſhes of their deceaſed enemies. At the diſtance of ten years, the ſons of the chiefs who had fallen before Thebes, reſented the indignities that had been thus offered to the manes of their fathers, and again laid ſiege to the city, deſtroyed the lives and property of many of the inhabitants, dragged others into captivity, and compelled the remainder to acknowledge the ſon of the injured Polynices as their king.

In their progreſs towards civilization, the Greeks ſoon perceived the advantages of political confederacy. Summoned to arms againſt foreign enemies, they readily flocked to the ſtandard of their king, and received with implicit ſubmiſſion his commands in the field; but when no common cauſe excited their valour, the inhabitants of each townſhip aſpired at independent juriſdiction, and the nominal ſubjects of the ſame prince often terminated their differences by an appeal to the ſword. To ameliorate ſuch diſorderly communities by municipal laws, required an example from ſome civilized people, among whom the effects of good government happily prevailed. Such an example occurred in the wiſe inſtitutions and policy of the Cretans, which are repreſented not only as the moſt ancient, but the beſt regulations that ever were eſtabliſhed in any portion of the Grecian territory. This celebrated iſland, which fable has dignified with the imaginary honour of giving birth to ſome of the gods, poſſeſſed the merit of communicating to Greece many uſeful improvements. Rhadamanthus, and others of its early kings, whom intereſt or curioſity carried into Egypt and the eaſt, appear to have had ſagacity to obſerve, and dexterity to employ, ſeveral of the inventions and inſtitutions of thoſe civilized kingdoms, for the purpoſe of confirming their own authority, and bridling the intemperate paſſions of their countrymen. The elder Minos is particularly diſtinguiſhed for promoting this beneficial deſign. The appellation of "Son of the Ocean," which he probably derived from his numerous voyages, leaves it uncertain whether he was a native Cretan, or a foreigner. But however this may be, he appears to have had ſufficient addreſs to perſuade the Cretans that he was admitted to the familiarity of the gods. From them he pretended to have derived a ſyſtem of laws, which he was enjoined to engrave on tables of braſs. The arrangement of this political code ſtruck the diſcerning eye of Theſeus, in his celebrated expedition to Crete, during the reign of the ſecond Minos, who had ſubdued ſeveral of the circumjacent iſles, and checked the piratical depredations of the Carians, Lycians, and Phenicians. Athens itſelf experienced the effects of his power and ambition, and reluctantly ſubmitted to a diſgraceful tribute of ſeven youths and ſeven virgins, thus cruelly exacted by a nation ſubſiſting from the labour of ſlaves. The tributary captives were drawn by lot from the body of the people, who trembled at the annual return of the Cretan veſſel. Diſcontents aroſe againſt the ſupine government of Ægeus king of Athens, when Theſeus, his heroic ſon, generouſly offered his life in the ſervice of his country. The fame of Theſeus had already reached the ears of Minos, who was ſtruck with admiration on beholding

holding the Athenian prince a voluntary captive. Minos treated him with affectionate regard; gave him his daughter Ariadne in marriage; and declared the Athenians from thenceforth free. Theſeus reaped immortal glory from this tranſaction; and the veſſel in which he ſailed continued to be annually ſent, for more than eight centuries afterwards, to return thanks to Apollo in his favourite iſland of Delos.

From the HEROIC AGE, to the FALL of TROY, and INSTITUTION of the OLYMPIC GAMES.

The ancient Greeks had ſtrongly imbibed an opinion, that the country in which they lived was ſo peculiarly favourable to the dignity of human nature, as to aſſimilate their heroes with the immortality of the gods. The voluptuous climates of Aſia produced invention and ingenuity, but ſoftened the tempers of men into a fitneſs for ſervitude. The rigorous ſeverity of European ſkies gave ſtrength to the limbs, and boldneſs to the mind; but chilled the fancy, and benumbed the finer feelings of the ſoul. The inhabitants of the eaſt and ſouth were degraded below the condition of humanity, by an unfortunate abuſe of power; while the turbulent ſons of the north and weſt were incapable, from ignorance and indocility, of ſubmitting to any regular ſyſtem of government. The Greeks alone, poſſeſſing an intermediate ſituation between the extremes of cold and heat, united both courage and capacity; tempered the ſtern and manly with the gentler virtues; and enjoyed the double advantage of liberty and laws. Thoſe who would repreſs the ebullitions of Grecian vanity, advert to the generous ſpirit of the ancient Germans; their military glory, impartial juſtice, and manly inſtitutions, as painted by the expreſſive pencil of Tacitus, ſcarcely inferior to the boaſted cuſtoms of the heroic age.—See the article GERMANY, p. 464 of this volume.—Yet there is one material circumſtance wanting in the German, which adds peculiar beauty to the Grecian character. Among the rude inhabitants of ancient Germany, the offices of prieſt and king were not united in the ſame perſon. The rites of religion were adminiſtered by a particular order of men, whoſe minds were of a dark and gloomy caſt, recommending principally the practice of courage, the only virtue which there was not any occaſion to recommend; and promiſing, as the reward of what was deemed the higheſt excellence in life, the enjoyment of an infamous paradiſe of immortal drunkenneſs after death. But the mythology of the Greeks was of a more elevated and uſeful nature. The ſceptre, which denoted the connection of civil power with ſacred protection, was conferred on thoſe only who were appointed to be the chief guardians of the people. The ſame voice that ſummoned the warriors to arms, or that decided in time of peace their domeſtic contentions, conducted the order of their religious worſhip. The ſubmiſſion of ſubjects to their prince, the duty of a prince to preſerve inviolate the rights of his ſubjects, the obedience of children to their parents, the reſpect of the young for the aged, the ſacred laws of truth, juſtice, honour, and decency, were inculcated and maintained by the Grecian heroes, in common with the rights of peace and of war. As the reward of religion and virtue, of heroiſm and fidelity, were to be derived from the gods; ſo the puniſhment of irreligion and vice, of injuſtice and rapine, failed not to be viſited upon them, even to the third and fourth generation, by ſome manifeſt vengeance of their offended deities.

Such was the ſimple creed of the ancient Grecians. But it is not within the limits of this treatiſe to diſplay the mythological tenets of Greece, or the imaginary offices of their numerous divinities. By the dim light of etymology and tradition, thrown on the deceitful glare of legend and fable, inquiſitive men have endeavoured to trace the corrupted ſtreams of Pagan worſhip to the pure fountain of the Jewiſh diſpenſation. But the majeſty of Jehovah is very feebly repreſented by the united power of Homer's divinities; and the mythology of the Greeks is of ſuch a peculiar texture, that whenceſoever originally derived, it muſt have undergone a particular modification in the Grecian ſoil; nor is it eaſy to concur with the opinion of writers who bring it either from Egypt, Chaldea, or Leſſer Aſia, when we conſider that there is not the ſmalleſt veſtige in Homer of the judicial aſtrology which prevailed ſo ſtrongly in the two firſt, or of the worſhipping of idols, which almoſt univerſally predominated in the laſt. It would perhaps be more conſonant to truth and reaſon, were we to attribute their tenets and mythology to the powers of the mind, oppreſſed or alarmed by the terrors of ſuperſtition. Even among poliſhed nations, the power of reaſoning and philoſophy, however highly it may be extolled when the gentle current of life flows with placid tranquillity, always proves too feeble to reſiſt the mountain torrent and the ſtorm of winter. Under the preſſure of ſudden or inextricable calamity, all thoſe, who are not more or leſs than men, have recourſe to the immediate aſſiſtance of ſome inviſible agency; and in the ſplendid abodes of wealth and power, as well as in the American village or Tartar horde, the era of a famine, a peſtilence, or an earthquake, is marked by ſincere expreſſions of faith, and commemorated by ſignal monuments of piety.

The great pillar of ſuperſtition raiſed by the anxious paſſions of men, ſeems to have been fortified in Greece by a circumſtance incidental to all nations, at a certain ſtage of their political progreſs. There is a period when nations emerging from barbarity, but not yet corrupted by the narrow purſuits of avarice, nor ſoftened by the pleaſures of luxury, enjoy a peculiar ſenſibility of character, which exerts itſelf in the ardour of ſocial affection, and ſtrengthens, by a thouſand aſſociations, their belief of inviſible and intelligent beings. To men thus diſpoſed to ſuperſtition, whatever dazzles the imagination announces the preſence of a deity; dreams and celeſtial phenomena are deemed ſacred and infallible admonitions; the ſilence and thick ſhade of a foreſt fills the ſoul with religious awe; and perſons, diſtinguiſhed by juſtice and piety, eaſily perſuade themſelves and others, that, as the beloved favourites of heaven, they are frequently honoured with holy inſpirations, and ſometimes indulged with the viſible preſence and happy intercourſe of their divine protectors. Not only the religion, but the ancient language and manners, of Greece, ſufficiently atteſt the exiſtence of this exceſſive ſenſibility, which, in thoſe early times, gave an eaſy victory to the indulgent powers of fancy over the ſeverer dictates of reaſon. The nature, the characters, and the occupations, of the gods, were hence ſuggeſted by the lively feelings of an ardent, rather than by the regular invention of a cultivated, mind. Theſe celeſtial beings were yet ſubject to the blind paſſions which govern unhappy mortals. Their wants, as well as their deſires, were ſimilar to thoſe of men. They required not the groſs nouriſhment of meat and wine, but they had occaſion to repair the waſte of their ethereal bodies by nectar and ambroſia; and they delighted in the ſteam of the ſacrifices, which equally gratified their ſenſes, and flattered their vanity. The refreſhment of ſleep was neceſſary to reſtore their exhauſted ſtrength; and, with the addition of a ſuperior but limited degree of power, and wiſdom, and goodneſs, the gods of the heroic ages were nothing more than immortal men. What was wanting in the dignity and perfection, was ſupplied by the number, of the gods. Homer only deſcribes the principal and reigning divinities; but Heſiod, who gives the genealogical hiſtory of this fanciful hierarchy, makes the whole number amount to thirty thouſand. Among theſe, every virtue had its protector, every quality of

extenſive power in human life had its patron, and every grove, and mountain, and river, its favourite inhabitants. Twelve divinities of ſuperior rank preſided over the active principles of the univerſe, and the leading virtues of the mind: but even theſe diſtinguiſhed beings were ſubject to the unrelenting power of vengeance and the fates, "who purſue the crimes of men and gods, and never ceaſe from their wrath till they have inflicted juſt puniſhment on the guilty ſons of earth and heaven." *Heſiod.* Theog.

It would require a volume to illuſtrate the ſalutary effects of this ancient and venerable ſuperſtition, which was diſtinguiſhed above moſt other falſe religions by the uncommon merit of doing much good, without ſeemingly occaſioning any conſiderable harm, to ſociety. The Grecian tenets, while they inculcated profound reſpect to the gods, tended not to break the ſpirit, or to repreſs the courage, of their warlike votaries. The ancient heroes addreſſed their heavenly protectors in an erect poſture, with the unfeigned ſincerity of manly freedom. They expected to avert the calamities threatened by the anger of their divinities, not by inflicting on themſelves ſuch tortures as could be acceptable only to the mean reſentment of weak and wicked beings, but by repairing the wrongs which they had committed againſt their fellow-citizens, or compenſating by new attentions for the neglect ſhewn to the ceremonies of their national worſhip. The dangerous power of oracles, the abuſed privileges of aſylums, the wild raptures of prophetic enthuſiaſm, the abominable ceremonies of the Bacchanalia, and the horrid practice of human ſacrifice, circumſtances which cover with infamy the later periods of paganiſm, were all unknown to the purity of the heroic age; nor is there to be diſcovered the ſmalleſt veſtige of any of theſe wild or wicked inventions, either in the writings of Homer, or of his contemporary Heſiod.

The perfection of civil and political inſtitutions, which was produced in Greece by the influence of religion, is found in moſt countries to be proportional to their improvements in arts, and their attainments in knowledge; while the happy effects of domeſtic union are frequently moſt conſpicuous among rude and ſimple nations. The reciprocal duties of the governor and the governed, as well as the mutual obligations of ſubjects, are gradually unfolded and enlarged by the progreſſive ideas of utility; but the tender connections of huſband and wife, of father and ſon, of brothers and kinſmen, excite, without reflection, the warmeſt feelings of the heart, and at once inſpire the affectionate ſentiments of love and friendſhip, of kindneſs and gratitude. Agreeably to theſe obſervations, we find in the hiſtory of the heroic age the moſt intereſting pictures of conjugal love, of parental affection, and of filial duty.

Two circumſtances render it difficult to explain with certainty the rank and condition of women in the heroic age. The Greek word denoting a wife, is borrowed from a quality which equally applies to a concubine, and the ſame term is uſed indifferently to expreſs both. But the women who in ancient Greece ſubmitted to the infamy of proſtitution, were generally captives taken in war, who were reduced by the cruel right of arms to the miſerable condition of ſervitude. Hence it has been erroneouſly inferred, that in ancient Greece, wives as well as concubines were the ſlaves of their huſbands. This miſtaken notion it has been attempted to confirm, not only by inſiſting on the humiliating condition of the fair ſex in the later ages of Greece, but by expreſsly aſſerting, that, in ancient times, they were purchaſed by their huſbands. But this is to ſupport one error by another. Before entering into the ſtate of wedlock, it was cuſtomary for a man to make a mutual exchange of preſents with his intended father-in-law. The Greeks had particular terms to expreſs the preſent which he beſtowed, as well as that which he received. The former, which has no correſponding term in the modern languages, is tranſlated by the more general word "*price*," which has given riſe to the falſe notion of the purchaſe and ſervitude of women; but the latter, which may with propriety be tranſlated "*dower*," was given as a proviſion for the wife, both during marriage, and after its diſſolution; and was ſufficient to deliver her from that ſuppoſed ſtate of dependence on the huſband, which never had any exiſtence but in the imagination of ſuperficial writers.

The attention of the Grecian ladies was chiefly confined to domeſtic cares, or to the practice of ſuch arts as required neither ſtrength, nor courage, nor wiſdom, but only the patient exertions of female dexterity. Our natural reſpect for the honour of the ſex might be offended at hearing them as much extolled for their ſkill in the productions of the loom, as for their beauty and virtue; but it deſerves to be conſidered, that weaving and embroidery being, like all other arts, leſs extenſively diffuſed in Greece than in improved commercial countries, were on this account more highly valued, and therefore better adapted to confer diſtinction on thoſe who excelled in them. They were practiſed by ladies of the higheſt rank, and even by queens, who alſo thought it an honour to be entruſted with the education of their children till they became fit for the ſociety of their fathers. Beſides theſe employments, the women were permitted to join in the celebration of religious rites, and many of them were conſecrated to the ſervice of particular divinities. In the ſeaſons of public feſtivity, they mixed more freely in the ſociety of the other ſex. This was ſometimes attended with ſuch inconveniences as might naturally be expected to ariſe in conſequence of the uſual reſtraints impoſed on their behaviour. "The beautiful Polymela, (ſays Homer,) dancing in the chorus of Diana, was embraced by Mercury; but ſhe had no ſooner brought forth a ſon, than one of the principal citizens offered her his hand." The inſtitutions of the heroic age promoted, with admirable propriety, the modeſt reſerve of women, while they permitted not one tranſient error to cover an amiable character with indelible infamy. The crime of having too tender a heart was not deemed inexpiable; and, as the conſequences of female weakneſs were imputed to the affectionate ardour of ſome amorous divinity, they were ſo far from obſcuring the charms of beauty, that they adorned it with new graces and more conſpicuous ſplendour.

The ſentiments of parental affection in the heroic age, were proportionably ſtrong and ardent. The reverence of children for their parents approached their veneration for the gods. The moſt violent and impetuous heroes ſubmitted, without reluctance, to the ſevereſt dictates of paternal authority. They relinquiſhed their favourite inclinations, diſavowed any will of their own, and committed their deareſt concerns to the experienced wiſdom and goodneſs of their fathers. The amiable expreſſions of filial reſpect were extended into a more general ſentiment of regard for the infirm and aged. Even among brothers who were nearly of the ſame age, the younger was obliged to yield in every inſtance to the elder; and it was an acknowledged principle of religion, that the Furies defended, by their ſtern authority, the ſacred rights of ſuperior years.

War was the principal employment of the heroic age; and in the field they both diſplayed their nobleſt qualities, and diſcovered the greateſt defects of their character. They marched to the field in a deep phalanx, ruſhed impetuouſly to the attack, and bravely cloſed with their enemies. Each warrior was firmly buckled with his antagoniſt, and compelled by neceſſity to the ſame exertions of valour, as if the fortune of the day had depended upon his ſingle arm. Their principal weapon was the javelin or ſpear, which, thrown by the nervous vigour of a ſteady hand, often penetrated the

firmeſt ſhields and bucklers. When they miſſed their aim, or when the ſtroke proved ineffectual through want of force, they drew their ſwords, and, ſummoning their utmoſt reſolution, darted impetuouſly on the foe. They had bows, and ſlings, and darts, intended for the practice of diſtant hoſtility; but the uſe of theſe weapons, which were much employed in the military paſtimes of the heroic age, was confined in the field to warriors of inferior renown. Their defenſive armour was remarkably complete: a bright helmet, adorned with plumes, covered the head and face, a firm corſlet defended the breaſt, greaves of braſs deſcended to the feet; and an ample ſhield, looſely attached to the ſhoulders, and turning in all directions, oppoſed its firm reſiſtance to every hoſtile aſſault.

Before any war could be lawfully undertaken, it was neceſſary to diſpatch ambaſſadors, who might explain the injury that had been done, demand immediate and complete ſatisfaction; and if this was refuſed, denounce in form the reſolution of their community to proſecute its claim by force of arms. After they had begun to execute their purpoſe, the characters of heralds, thoſe ſacred miniſters of kings, were equally reſpected by friends and foes. They travelled in ſafety through the midſt of embattled hoſts, proclaimed to the ſilent warriors the commiſſions with which they were entruſted, or demanded a truce for burying the dead, which could not be refuſed without enormous impiety. The uſe of poiſoned weapons was forbidden, under pain of the divine diſpleaſure. It was agreeable to the will of the gods that the life ſhould be ſpared, when a ſufficient ranſom was promiſed. And after a treaty of peace was concluded between hoſtile nations, without any apparent ratification but the honour of the contracting parties, the perfidious wretches who betrayed the ſanctity of their engagements, were devoted, amidſt ſolemn ſacrifices and libations, to the fury of the goddeſſes.

From the arts of peace the early Greeks had acquired the neceſſaries, and procured the accommodations, but had not obtained the luxuries, of life. Paſturage and agriculture ſupplied them with the moſt indiſpenſable articles of food, and with the principal materials of clothing. The implements of huſbandry were extremely imperfect; the plough, the moſt uſeful of them all, being compoſed entirely of wood, which aroſe rather from the ſcarcity of iron than from any defect of mechanical ingenuity. They employed, in the time of Heſiod, the invention of ſhears, for depriving the ſheep of their wool, having formerly waited the ſeaſon of its annual ſeparation by nature. Barley was the principal produce of their fields, and furniſhed the ordinary food both of men and of horſes. The invention of mills was unknown, and the grain underwent ſeveral tedious operations, in order to facilitate the bruiſing of it between two large ſtones with the hand. Although the Greeks cultivated the olive, they were unacquainted with the benefit derived from the fruit of this plant, ſo well adapted to cheer the melancholy gloom of night. The Grecian ſoil was naturally favourable to the grape; but the long and operoſe proceſs by which the juice of it was ſeparated and prepared, rendered wine ſcarce and dear.

In the heroic age men had neither leiſure nor inclination to attend to the ſpeculative ſciences. All the knowledge that they poſſeſſed or eſteemed was of the practical kind. From arithmetic they learned ſuch ſimple calculations as ſuited the narrow ſphere of their tranſactions. Aſtronomy taught them to obſerve the conſtellations moſt neceſſary to direct the adventurous courſe of the mariner: but their navigation was ſtill ſo imperfect that they ſeldom abandoned the coaſts; and the only ſtars mentioned by Homer are the Great and Little Bear, the Pleiades, the Hyades, Orion, and the Dog Star. The main objects propoſed in the education of the young warriors were, that they ſhould learn to excel in the military exerciſes of the age, eſpecially thoſe of throwing the lance and of driving the chariot, and to command the attention of the ſenate, or aſſembly, by delivering their opinion in a perſpicuous, elegant, and manly, ſtyle. The funeral games, and thoſe celebrated in commemoration of ſeveral important events, both of a civil and ſacred kind, opened a continual ſource of entertainment. There the young and vigorous contended in the rapid race; wielded the maſſy ceſtus or ponderous quoit; and exerted equal efforts of ſtrength and ſkill in the other manly exerciſes which confirm the vigour of the body and the fortitude of the mind. Nor were the aged and infirm allowed to languiſh for want of proper objects to rouſe their emulation, to flatter their pride, and to employ their remaining activity. It belonged to them to offer their wiſe counſels, to interpoſe their reſpected authority, and to decide the quarrels, as well as to determine the merit, of the young candidates for fame. The applauſe and rewards beſtowed on him whoſe councils and deciſions were moſt generally approved, conſoled the weakneſs of his declining years, while his rivals, though diſappointed for the preſent, expected, on ſome future occaſion, to obtain the ſame honourable marks of the public eſteem.

In the heroic age, the Greeks had advanced beyond that uniform inſipidity of deportment, that ſullen ferocity of manners, and that hardened inſenſibility of heart, which univerſally characteriſe the ſavage ſtate. They ſtill poſſeſſed, however, that patient intrepidity, that noble ſpirit of independence, that ardent attachment to their friends, and that generous contempt of pain and danger and death, which render the deſcription of the wild tribes of America ſo intereſting to a philoſophic mind. Of two principal enjoyments of life, ſtudy and converſation, they were little acquainted, indeed, with the conſolations and pleaſures of the firſt, the want of which was compenſated by the ſincerity, the confidence, the charms, of the ſecond. Their ſocial affections were leſs comprehenſive in their objects, but more powerful in their effects, than thoſe of poliſhed nations. A generous chief ruſhes to certain death, to revenge the cauſe of his friend; yet refuſes to the prayers of an aged parent the melancholy conſolation of interring the remains of his favourite ſon; till the correſponding image of his own father ſtrikes his mind, and at once melts him to pity. The imaginary wants and artificial paſſions which are ſo neceſſary to urge the hand of induſtry, and to vary the purſuits of men, in improved commercial ſocieties, were ſupplied to the Greeks by that exceſſive ſenſibility, which intereſted them ſo deeply in the affairs of their community. As they were not acquainted with the ſame diverſity of employments, ſo neither were they fatigued with the ſame giddy round of diſſipated pleaſures which augment the ſplendid miſery of later times. Though ignorant of innumerable arts which adorn the preſent age, they had diſcovered one of ineſtimable value—to render the great duties of life its moſt eſſential amuſement. It will not, perhaps, be eaſy to point out a nation who united a more complete ſubordination to eſtabliſhed authority with a higher ſenſe of perſonal independence, and a more reſpectful regard to the dictates of religion with a more ardent ſpirit of martial enterpriſe. The generous quality of their political eſtabliſhments, and their fancied intercourſe with the gods, conſpired to raiſe them to a certain elevation of character which will be ſtedfaſtly remembered, and for ever admired.

Such was the heroic age at the commencement of the Trojan war, when all the Grecian ſtates had embraced one uniform ſyſtem of government, uniting the independent ſpirit of European freedom with the reverential ſuperſtition of Egypt and Aſia. This ſingular frame of political alliance was peculiarly adapted to great and generous undertakings: it ſerved to rouſe them to diſtant

tant and difficult enterprises, and animated and supported them under every peril during the ten years' siege of Troy.

Before we notice the incidents of this celebrated siege, it may be proper to take a short view of the strength and resources of the two nations, who were so eager to plunge themselves into a conflict, that totally destroyed the one, and proved extremely ruinous to the other. Exclusive of the provinces of Epirus and Macedonia, the continental possessions of the Greeks were nearly equal to Scotland in extent, but marked with bolder features, and blessed with a warmer sun. In its length, the whole country is almost equally divided by two opposite gulphs, compressing between them a mountainous neck of land, to the breadth of only five miles, into the peninsula of Peloponnesus, and the territory extending northwards, from the extremity of the Corinthian isthmus to the southern frontier of Macedonia. The Peloponnesus, an hundred and sixty miles in length, and scarcely one hundred in breadth, is every where intersected by mountains, particularly the towering ridges of Zarex and Taygetus. During the flourishing ages of Greece, this small peninsula contained seven independent communities of unequal power and fame, which ranked in the following order: The comparatively large and highly diversified territory of Laconia; the fruitful vale of Argos; the extensive coast of Achaia; the narrow but commercial isthmus of Corinth; the central and mountainous region of Arcadia; together with the more level countries of Elis and Messenia, which are better adapted to tillage than any other provinces of the Peloponnesus. The Grecian possessions beyond the Corinthian isthmus were more considerable, extending above two hundred miles from east to west, and one hundred and fifty from north to south. They were naturally divided by the towering ridges of Olympus, Pindus, Oeta, and Ossa, into nine separate provinces; which, during the celebrated ages of Grecian freedom, were occupied by nine independent republics. They comprehended the extensive and fertile plains of Thessaly and Bœotia, both of which were, in early times, much exposed to inundations; and the latter, abounding in subterranean caverns, was peculiarly subject to earthquakes; the less fertile, but more secure, territory of Attica; the western provinces of Ætolia and Acarnania, encompassed on one side by dangerous seas, and confined on the other by almost impassable mountains; and the four small rocky districts of Phocis, Doris, Locris, and Megara.

It has been observed, that these names and divisions, which remained to the latest times, are accurately marked by Homer, whose poems continued, through succeeding ages, to be the standard to which neighbouring communities appealed in adjusting their boundaries. This observation, however, must be qualified by two exceptions. During the Trojan war, the extensive province of Thessaly sent forth above a fourth part of the whole Grecian strength, and was divided among many warlike leaders. It might naturally be expected, while agriculture and pasturage were the principal occupations subservient to human life, that a country abounding in plains and meadows should excel in population and in power. When commerce, navigation, and the mechanic arts, enriched and adorned the middle and southern divisions of Greece, the northern district of Thessaly lost its ancient pre-eminence. The second exception arose from the extensive power of the house of Pelops, which had acquired dominion over the northern and eastern parts of the Peloponnesus, formerly containing several independent principalities; and, after the misfortunes of Agamemnon and his family, was again divided into the republics of Sparta, Argos, Corinth, and Achaia. From this idea of the country, it will not appear remarkable, that, in an age when every citizen was a soldier, Greece should have raised an army of an hundred and two thousand men. The Acarnanians alone, for reasons unknown, sent no forces to Troy. But the continent was assisted by the efforts of Crete, of Rhodes, and of many smaller islands, which were subject only to their respective princes, or governed by the wide-extended dominion of Agamemnon. The vessels collected for transporting these forces to Asia amounted to twelve hundred sail. They were equipped at little expence, being moved by only one bank of oars, and entirely unprovided with decks. Their complement varied in different vessels; some containing an hundred and twenty, others only fifty, men, who appear to have been equally trained to the military art, and the rude simplicity of ancient navigation.

The celebrated kingdom of Priam, against which this armament was directed, occupied the eastern banks of the Hellespont, the southern coast of the Propontis, and the northern shores of the Ægean Sea. From the river Esepus to the promontory of Lectum, the Trojan dominions extended in length two hundred miles; but their breadth was less considerable, being compressed between three seas, and the lofty ridges of mount Ida. This picturesque country, which excelled Greece in fruitfulness, was distinguished by the epithet of Hellespontian, from the large inland province which bore the name of Phrygia. It was planted, according to tradition, by a Grecian colony, about two hundred years before the Trojan war.

From the prevalence of the Grecian language and customs on the one hand, and the name of the country on the other, it has been supposed that the Trojans were a mingled race of Greeks and Phrygians, collected by Dardanus, the fifth ancestor in degree to old Priam. This adventurer, whose parentage Homer leaves uncertain, by calling him son of Jupiter, founded a city on one of the western branches of mount Ida, commanding a beautiful and fertile plain, watered by the rivers Simois and Scamander. The new settlement flourished under his son Erichthonius, who, by the judicious management of his mares and stallions, supplied the neighbouring kingdoms with horses of a superior breed. His successor, Tros, communicated his name to the territory, which was often called Troas, and to the celebrated city Ilion, which his son Ilus, having removed his residence from the mountain, built on the adjoining plain. Laomedon, the successor of Ilus, fortified the town of Ilion, or Troy, with walls of such uncommon strength, that, in the language of the times, they were said to be the work of the gods. Whether he defrauded his auxiliaries of their promised rewards and sacrifices, or supplied the expence of this undertaking by despoiling their sacred shrines, it is certain that the guilt of Laomedon was believed to entail calamity on his descendants. His son Priam, however, long enjoyed the choicest gifts of fortune before he was overtaken by the vengeance of heaven. Having attained extreme old age in the undisturbed possession of his throne, he was surrounded by a numerous and flourishing family, beloved by his subjects, and respected by his neighbours: yet this amiable prince was destined to feel the sharpest pangs of human misery.

Hereditary feuds had long subsisted between the ancestors of Priam and those of Agamemnon, when the latter quitted their establishments in Asia, to seek new settlements in Greece. The unnatural insult offered to Ganymede, a beautiful Trojan youth, by Tantalus father of Pelops, was retorted on Menelaus, the fourth in descent from that prince, by the rape and detention of his queen, the celebrated Helen. Paris, the ill-fated son of Priam, was the author of this new injury. Helen was the daughter of Tyndareus king of Sparta. The high honours of her family were adorned by the generous magnanimity of her brothers, Castor and Polydeuces, whose exploits shone conspicuous in all the military expeditions of that gallant age. But the native

luſtre of Helen needed not the aid of foreign ornament. Even in the tender age of childhood, her opening charms had inflamed the heart of Theſeus, the moſt virtuous and magnanimous of the Grecian chiefs. The fame of her beauty increaſed with her ripening years, and her perſon became an object of contention among thoſe who, by birth or merit, were entitled to aſpire at the invaluable prize. The princely mien and inſinuating manners of Menelaus were preferred to the more ſolid qualities of his numerous competitors. Having married the heireſs of Tyndareus, he ſucceeded, in her right, to the Spartan throne. The graceful pair had not long enjoyed the ſweets of conjugal union, when their happineſs was blaſted by the arrival of Paris, the handſomeſt man of his age, and formed to captivate the weakneſs of a female mind. Though a ſoldier of no renown, Paris had imbibed the romantic ſpirit of gallantry, and was diſtinguiſhed by an ardent paſſion for beauty, which, notwithſtanding the ſoftneſs of his character, prompted him to brave every danger in purſuit of his favourite object. Animated by this view, he ſeized the opportunity of a voyage of Menelaus into Crete:—he viſited the dominions of his hereditary enemies, and ſolicited the rights of hoſpitality at the Spartan court. His perſon, his accompliſhments, his addreſs, and, ſtill more, the voluntary hardſhips which he profeſſed to have long endured for her ſake, ſoon ſeduced the affections of the Grecian queen. Enamoured of the elegant ſtranger, ſhe unfeelingly abandoned her country and her huſband; and having tranſported her moſt valuable treaſures within the walls of Troy, defied the reſentment of Greece, and the vengeance of heaven.

Menelaus, diſtracted and enraged, now called for the ſtipulated aſſiſtance of his ancient rivals; and his demands were enforced by the authority of Agamemnon. At the ſummons of the two brothers, the confederates aſſembled at Ægium, the capital of Achaia; confirmed the obligation of their former promiſe; ſettled the proportion of troops to be raiſed by each prince; determined the time and place of their departure; and named Agamemnon to the chief command. Aulis, a ſea-port of Bœotia, was appointed for the place of embarkation. But before the armament ſailed from thence, Ulyſſes king of Ithaca, and the injured Menelaus, undertook a ſolemn embaſſy to Troy, in order to demand reſtitution and reparation; but they returned highly diſguſted with their reception and illiberal treatment. Some of the Trojan council had the audacity to propoſe putting them to death. Their juſt indignation increaſed the warlike ardour of their aſſociates: but contrary winds long retarded their departure. The Trojans had time to ſtrengthen their ramparts, to collect arms and proviſions, and to ſummon the aſſiſtance of their diſtant allies. The martial ſpirit of the age brought many powerful auxiliaries to Priam. His cauſe was defended by the hardy mountaineers, who covered the back of his kingdom; by the Carians, Lycians, and other nations of Aſia Minor, extending from the mouth of the river Halys to the ſouthern extremity of Cilicia; and by the Pelaſgi, Thracians, and Pæonians, barbarians who inhabited the European ſide of the Helleſpont and Propontis. The debarkation of the Greeks was purchaſed by much blood. Having effected a deſcent, they encamped on the Trojan plain, in the year before Chriſt 1193; but loſt the only opportunity which at firſt preſented itſelf, of cruſhing at once the power of their enemies; who immediately ſhut themſelves up within their impenetrable walls, leaving the city open only on the ſide of mount Ida, from which they received corn, cattle, and other neceſſary ſupplies.

Agamemnon had been more induſtrious in collecting a great army, than provident in contriving means by which it might keep the field. The proviſions were ſpeedily conſumed, while the operations of the ſiege promiſed little hopes of ſucceſs, the Greeks being unacquainted with any military engines fitted to make an impreſſion on the Trojan walls. Nine ſummers and winters elapſed, without affording any proſpect of a deciſion to the conteſt; but, in the tenth year of the war, the Greeks precipitated the downfal of the city. A dreadful peſtilence had invaded the camp of the beſiegers, and long continued to rage with unabating fury. This calamity was followed by the ill-timed quarrel between Agamemnon and Achilles, which deprived the Grecian army of its principal hero. The Trojans derived new ſpirits from theſe contentions among their enemies; they ventured to abandon the protection of their walls; they boldly aſſailed the Grecian camp, and riſked ſeveral engagements, in moſt of which they were victorious. In the laſt of theſe, Patroclus, the beloved friend of Achilles, was ſlain by Hector, the braveſt of the Trojan race. This event, which was infinitely more dreadful than death to the affectionate ardour of Achilles, ſtifled his hitherto inexorable reſentment againſt the tyranny of Agamemnon. His return to the camp reſtored the declining fortune of the Greeks; and the indignant fury of his rage could only be quenched by the blood of Hector, whoſe patriotic valour was the chief bulwark of his father's kingdom. The deſtruction of Troy ſoon followed the death of this hero. The city, whether taken by ſtorm, or by ſtratagem, was ſet on fire in the night; moſt of the citizens periſhed by the ſword, or were dragged into captivity; and a remnant only eſcaped through the confuſed horror of raging flames and expiring kinſmen.

The deſtruction of Troy happened eleven hundred and eighty-four years before the birth of Chriſt. Neither the city nor territory ever aſſumed, in any ſucceeding age, the dignity of independent government. The ſea-coaſt was planted eighty years after the Trojan war, by new colonies from Greece; and the inland parts ſubmitted to the growing power of the Lydians, whoſe arms overſpread and conquered all the fineſt provinces of Leſſer Aſia. The Greeks recovered poſſeſſion of the admired Helen; they had taken complete vengeance on the family and nation of her ſeducer; but the misfortunes which were the conſequence of the Trojan expedition, left them little reaſon to boaſt of their victory. Of five Bœotian commanders, only one remained; and the ſiege had been proportionably fatal to the leaders of other tribes, as well as to their followers. Thoſe who lived to divide the rich ſpoils of Troy, were impatient to ſet ſail with their newly-acquired treaſure, notwithſtanding the threatening appearance of the ſkies. Many of them periſhed by ſhipwreck; others were long toſſed on unknown ſeas; and when they expected to find in their native country a happy termination of their calamities, they were expoſed to ſuffer greater misfortunes there, than any which they had yet endured. The thrones of ſeveral of the abſent princes had been uſurped by violence and intrigue; the lands of various communities had been occupied by the invaſion of hoſtile tribes: even the leaſt unfortunate of thoſe adventurers found their domains uncultivated, or their territories laid waſte; their families torn by diſcord, or their cities ſhaken by ſedition. And thus the moſt celebrated enterpriſe of the combined provinces of Greece, tended to plunge that delightful country into barbariſm and miſery.

Thus Greece triumphed over Troy; but it was a melancholy triumph. The victorious Agamemnon had ſcarcely ſet foot on his native land, when he was cut off by an adulterous ſpouſe and a perfidious aſſaſſin. His ſon Oreſtes found protection in Athens againſt the reſentment of an uſurper. In the eighth year of his exile he returned with his partiſans, and took ample vengeance on the unfeeling Egyſtheus and Clytemneſtra. He reigned in Argos, but with far leſs glory than his father; nor did that kingdom ever again aſſume its ancient pre-eminence. The wanderings and the

the woes of Ulyſſes, which alike reſulted from this famous ſiege, are too well known to be deſcribed here. His patient fortitude regained him the kingdom of Ithaca; but not without wading through the blood of his moſt illuſtrious ſubjects. Had hiſtory minutely recorded the domeſtic feuds which prevailed in other ſtates, it would probably exhibit a diſguſting picture of fraud and cruelty, offenſive to humanity, and derogatory to the human character. Suffice it to ſay, that during the four following centuries, viz. from the year 1184, to 775, before Chriſt, the fatal effects of the Trojan war appear to have plunged the affairs of Greece into much diſtreſs and obſcurity, and to have occaſioned many and conſiderable migrations.

In the year 1104 B. C. a moſt extenſive migration totally changed the affairs of the Peloponneſus; and, in its conſequences, gave new inhabitants to the whole weſtern coaſt of Aſia Minor. The rival families of Perſeus and Pelops anciently contended for the dominion of the Grecian peninſula. The fortune of the Pelopidæ prevailed; but their ſuperiority led them rather to perſecute, than to forgive, their enemies. The deſcendants and partiſans of Hercules, the moſt illuſtrious hero of the Perſeid line, were diveſted of their poſſeſſions, and driven into baniſhment. The exiles were firſt received by the Athenians, whoſe more humane or more enlarged policy, rendered Attica, ever ſince the reign of Theſeus, the ordinary reſource of the miſerable. Their leader Hyllus was afterwards adopted by Epalius, the aged king of Doris; and the death of their benefactor ſoon made the Heracleidæ maſters of that mountainous province. But the wilds of Oeta and Parnaſſus were little fitted to ſatisfy men, whoſe anceſtors had enjoyed far more valuable poſſeſſions. Inſtructed by paſt miſcarriages, Temenus, Creſphontes, and Ariſtodemus, deſcendants in the fifth degree from Hercules, finally abandoned the hopeleſs deſign of entering the Peloponneſus by land; but determining to uſe every exertion for regaining their hereditary eſtabliſhments, they ſet themſelves, with great induſtry, to prepare tranſports in a convenient harbour, at the northern extremity of the Corinthian gulph, which, in conſequence of this tranſaction, received, and thenceforth retained, the name of Naupactus. The warlike and rapacious Ætolians, whoſe leader Oxylus was nearly related to the family of Hercules, readily aſſiſted their labours with a view to ſhare the booty that might accrue from the expedition. The Dorians, who inhabited the neighbourhood of Mount Pindus, cheerfully deſerted the gloomy ſolitude of their woods, in order to ſeek poſſeſſions in a more cultivated country. Animated by theſe reinforcements, the Heracleidæ redoubled their diligence. All neceſſary preparations were made for the invaſion; and, before ſetting ſail, they judiciouſly detached a body of light armed troops, whoſe appearance at the iſthmus drew the ſtrength of the enemy towards that quarter. Meanwhile their armament was carried by a favourable gale towards the eaſtern coaſt of Peloponneſus. The Heracleidæ landed their followers without oppoſition, and aſſailed the defenceleſs territories to which they had long laid claim, comprehending the whole peninſula, except the central province of Arcadia, and the maritime diſtrict of Achaia. The five other provinces were conquered at the ſame time, though by different means. Laconia was betrayed to the invaders; Argos acknowledged their authority; Corinth, Elis, and Meſſenia, ſubmitted to their arms. The revolution was complete, and effected with little bloodſhed, but not without great oppreſſion of the ancient inhabitants, many of whom were reduced to ſlavery.

The Heracleidæ, agreeably to the cuſtom of that age, divided their new acquiſitions by lot. The kingdom of Argos fell to the ſhare of Temenus; Creſphontes obtained Meſſenia; and, as Ariſtodemus then happened to die, Laconia was ſet apart for his infant ſons, the twin-brothers, Euryſthenes and Procles. Corinth was beſtowed on their kinſman Aletes; and Elis given to Oxylus, their Ætolian ally. The diſtribution, however, referred only to the royal dignity, then extremely limited, and to an appropriated domain to the ſeveral princes in their reſpective allotments. The reſt of the territory was divided among the warlike Dorians and Ætolians, who had conquered for themſelves, not for their leaders; and who, having over-run, without oppoſition, the fineſt provinces of the Peloponneſus, would not return to lead a life of hardſhip and miſery on their native mountains.

Before this important revolution, Argos and Lacedæmon were ſubject to Tiſamenus, grandſon of Agamemnon; Meſſenia was governed by Melanthus, a deſcendant of the celebrated Neſtor. Theſe princes had not ſo far degenerated from the glory of their anceſtors, as to ſubmit to become ſubjects in the countries where they had long reigned. On the firſt falſe alarm of invaſion occaſioned by the appearance of light troops at the iſthmus, Tiſamenus and Melanthus had taken the field with the flower of the Argive and Meſſenian nations. But while they prepared to repel the expected inroads from the north, they received intelligence that their kingdoms had been attacked on another ſide, on which they thought them ſecure. Inſtead of returning ſouthward to diſpoſſeſs the Heracleidæ, an enterpriſe too daring to afford any proſpect of ſucceſs, Tiſamenus turned his arms againſt the Ionians, who inhabited the ſouthern ſhore of the Corinthian gulph. An obſtinate battle was fought, which proved fatal to Tiſamenus; but his followers obtained a deciſive victory, and, having expelled or enſlaved the ancient inhabitants, took poſſeſſion of that valuable province, ſo famous in later times under the name of Achaia. Melanthus enjoyed better fortune. Accompanied by his faithful Meſſenians, he reſorted to Attica, then engaged in war with the neighbouring kingdom of Bœotia. The Bœotian prince propoſed to decide the conteſt by ſingle combat. Thymætes, though deſcended from the heroic Theſeus, declined the challenge. Melanthus accepted it, prevailed in the conflict, and the ſceptre of the depoſed Thymætes was his reward.

The fermentation occaſioned in Greece by ſo many expulſions and migrations, expanded itſelf through the iſlands and coaſts of Aſia Minor. Many Peloponneſian fugitives, who beheld with indignation the calamities inflicted on their country, flocked to the ſtandard of Penthilus, a younger brother of Tiſamenus, who had taken refuge in Eubœa. Others followed the banners of Cleues and Melaus, alſo deſcendants of Agamemnon. The partizans of all theſe princes having unſucceſsfully traverſed the northern parts of Greece in queſt of new ſettlements, finally yielded to the dictates of their enterpriſing ſpirit, and, in the year before Chriſt 1096, croſſed the Helleſpont eighty-eight years after the taking of Troy, and eſtabliſhed themſelves along the ſhore of the ancient kingdom of Priam. They gradually diffuſed their colonies from Cyzicus on the Propontis to the mouth of the river Hermus; which delightful country, together with the iſle of Leſbos, thenceforth received the name of Eolis or Eolia, to denote that its inhabitants belonged to the Eolian branch of the Hellenic race.

Conſequences ſtill more important reſulted from the expulſion of the Achæans by the followers of Tiſamenus. The ancient inhabitants of Achaia, being themſelves Ionians, took refuge with their kinſmen in Attica. The Meſſenian fugitives under Melanthus had ſought protection in the ſame country. The Athenians readily accepted theſe new acceſſions of ſtrength, being inſpired with a well-founded jealouſy of the Dorian conquerors of Peloponneſus, whoſe ambition early produced that memorable rivalſhip between the Doric and Ionic race, which ſubſiſted to the lateſt times of the Grecian

Grecian republics. In the reign of Codrus, before Chriſt 1089, the Dorians had encroached on the Athenian frontier, and ſeized the territory of Megara, on the northern coaſt of the Saronic gulph. Iſſuing from their ſtrong holds in that rocky diſtrict, from which it was long impoſſible to diſlodge them, they haraſſed the Athenians in a cruel war, concerning which a ſuperſtitious rumour prevailed, that they ſhould finally remain conquerors, provided they abſtained from injuring the perſon of the Athenian king. Codrus, hearing the report, was inſpired with the ſpirit of heroiſm congenial to his family. Diſguiſing himſelf in the habit of a peaſant, he proceeded to the quarters of the enemy; inſulted a Dorian ſoldier; a combat enſued; Codrus fell; his body was recogniſed; and the ſuperſtitious Peloponneſians, now deſpairing of ſucceſs, ſuſpended their hoſtilities. The inimitable merit of a prince, who had devoted himſelf to death for the ſafety of his country, furniſhed the Athenians with a pretence for aboliſhing the royal authority. None of the human race, they declared, was worthy to ſucceed Codrus; and none but Jupiter ſhould thenceforth reign in Athens. Medon, the eldeſt ſon of that admired prince, was appointed firſt magiſtrate of the republic under the humbler title of archon. His brothers, Neleus, and Androclus, probably diſſatisfied with theſe tranſactions, determined to leave their country. Their deſign was approved by the Achæan and Meſſenian refugees, and by many Athenian citizens, who complained that Attica was too narrow and barren to maintain the increaſing numbers of its inhabitants. The reſtleſs ſpirits in Phocis, Bœotia, and other neighbouring provinces, eagerly joined the emigrants. They ſailed to Aſia Minor, expelled the ancient inhabitants, a mixed race of Lydians, Carians, and Pelaſgi, and in the year before Chriſt 1055, ſeized the central and moſt beautiful portion of the Aſiatic coaſt. Their colonies were gradually diffuſed from the banks of the Hermus to the promontory of Poſideion. They afterwards took poſſeſſion of Chios and Samos; and all theſe countries were united by the common name of Ionia, to denote that the Ionians compoſed the moſt numerous diviſion of the colony.

During the ſame turbulent ages, inteſtine ſedition, foreign invaſion, or the reſtleſs ſpirit of adventure and rapine, occaſioned other important extenſions of Grecian colonization. The moſt numerous colonies occupied the iſles of the Ionian and Ægean ſeas, the ſouthern coaſt of Italy almoſt interſected by the former, and the winding ſhores of Aſia Minor ſo beautifully diverſified by the latter. The larger iſlands of Sicily, Sardinia, and Cyprus, were very anciently planted by Greeks. While the Hellenic ſtock puſhed forth theſe vigorous ſhoots towards the eaſt and weſt, very conſiderable branches extended towards the north and ſouth. The maritime parts of Epirus, Macedonia, and Thrace, themſelves abounding in Greek ſettlements, poured forth new colonies along the European ſhores of the Propontis and the Euxine: and emigrants from the Peloponneſus having early eſtabliſhed themſelves on the oppoſite coaſt of Africa, were gradually diffuſed from the confines of Egypt to the Syrtic gulph.

The Aſiatic Greeks, whoſe affairs firſt became intimately connected with thoſe of the mother country, received a conſiderable acceſſion of ſtrength in conſequence of the renewal of hoſtilities between the Athenians and Dorians. The latter were finally expelled from many of their ſtrong holds in Megara. Diſdaining after this misfortune to return into the Peloponneſus, many of them ſailed to the iſlands of Rhodes and Crete, already peopled by Doric tribes; while others tranſported themſelves to the peninſula of Caria, which, in honour of their mother country, A. C. 944, received the name of Doris.

In conſequence of this eſtabliſhment, which was formed two hundred and forty years after the Trojan war, the weſtern coaſt of Aſia Minor was planted by the Eolians in the north, the Ionians in the middle, and the Dorians in the ſouth. Theſe original diviſions of the Hellenic race retained in their new ſettlements the peculiarities of accent and dialect, by which they had been reſpectively diſtinguiſhed in Europe; and which, at the time of their ſeveral emigrations, prevailed in Bœotia, Attica, and Lacedæmon. The Bœotians, and Lacedæmonians, who claimed the firſt honours, the one of the Eolic, and the other of the Dorian, name, adhered, with little variation, to their ancient dialects: but the Athenians, more ingenious, made ſuch conſiderable alterations in their writing and pronunciation, as remarkably diſtinguiſhed them from their Ionian brethren; thus the ſame language came to be modified into four ſubdiviſions, or dialects, and diſtinguiſhed four ſtates or kingdoms, which roſe out of the ruins of the heroic age, or reſulted from the ſiege of Troy.

During the prevalence of thoſe generous though romantic opinions, which characteriſed the heroic ages, the authority of kings was founded on religion, ſupported by gratitude, and confirmed by utility. While they approved themſelves worthy miniſters of heaven, they were entitled to due and hereditary honours; but in the exerciſe of the regal office, they were bound to reſpect the rights, the ſentiments, and even the prejudices, of their ſubjects. The fatal dictates of ambition and avarice led them to tranſgreſs the preſcribed limits, and to trample on thoſe laws which their predeceſſors had held ſacred. The minute diviſion of landed property which had taken place, rendered the nobles and people more ſenſible of theſe encroachments, which they muſt at once boldly reſiſt, or ſubmit for ever to the yoke of oppreſſion. Reduced to this alternative, the Greeks were inclined by diſpoſition, and enabled by ſituation, to prefer and to maintain the moſt honourable part. The prerogatives of royalty were not as yet ſupported by the excluſive right of the ſword, by which a particular claſs of men might intimidate and controul the reſolutions of their fellow-ſubjects. The more independent and illuſtrious citizens, who had been accuſtomed from the earlieſt times to come armed to the council or aſſembly, communicated their grievances, and took proper means to remove them. Miltas, the fourth Argive prince in ſucceſſion to Temenus, was condemned to death for uſurping abſolute power. Monarchy expired more honourably in Attica; it periſhed ſtill more diſgracefully in Arcadia, but was gradually aboliſhed in every province of Greece, except Sparta alone, from the ſouthern extremity of Peloponneſus to the northern frontier of Theſſaly. The conſequences of this revolution, ſerved only to multiply the grievances which it was deſigned to remedy. Greece, oppreſſed by its kings, was ſtill more oppreſſed by its archons, or magiſtrates; and, already too much divided under the ancient government, was ſtill more ſubdivided under the new form of polity. Many inferior cities diſdained the juriſdiction of their reſpective capitals. Each town maintained war with its neighbours; and every concomitant evil began to fall upon the diſtracted country. From theſe accumulated diſorders, the people were at length to be preſerved through the ſalutary influence of the Amphictyonic council. In the northern parts of Greece, this inſtitution, which had been originally intended to prevent foreign invaſion, had been found equally uſeful in promoting domeſtic concord. The Dorians, being conſtituent members of the council, continued to attend its meetings after they had ſettled beyond the mountainous iſthmus of Corinth. The provinces which they conquered gradually aſſumed the ſame privilege. The Amphictyons thus became a repreſentative aſſembly of the whole Grecian name, conſiſting not only of the three original tribes of Ionians, Dorians, and Eolians, but of the ſeveral ſubdiviſions of theſe tribes, and of the

various communities formed from their promiſcuous combination. Each independant ſtate had a right to ſend two members, the Pylagoras and Hieromnemon, reſpectively entruſted with the civil and religious concerns of their conſtituents. The abolition of royalty rendering the independent communities more numerous, increaſed the Amphictyons to about an hundred perſons. The central city of Delphi was choſen as a convenient place for holding their vernal aſſembly; the autumnal was ſtill held at Thermopylæ. An oath, guarded by the moſt ſolemn imprecations, was adminiſtered to each member, "that he would never ſubvert any Amphictyonic city, nor ſtop the courſes of its running water, but puniſh to the utmoſt of his power thoſe who committed ſuch outrages." Hence this reſpected tribunal, though it was deficient in coërcive power, had a conſiderable effect to ſuppreſs internal diſcord, and reſtrain the barbarities of war.

The Amphictyons gained much conſideration by declaring themſelves protectors of the Delphic oracle, which had acquired an extraordinary influence on the affairs of Greece. It is ſeldom poſſible to explain the riſe of inſtitutions derived from the natural paſſions of men, or founded on prejudices as ancient as the world. The moſt probable information concerning the origin of Grecian oracles was conveyed to Herodotus, in a thin allegorical veil, by the prieſts of Dodona, and explained to that inquiſitive traveller by the prieſts of Jupiter in Egypt. In the allegorical ſtyle of antiquity, a black pigeon flew from the temple of Egyptian Thebes, to Theſprotia in Epirus, perched on a ſpreading oak, proclaimed with a human voice, that an oracle of Jupiter ſhould be eſtabliſhed; and the inhabitants of the neighbouring hamlet of Dodona obeyed the divine admonition. In plain language, it was a female attendant belonging to the temple of Thebes on the Nile, who was tranſported to Epirus by Phœnician pirates, and there ſold as a ſlave. Her Egyptian complexion deſerved the epithet of *black* among the mountaineers of Theſprotia, who were remarked by the Greek hiſtorians for their blooming complexions, active vigour, and longevity. She was ſaid to ſpeak the languages of birds, before ſhe underſtood the Grecian tongue, often diſtinguiſhed by the appellation of human ſpeech. This enterpriſing female, though reduced to captivity among thoſe whom ſhe muſt have regarded as barbarians, did not yield to deſpair, but dexterouſly availed herſelf of the advantages which ſhe derived from her education and her country. In Egypt, ſuperſtition had been reduced into ſyſtem; and a pretenſion to prophecy was one of the moſt ſucceſsful artifices by which the prieſts of Thebes long governed the reſolutions both of prince and people. Her attendance on the temple had taught her ſome of the arts by which this pretenſion was maintained. She choſe the dark ſhade of the venerable oak; delivered myſterious anſwers to the admiring multitude; her reputation increaſed; ſucceſs gained her aſſociates; a temple roſe to Jupiter, and was ſurrounded by houſes for his miniſters. This ſingular inſtitution was imitated, at a very early period, in many provinces of Greece. The various and inconſiſtent accounts of ſimilar eſtabliſhments abundantly confirm the antiquity of their origin, and the multiplicity of temples, groves, grottos, and caverns, in which the favourites of innumerable divinities declared their will to men, proves them not leſs univerſal than ancient. During the heroic age, indeed, as illuſtrious and pious men believed themſelves, on important occaſions, honoured with the preſence and advice of their heavenly protectors, the ſecondary information of prieſts and oracles was leſs generally regarded and eſteemed. But in proportion as the belief ceaſed that the gods appeared in a human form, or the ſuppoſed viſits of theſe celeſtial beings ſeemed leſs frequent and familiar, the office of prieſt became more reſpectable, and the confidence in oracles continually gained ground. At length, theſe inſtitutions, being conſidered as the chief and almoſt only mode of communication with ſupernatural powers, acquired a degree of influence capable to controul every other principle of authority, whether civil or ſacred. But theſe various oracles, though alike founded on ignorance, and raiſed by deceit, were not equally ſupported by power and policy. The crafty Cretans, who inſtituted the worſhip of the Delphian Apollo, gradually procured the credit of ſuperior veracity to the predictions of the god whom they ſerved. Favourable circumſtances concurred; the central ſituation of Delphi; the vernal ſeſſion of the Amphictyons; the luſtre derived from the immediate protection of that aſſembly; above all, the uncommon and awful aſpect of the place itſelf, fitted to excite wonder in ages leſs addicted to ſuperſtition. See the article DELPHI, vol. v. p. 681.

The ſubſequent hiſtory of Greece atteſts the important influence of the Delphic oracle, which no ſooner attained ſplendour, than it confirmed, by its powerful ſanction, two inſtitutions, the firſt religious, the ſecond civil, and both accompanied with very extraordinary conſequences. The Olympic games, and Spartan laws, were reſpectively eſtabliſhed by Iphitus and Lycurgus, contemporaries, friends, both animated by the true ſpirit of patriotiſm, and unqueſtionably the moſt illuſtrious characters of the age in which they lived; yet the roads which they purſued for reaching the ſame goal, the ſafety of their reſpective territories, were ſo widely different, that, while the Olympic games rendered Elis the moſt pacific, the laws of Lycurgus made Sparta the moſt warlike, of all the Grecian communities.

It was held an ancient and ſacred cuſtom, in the heroic ages, to celebrate the funerals of illuſtrious men by ſuch ſhows and ceremonies as ſeemed moſt pleaſing to their ſhades. The tombs, around which the melancholy manes were ſuppoſed to hover, naturally became the ſcene of ſuch ſolemnities. There the fleeting ghoſts of departed heroes were entertained and honoured by exhibitions of ſtrength and addreſs; while the gods, though inhabiting the broad expanſe of heaven, were yet peculiarly worſhipped, by prayers and ſacrifices, in the ſeveral places, which ſometimes the wildneſs, and ſometimes the elegance of fancy, had aſſigned for their favourite, though temporary, reſidence on earth. The lofty chain of Olympus, ſeparating the barbarous kingdom of Macedon from the fertile plains of Theſſaly, is diſtinguiſhed by ſeveral circumſtances, which ſeemed juſtly to entitle it to that honour. This long and lofty ridge aſcends above the regions of ſtorms and tempeſts. Its winding ſides are diverſified by woods, and interſected by torrents. Its fantaſtic tops, towering above the clouds, reflect, during day, the rays of the ſun, and ſometimes brighten the gloom of night with the lambent ſplendours of the Aurora Borealis. This extraordinary mountain began naturally to be regarded as the principal terreſtrial habitation of the gods; along the receſſes of Olympus each divinity had his appropriate palace; on its higheſt ſummit Jupiter often aſſembled the heavenly council; and from thence, veiled in a white gleam, the protectors of mankind deſcended, and were viſibly manifeſted to mortal eyes.

While Olympus was conſidered as the general rendezvous of theſe fanciful beings, it was natural to imagine that the partiality of particular divinities might ſelect other favourite ſpots of the earth for their ſeparate abode. The ſingular aſpect of Delphi, or Pytho, which recommended it as the ſeat of the oracle of Apollo, and afterwards of the Pythian games, was under the ſame influence. The Corinthian territory was particularly conſecrated to Neptune; for where could the god of the ſea be more properly worſhipped, than on a narrow iſthmus, whoſe ſhores were adorned by grateful mo-

numents of delivered mariners, and which had continued, from early times, the principal centre of Grecian navigation?

A tradition had long prevailed, that the fruitful and picturesque banks of the Alpheus, in the province of Elis, or Eleia, had been consecrated to Jupiter. It is certain that athletic sports, similar to those described by Homer at the funeral of Patroclus, had been on many occasions exhibited in Elis, by assembled chiefs, with more than ordinary solemnity. The Dorian conquerors are said to have renewed the consecration of that delightful province. But the wars which early prevailed between them and the Athenians, and the jealousies and hostilities which afterwards broke out among themselves, totally interrupted the religious ceremonies and exhibitions with which they had been accustomed to honour their common gods and heroes. Amidst the calamities which afflicted or threatened the Peloponnesus, Iphitus, a descendant of Oxylus, to whom the province of Eleia had fallen in the general partition of the peninsula, applied to the Delphic oracle. The priests of Apollo, ever disposed to favour the views of kings and legislators, answered agreeably to his wish, that the festivals anciently celebrated at Olympia, on the Alpheus, must be renewed, and an armistice proclaimed for such states as were willing to partake of them, and desirous to avert the vengeance of heaven. Fortified by this authority, and assisted by the advice of Lycurgus, Iphitus took measures, not only for restoring the Olympic solemnity, but for rendering it perpetual. The injunction of the oracle was speedily diffused through the remotest parts of Greece, by the numerous votaries who frequented the sacred shrine. The armistice was proclaimed in Peloponnesus, and preparations were made in Eleia for exhibiting shows and performing sacrifices. In the heroic ages, feats of bodily strength and address were destined to the honour of deceased warriors; hymns and sacrifices were reserved for the gods. But the flexible texture of Grecian superstition, easily confounding the expressions of respectful gratitude and pious veneration, enabled Iphitus to unite both in his new institution.

The festival, which lasted five days, began and ended with a sacrifice to Olympian Jove. The intermediate time was chiefly filled up by the gymnastic exercises, in which all freemen of Grecian extraction were invited to contend, provided they had been born in lawful wedlock, and had lived untainted by any immoral stain. The preparation for this part of the entertainment was made in the gymnasium of Elis, a spacious edifice, surrounded by a double range of pillars, with an open area in the middle. Adjoining were the various apartments, containing baths, and other conveniences for the combatants. The neighbouring country was gradually adorned with porticoes, shady walks and groves, interspersed with seats and benches, the whole originally destined to relieve the fatigues and anxiety of the candidates for Olympic fame; and frequented, in later times, by sophists and philosophers, who were fond to contemplate wisdom, and communicate knowledge, in those delightful retreats. The order of the athletic exercises was established by Lithurgus; Iphitus, we are told, appointed the other ceremonies and entertainments; settled the regular return of the festival at the end of every fourth year, in the month of July; and gave to the whole solemnity that form and arrangement, which it preserved with little variation above a thousand years; a period exceeding the duration of the most famous kingdoms and republics of antiquity.

From the LEGISLATION of LYCURGUS to the TERMINATION of the MESSENIAN, and FIRST SACRED WAR.

At the period when Lycurgus proposed his celebrated laws, which were universally admired, but never imitated, Greece presented a gloomy picture of domestic discord. The elevated, though romantic, sentiments of antiquity had ceased to prevail; the character of the heroic age was effaced; and the generous protection of the virtuous and the brave had given way to violence and ambition. Each petty prince was desirous to exalt his prerogative, and to extend his dominions; whilst the resistance of his subjects counteracted his usurpations. Thus every city was torn by a double conflict, and new dangers surrounded the people on every side. During these tumultuary scenes, Lycurgus, of the line of Procles, and commonly reckoned the tenth in descent from Hercules, received the Spartan sceptre upon the death of his elder brother Polydectes: but the widow of Polydectes declaring herself pregnant, he resigned the crown, and assumed the title of Protector. This delicate attention to justice, rare in any age, excited just admiration for Lycurgus, which was enhanced by contrast. The ambitious princess, more solicitous to preserve the magnificence of a queen, than desirous to know the tender cares of a mother, secretly intimated to the Protector, that, if he consented to marry her, she would engage that no posthumous son of his brother should disappoint him of the succession. Lycurgus feigned to enter into this unnatural project, but exhorted her not to endanger her health by procuring an abortion. When her delivery drew near, he sent trusty persons to attend her, with orders that, if she brought forth a son, the infant should be immediately carried to him. This command was obeyed, while he supped with the principal magistrates of the republic. He received the child in his arms, saying, "Spartans, a king is born to you!" Joyous congratulations followed, to commemorate which, the infant was named Chaerelaus, "the people's joy." Notwithstanding the fame redounding to Lycurgus from this transaction, the intrigues of the slighted queen raised a powerful faction against him. He withdrew himself from the gathering storm; and, being yet in early manhood, resolved to visit foreign countries.

The renowned island of Crete first attracted his regard. The Cretans still partially adhered to the laws of Minos; but their island never resumed its pristine lustre after the war of Troy. From Crete he sailed to Egypt, and carefully examined the civil and religious polity of that ancient and learned kingdom. Despising the terrors of the sea, as well as the fatigues and dangers of unexplored journies through barbarous or desert countries, he is said to have reached the populous and flourishing kingdoms of the East: nor, could we trust the partial evidence of his countryman Aristocrates, did the remote provinces of India escape his observation. He returned by the coast of Asia Minor, and observed with astonishment and satisfaction, the innumerable Greek colonies that had risen with sudden splendour on the western coast of that luxuriant peninsula. The numerous advantages derived from this extensive view of men and manners, moulded by such a wide variety of religious, political, and military, institutions, were all eclipsed by one discovery—the immortal poems of Homer, unknown to the Dorian conquerors of Peloponnesus, but carefully preserved among the Eolians and Ionians, whose ancestors they celebrated. Lycurgus collected these invaluable compositions; arranged the several parts; transcribed and transported them to Sparta, where, after two centuries of wars and revolutions, the customs as well as the sentiments described by that divine poet, had been obliterated and forgotten.

The sagacity of Lycurgus in thus contemplating the relations and interests of his country, regarded martial spirit and political liberty as the great ends of his new legislation. His immediate determination was, to extinguish the ambition of distant or extensive conquest, to level the inequality of fortune, to crush the baneful effects

LYCURGUS.

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effects of wealth and luxury, to arreſt the progreſs of what is called the refinement, but what ſeemed to the manly diſcernment, of this legiſlator, the corruption of human ſociety. To form ſuch a deſign was the work of no vulgar mind; to carry it into execution required the moſt ſtrenuous exertions of perſeverance and courage. Yet, even at this diſtance of time, we may diſcover ſeveral favourable circumſtances, which ſeaſonably conſpired with the views of Lycurgus; we may diſcover in the gradual diſplay of his ſyſtem, how the firſt inſtitutions naturally paved the way for thoſe which ſucceeded them; and while we admire the genius and the virtue, we muſt alſo acknowledge the dexterity and the fortune, of the Spartan legiſlator.

But no propitious circumſtances, nor the merit of ten years travel in purſuit of moral ſcience and political knowledge, nor the ties of blood, of friendſhip, and of gratitude, which confirmed the influence of Lycurgus among the principal inhabitants of Sparta, could have enabled this great man to eſtabliſh his plan of government, without the friendly co-operation of the Delphic oracle; which, ſince the decay of the heroic opinions and belief, had become the ſovereign umpire of Greece. The Pythia or prieſteſs addreſſed him in terms of the higheſt reſpect; heſitated whether to call him a god or a man, but rather deemed him a divinity; approved the general ſpirit of the inſtitutions which he propoſed to eſtabliſh; and promiſed to furniſh him, as occaſion might require, with ſuch additional regulations as would render the republic happy and immortal. Fortified by this authority, Lycurgus proceeded with a ſkilful hand, firſt, to new-model the government; ſecondly, to regulate wealth and poſſeſſions; thirdly, to reform education and manners; judiciouſly purſuing this natural order of legiſlation, becauſe men are leſs jealous of power than tenacious of property, and leſs tenacious of property itſelf than of their ancient uſages and cuſtoms.

The firſt laws which he eſtabliſhed, tended to reſtore the mild form of government which diſtinguiſhed the heroic age. They confirmed hereditary honours, but aboliſhed the deſpotiſm, of kings: they enforced dutiful obedience, but vindicated the liberty of the ſubject. Of the reigning princes, Chaerelaus owed to Lycurgus his throne and his life, and Archelaus deemed it dangerous to oppoſe his projects. Inſtructed by the fatal experience of neighbouring tyrants, they were eaſily prevailed on to prefer a limited to an abſolute reign. The ſuperſtition of the people could not decline the authority of the legiſlator, when confirmed by the oracle of Apollo; and the intereſt of the nobles engaged them unanimouſly to promote his meaſures. With this illuſtrious body, conſiſting of twenty-eight chiefs, the moſt diſtinguiſhed in the tribes and cities of Laconia, Lycurgus conſulted by what means to prevent the political diſſenſions from ſettling in the deſpotiſm of kings, or in the inſolence of democracy. By his new regulations the ancient honours of the nobility were confirmed and extended. They were formed into a permanent ſenate, which examined all matters of government before they were propoſed to the deliberation of the people. The kings were entitled, as in the heroic age, to be the hereditary preſidents of this national tribunal; which, as in all important queſtions it poſſeſſed a negative before debate; as the members were choſen for life; and as, on the deceaſe of any ſenator, his ſon or neareſt kinſman was naturally ſubſtituted in his ſtead; might have ſoon arrogated to itſelf the whole legiſlative as well as executive authority.

In order to counteract this dangerous tendency, Lycurgus inſtituted the Ephori, five annual magiſtrates, inveſted with a temporary power to inſpect and controul the adminiſtration of government, and to maintain the ſpirit and vigour of the eſtabliſhed conſtitution. To the Ephori it belonged to convoke, prorogue, and diſſolve, the greater and ſmaller aſſemblies of the people; the former compoſed of nine thouſand Spartans, inhabitants of the capital; the latter of thirty thouſand Lacedæmonians, inhabitants of the inferior towns and villages. By frequently convening ſuch numerous bodies of men, who had arms in their hands, they rendered them ſenſible of their own ſtrength. The Lacedæmonians felt themſelves entitled not only to execute the juſt, but to thwart the unjuſt, orders of the ſenate. Nor was their liberty endangered by the limited prerogative of the kings, who monthly exchanged with the Ephori ſolemn oaths; the former ſwearing for themſelves to obſerve the laws of Sparta, the latter for the people whom they repreſented, to maintain the hereditary honours of the Herculean race, to reſpect them as miniſters of religion, to obey them as judges in peace, and to follow them as leaders in war.

This equitable diſtribution of power was accompanied with an exact diviſion of property. At the diſtance of five centuries, it was the current tradition in Greece, that Lycurgus had totally altered the political ſtate of his countrymen, by the introduction of an agrarian law, ſimilar to that which has been ſo often, but always ſo ineffectually, propoſed in other republics, as the ſureſt foundation of liberty and happineſs. Yet the equal diviſion of lands, or, in other words, the community of landed property, and the annual partition of the harveſt, took place among the original inhabitants of Greece, as well as among the free-born warriors of ancient Germany. It may be ſuppoſed therefore, with a high degree of probability, that the Spartans, in the time of Lycurgus, ſtill preſerved ſome traces of their primitive inſtitutions, and that their minds were comparatively untainted with the vices of avarice and luxury. To bring them back, however, to the perfect ſimplicity of the heroic age, and to prevent their future degeneracy, the territory of Laconia was divided into thirty-nine thouſand portions, each producing eighty-two medimni, or buſhels, of barley, with a proportional meaſure of fruits, wine, and oil. The kings, as in the age of Homer, enjoyed their ſeparate domain, conferred by the voluntary gratitude of their ſubjects. The ſenators, contented with an increaſe of power and honour, neither obtained nor deſired any pre-eminence of fortune. Their moderation in this reſpect afforded a ſalutary example to the people, the greater part of whom would naturally be gainers by the agrarian law, while the few who were rich, ſubmitted without reſiſtance to the wiſdom of Lycurgus, and the authority of Apollo.

The equal diviſion of land ſeemed not alone ſufficient to introduce an equality in the manner of life, and to baniſh the ſeeds of luxury. The accumulation of inviſible property, might enable the rich to command the labour of the poor, and, according to the natural progreſs of wants and inventions, would encourage the dangerous purſuit of elegance and pleaſure. The precious metals had long been the ordinary meaſures of exchange in Sparta, and, could we credit a very doubtful tradition, had greatly accumulated in private hands. Lycurgus withdrew from farther circulation all this gold and ſilver, a conſiderable part of which probably repaid his obligations to the Delphic oracle, while the remainder increaſed the ſplendour of the Lacedæmonian temples. Inſtead of theſe precious metals, the Spartans received pieces of iron, which had been heated red in the fire, and afterwards quenched in vinegar, in order to render them brittle, and uſeleſs for every other purpoſe but that of ſerving as the current ſpecie. Aſtoniſhing were the effects of this operation. With the baniſhment of gold and ſilver were baniſhed all the pernicious appetites which they excite, and all the frivolous arts which they nouriſh. Neither fortune-teller, nor phyſician, nor ſophiſt, were longer to be ſeen in Sparta; gaudy trinkets and toys, and all uſeleſs finery in dreſs and furniture, at once diſappeared; and the innocence and dignity of Spartan manners correſponded with the primitive

primitive ſimplicity of the iron money. And this iron money continued permanent in Sparta alone, after the vices of wealth and luxury had polluted the reſt of Greece, and it repelled from the republic of Lycurgus the votaries of pleaſure, as well as the ſlaves of gain, and all the miſerable retinue of vanity and folly. Of what avail was abundant wealth to a people, among whom it was enjoined by the laws, and deemed honourable by the citizens, freely to communicate their arms, horſes, inſtruments of agriculture and hunting; to eat together at common and frugal tables, agreeably to the practice of the heroic age; to diſregard every diſtinction but that of perſonal merit; to deſpiſe every luxury but that of temperance; and diſdain every acquiſition but that of the public eſteem?

The univerſal aſſent to the divine miſſion of Lycurgus, excited the moſt generous and manly ſentiments in the minds of his countrymen. His laws were few and ſhort; for the ſake of memory they were conceived in verſe; they were not conſigned to writing, but treaſured in the *hearts* of his diſciples as the immediate dictates of heaven. The Lacedæmonians were ſeverely prohibited from the contagious intercourſe of ſtrangers, except at the ſtated returns of religious ſolemnities. Lycurgus, who had aſſiſted Iphitus in the Olympic games, inſtituted ſimilar, though leſs ſplendid, feſtivals in his native country. When unemployed in the ſerious buſineſs of war, the Lacedæmonians were continually engaged in aſſemblies for converſation and the gymnaſtic exerciſes, or in religious and military amuſements. Agriculture and the mechanic arts were left to the ſervile hands of ſlaves; the ſciences of war and of government were recommended by the laws of Lycurgus, as the only purſuits worthy the attention of freemen.

In the knowledge and practice of war, the Lacedæmonians excelled all the Greeks. Courage, the firſt quality of a ſoldier, was enlivened by every motive that can operate moſt powerfully on the mind, while cowardice was branded as the moſt odious and deſtructive of crimes. The Spartans preſerved the uſe of the ſame weapons and defenſive armour that had been adopted in the heroic age. Their troops were divided into regiments, conſiſting of five hundred and twelve men, ſubdivided into four companies, and each of theſe into ſmaller diviſions, commanded by their reſpective officers; for it was peculiar to the Lacedæmonian armies to contain comparatively few men not entruſted with ſome ſhare of ſubordinate command. A body of cavalry always preceded their march; ſenſible of the weakneſs of angles, they encamped in a circular form: the order of their guards and watches was highly judicious; they employed, for their ſecurity, out-ſentries and vedettes; and regularly, every morning and evening, performed their cuſtomary exerciſes. Xenophon has deſcribed with what facility they wheeled in all directions; converted the column of march into an order of battle; and, by ſkilful and rapid evolutions, preſented the ſtrength of the line to an unexpected aſſault. In the day of battle, the Spartans aſſumed an unuſual gaiety of aſpect; and diſplayed, in their dreſs and ornaments, more than their wonted ſplendour. Their long hair was arranged with elegance; their ſcarlet uniforms, and brazen armour, diffuſed a luſtre around them. As they approached the enemy, the king ſacrificed anew; the muſic ſtruck up; and the ſoldiers advanced with a ſlow and ſteady pace, and with a cheerful but deliberate countenance, to what they were taught to regard as the nobleſt effort of their lives.

But that continual exerciſe in arms, which improved the ſkill and confirmed the valour, muſt gradually have exhauſted the ſtrength of Sparta, unleſs the care of population had formed an object of principal concern in the ſyſtem of Lycurgus. Marriage was enjoined by ſome very ſingular inſtitutions; but ſtill more powerfully encouraged by extirpating its greateſt enemies, luxury and vanity. Lycurgus, not content with maintaining the populouſneſs of Sparta, endeavoured to ſupply the paſt generation with a nobler and more warlike race, and to enlarge and elevate the bodies and minds of men to that full proportion of which their nature is ſuſceptible. Of this extraordinary circumſtance, the evidence of contemporary writers could ſcarcely convince us, had they barely mentioned the fact, without explaining its cauſe. In deſcribing the ſyſtem of Lycurgus, they have not omitted his important regulations concerning the intercourſe between the ſexes, women, marriage, and children, whoſe welfare was, even before their birth, a concern to the republic. The generous and brave, it is ſaid, produce the brave and good; but the phyſical qualities of children ſtill more depend on the conſtitution of their parents. In other countries of Greece, the men were liberally formed by war, hunting, and the gymnaſtic exerciſes; but the women were univerſally condemned to drudge in ſedentary and ignoble occupations, which enfeebled both mind and body. Women, thus degraded by ſervility, appeared incapable of giving good ſons to the republic, which Lycurgus regarded as the principal duty of the Lacedæmonian females. By the inſtitutions of Sparta, therefore, the free-born women enjoyed and practiſed thoſe liberal exerciſes and amuſements, which were elſewhere conſidered as the peculiar privilege of men; they aſſiſted at the public ſolemnities, mingled in general converſation, and, like the ladies in the age of chivalry, where the principal arbiters of applauſe and reproach. Hence they became not only the companions, but the judges, of the other ſex; and, except that their natural delicacy was not aſſociated to the honours of war, they enjoyed the benefit, without feeling the reſtraint, of the Spartan laws.

This reſtoration of the natural rights of women induced moderation and modeſty in the intercourſe between the ſexes. Marriage, though enjoined as a duty, could only be contracted in the full vigour of age; and theſe ſimple inſtitutions had a more ſalutary influence on the phyſical improvement of the Spartan youth, than either the doubtful expedient of adorning the women's apartments with the fineſt ſtatues of gods and heroes, that, by frequently contemplating theſe graceful images, they might produce a fairer offſpring; or the unnatural and deteſtable cruelty of expoſing deformed children, a practice ſtrongly recommended by Lycurgus, and ſilently approved, or but faintly blamed, by the greateſt philoſophers of antiquity.

In a moral view, the character of Spartan mothers muſt have been highly beneficial to their ſons; ſince much of the happineſs of life depends on the firſt impreſſion of our tender years. When boys were emancipated from the juriſdiction of women, they were not entruſted, as in other parts of Greece, to the tuition of ſlaves, who might degrade their ſentiments, and corrupt their morals. The education of youth, as an office of the higheſt confidence, was committed to thoſe who had enjoyed, or who were entitled to enjoy, the moſt ſplendid dignities of the republic; and it was required that the maſter ſhould himſelf poſſeſs the virtues with which he undertook to inſpire his pupils. The Spartan youth were taught muſic and drawing: the former of which comprehended the ſcience not only of ſounds, but of number and quantity: they were taught to read and ſpeak their own language with graceful propriety; to compoſe in proſe and verſe; above all, to THINK; and in whatever they ſaid, even during the flow of unguarded converſation, to accommodate the expreſſion to the ſentiment. Their ſedentary ſtudies were relieved by the gymnaſtic exerciſes, the early practice of which might qualify them for the martial labours of the field. For this important buſineſs of their manhood, they were ſtill further prepared, by being enured, even in their tender

tender years, to a life of hardſhip and ſeverity. They wore the ſame garment ſummer and winter; they walked bare-footed in all ſeaſons; their diet was plain and frugal, and ſo ſparing, that they loſt no opportunity to ſupply the defect. What they were unable to take by force, they were to acquire by fraud. When their theft (if theft can be practiſed where ſeparate property is almoſt unknown) was diſcovered, they were ſeverely puniſhed; but if their dexterity eſcaped obſervation, they were allowed to boaſt of their ſucceſs, and met with applauſe for their activity, vigilance, and caution; which indicated a character fitted to excel in the future ſtratagems of war.

After attaining the ordinary branches of education, youth frequently become the maſters of their own actions. Of all practical errors, Lycurgus deemed this the moſt dangerous. His diſcernment perceived the value of that moſt important period of life, which intervenes between childhood and virility; and the whole force of his diſcipline was applied to its direction and improvement. Inſtead of being looſened from the uſual ties of authority, the Spartans, at the age of adoleſcence, were ſubjected to a more rigorous reſtraint; and the moſt extraordinary expedients were employed to moderate the love of pleaſure, to correct the inſolence of inexperience, and to controul the headſtrong impetuoſity of youthful paſſions. If the ſeeds of their vicious appetites had not been thoroughly eradicated by a life of habitual toil and temperance, they were ſubjected to corporal puniſhment, which it was their cuſtom to endure with patient fortitude. The maxims of honour were inſtilled by precept, and enforced by example. The public tables, which were frequented by all ages, ſerved as ſo many ſchools of wiſdom and virtue; where, on ordinary occaſions, but more particularly on days of feſtivity, the old related their ancient exploits, and boaſted their paſt proweſs; thoſe in the vigour of life diſplayed the ſentiments which their manly courage inſpired; and the young expreſſed a modeſt confidence that, by ſteadfaſtly adhering to the precepts of Lycurgus, they might be enabled in due time to equal, perhaps to ſurpaſs, the glory of both.

The reverence for aged wiſdom, which formed the prevailing ſentiment of the heroic times, was reſtored by the legiſlation of Lycurgus, and employed as a main pillar of his political edifice. The fears and infirmities of the old were compenſated by honour and reſpect; the hopes and vigour of the young were balanced by obedience and reſtraint. The difference of years thus occaſioned little diſproportion of enjoyment; the happineſs of every age depended on the practice of virtue; and as all adventitious and accidental diſtinctions were removed, men perceived the importance of perſonal merit, and of its reward, the public eſteem, and eagerly graſped the advantages which glory confers; the only excluſive advantages which the laws of Lycurgus permitted them to enjoy. The paternal authority, which maintained the diſcipline and promoted the grandeur of Rome, was firmly eſtabliſhed at Sparta, where every father might exerciſe an unlimited power, over not only his own, but the children of others, who were all alike regarded as the common ſons of the republic. This domeſtic ſuperiority naturally prepared the way for civil pre-eminence; the elective dignities of the ſtate were obtained only by men of experienced wiſdom; and it required ſixty years of laborious virtue to be entitled to a ſeat in the ſenate-houſe, the higheſt ambition of the Spartan chiefs. Such regulations, of which it is impoſſible to miſtake the ſpirit, had a direct tendency to produce moderation and firmneſs in the public councils, to controul the too impetuous ardour of a warlike people, to allay the ferment of domeſtic faction, and to check the dangerous ambition of foreign conqueſt. The power of the magiſtrate was confounded with the authority of the parent; they mutually aſſiſted and ſtrengthened each other, and their united influence long upheld the unſhaken fabric of the Spartan laws, which the old felt it their intereſt to maintain, and the young deemed it their glory to obey.

Such a condition of ſociety ſeems the higheſt elevation and grandeur to which human nature can aſpire. The Spartans attained, and long preſerved, this ſtate of exaltation; but ſeveral circumſtances and events, which the wiſdom of Lycurgus had foreſeen, but which no human power could prevent, undermined the foundation of their greatneſs and felicity. Their military proweſs gave them victory, ſlaves, and wealth; and though individuals could feel only the pride of virtue, and enjoy only the luxury of glory, the public imbibed the ſpirit of rapacity, and the ambition of conqueſt. As in other countries the vices of individuals corrupt the community, in Laconia the vices of the public corrupted individuals. The Spartans, however, long maintained their ſuperiority over other nations. By dividing the ſtrength, they diſarmed the fury of their enemies, and the flames of domeſtic diſcord were eclipſed by the ſplendour of foreign conqueſt, by which both the magiſtrates and the ſubjects were enriched and corrupted: yet, amidſt civil diſcord and political degeneracy, they preſerved their religious and military inſtitutions, as well as their invaluable plan of education; and their tranſactions, even in the lateſt ages of Greece, furniſh an ample and honourable commentary on the laws of Lycurgus.

Concerning this extraordinary man, only one farther circumſtance is recorded with any appearance of authenticity. Having beheld the harmony of the political machine which he had ſo ſkilfully contrived, he ſummoned an aſſembly, and declared, that now he had but one new regulation to propoſe, upon which, however, it was neceſſary he ſhould go and conſult the oracle of Delphi; that, meanwhile, his countrymen, who had ſeen the ſucceſs of his labours, would engage that no alteration ſhould take place before his return. The king, the ſenate, and the people, ratified the engagement by a ſolemn oath. Lycurgus undertook his journey; the oracle predicted the happineſs which the Spartans ſhould enjoy as long as they lived by his admirable laws. The reſponſe was tranſmitted to his country, where Lycurgus himſelf determined never more to return, convinced that the duration of the government which he had eſtabliſhed would be better ſecured by the eternal ſanctity of an oath, than by the temporary influence of his own perſonal preſence. It is ſaid that he afterwards died a voluntary death, by abſtaining from all nouriſhment.

The Lacedæmonians thus left to themſelves, ſoon entered into an obſtinate war with the Meſſenians. On the confines of Meſſenia and Lacedæmon ſtood an ancient temple of Diana, which, being erected at the common expence, was open to the prayers and ſacrifices of the two nations. Hither, according to annual cuſtom, repaired a ſelect band of Spartan virgins to ſolemnize the rites of their favourite divinity. A company of Meſſenian youths arrived at the ſame time to perform their cuſtomary devotion, and to implore the protection of the warlike goddeſs. Inflamed by the beauty of the Spartan ladies, the Meſſenian youths, after vainly attempting by the moſt ardent vows to move the inflexibility of Spartan virtue, had recourſe to violence in order to conſummate their brutal deſigns; and the deflowered victims, unwilling to ſurvive ſo intolerable a diſgrace, periſhed by their own hands.

In reſentment of this atrocious injury, the Spartans invaded the Meſſenian frontier, and attacked the ſmall town of Ampheia, in the year before Chriſt 743. The time choſen for the aſſault was the dead of night, when the unſuſpecting inhabitants repoſed in full confidence of their accuſtomed ſecurity. Many Ampheians were aſſaſſinated in their beds; ſeveral fled in vain to the altars of their gods; and but few eſcaped the ſwords of the enraged Spartans.

On this ſanguinary occaſion Euphaes, who had ſucceeded to the throne of his father Antiochus, ſummoned a general aſſembly of his countrymen to the plain of Stenyclara; where it was reſolved to abandon the open country, and ſettle in ſuch of their towns as were beſt fortified by art or nature, leaving the remainder to the invaſion of an enemy, with whoſe bravery and numbers they were not able to contend. But while they kept within the walls, they continued to exerciſe themſelves in arms, and to acquire ſuch vigour and diſcipline, as might eventually enable them to oppoſe the Spartans in the field. Four years elapſed from the taking of Ampheia before they ventured to embrace this dangerous meaſure. During all that time, the Spartans made annual incurſions into their country, deſtroying their harveſts, and carrying into captivity ſuch ſtraggling parties as they happened to ſurpriſe. The Meſſenians, on the other hand, as their courage increaſed, were not contented with defending their own walls, but detached, in ſmall parties, the boldeſt of their warriors to ravage the ſea-coaſt of Laconia. Encouraged by the ſucceſs of theſe predatory expeditions, Euphaes determined to take the field with the flower of the Meſſenian nation. The hoſtile armies approached with a celerity proportioned to the fury of their reſentment, and arrived, with high expectations, at the intermediate plain which overſpread the confines of the two kingdoms. But there, the martial ardour of the troops received a check, which had not been foreſeen by their commanders. The rivulet, interſecting the plain, was ſwelled by the rains into a torrent. This circumſtance prevented a general engagement. The cavalry alone (amounting on either ſide to about five hundred horſe) paſſed near the head of the ravine, and contended in an indeciſive ſkirmiſh; while the fury of the infantry evaporated in unavailing inſults. Night came on, during which the Meſſenians fortified their camp with ſo much ſkill, that the enemy, rather than venture to ſtorm it, preferred to return home, after an expedition, which, conſidering their ſuperiority in numbers, appeared no leſs inglorious than ineffectual.

The puſillanimous behaviour of the Spartan army deſerved not the approbation of the ſenate. The fathers of the republic upbraided the degeneracy of the youth, who no longer paid regard to the ſanctity of the oath which they had taken, never to lay down their arms until they had ſubdued the Meſſenians. The ſpirit of the ſenate was ſoon diffuſed through the community; and it was determined to renew the war with an army which amounted to about twenty thouſand men. The management of the expedition was entruſted to Theopompus and Polydorus; the former of whom commanded the right, and the latter the left, wing, while the central diviſion was committed to the diſcretion of Euryleon, of the royal race of the Theban Cadmus. The Meſſenians were inferior both in numbers and in diſcipline, but ardent in the cauſe of every thing moſt dear to them. Euphaes headed their left wing, which oppoſed the diviſion of Theopompus; Pytharatus led the right; and Cleonnis commanded the centre. When the ſignal was given for the charge, the Meſſenians rather ran than marched to the battle. As they advanced upon the enemy, they reproached them with an inſatiable avidity for wealth and power, an unnatural diſregard to the ties of blood, and an impious contempt for the revered name of Hercules, the acknowledged founder and patron of both kingdoms. From words of reproach they proceeded to deeds of violence. Many quitted their ranks, and aſſailed the embattled phalanx of the Spartans. The wounded ſpent the laſt exertions of their ſtrength in ſignal acts of vengeance, or employed their laſt breath in conjuring their companions to imitate the example of their bravery. To the generous ardour of the Meſſenians, Sparta oppoſed the intrepidity of diſciplined valour. Her citizens, enured to the uſe of arms, cloſed their ranks, and remained firm in their reſpective poſts. Where the enemy in any part gave way, they followed them with fatal progreſs; and endeavoured, by the continuance of regular exertion, to overcome the deſultory efforts of rage, fury, and deſpair.

The kings, who had hitherto been ſatisfied with leading their troops to action, and ſharing the common danger, longed, as the battle began to warm, to ſignalize their valour in ſingle combat. With this deſign, Theopompus firſt marched towards Euphaes, who, ſeeing him approach, cried out to his companions, "Does not Theopompus well imitate the bloody-minded Polynices, who, at the head of an army of ſtrangers, levied war againſt his native country, and, with his own hand, ſlew a brother, by whom, at the ſame inſtant, he himſelf was ſlain? In like manner does Theopompus, with unnatural hatred, perſecute his kinſmen of the race of Hercules; but I truſt he ſhall meet the puniſhment due to his impiety." At ſight of this intereſting ſpectacle, the troops were inſpired with new ardour, and the battle raged with redoubled fury. The choſen bands, who reſpectively watched the ſafety of the contending princes, became inſenſible to perſonal danger, and only ſolicitous to preſerve the ſacred perſons of their kings. The ſtrength of Sparta, at length, began to yield to the activity of her rivals. The troops of Theopompus were broken and thrown into diſorder; and the reluctant prince was himſelf compelled to retire. At the ſame time the right wing of the Meſſenians, having loſt their leader Pytharatus, yielded to the exertions of Polydorus and his Spartans: but neither this general, nor king Euphaes, thought proper to purſue the flying enemy. It ſeemed more expedient to ſtrengthen, with their victorious troops, the central diviſions of their reſpective armies, which ſtill continued to fight with obſtinate valour, and doubtful ſucceſs. Night at length put an end to the engagement, which had proved extremely humiliating to both parties; for next morning neither offered to renew the battle, neither ventured to erect a trophy of victory; while both craved a ſuſpenſion of arms, for the purpoſe of interring the dead. Although the immediate effects of the battle were alike injurious to the Spartans and to the Meſſenians, its remote conſequences were peculiarly ruinous to the latter. They were obliged to ſeek refuge among the almoſt inacceſſible mountains of Ithomè; a place which, though ſituated near the frontiers of Laconia, afforded them the ſecureſt retreat amidſt their preſent calamities, being ſtrongly fortified by nature, and ſurrounded by a wall, which bade defiance to the battering engines known in that early age.

The Meſſenians, thus defended againſt external aſſaults, found means to form a confederacy with the Argives and Arcadians, who from proximity of ſituation, as well as interference of intereſt and ambition, held the Lacedæmonians in peculiar deteſtation. By the aſſiſtance of theſe powerful allies, the Meſſenians gained conſiderable advantages in two general engagements; in the former of which their king Euphaes, betrayed by the ardour of ſucceſs into an unequal combat, was overpowered by numbers, and ſlain in the action. Ariſtodemus was called by the voice of the people to fill the vacant throne; and his conduct in war juſtified the high opinion entertained of him by his countrymen. For five years he baffled the aſpiring hopes of the Spartans; defeated them in ſeveral deſultory rencounters; and, in a pitched battle, fought near the walls of Ithomè, overcame the principal ſtrength of their republic, aſſiſted by that of the Corinthians. This victory threw the Spartan ſenate into great perplexity; but their troops, with revived hopes, again took the field; and their ardour was ſucceſsful in ſeveral ſkirmiſhes with the Meſſenians. Ithomè was immediately inveſted, and, after a ſiege of five months, compelled to ſubmit to the ſlow but irreſiſtible impreſſions of famine. The greater part of the people diſperſed themſelves through the interior towns

towns and villages, endeavouring, in the obſcurity of their ancient habitations, to elude the purſuit of an unrelenting enemy.

The Lacedæmonians, having obtained poſſeſſion of the Meſſenian capital, diſcovered ſignal gratitude to their gods, fidelity to their allies, and cruelty to their enemies. Ithomè was demoliſhed to the foundation. Of its ſpoil, three tripods were conſecrated to Amyclean Apollo. The firſt was adorned with the image of Venus, the ſecond with that of Diana, and the third with the figures of Ceres and Proſerpine. To the Aſſinians, who had aſſiſted them in the war, the Spartans gave that beautiful portion of the Meſſenian coaſt, which aſſumed, and long retained, the name of its new inhabitants. They rewarded Androcles, who, at the commencement of the war, had diſcovered his partiality for Sparta, by beſtowing on his deſcendants the fertile diſtrict Hyamia. The reſt of the Meſſenian nation were obliged to take an oath of allegiance to their conquerors, to preſent them every year with half the produce of their ſoil, and, under pain of the ſevereſt puniſhment, to appear in mourning habits at the funerals of the Spartan kings and magiſtrates.

Thus ended the firſt Meſſenian war. Peace promoted population; and the inhabitants of Peloponneſus continued to diffuſe their numerous colonies over the iſlands of Sicily and Corcyra, as well as over the ſouthern diviſion of Italy, afterwards known by the name of Magna Græcia. In this delicious country two conſiderable eſtabliſhments were formed, about the ſame time, the one at Rhegium, and the other at Tarentum. The cauſes which occaſioned theſe migrations, are not related in ancient hiſtory; the Lacedæmonian eſtabliſhment at Tarentum was alone marked by ſuch circumſtances as have merited, on account of their ſingularity, to be handed down to ſucceeding ages.

During the firſt war of the Spartans againſt Meſſenia, the army, conſiſting of the greater part of the citizens who had attained the military age, bound themſelves, by oath, not to return home until they had ſubdued their enemies. This engagement detained them ſeveral years in the field, during which Sparta, inhabited only by women, children, and decrepid old men, produced no ſucceeding generation to ſupport the future glories of the republic. Senſible of this inconvenience, which, in a warlike ſtate, might have been productive of the moſt dangerous conſequences, the ſenate recalled ſuch young men as, having left their country before they had attained the military age, were not under any obligation to keep the field; and enjoined them to aſſociate promiſcuouſly with thoſe married women, whoſe huſbands were engaged in the war, that the city might thus be preſerved from decay and deſolation. The children born of theſe irregular connections, were diſtinguiſhed by the name of *Partheniæ*; probably denoting the condition of their mothers. They had no certain father; nor were they entitled, though citizens of Sparta, to any private inheritance. Theſe circumſtances kept them a diſtinct body, the members of which were attached by the ſtricteſt friendſhip to each other, and hoſtile to the reſt of the community. This dangerous diſpoſition was farther encreaſed by the imprudent behaviour of the Spartans, who, on their return from the conqueſt of Meſſenia, treated the Partheniæ with the utmoſt contempt. The young men knew how to endure poverty and misfortune, but could not brook diſgrace. Their unhappy ſituation, and the impatience with which they ſubmitted to it, naturally connected them with the Helots, thoſe miſerable ſlaves, whoſe juſt indignation ever prompted them to revolt from the cruel tyranny of their maſters. A conſpiracy was formed; the day, place, and ſignal, were determined, upon which the Partheniæ and Helots, armed with concealed daggers, and with the moſt hoſtile fury, ſhould retaliate, in the public aſſembly, their ſufferings and inſults on the proud lords of Sparta. The time approached, and the deſign was ripe for execution, when the preſident of the aſſembly ordered the cryer to proclaim, That none preſent ſhould throw up his cap (for that had been the ſignal appointed by the conſpirators); and thus clearly intimated that the plot had been diſcovered, and that the Spartans were prepared to overcome the treachery. We are not informed of the puniſhment inflicted on the Helots; but the Partheniæ were treated with remarkable lenity: they were not only allowed to eſcape unpuniſhed, but were furniſhed with every thing neceſſary for undertaking a ſucceſsful expedition againſt the neighbouring coaſts; and thus enabled to eſtabliſh themſelves under their leader Phalantus, in the delightful receſſes of the Tarentine gulph.

The Spartans, delivered from this formidable conſpiracy, enjoyed, above thirty years, domeſtic as well as public peace, until again diſturbed by the revolt of the Meſſenians. The young men of Andania thirſted to take up arms. They were headed by Ariſtomenes, a youth deſcended from the ancient line of Meſſenian kings. Before diſcovering their intention to take arms, the Meſſenians diſpatched meſſengers to the Arcadians and Argives, entreating their aſſiſtance. Both theſe nations joined the Meſſenians; and the firſt battle was fought at Darae, a village of Meſſenia. The ſoldiers, on both ſides, behaved with equal bravery; the victory was doubtful; but Ariſtomenes, the Meſſenian, acquired unrivalled glory and renown. On the field of battle he was ſaluted king by the admiring gratitude of his countrymen. He declined, however, the dangerous honours of royalty, declaring himſelf ſatisfied with the more humble appellation of general. Senſible how much depended on the auſpicious beginning of the war, he immediately marched to Sparta; entered the city by night, and ſuſpended in the temple of Minerva a buckler, inſcribed with his name, as a monument of his ſucceſs againſt the enemy, and an offering to procure the goodwill of that warlike goddeſs.

The boldneſs of this exploit was rivalled by the ſingular intrepidity of his companions Panormus and Gonippus. While the Lacedæmonians celebrated, in their camp, the feſtival of their heroes Caſtor and Pollux, the two youths of Andania, mounted on fiery ſteeds, with lances in their hands, and a purple mantle flowing over their white veſtments, preſented themſelves in the midſt of the joyous aſſembly. The ſuperſtitious crowd, diſſolved in mirth and wine, imagined that their heavenly protectors had appeared in a human form, in order to grace the feſtival eſtabliſhed in their honour. As they approached, unarmed, to pay their obeiſance to the divine brothers of Helen, the young Meſſenians couched their ſpears, attacked the multitude with irreſiſtible fury, ſlew them with their weapons, or trod them down with their horſes, and, before the aſſembly could recover from its ſurpriſe and conſternation, ſet out, in triumph, on their return to Andania.

Theſe exploits were ſufficient to alarm the fears of the Spartans, and to make them ſeek the advice of Apollo. The oracle, when conſulted by what means they might change the ſucceſs of the war, ordered them to demand a general from Athens. The Athenians, on being informed of the oracle, immediately diſpatched to Sparta, Tyrtæus, a man who had never been diſtinguiſhed by any rank in the army. He was chiefly known to his fellow-citizens as a poet; a character in which he has been juſtly admired by ſucceeding ages. Among the Spartans, however, he was regarded as the ſacred meſſenger of the divinity; and his verſes were ſuppoſed to convey the inſtructions and ſentiments inſpired by the oracle. The heroic valour of Ariſtomenes, however, ſtill continued to prevail. He defeated the Spartans in three ſucceſſive engagements, the circumſtances of which are ſo ſimilar, that they have frequently been confounded with each other. They were all fought in

the plain of Stenyclara, and the moſt remarkable at a place called the Boar's Monument, from a tradition that Hercules had anciently ſacrificed there an animal of that ſpecies. The Meſſenians were reinforced by the aſſiſtance of their allies of Elis and Sicyon, as well as of Argos and Arcadia. The Spartans were followed by the Corinthians, their ancient confederates, and by the citizens of Leprea. The combined army was commanded by Anaxander the Spartan king, whoſe influence, however, was rivalled by the authority of Hecatæus the diviner, and of Tyrtæus the poet.

Theſe ſucceſſes were chiefly owing to the ſpirited exertion of the Meſſenian general; and they were celebrated with great pomp at Andania. The men received their favourite hero with joyous acclamations; and their women, ſtrowing his way with flowers, ſung in his praiſe a ſtanza that has reached modern times, expreſſing, with elegant ſimplicity, the glorious victory obtained over the Lacedæmonians. This tribute of applauſe paid to the virtues of Ariſtomenes, inſpired him with a generous ambition further to deſerve the gratitude of his countrymen. With unremitting activity he continued to overrun the hoſtile territory, to deſtroy the defenceleſs villages, and to carry the inhabitants into ſervitude. But after attacking Egila, he met with an unexpected check from the enthuſiaſm of the Spartan matrons, who were offering ſacrifice to Ceres in a neighbouring temple. As ſoon as they perceived the approach of the enemy, the women, who, according to the inſtitutions of Lycurgus, had been trained to all the manly exerciſes of the other ſex, iſſued from the temple, and aſſailing the Meſſenians with knives, hatchets, burning torches, and the other inſtruments of ſacrifice, threw them into a panic, and ſeized the perſon of their commander. Next day, however, Ariſtomenes was delivered from captivity, through the kindly offices of Archidamea, prieſteſs of Ceres, whoſe ſuſceptible heart had long admired the merit and renown of the Meſſenian hero.

The victories of the Meſſenians, which, in the courſe of three years, had been interrupted only by this ſingular incident, diſpoſed the Spartans to abandon the war, and to allow their enemies to enjoy the honour and advantages which they had ſo bravely earned. This reſolution was approved by the ſenate and aſſembly. The allies of Sparta adopted the ſame opinion. Tyrtæus alone oppoſed the diſgraceful meaſure, with all the force of his authority. The ſacred character of the bard, with the divine influence of his poetry, prevailed; and the Spartans again entered Meſſenia with an army, as numerous and powerful as any they had before collected. But at ſight of the Meſſenian troops, headed by Ariſtomenes, they were thrown into new conſternation. A ſecond time Tyrtæus revived their drooping courage, while he expatiated on the glory of ancient warriors; the magnanimity of deſpiſing fortune; and the honours and rewards of victory. Theſe ſentiments, dictated by the true ſpirit of heroiſm, fired their minds with martial ardour. One conſideration only damped the generous warmth that animated their ſouls. In an engagement, which there was every reaſon to believe would be fought with the moſt obſtinate valour on both ſides, what crowds of warriors muſt fall, whoſe bodies, heaped together in confuſion, could not be recognized by their friends, or obtain, with due ſolemnity, the ſacred rites of burial! This melancholy thought, which chilled the boldeſt heart, might have formed an inſurmountable obſtacle to their ſucceſs, had not their terrors been removed by the miſſionary of Apollo. By the advice of Tyrtæus, each ſoldier tied a token, inſcribed with his name and deſignation, round his right arm, by means of which his body, however diſfigured, might be known to his friends and kindred. Thus fortified againſt the only illuſion that could alarm the minds of men who preferred death to a defeat, they ruſhed forward to the attack, reſolving to conquer or die.

The Meſſenian general had drawn up his forces at a place called the Great Ditch, from which this engagement has been called the battle of the Trenches. The national ſtrength was reinforced by a conſiderable body of Arcadian troops, commanded by their king Ariſtocrates, to whoſe treachery, as much as to their own valour, the Spartans were indebted for the victory. When the charge was ſounded, and the Meſſenians were preparing to reſiſt the firſt onſet of the enemy, Ariſtocrates led off his Arcadians; and, to make his defection more apparent, he croſſed the whole Meſſenian army. The Meſſenians, confounded with a treachery ſo bold and manifeſt, almoſt forgot that they were contending againſt the Spartans. Many forſook their ranks, and ran after the Arcadians, ſometimes conjuring them to return to their duty, and ſometimes reproaching them with their perfidious ingratitude. Their entreaties and inſults were alike vain; their army was ſurrounded on almoſt every ſide; the little band of Ariſtomenes alone were able to reſiſt the efforts, and break through the embattled ſquadrons of the enemy.

Among the republics of ancient Greece, the fate of a nation often depended on the event of a battle. The contention was not between mercenary troops, who regarded war as a trade, which they carried on merely from intereſt, without emulation or reſentment. The citizens of free communities fought for their liberties and fortunes, their wives and children, and for every object held dear or valuable among men. In ſuch a ſtruggle they exerted the utmoſt efforts of their ſtrength; nor did the conflict ceaſe, till the one party had reduced the other to extremity. It was not extraordinary, therefore, that after the battle of the Trenches, the Meſſenians ſhould be unable to keep the field. Ariſtomenes, however, determined, while he preſerved his life, to maintain his independence. With this view he collected the miſerable remains of his troops; aſſembled the ſcattered inhabitants of the open country; abandoned the cities and villages on the plain to the mercy of the victors; and ſeized, with his little army, the ſtrong fortreſs of Eira, ſituate among the mountains which riſe along the ſouthern ſhore of Meſſenia, defended on the north by the river Neda, and open only on the ſouth towards the harbours of Pylus and Methonè, which offered it a plentiful ſupply of corn, and other neceſſary proviſions. In this ſituation the gallant Meſſenian reſiſted, for eleven years, from A. C. 682 to 671, the efforts of the Spartans, who endeavoured, with unremitting perſeverance, to gain poſſeſſion of the fortreſs. Nor was he ſatisfied with defending the place: on various occaſions he made vigorous and ſucceſsful ſallies againſt the beſiegers. With a body of only three hundred Meſſenians, he, at different times, over-ran the Spartan territories, and plundered ſuch cities as were either weakly garriſoned or negligently defended. Marching all night, they arrived by day-break at Amyclæ, a Lacedæmonian city, ſituate on the banks of the Eurotas, at the diſtance only of a few miles from the capital. Having entered the place without reſiſtance, they carried off a conſiderable booty in ſlaves and merchandiſe, before the Spartans could arrive to the aſſiſtance of their neighbours.

A continued ſeries of ſuch exploits inſpired the Meſſenians with a degree of confidence, which at length proved fatal to their cauſe. Neglecting thoſe precautions to which they owed their paſt advantages, they began to continue ſo long in the field, that the Spartans found an opportunity to intercept their return. The little band of Meſſenians behaved with its uſual gallantry, and long defended itſelf againſt ſuperior numbers. Ariſtomenes, after receiving many wounds, was taken priſoner; and, with fifty of his braveſt companions, carried in chains to the Lacedæmonian capital. The reſentment of that republic againſt thoſe who had inflicted on her ſuch dreadful calamities, was not to be gratified by an ordinary puniſhment. After much deliberation,

beration, the priſoners were thrown, alive, into the Ceada; a profound cavern, commonly employed as a receptacle for the moſt atrocious criminals. All the companions of Ariſtomenes were killed by the fall; he alone was preſerved by an accident, which, though natural in itſelf, has been diſfigured by many fabulous circumſtances. The Spartans, who regarded valour even in an enemy, permitted him, at his earneſt deſire, to be buried with his ſhield; a weapon of defence held in peculiar veneration by the Grecian ſoldiers. As he deſcended into the deep cavity, the edge of his buckler, ſtriking againſt the ſides of the rock, broke the force of the fall, and ſaved his life. Two days he continued in this miſerable dungeon, amidſt the ſtench of dead bodies, his face covered with his cloak, waiting the ſlow approaches of certain death. The third day he heard a noiſe, and looking up, perceived a fox devouring the mangled remains of his companions. He allowed the animal to approach him, and catching hold of it with one hand, while he defended himſelf againſt its bite with the other, he determined to follow wherever it ſhould conduct him. The fox drew towards a chink in the rock, by which he had entered the cavity. Ariſtomenes then gave liberty to his guide, whom he followed with much difficulty, ſcrambling through the paſſage which had been opened for his deliverance. He immediately took the road of Eira, and was received with unſpeakable aſtoniſhment and delight by his admiring ſubjects.

The news of his wonderful eſcape reached Sparta by ſome Meſſenian deſerters, whoſe information was not more credited, than if they had brought intelligence of one riſen from the dead. But, in the ſpace of a few days, the exploits of Ariſtomenes convinced the incredulity of the Spartans. He was informed that the Corinthian army was on its march, obſerving no order or diſcipline in the day, and encamping during night without guards or centinels. Ariſtomenes reſolved to ſurpriſe them. That no appearance of danger might alarm the negligence of the Corinthians, he waited their approach in concealment, attacked their camp in the dead of night, marked his route with blood, and returning loaded with ſpoils to Eira, offered to Meſſenian Jove the *Hecatomphonia*; a ſacrifice of an hundred victims, which *he* alone was entitled to perform, who with his own hand had killed an hundred of his enemies. This was the third time the Meſſenian hero had celebrated the ſame ſavage rite.

Eleven years had the vigorous and perſevering efforts of a ſingle man prolonged the deſtiny of Eira. Ariſtomenes might have ſtill withſtood the impetuous ardour of the Spartans, but for the ſecret treachery of a Lacedæmonian adulterer, who was the ſlave of Emperamus, the Spartan general. The perfidious ſlave had eſcaped to Eira with his maſter's property, and had formed an intrigue with a Meſſenian woman, whom he viſited as often as her huſband was called in his turn to guard the citadel. Amidſt the miſerable joys of their infamous commerce, the lovers were one night diſturbed by the huſband, who loudly claimed admittance, which however he did not obtain till his wife had concealed the adulterer. When the wife, with the moſt inſidious flattery, inquiring by what good fortune ſhe was *bleſſed* with her huſband's unexpected return, the ſimple Meſſenian related, that the inclemency of the weather had driven the ſoldiers from their poſts, and that Ariſtomenes was prevented by a recent wound from walking the rounds as uſual, and it was not to be expected that the Spartans would venture an attack againſt the citadel during the horror of a tempeſt. The Lacedæmonian ſlave overhearing this recital, cautiouſly eſcaped from his concealment, and fought with the utmoſt celerity the Spartan camp. Emperamus readily pardoned the fortunate treachery of a ſervant that had afforded him the hopes of obtaining the higheſt object of his ambition. Notwithſtanding the ſlipperineſs of the ſteep aſcent, the Spartans, by the direction of the ſlave, mounted the unguarded citadel in the midſt of forked lightning and loud peals of thunder, and obtained poſſeſſion of all the principal poſts, before the Meſſenians were ſenſible of their danger. But as ſoon as it was known that the enemy had entered the city, Ariſtomenes, accompanied by the warlike Theocles, together with their reſpective ſons Gorgus and Manticles, endeavoured to animate the deſpair of their fellow-citizens, and to make them defend to the laſt extremity, the little ſpot of ground to which they could yet apply the endearing name of country. Such however were the terrors and confuſion of the night, that it was impoſſible to form the Meſſenians into any order of battle; and, as the morning dawned, they ſaw the impoſſibility of any other aſſiſtance than what may be derived from deſpair. They determined, at every hazard, to attack and penetrate the Spartan battalions. Even the women armed themſelves with tiles and ſtones, and every weapon that preſented itſelf to their fury. They lamented that the violence of the hurricane prevented them from mounting to the roofs of the houſes, which they had purpoſed to throw down on the enemy; and declared that they would rather be buried under the ruins of their country, than dragged in captivity to Sparta. Such generous reſolutions ought to have retarded the fate of Meſſenè; but it was impoſſible to hold out for ever againſt ſuperior numbers. For three days and nights they withſtood the combined force of their irreſiſtible enemies; and when at length they began to give way, the heroic Theocles threw himſelf into the midſt of the Spartans, crying out, "That they were not always to be victorious, nor the Meſſenians always to be their ſlaves. Such was the will of the gods! who commanded him to periſh in the wreck of a country, which, in a future age, was deſtined to riſe from its ruins."

It might have been expected that the patriotiſm of Ariſtomenes would have choſen the ſame fate with Theocles; but he preferred life for the ſake of defending the ſmall remnant of a community, which, he flattered himſelf, might yet be preſerved for the reſtoration of his country. For this purpoſe, the only expedient that could be employed, was the ſounding a retreat, and the collecting into one body ſuch of his ſoldiers as were not already too far engaged with the Spartans. Having accompliſhed this meaſure, he placed the women and children in the centre of the battalion, and committed the command of the rear to Gorgus and Manticles. He himſelf conducted the van, and marching towards the enemy with his ſpear equably poized, ſhewed, by his mien and countenance, that he was reſolved to defend to the laſt extremity the little remnant of the Meſſenian ſtate. The Spartans, as directed by Hecatus their diviner, opened their ranks, and allowed them to paſs unhurt, judiciouſly avoiding to irritate their deſpair. The Meſſenians abandoned their city, and marched towards Arcadia.

As the wars of the Grecian republics were more bloody and deſtructive than thoſe of modern times, ſo were their alliances more generous and ſincere. When the Arcadians were informed of the taking of Eira, they travelled in great numbers towards the frontiers of their kingdom, carrying with them victuals, clothing, and all things neceſſary to the relief of the unfortunate fugitives; whom, having met at mount Lycæa, they invited into their cities, offered to divide with them their lands, and to give them their daughters in marriage. The generous ſympathy of the Arcadians animated Ariſtomenes to an exploit, the boldneſs of which little correſponded with the depreſſion incident to his fortune. He had only five hundred ſoldiers whoſe activity and ſtrength were ſtill equal to their valour; and theſe he commanded, in the preſence of his allies, to march ſtraightway to Sparta. Three hundred Arcadians deſired to ſhare the glory of

the enterprife; and it was hoped, that as the greater part of the Lacedæmonians were employed in plundering Eira, this fmall but valiant body of men might make a deep impreffion on a city deprived of its ufual defence. The arrangements for this purpofe were taken with the Arcadian king Ariftocrates, whofe behaviour at the battle of the Trenches had occafioned the defeat of the Meffenians, and whofe artifice had fince perfuaded them, that his fhameful behaviour on that day was the effect of terror, and not of perfidious treachery. A fecond time, however, this wretch betrayed the caufe of his country and its allies. Having retarded the execution of Ariftomenes's project, he difpatched a confidential flave to Sparta, who difcovered the imminent danger to Anaxander the Lacedæmonian king. The flave was intercepted on his return, carrying a letter from that prince, in which he acknowledged the faithful fervices of Ariftocrates. Upon the difcovery of this letter, the Arcadians, frantic with difappointment and rage, ftoned to death the perfidious traitor who difgraced the name of king.

Thus ended the fecond Meffenian war, in the autumn of the year 671 before Chrift. The fugitive Meffenians experienced various fortunes. The aged and infirm were treated by the Arcadians, among whom they continued to reide, with all the cordial attention of ancient hofpitality. The young and enterprifing took leave of their benefactors, and under the conduct of Ariftomenes repaired to Cylenè, a harbour belonging to the Eleans. Agreeably to the information which they had received, they found in that place their countrymen of Pylus and Methonè, with whom they confulted about the means of acquiring new eftablifhments. It was determined, by the advice of their Elean friends, not to undertake any expedition for this purpofe until the return of fpring, when they fhould again convene in full affembly, finally to conclude this important deliberation. Having met at the time appointed, they agreed unanimoufly to commit their future fortunes to the wifdom of Ariftomenes, who declared his opinion for eftablifhing a diftant colony, but declined the honour of conducting it in perfon, and named for this office the brave Meffenian youths Gorgus and Manticles. The former of thefe, inheriting his father's hatred againft Sparta, advifed his countrymen to take poffeffion of the ifland of Zacynthus, which, from its fituation in the Ionian fea, lay conveniently for haraffing the maritime parts of Laconia. Manticles propofed a different opinion, obferving, that the ifland of Sardinia, though lefs advantageoufly fituate for the purpofes of revenge, was far better adapted to fupply the neceffary comforts of life; and that the Meffenians, if once fettled in that large and beautiful ifland, would foon forget the calamities which Sparta had inflicted on them. But before any refolution was taken, a meffenger arrived from Rhegium, then governed by Anaxilas, a prince defcended from the royal houfe of Meffenia, who invited his wandering countrymen to a fafe retreat in his dominions. When, agreeably to this invitation, they arrived at Rhegium, Anaxilas informed them, that his fubjects were continually haraffed by the piratical depredations of the Zancleans, an Eolian colony, who poffeffed a delightful territory on the oppofite coaft. With the affiftance of the Meffenians it would be eafy to deftroy that neft of pirates; a meafure by which the city of Rhegium would be delivered from very troublefome neighbours, and the Meffenians enabled to eftablifh themfelves in the moft delicious fituation of the whole Sicilian coaft. The propofal was received with alacrity; the armament failed for Sicily; the Zancleans were befieged by fea and land. When they perceived that part of their wall was deftroyed, and that they could derive no advantage from continuing in arms, they took refuge in the temples of their gods. Even from thefe refpected afylums the refentment of Anaxilas was ready to tear them; but he was reftrained by the humanity of the Meffenians, who had learned from their own calamities to pity the unfortunate. The Zancleans, thus delivered from the fword and from fervitude, fwore eternal gratitude to their generous protectors. The Meffenians returned this friendly fentiment with an increafe of bounty; they allowed the Zancleans either to leave the place, or to remain in the honourable condition of citizens; the two nations gradually coalefced into one community; and Zanclè, in memory of the conqueft, changed its name to Meffenè, a name ftill recognized, after the revolution of twenty-five centuries.

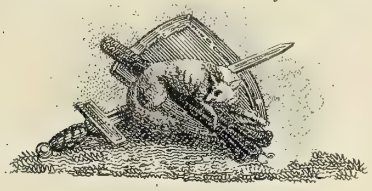
It has been obferved, that Ariftomenes declined the honour of conducting the colony. His fubfequent fortune is differently related by ancient writers. Paufanias informs us, that he failed to the ifle of Rhodes with Demagetes, king of the city and territory of Ialyfus in that ifland, who being advifed by the oracle of Apollo to marry the daughter of the moft illuftrious character in Greece, had without hefitation preferred the daughter of Ariftomenes. From Rhodes he failed to Ionia, and thence travelled to Sardis, with an intention of being prefented to Ardys, king of the Lydians, probably to propofe fome enterprize to the ambition of that prince, which might finally be productive of benefit to Meffenè. But upon his arrival at Sardis he was feized with a diftemper which put an end to his life. Other generals have defended their country with better fuccefs, but none with greater glory; other characters are more fully delineated in ancient hiftory, but none more deferving of immortal fame: fince whatever is known of Ariftomenes tends to prove, that according to the ideas of his age and country, he united, in fingular perfection, the merits of the citizen and of the foldier, the powers of the underftanding, and the virtues of the heart.

The conqueft of Meffenia rendered Sparta the moft confiderable power in Greece. The Peloponnefus, formerly comprehending feven, now contained only fix independent ftates. The fubjects of Sparta alone occupied two-fifths of the whole peninfula. The remainder was unequally divided among the Corinthians, Achæans, Eleans, Arcadians, and Argives. In a narrow extent of territory, thefe fmall communities exhibited a wonderful variety of character and manners. The central diftrict of Arcadia, confifting of one continued cluſter of mountains, was inhabited by a hardy race of herdfmen, proud of their anceftry, and confident in their own courage and the ftrength of their country. Their Eolian extraction, their jealoufy, and their pride, made them difdain connection with the Dorians, by whofe poffeffions they were on all fides furrounded. Careleſs of the arts of peace, they were engaged in unceafing hoftilities with their neighbours, by whom they were defpifed as barbarians, and whom they contemned as upftarts; fince, amidft all the revolutions of Peloponnefus, the Arcadians alone had ever maintained their original eftablifhments.

The induftrious and wealthy Corinthians prefented a very different fpectacle. Inhabiting the mountainous ifthmus, which, towering between two feas, connects the Peloponnefus with the north of Greece, the Corinthians long formed the principal centre of inland communication and foreign commerce. Their fea-fight againft their rebellious colony, Corcyra, is the firft naval engagement recorded in hiftory. It was fought fix hundred and fifty years before Chrift, at which time the Corinthians were regarded by their neighbours as a wealthy and luxurious people. The influence of wealth to produce fervitude prevailed over that of commerce, which is favourable to liberty. Their government, after the abolition of monarchy, was ufurped by a numerous branch of the royal family, ftyled Bacchiadæ. This oligarchy was deftroyed by Cypfelus, a mild and gentle ruler, whofe family governed Corinth till the year 585 before Chrift.

The contraft between Arcadia and Corinth was not more

J. Chapman sculp.



ARISTOMENES.

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more ſtriking than that between Argolis and Achaia. The citizens of Argos, having expelled their kings, were ſeized with an ambition to domineer over the inferior towns in the province. The inſolence of the capital provoked the indignation of the country. Mycenæ, Træzene, Epidaurus, and other places of leſs note, were often conquered, but never thoroughly ſubdued. Intereſt taught them to unite; and union enabled them to ſet at defiance the power of Argos, by which they were branded as rebellious, and which they reproached as tyrannical. The fortunate diſtrict of Achaia, having ſucceſsfully reſiſted the oppreſſion of Ogygus, an unworthy deſcendant of Agamemnon, eſtabliſhed, at a very early period, a democratical form of policy. Twelve cities, each of which retained its municipal juriſdiction, united on a foot of perfect equality and freedom. This equitable confederacy prepared the way for the Achæan laws, ſo celebrated in later times, when the cauſe of Greece, ſhamefully abandoned by more powerful guardians, was defended by the feeble communities of Achaia.

We have already noticed the important inſtitutions of Iphitus and Lycurgus. The very oppoſite ſyſtems adopted by theſe great legiſlators, reſpectively ſuited the weakneſs of Elis and the ſtrength of Sparta, and occaſioned a remarkable contraſt between the peaceful tranquillity of the former republic, and the warlike ambition of the latter, the lines of whoſe national character grew more bold and deciſive after the Meſſenian conqueſt. The haughty temper of the Spartans became continually more preſumptuous. They totally diſdained ſuch arts and employments as they uſually ſaw practiſed by the induſtry of ſlaves. War, and hunting as the image of war, were the only occupations which it ſuited their dignity to purſue; and this conſtant exerciſe in arms, directed by the military code of Lycurgus, rendered them ſuperior in the field of battle, not only to the neighbouring ſtates of Peloponneſus, but to the braveſt and moſt renowned republics beyond the Corinthian iſthmus.

Having aboliſhed the regal office, the Athenians, whoſe political revolutions were followed with remarkable uniformity by neighbouring ſtates, ſubmitted the chief adminiſtration of their affairs, as above noticed, to a magiſtrate intitled *archon*. The authority of the archon long continued hereditary: it became afterwards decennial: at length nine annual archons were appointed by the powerful claſs of nobility, conſiſting not only of the deſcendants of ſuch foreign princes as had taken refuge in Athens, but of thoſe Athenian families which time and accident had raiſed to opulence and diſtinction. The great body of the people gained nothing by theſe revolutions. The equeſtrian order, ſo called from their fighting on horſeback, which, before the improvement of tactics, rendered them ſuperior in every rencounter with the diſorderly rabble, enjoyed all authority, religious, civil, and military. The Athenian populace, about the year before Chriſt 594, were reduced to a condition of miſerable ſervitude; nor did they recover their hereditary freedom, until the admired inſtitutions of Theſeus were reſtored and improved by Solon, towards the beginning of the ſixth century before Chriſt.

The domeſtic diſſenſions which prevailed in almoſt every ſtate beyond the iſthmus, were only interrupted by foreign hoſtilities. Interference of intereſt occaſioned innumerable conteſts between the Phocians and Thebans, the Dorians and Theſſalians, the Locrians and Ætolians. Their various inroads, battles, and ſieges, which were begun with paſſion, carried on without prudence, and concluded without producing any permanent effect, have been conſigned to a juſt oblivion. But the firſt ſacred war is recommended to our attention, both on account of the cauſe from which it aroſe, and the conſequences with which it was attended. This memorable enterprize was occaſioned by an injury committed againſt the oracle of Delphi; it was undertaken by order of the Amphictyons; it ended in the total deſtruction of the cities accuſed of ſacrilegious outrage; and its concluſion was celebrated by the Pythian games and feſtival; which, of all Grecian inſtitutions, had the moſt direct as well as moſt powerful tendency to refine rudeneſs and ſoften barbarity.

The territory of the Criſſeans, lying to the ſouth of Delphi, near the Corinthian gulph, comprehended three magnificent cities, Criſſa the capital, Cirrha, and Anticirrha, all advantageouſly ſituated for commerce, and placed in the midſt of a diſtrict which had acquired and deſerved the epithet of *Happy*. Their harbour was frequented by the veſſels, not only of Greece, but of Italy and Sicily; they carried on an extenſive foreign commerce, and the neighbourhood of Delphi, at which it was impoſſible to arrive without paſſing through their dominions, brought them conſiderable acceſſions of wealth, as well as of dignity and reſpect. But theſe advantages, inſtead of ſatisfying, increaſed the natural avidity of the Criſſeans. They levied a ſevere impoſt on the pilgrims, whether Greeks or Barbarians, who viſited the temple of Apollo; a meaſure directly inconſiſtent with a decree of the Amphictyons, which declared that all men ſhould have free acceſs to the oracle. The Delphians remonſtrated againſt the extortions of the Criſſeans; but their remonſtrances, inſtead of producing any happy effect, only exaſperated men grown inſolent through proſperity, and at once determined them to plunder the rich ſhrine of Delphi. The imaginations of men were not prepared for ſuch an event; nor had any meaſures been taken to prevent ſuch an unexpected and abominable profanation. The enemy, meeting with no reſiſtance, became maſters of the temple, and ſeized the invaluable offerings accumulated by the pious generoſity of ages. Thence they paſſed into the ſacred wood, and, rendered furious through pride or guilt, attacked, plundered, and murdered, the promiſcuous crowd, who were employed in the uſual exerciſe of their devotions. The young were violated with a licentious rage which bade defiance to decency and nature. Even a deputation of the Amphictyons were repelled with blows and inſults, while they vainly attempted to ſtop the fatal progreſs of theſe frantic and impious outrages, committed againſt every thing held ſacred among men.

The Amphictyonic council, to whom it belonged to judge and to puniſh every atrocious enormity, met with conſiderable oppoſition in proceeding againſt the aggravated crimes of the Criſſeans; and it was not without encountering many difficulties, that Solon, one of the Athenian repreſentatives, rouſed his aſſociates to the reſolution of avenging the offended majeſty of religion, the violated laws of nature, and their own perſonal injuries. The meaſures purſued on the occaſion, were ſlow and indeciſive. The forces brought into the field were by no means equal to the enterprize for which they were deſigned; they were not able, during nine ſummers and winters, to reduce the towns of Criſſa and Cirrha; but which ſubmitted in the tenth year of the war, rather to the art than to the power of the beſiegers.

The Greeks had been for a long time too deeply engaged in domeſtic diſſenſions, to make effectual efforts for the glory of Apollo. Few adventurers repaired to the holy ſtandard; and the war, neither ſupported by vigour of execution, nor directed by wiſdom of deliberation, languiſhed under different generals. At length Eurylochus, a Theſſalian prince, was entruſted with the command of the Amphictyonic army. On ſeveral occaſions he defeated the Criſſeans, who made frequent and vigorous ſallies in order to defend their poſſeſſions. But when he attempted to make an impreſſion on the fortified ſtrength of Criſſa, its thick walls, its lofty towers, and, above all, the activity and courage of its citizens, preſented obſtacles which it was impoſſible to ſurmount. The beſieging army, in the ninth year of the war, was ſorely

ſorely afflicted with a peſtilential diſorder, occaſioned by ſome unknown malignity of the atmoſphere. A great part of the army fell a prey to the increaſing contagion. Anxious for the public ſafety, the Amphictyons had recourſe to the oracle, which directed them to bring from the iſle of Cos the *fawn with gold*. Ambaſſadors were diſpatched to that iſland, in order to unravel the meaning wrapped up in this veil of myſtic obſcurity. They had no ſooner explained their commiſſion in the Coan aſſembly, than an eminent citizen, named Nebros, riſing up, declared the ſenſe of the oracle. "I am the fawn," ſaid he, "pointed out by Apollo," (for Nebros in Greek ſignifies a fawn,) "and my ſon Chryſos" (which is the Greek word for gold) has carried off the prize of ſtrength, courage, and beauty, from all his competitors." The perſon who thus ſpoke, was celebrated on account of his anceſtor Eſculapius, of his deſcendant Hippocrates, and of his own unrivalled ſkill in the healing art. The knowledge of phyſic was become the hereditary honour of his family, by which it had been cultivated for many ages, and to which it is ſuppoſed even at preſent to owe its principal improvement and perfection. Nebros obeyed with alacrity the injunction of Apollo, the peculiar patron of the ſcience in which he excelled. At his own expence he equipped a veſſel of fifty oars, loaded with valuable medicines, as well as with warlike ſtores, and accompanied by his ſon Chryſos, ſet ſail with the Amphictyonic ambaſſadors, in order to cure the confederates deſtined to conquer the Criſſeans.

His advice, his prudence, and his aſſiduity, reſtored the decaying health of the army. Their numbers, however, were ſo much diminiſhed, that it ſeemed impoſſible by open force to put a ſucceſsful end to the war. On this occaſion the artful Coan employed a ſtratagem, which would have appeared inconſiſtent with the laws of arms, if it had not been the dictate of a divine admonition. The horſe of Eurylochus was obſerved for ſeveral days to roll on the ſand, and to ſtrike his foot with great violence againſt a particular ſpot of ground. In digging under this ground, a wooden pipe was diſcovered, which ſupplied Criſſa with water. The extraordinary means by which this diſcovery was made, convinced the ignorant credulity of the Greeks, that ſome important advantage might be derived from it; and upon mature deliberation it was concluded, that Apollo had thus ſuggeſted a contrivance for deſtroying his own and their enemies. Agreeably to the intimation, Nebros poiſoned the conduit of water; and the effect of this deteſtable artifice was ſoon diſcernible in the languid efforts and diminiſhed reſiſtance of the beſieged. The beſiegers, thus encouraged, carried on their operations with redoubled vigour. A reward was propoſed for the man who ſhould firſt mount the walls, an honour obtained by the youthful ardour of Chryſos. The city was taken by aſſault; the fortifications were demoliſhed, the houſes burnt, and the inhabitants treated with a ſeverity proportioned to the ſacrilegious enormity of their own crimes, and the exaſperated reſentment of the victors.

The command of Apollo, however, was not completely executed by the deſtruction of the Criſſean capital: the maritime town of Cirrha was next to be reduced; and the mode of ſucceeding in it was only to be aſcertained by again having recourſe to the oracle. The anſwer delivered was involved in twofold obſcurity: "You ſhall not overturn the lofty towers of Cirrha, until the foaming billows of blue-eyed Amphitrité beat againſt the reſounding ſhores of the Holy Land." How could the ſea be conveyed for ſeveral leagues over rocks and mountains, to daſh againſt the craggy precipices which ſurround the ſacred groves of Delphi? This was an enigma which the Amphictyonic council acknowledged themſelves unable to explain. Solon, the Athenian, alone ventured to propound the meaning. His ſuperior wiſdom taught him the impiety of ſuppoſing that the god ſhould require an impoſſibility as the condition of happily terminating a war, the firſt meaſures of which he had himſelf ſuggeſted and approved. It exceeded, indeed, human power to extend the ſea to the boundary of Delphi; but by removing this boundary, it was poſſible to make that Holy Land communicate with the ſea. This might eaſily be accompliſhed, ſince it only ſufficed for that purpoſe, to conſecrate all the intermediate ſpace with the ſame ceremonies which had formerly been employed in dedicating the Delphian territory. The opinion of Solon was honoured with the unanimous approbation of his aſſociates. Preparations were made for carrying it into execution, and the property of the Cirrhean plain was ſurrendered to the god with the moſt ſacred rites and pompous formality.

When the ſenators had performed the conſecration, the ſoldiers aſſailed the walls of Cirrha with the increaſing activity of re-animated hope. That place, as well as the dependent town of Anticirrha, ſituate on the oppoſite ſhore, ſoon ſubmitted to their arms. The devoted citizens were either put to the ſword, or dragged into captivity. The Criſſean community, formerly ſo rich and flouriſhing, was for ever extinguiſhed. Their lands were laid waſte, their cities demoliſhed, the proud monuments of their victories levelled with the ground; and the port of Cirrha, which was allowed to remain as a convenient harbour for Delphi, ſubſiſted as the only veſtige of their ancient grandeur.

The ſucceſsful event of a war, begun, carried on, and concluded, under the ſanction of the Amphictyonic council, was celebrated with all the pomp and feſtivity congenial to the Grecian character. According to an ancient inſtitution, the ſeveral republics were accuſtomed, by public ſhows, to commemorate their reſpective victories. When different communities had employed their joint efforts in the ſame glorious enterpriſe, the grateful triumph was exhibited with a proportional increaſe of magnificence; but the fortunate exploits of gods and heroes, which had extenſively dignified the Grecian name, were diſtinguiſhed by ſuch peculiar and tranſcendent honours as eclipſed the ſplendour of all other ſolemnities. While each republic paid the tribute of provincial feſtivals to the memory of its particular benefactors, the whole nation were concerned in acknowledging the bountiful goodneſs of Jupiter, the protecting aid of Neptune, the unerring wiſdom of Apollo, and the unrivalled labours of Hercules. Hence the Olympian, Iſthmian, Pythian, and Nemean, games, which, though alike founded on the ſame principle of pious gratitude, were, from their firſt eſtabliſhment, diſtinguiſhed by different ceremonies, and reſpectively conſecrated to ſeparate divinities.

FROM THE TERMINATION OF THE FIRST SACRED WAR, TO THE FINAL OVERTHROW OF THE PERSIAN INVASION.

The handful of Greeks who had eſtabliſhed themſelves in Aſia and Africa, wonderfully maintained and extended their poſſeſſions in thoſe quarters of the world. Wherever the ſpirit of enterpriſe diffuſed their ſettlements, they perceived, on the ſlighteſt compariſon, the ſuperiority of their own religion, language, inſtitutions, and manners; and the dignity of their character and ſentiments eminently diſtinguiſhed them from the general maſs of nations whoſe territories they conquered. Yet theſe advantages, inſtead of conciliating good-will, tended only to exaſperate hoſtility. The northern Greeks were perpetually haraſſed by the fierce inroads of the Thracians: the ſouthern were endangered by the united ſtrength of Egypt and Lybia. The colonies in Magna Græcia, having eaſily reſiſted the rude though warlike natives of that country, were called to contend with the more formidable power of Carthage. But the conſequences of all theſe wars extended not beyond the countries

countries in which they firſt aroſe. The memorable conflict between the Greek colonies in the Eaſt, and the great nations of Aſia, forms a ſubject more extenſively intereſting.

Through the ſupine neglect of their neighbours reſpecting maritime affairs, the Aſiatic Greeks acquired without conteſt, and enjoyed without moleſtation, beſides ſeveral valuable iſlands, the whole weſtern coaſt of the continent, extending, in a waving line, above ſix hundred miles in length, beautifully diverſified by hill and dale, interſected by rivers, and adorned by the nobleſt proſpects and fineſt climate in the world. Its inhabitants, having convenient and capacious harbours before them, and behind, the wealthy and populous nations of Aſia, whoſe commerce they enjoyed and engroſſed, attained ſuch early and rapid proficiency in the arts of navigation and traffic, as raiſed the cities of Miletus, Colophon, and Phocæa, to an extraordinary pitch of opulence and grandeur. Their population increaſing with their proſperity, they diffuſed new colonies every where around them. Having obtained footing in Egypt, in the eighth century before Chriſt, they acquired, and thenceforth preſerved, the excluſive commerce of that ancient and powerful kingdom. Such multiplied advantages could not languiſh in the hands of men who had genius to conceive, and courage to execute, the moſt arduous deſigns. With the utmoſt induſtry and perſeverance they improved and ennobled the uſeful and elegant arts, which they found already practiſed among the Phrygians and Lydians.

The firſt formidable enemies with whom the Aſiatic Greeks had to contend, were the barbarous Cimmerians, who, being driven from the banks of the Euxine, by a Scythian horde ſtill fiercer than themſelves, overflowed, with irreſiſtible violence, the fineſt provinces of Aſia Minor. But the invaſion of the Cimmerians was a predatory incurſion, not a regular plan of enterpriſe. The hurricane ſoon ſpent its force; the Greeks recovered from the terror inſpired by theſe deſultory ravagers, and, within a few years after their departure, the Ionian and Eolian colonies, totally forgetting their common danger, engaged in cruel domeſtic wars. Theſe unnatural diſſenſions were at length repreſſed by the growing power of the Lydians. The kingdom of Lydia was anciently ſubject to a race of princes, ſtyled Atyatidæ, from Atys, the great founder of their houſe. To the family of Atys ſucceeded that of Hercules, which had obtained the government before the war of Troy, and continued to reign five hundred and five years, till their honours expired in the unhappy Candaules. The ſtory of Candaules, of his beautiful wife, and of his fortunate ſervant, has been adorned by the father of hiſtory with the inimitable charms of his Ionic fancy. The vain, credulous prince, injudiciouſly diſplaying the beauty, offended the modeſty, of his injured ſpouſe. Gyges, the moſt favoured of her huſband's attendants, to whom his weak maſter had proſtituted the ſight of her naked charms, was involuntarily employed as the inſtrument of her reſentment. As a reward for taking away the life of Candaules, he was honoured with the hand of the queen, and from the rank of captain of the guard, was advanced to the throne of Lydia.

This revolution, which happened ſeven hundred and eighteen years before Chriſt, was felt by the neighbouring nations, who ſoon diſcovered in the enterpriſing character of Gyges, the difference between adventurers who acquire, and princes who inherit, a crown. The Ionian cities of Aſia offered a tempting prize to the valour of Gyges, and the valuable mines diſcovered between the cities Atarneus and Pergamos, enabled him to hire ſuch a number of troops as ſeemed neceſſary to accompliſh his ambitious deſigns. The citizens of Miletus and Smyrna were haraſſed by a long war; but of all the Ionic ſettlements, Colophon alone ſubmitted to his arms, B. C. 680. Ardys his ſucceſſor, following the military example of Gyges, ſtormed the city of Prienè, and invaded the territories of the Mileſians. He tranſmitted his enmity againſt that people to his ſon Sadyattes, from whom it deſcended to his more warlike grandſon. Alyattes, grandſon of Ardys, annually invaded the country of Miletus, cut down the trees, burnt the ſtanding corn, ravaged and deſolated the whole territory. In this manner he continued, during eleven years, to haraſs, but was unable to conquer, the Mileſians. The inhabitants of the country retired at his approach, and ſhut themſelves up in their capital, the walls of which bade defiance to his aſſaults; nor was it poſſible to reduce by blockade a city that had long been, and ſtill continued, miſtreſs of the ſea. But Alyattes perſiſted in diſtreſſing thoſe whom it ſeemed impoſſible to ſubdue; and he was carrying on his twelfth autumnal incurſion with fire and ſword, when the flames of the ſtanding corn, impelled by the violence of the wind, communicated with the temple of Aſſeſian Minerva. That ſacred edifice was burnt to the ground. Alyattes, who was attended on his march by pipes, harps, and flutes, did not immediately conſider, amidſt the noiſe of military triumph, the fatal conſequences of this enormous impiety. But falling ſick ſoon after at Sardis, he had leiſure to reflect on the horror of his crime; and, prying into futurity, he diſpatched meſſengers to the temple of Delphi, to conſult the Grecian god concerning the means of mitigating the diſtreſs of his preſent ſtate of mind. Apollo refuſed giving an anſwer to his petition, until he had rebuilt the temple of Minerva. The Lydian prepared to comply with this condition, and immediately ſent ambaſſadors to Miletus, to propoſe a ſuſpenſion of arms, until the great work ſhould be completed. That city was then governed by Thraſybulus, who, by one of thoſe revolutions not unfrequent in the Grecian republics, had attained the rank of tyrant, as it was then called, in a ſtate uſually governed as a democratical community. Similarity of views and diſpoſitions had introduced a friendly connection between Thraſybulus and the celebrated Periander of Corinth, who was no ſooner acquainted with the advice of Apollo, than he ſent immediate intimation of it to the Mileſian prince, counſelling him at the ſame time to avail himſelf of the preſent conjuncture to promote the intereſt of his country. When the Lydian ambaſſadors arrived at Miletus, they were treated with ſuch generous hoſpitality, that returning to Sardis, they repreſented in very affecting language the princely conduct of a people, whom it had been the great object to afflict and to annoy. Alyattes, affected by the intelligence, conſented to an immediate peace with the Mileſians; and to compenſate for his paſt injuries and impiety, he promiſed to dedicate to Minerva two new edifices, the magnificence of which ſhould far eclipſe the ſplendour of her ancient temple. The promiſe was performed, the new temples were conſecrated, Alyattes recovered from his diſtemper, and peace was eſtabliſhed between the two nations.

This prince was ſucceeded five hundred and ſixty-two years before Chriſt, by his ſon Crœſus, whoſe uninterrupted proſperity, in the firſt years of his reign, far eclipſed the glory of all his predeceſſors. But the ſplendour of Crœſus was that of a paſſing meteor, which dazzles for a moment, and diſappears for ever. Under various unjuſt pretences he attacked the Grecian cities of Aſia Minor, which being undiſturbed by foreign war, had unfortunately engaged in domeſtic feuds. While jealouſy prevented the Greeks, ignorance hindered the barbarians, from forming a confederacy ſufficient to reſiſt the Lydian power. The Carians, Myſians, and Phrygians, fighting ſingly, were ſucceſſively ſubdued; and the whole peninſula of Leſſer Aſia (except only the little territory of the Lycians and Cilicians,) extending eaſtward as far as the river Halys, and inhabited by three nations of Grecian, and eleven of barbarian extraction,

traction, finally acknowledged the power of Crœsus, and submitted to his commands.

Having met with such extraordinary success by land, the Lydian prince determined to render his power equally conspicuous by sea. For this purpose he thought seriously of equipping a fleet, with which he purposed to conquer the Grecian islands directly fronting his dominions. But this design, which, considering the slow progress in maritime power among the nations most diligent to attain it, would probably have failed of success, was prevented by the advice of a philosophical traveller, conveyed in such a lively turn of wit, as easily changed the resolution of the king. Bias of Prienè, in Ionia, some say Pittacus of Mitylenè, in the isle of Lesbos, while he travelled, after the Grecian custom, from curiosity and a love of knowledge, was presented to Crœsus at the Lydian court; and being asked by that prince what news from Greece? he answered with republican freedom, that the islanders had collected powerful squadrons of cavalry, with an intention of invading Lydia. "May the gods grant," said Crœsus, "that the Greeks, who are unacquainted with horsemanship, should attack the disciplined valour of the Lydian cavalry; there would soon be an end to the contest." "In the same manner," replied Bias, "as if the Lydians, who are totally unexperienced in naval affairs, should invade the Grecians by sea." Struck by the acuteness of this reply, Crœsus desisted from his intended expedition; and, instead of employing new means for extending his conquests, determined peaceably to enjoy the laurels which he had won, and to display the grandeur which he had attained.

His court was the gayest and most splendid of any in that age; and the Asiatic Greeks, whatever dishonour they incurred, sustained not, perhaps, any real loss by their easy submission to a vain and weak man, but a magnificent and liberal prince, who was extremely partial to their country. They acknowledged the conqueror, indeed, by a very moderate tribute, but they enjoyed their ancient laws, and administered without controul their domestic concerns and government. Crœsus spoke their language, encouraged their arts, admired and protected their poets and philosophers. Ionia, perhaps, was never more happy than under the eye of this indulgent master, whose protection nourished the tender shoot of philosophy, which had begun to spring up shortly before his reign. Thales of Miletus, Pittacus of Mitylenè, Bias of Prienè, Cleobulus of Lindus, and the other wise men, as they are emphatically styled, who lived in that age, not only gave advice and assistance to their countrymen in particular emergencies, but restrained their vices by wholesome laws, improved their manners by lessons of morality, and extended their knowledge by many important discoveries.

For several years Crœsus remained not only the master but the friend of the Greeks, when the growing greatness of Persia threatened the safety of his dominions, and roused him again to arms. That country was anciently confined to a small part of the immense region at present known by the Persian name. Its inhabitants had rapidly become formidable, and in the course of a few years, under the elder Cyrus, they extended their name and conquests over Upper Asia, overturned the power of Crœsus, enslaved the Greeks of Asia Minor, and for the first time, threatened Europe with the terrors of Asiatic despotism. See the article PERSIA.

During the reign of Crœsus, and his four immediate predecessors, the Asiatic Greeks sometimes enjoyed their favourite form of republican government, sometimes submitted to domestic tyrants, alternately recovered and lost their national independence; but the success of the ambitious Cyrus was not likely to improve their condition. When his hostile intentions were first made known in Ionia, the inhabitants of that delightful country assembled in the Panionian grove, their ordinary rendezvous in important deliberations. This place, which, together with the adjoining promontory of Mycalè, was solemnly consecrated to Neptune, formed the centre of the Ionic coast. Towards the north extended the spacious bay of Ephesus, beyond which the beautiful peninsula of Clazomenè stretched an hundred miles into the Ægean. On the south, the territory of Miletus occupied sixty-two miles of the winding shore. But the Milesians sent not their deputies to the present convention; for having been the confederates, not the subjects, of Crœsus, they were admitted into the Persian alliance on terms of equality and independence. The Grecian interest in Asia, thus ungenerously abandoned by the principal member of the confederacy, was supported with unusual spirit by all the inferior communities. Representatives immediately appeared from Myus and Prienè, which were situate, like Miletus, on the coast of Caria; from Ephesus, Colophon, Lebedus, Teos, Clazomenè, Erythræ, Phocæa, and Smyrna, which formed the maritime part of Lydia; and from the isles of Chios and Samos, which completed the whole number of the Ionic settlements. But to these were added the alliance of the Eolians, who were alarmed and threatened by the same danger.

The Asiatic Greeks, however, examining the state of their affairs, still felt their own weakness, compared with the strength of the enemy. They therefore resolved to send an embassy into Greece, in order to explain the danger to which they were exposed, and to shew the necessity of powerful and timely aid. It might have been expected that Attica, the native country of the Ionians, should have received the first visit of the ambassadors; but Athens was then governed by the tyrant Pisistratus, who, it was supposed, would be averse to take arms against a tyrant like himself. Sparta, though a republic of greater power and renown, was little connected, either by commerce or affinity, with the Greeks of Asia. The proposals of the Asiatic ambassadors, therefore, were very coolly received by the Spartan senate; and the Lacedæmonians, mindful of the ancient enmity between the Ionic and the Doric race, declined sending any forces into Asia, to resist the arms of Cyrus. But though their generosity furnished no public assistance, their caution privately dispatched several Spartan citizens to observe the operations of the war. When these men arrived in Ionia, they were easily persuaded to exceed the bounds of their commission. They appointed Lacrines, the most considerable of their number, to travel to the Lydian capital, in order to acquaint Cyrus, that if he committed hostilities against any of the Grecian cities, the Lacedæmonian republic would know how to punish his injustice. Cyrus, astonished at such an insolent message from a people altogether unknown to him, asked the Greeks who the Lacedæmonians were? and what number of men they could bring into the field? When informed of these particulars, he replied to the Spartan ambassador, "That he never should fear men who had a square in the midst of their city, in which they met together to practise mutual falsehood and deception; and that if he continued to enjoy the blessings of health, he should afford the Spartans more domestic reasons of complaint, than his military preparations against the Greeks of Asia." After this interview with Lacrines, looking on the Grecian power with contempt, he thought proper to attempt in person enterprises of greater renown, while he committed the Grecian war to the skill of his lieutenant Harpagus.

The war with Cyrus commenced in the year before Christ 539; and in the course of a few months Harpagus made himself master of all the countries of Lower Asia, possessed by either Greeks or barbarians. Having the command of men and labour, he caused mounds of earth to be thrown up adjacent to the Grecian walls. In this service, immense numbers must have perished by

by the darts of the enemy; but the work was no ſooner completed, than the Perſians, running up the mounds, got poſſeſſion of the walls, drove the Greeks from their battlements, overpowered them from their own fortifications, entered, and ſacked their towns.

The firſt place which Harpagus attacked was the celebrated capital of the Phocæans, the moſt northern city of Ionia. The inhabitants, as already mentioned, were famous for their long and ſucceſsful navigations, in the courſe of which they had often viſited the coaſts of Spain, the Mexico and Peru of the ancient world. The money derived from that country had enabled them to build the beſt fortification that was to be ſeen in all thoſe parts; yet they entertained not any hopes of reſiſting the Perſian invaders. Such, however, was their love of liberty, that they reſolved on a meaſure which has been often propoſed, but ſeldom executed. When Harpagus ſent them his commands, they begged the favour of a day's pauſe for deliberation. In all probability they had already taken meaſures for effecting their eſcape; for during that ſhort interval, their ſhips were prepared, their money and goods put on board, their wives and families embarked, and the whole community was floating on the waves, when the Perſians arrived to take poſſeſſion of deſolated walls and empty dwellings. The advantageous ſituation of Phocæa, and the pains which had been taken to improve and to embelliſh it, make this flight very extraordinary; if any thing can add to the wonder, it is that a whole people ſhould unanimouſly abandon their temples, their altars, and, what in ancient times ſeemed not leſs ſacred, the tombs of their anceſtors; ſhould totally diveſt themſelves of every right to a country which they had ſo long called their own; and ſet ſail with their wives and children, ignorant whither to direct their courſe, or in what friendly port they might expect protection or repoſe.

The Phocæan fleet, conſiſting of more than two hundred ſail, made for the iſle of Chios, which, of all the Ionic ſettlements, ſeemed moſt ſecure againſt the Perſian arms. Having arrived there, they endeavoured to purchaſe from the Chians the ſmall Oenuſſian iſlands: but the Chians, jealous of their commerce, and knowing the adventurous ſpirit of the fugitives, denied their requeſt. The Phocæans, thus rejected by men of the ſame race and language with themſelves, ſet ſail on a much longer voyage, for the iſle of Cynus, or Corſica, where, about twenty years before, they had formed a ſmall eſtabliſhment. As they coaſted in the night along the ſolitary ſhore of their ancient city, a few ſhips, manned with enterpriſing crews, landed in the harbour, ſurpriſed the Perſian garriſon, and put every man to the ſword. After applauding this memorable act of revenge, the whole fleet, tranſported with fury againſt the Perſians, bound themſelves by mutual oaths never to return to Phocæa, until a burning ball of iron, which they threw into the ſea, ſhould again emerge unextinguiſhed. Yet ſuch is the powerful attachment of men to their native ſoil, that in a few hours, more than one half the fleet diſregarded their oaths, and ſailed for the well-known harbour. The deſtruction of the Perſian garriſon removed the only obſtacle in the way of immediate poſſeſſion; and the blame of this maſſacre might be thrown on their countrymen who fled, while thoſe who returned to Phocæa might prove their innocence, by ſpeedily ſubmitting to every burden impoſed on them. Meanwhile, the beſt and braveſt portion of the Phocæan republic landed with ſafety on the iſland of Corſica.

The Phocæans were not the only people of Aſiatic Greece who deſerted their country, rather than abandon their liberty. The Teians, who inhabited the ſouthern ſhore of the Ionic peninſula, followed the example which the inhabitants of Phocæa had ſet; forſook a city in which they could no longer remain free, and ſought refuge in Abdera, an ancient colony of Clazomenè, on the coaſt of Thrace, near the mouth of the Neſſus. The city of Clazomenè, now mentioned, was built on the continent; but on the preſent occaſion, the inhabitants, to avoid ſlavery, ſettled in eight ſmall iſlands, at a little diſtance from the ſhore, on which they founded a new city, the model of that of Venice. The advantage which the Clazomenians enjoyed by nature, the Cnidians endeavoured to procure by art. They occupied the extremity of the Carian peninſula; and their city being joined to the continent by an iſthmus of only half a mile broad, they attempted by means of a foſs, to detach themſelves entirely from the main land. If this could be effected, they might deſpiſe the power of their enemies, who not having as yet ſubdued the Phœnicians, poſſeſſed not any naval force ſufficient to conquer the Grecian iſles. But the approach of the Perſians, and ſtill more their own ſuperſtitious fears, interrupted this uſeful undertaking; and the city of Cnidus, as well as all others on the Aſiatic coaſt, Miletus alone excepted, were reduced to the Perſian yoke. Thus, while the arms of Harpagus were every where ſucceſsful on the weſtern ſhore, thoſe of Cyrus acquired ſtill greater glory in the central parts of Aſia. With amazing rapidity his victorious troops over-ran the rich countries between the Mediterranean and the Tigris; reduced the city of Babylon; and his ſon Cambyſes received the ſubmiſſion of Tyre and Cyprus, and effected the entire conqueſt of Egypt, in the conſequences of which the Greek colonies in that country were involved.

Cambyſes is ſaid to have died by an accidental wound from his own ſword. Darius Hyſtaſpes, the third in ſucceſſion to the empire, poſſeſſed the political abilities, but reached not the magnanimity, of Cyrus. His ambition was unbounded, and his avarice led him to project the conqueſt of Greece, in the hope of enriching himſelf by the ſpoils of ſo luxuriant a country. Hiſtiæus, tyrant of Miletus, for ſome time favoured the idea of this grand invaſion. He was taken into the confidence of Darius, and accompanying him to Sardis, and afterwards to Suſa, became the friend, counſellor, and favourite, of the great king. While Hiſtiæus acted ſuch a diſtinguiſhed part at the Perſian court, his nephew Ariſtagoras, to whom he had committed the government of Miletus, incurred the diſpleaſure of Artaphernes, the brother of Darius, and governor of Sardis. The repreſentations of that miniſter, he well knew, would be ſufficient to ruin him, both with his uncle, and with Darius, by whom he might be deprived not only of his authority, but of his life. Governed by theſe conſiderations, Ariſtagoras meditated a revolt, when a meſſenger unexpectedly arrived from Hiſtiæus, exhorting him to that meaſure. The crafty Mileſian, who ſoon diſliked the reſtraint of the Perſian king, languiſhed for a pretence to return to his native country. His meſſage confirmed the reſolution of Ariſtagoras, who, as the firſt act of rebellion againſt the Perſians, formally renounced all power over his fellow-citizens. After giving this diſintereſted proof of his regard for the public, he erected the ſtandard of freedom, which was ſoon ſurrounded by the flower of the Ionian youth; by whoſe aſſiſtance, traverſing the whole coaſt, he aboliſhed in every city the authority of kings, and proclaimed to all worthy to acquire it, the bleſſing of civil liberty and national independence. The revolt thus haſtily commenced, could not be maintained without more powerful reſources than the ſtrength of the Aſiatic Greeks. In order to reſiſt the force of the Perſian empire, it was neceſſary for the Ionians to obtain the cooperation of their brethren in Europe. This important object was committed to the prudence and activity of Ariſtagoras, who having ſettled the affairs of the Eaſt, undertook the embaſſy into Greece.

Lacedæmon ſtill continued the moſt powerful ſtate in that country; and was then governed by Cleomenes. To him Ariſtagoras found it neceſſary to apply; and in order

order to effect the object of his miſſion, he deſcribed to the Spartan king the immenſe wealth of the Perſians, which they had neither virtue to enjoy, nor valour to defend. He painted in the warmeſt colours, the love of liberty which animated the Ionians, and their firm expectation that the Spartans would enable them to maintain that political independence, which their own laws taught them to conſider as the moſt valuable of all human poſſeſſions. Their intereſt, he obſerved, was on this occaſion united: and how much greater glory might be acquired by conquering Aſia, than by ſuffering an invaſion to be made for ravaging Greece? the Perſian archers it would be eaſy to ſubdue; and the journey to Suſa, the rich capital of the Perſian dominions, would be not only ſafe but delightful. Cleomenes, having patiently liſtened to the ſupplication of the Mileſian, anſwered him with Laconic brevity, "In three days I will decide concerning the propriety of your demand." At the expiration of that time, Ariſtagoras failed not to repair to the place appointed, where he was ſoon met by the Spartan king, who aſked him, In how many days they might march to Suſa? He replied unguardedly, That travelling at the rate of about eighteen miles a day, they might reach Suſa in three months. Upon this, Cleomenes exclaimed with indignation, "Mileſian ſtranger, you muſt be gone from Sparta before the ſetting of the ſun; for you have made a very inauſpicious and a very dangerous propoſal, in adviſing the Spartans to undertake a journey of three months from the Grecian ſea."

Ariſtagoras, thus diſmiſſed from Sparta, had recourſe to the Athenians, from whom he had reaſon to expect a more favourable reception. Athens was the mother-country of the Ionians, who formed the greateſt and moſt diſtinguiſhed portion of the Aſiatic Greeks. Ariſtagoras had no ſooner arrived at Athens, than he openly ſolicited the aſſiſtance of the Athenians in defending their own colonies againſt the oppreſſive violence of the common foe. Many arguments were not neceſſary to make the ſenate adopt a meaſure which gratified their own paſſions. The aſſembly immediately decreed that aſſiſtance ſhould be ſent to Ionia. Twenty ſhips were fitted out with all convenient ſpeed, which, reinforced by five more belonging to Eretria, a town of Eubœa, they all unbent their ſails in the harbour of Miletus. Ariſtagoras ſpent no long time in his embaſſy to the other ſtates of Greece, but ſoon met his Athenian allies at that place. It was here determined, that while the commander in chief regulated the civil affairs of the Ionians, his brother Charopinus ſhould conduct a military expedition againſt the wealthy capital of Lydia. The united fleets left the harbour of Miletus, and ſailed to Epheſus, where the troops were diſembarked; and, in three days, accompliſhing a journey of ſeventy miles, appeared before the walls of Sardis. The Perſian governor little expected ſuch a viſit; his ſoldiers were not prepared to take the field; and the extenſive walls of the city could not be defended, on all ſides, againſt the beſiegers. Artaphernes, therefore, contented himſelf with defending the citadel; while the Greeks, without oppoſition, entered the city, in order to plunder the accumulated wealth of that ancient capital. But an accident prevented them from reaping the fruits of their ſucceſs. The reſentment of a rapacious ſoldier, diſappointed of his prey, ſet fire to the houſe of a Lydian on the ſkirts of the city, which communicating to the reſt of the houſes, in a ſhort time the whole circumference of the place was ſurrounded with a wall of fire. Sardis was built in the Grecian manner, having a ſpacious ſquare in the centre, which commonly ſerved for the market-place. Thither the Perſians, driven from the extremities, betook themſelves for refuge againſt the fury of the flames. Arms formed part of the dreſs of the barbarians, and the Perſians, who had aſſembled in the ſquare without any intention of making defence, diſcovered their own ſtrength to be more than ſufficient to reſiſt the enemy. Meanwhile the fire of Sardis brought the inhabitants from all parts of Lydia to their aſſiſtance. The Greeks were attacked, repelled, obliged to abandon their booty; and it was not without much difficulty that they effected their eſcape. The enemy, collecting their whole force, purſued them to Epheſus, and defeated them with great ſlaughter. The Eubœan auxiliaries behaved with uncommon ſpirit, headed by their countrymen Eualcides, whoſe Olympic victories had been highly extolled in the verſes of Simonides, and whoſe death on this occaſion was long and deeply regretted.

Bad fortune is commonly attended with diſſenſions in a confederate army. The allies threw the blame on each other, and the Athenians returned home in diſguſt, determined no longer to endanger themſelves for the ſake of men who employed ſo little wiſdom or valour in their own defence. The Ionians, though deſerted by their allies, and defeated by the enemy at land, ſtill carried on the war by ſea. Sailing northwards, they reduced Byzantium, and all the neighbouring cities on the Helleſpont, or Propontis. Their fleet then directed its courſe to Caria, and having become maſter of the moſt conſiderable portion of that coaſt, defeated the Phœnicians off the iſle of Cyprus. The military ſucceſs of the Perſians tempted them, on the other hand, to proſecute the war by land; and their ſubſequent operations diſcovered ſuch a degree of prudence and courage, as they ſeem never to have exerted on any future occaſion. In order the more ſpeedily to quaſh the hopes of the inſurgents, they formed the numerous army into three diviſions, allotting to each its particular department. After theſe ſeparate brigades had reduced the ſmaller cities of the Eolians, Dorians, and Ionians, the three great branches of the Hellenic race, it was concerted, that they ſhould re-aſſemble in one body, to attack Miletus, which was regarded as the metropolis of the whole country. This plan, ſo judiciouſly concerted, was carried into execution by three ſons-in-law of Darius, Hymees, Dauriſes, and Otanes; the firſt of whom reduced the Eolian cities; the ſecond conquered the Dorians, as well as the other inhabitants of Caria; while Otanes, aſſiſted by the counſels of Artaphernes, overran the Ionic coaſt, burning and deſtroying all before him. The miſerable natives were put to the ſword, or dragged into captivity; the more fortunate eſcaped theſe calamities by flying to their ſhips, or taking refuge within the lofty walls of Miletus. But the time now approached for attacking that place, which, as its harbour commanded the coaſt, it was neceſſary to inveſt both by ſea and land. We might here expect to find Ariſtagoras diſplaying the fertile reſources of his genius; but before Miletus was beſieged, Ariſtagoras was no more.

About this time the inſidious and ſubtle Hiſtiæus, uncle of Ariſtagoras, arrived from Suſa, commiſſioned by Darius to direct, by his experienced wiſdom, the valour and activity of the Perſian generals. The birth, the education, the manners of this ſingular man, together with the ſtrong partiality of every Greek in favour of his native land, might have afforded good reaſon to the Perſian king to ſuſpect his fidelity: he indeed ſuſpected it; but the artful addreſs, the warm profeſſions, the ſubtle inſinuation, of Hiſtiæus, eaſily overcame every prejudice which his ſituation and character made it natural to conceive againſt him. He was ſent to aſſiſt the army of Darius in cruſhing the Grecian rebellion; but his real intention was to take upon himſelf the conduct of that rebellion, and to raiſe his own greatneſs on the ruins of the Perſian power. As he paſſed to the coaſt of Aſia Minor, his intrigues produced a conſpiracy at Sardis, which, being diſcovered by the vigilance of Artaphernes, ended in the deſtruction of his accomplices. Hiſtiæus made a ſeaſonable retreat to the Ionian

nian ſhore, where he hoped to be received with open arms by his ancient friends. But the Mileſians, remembering his former tyranny, ſhut their gates againſt him. He ſought admiſſion into Chios, but without better ſucceſs. The Leſbians, with much difficulty, lent him eight veſſels, which he employed againſt the enemy in the Euxine; but he was taken by the Perſians, and crucified at Sardis.

Meanwhile the Perſian fleet and army ſurrounded the walls of Miletus. Their fleet, compoſed of Phœnicians, Cilicians, and Egyptians, amounted to ſix hundred ſail; beſides a conſiderable naval force belonging to the iſle of Cyprus, which, having co-operated during one year with the Ionian inſurgents, had recently ſubmitted to Darius. In order to deliberate concerning the means of oppoſing this mighty armament, the Grecians aſſembled in the Panionian council, where it was unanimouſly reſolved, that no attempt ſhould be made to reſiſt the Perſians by land: the citizens of Miletus alone were exhorted to defend their walls to the laſt extremity, under the conduct of Pythagoras, a perſon of great rank and eminence in that republic. While every effort ſhould be exerted for maintaining this ſtrong hold of Ionia, it was determined that the Grecian fleet, the laſt and only hope of the nation, ſhould aſſemble at the ſmall iſland of Ladè, lying off the harbour of Miletus, and offer battle to that of the Perſians. When all their forces were collected at the appointed rendezvous, they amounted to three hundred and fifty-three ſhips, which, containing, each at a medium, a complement of above two hundred men, made the whole amount to a number ſufficiently reſpectable, and which, had they all remained firm and unanimous in the common cauſe, might, perhaps, have rendered them victorious. To determine on the beſt mode of reſiſting the Perſians, a council was convened, in which every individual had full liberty to propoſe his opinion. That of Dionyſius, a Phocæan, met with the approbation of the aſſembly. "Our fortunes," ſaid he, "O Ionians! ſtand on a needle's point. We muſt either vindicate our liberty, or ſuffer the ignominious puniſhment of fugitive ſlaves. If we refuſe preſent labour and danger, we ſhall be expoſed to eternal diſgrace; but the toils of a few days will be compenſated by a life of freedom, of glory, and of happineſs. Submit, therefore, to my direction, and I will pledge my life, that, if the gods declare not againſt us, the enemy will either decline the engagement, or, engaging, be ſhamefully defeated." The Greeks, conſenting to ſubmit to the diſcipline of Dionyſius, he, every day, arranged the fleet in three diviſions, and commanded them often to change their ſtations, habituating the ſailors to the labour of the oar, and the reſtraints of diſcipline, which he aſſured them would, by habit, become eaſy and agreeable. For ſeven days they cheerfully obeyed his commands: but at length the warmth of the ſeaſon rendered their exertions too great for their patience. Diſtempers broke out in the fleet. The Greeks, always averſe to every ſhadow of abſolute authority, complained at firſt in ſecret murmurs, and afterwards in licentious clamours, of the intolerable hardſhips to which they were expoſed by the inſolent Phocæan, who, though he brought only three ſhips to the common defence, had aſſumed an arbitrary direction in all their affairs. Governed by theſe ſentiments, they refuſed any longer to obey his commands, landed on the ſhore of Ladè, formed a camp on the iſland, and, ſitting under the ſhade of their tents, diſdained any further co-operation. The Samians, who ſaw and dreaded the conſequence of this general diſorder, privately accepted a propoſal which had been made them by the Perſians. Their perfidy brought deſtruction on the common cauſe; for in the engagement, which followed ſoon after, they hoiſted ſail and deſerted the line. The Leſbians followed their example. Among thoſe, however, who obtained ſignal honour by adhering to the cauſe of Greece, were eleven captains of Samian veſſels, who deteſted the treachery of their companions, and deſpiſed the ſigns of their admirals; on which account they were rewarded, at their return, by the community of Samos, with a pillar and inſcription, tranſmitting their names, with immortal renown, to poſterity. But of all the Greeks, the Chians acquired the greateſt glory on that memorable day: notwithſtanding their inferior ſtrength, they defended themſelves to the laſt extremity, and rendered the victory late and dear to the Perſians. The naval defeat was ſoon followed by the taking of Miletus, which ſurrendered in the ſixth year from the commencement of the revolt. The Perſians made good the threats which they had denounced againſt the obſtinacy of their enemies. Samos alone, as the price of its perfidy, obtained the ſafety of its houſes and temples. Thoſe of all the other communities were burnt to the ground. The women and children were dragged into captivity. Such of the Mileſian citizens as eſcaped not by flight, were either put to the ſword, or carried into the heart of Aſia, and finally ſettled in the territory of Ampè, near the mouth of the Tigris. The Perſian fleet wintered at Miletus, and next ſpring ſubdued the iſlands of Chios, Leſbos, and Tenedos; while Darius prepared to carry the war into the heart of Greece.

The execution of his deſign was entruſted to Mardonius, a Perſian nobleman, who had married Artazoſtra, the daughter of Darius. In the year before Chriſt 493, Mardonius approached the European coaſt with an armament ſufficient to inſpire terror into Greece. The rich iſland of Thaſus, whoſe golden mines yielded a revenue of near three hundred talents, ſubmitted to his fleet; while his land forces added the province of Macedon to the Perſian empire. But having ſteered ſouthward from Thaſus, the whole armament was almoſt deſtroyed by a ſtorm. Three hundred veſſels were daſhed againſt the rocks, and twenty thouſand men periſhed in the ſea. This diſaſter wholly defeated the deſign of the expedition; and Mardonius, having recovered the ſhattered remains of the fleet and army, returned to the court of Perſia, where, by flattering the pride, he in ſome meaſure averted the reſentment of Darius. Two generals were appointed in his room, of whom Datis, a Mede, was the more diſtinguiſhed by his age and experience, while Artaphernes, a Perſian, was the more conſpicuous for his rank, being the ſon of Artaphernes governor of Sardis. Darius now aſſembled an army of five hundred thouſand men, conſiſting of the flower of the troops of his extenſive empire. The maritime provinces of the empire, Egypt, Phœnicia, and the coaſts of the Euxine and Ægean ſeas, were commanded to fit out, with all poſſible expedition, their whole naval ſtrength; and in the courſe of the year a fleet of ſix hundred ſail was ready to put to ſea. This immenſe armament enjoyed a proſperous voyage to the iſle of Samos, from whence they were ready to proceed to the Athenian coaſt. The late diſaſter which befel the fleet commanded by Mardonius, deterred them from purſuing a direct courſe along the ſhores of Thrace and Macedonia: they determined to ſteer in an oblique line through the Cyclades, a cluſter of ſeventeen iſlands, lying oppoſite to the territories of Argos and Attica. The approach of ſuch an innumerable hoſt, whoſe tranſports darkened the broad ſurface of the Ægean Sea, ſtruck terror into the inhabitants of thoſe delightful iſlands. The Naxians took refuge in their inacceſſible mountains; the natives of Delos, the favourite reſidence of Latona, abandoned the awful majeſty of their temple, which was overſhadowed by the rough and lofty mount Cynthus. Paros, famous for its marble; Andros, celebrated for its vines; Ceos, the birthplace of Simonides; Syros, the native country of the philoſophic Pherecydes; Ios, the tomb of Homer; the fertile Amorgos; as well as all the other iſlands which

ſurrounded the once-ſacred ſhores of Delos, either ſpontaneouſly offered the uſual acknowledgment of earth and water, as a teſtimony of their friendſhip, or ſubmitted, after a feeble reſiſtance, to the Perſian arms. The invaders then proceeded weſtward to the iſle of Eubœa, where, after a continued engagement of ſix days, their ſtrength and numbers, aſſiſted by the perfidy of two traitors, finally overcame the valour and obſtinacy of the Eretrians.

After burning the city of Eretria, the Perſian generals ſet ſail from Eubœa, and ſafely arrived on the *Marathonian ſhore*, a diſtrict of Attica about thirty miles from the capital. Here the Perſians pitched their camp, by the advice of Hippias, the baniſhed king of Athens, whoſe perfect knowledge of the country, and intimate acquaintance with the affairs of Greece, rendered his opinion on all occaſions reſpectable. Meanwhile the Athenians had raiſed an army, and appointed ten generals, with equal power, choſen from the ten tribes into which the citizens were divided. Their obſtinate and almoſt continual hoſtilities with the Phocians, the Thebans, and their other northern neighbours, prevented them from entertaining any hopes of aſſiſtance from that quarter: but, on the firſt appearance of the Perſian fleet, they ſent a meſſenger to Sparta, to acquaint that republic with the immediate danger that threatened them, and to explain how much it concerned the intereſt, as well as the honour, of the Spartans, who had acquired juſt pre-eminence among the Grecian ſtates, not to permit the deſtruction of the moſt ancient and the moſt ſplendid of the Grecian cities. The ſenate and aſſembly, approving the juſtice of the demand, collected their troops, and ſeemed ready to afford their rivals, whoſe danger now converted them into allies, a ſpeedy and effectual relief. The Athenians had alſo been reinforced by a thouſand choſen warriors from Platæa, a ſmall city of Bœotia, diſtant only nine miles from Thebes. The Athenian army, now ready to take the field, conſiſted of about ten thouſand freemen, and of probably a ſtill greater number of armed ſlaves. The generals might certainly have collected a larger body of troops; but they ſeem to have been averſe to commit the ſafety of the ſtate to the fortune of a ſingle engagement; neither would it have been prudent to leave the walls of Athens, and the other fortreſſes of Attica, altogether naked and defenceleſs. But though the Athenians were few in number, they were choſen men; and their conſtant exerciſe in war had inured them to hardſhip and fatigue, accuſtomed them to ſtrict diſcipline, and familiariſed them to thoſe ſkilful evolutions which often decide the fortune of the field.

The Perſians, comprehending the various nations which followed the ſtandard of Datis and Artaphernes, were not deficient in martial appearance, nor deſtitute of valour, being ſelected with care from the flower of the Aſiatic provinces. But, compared with the regularity of the Greek battalions, they may be regarded as a promiſcuous crowd, armed in each diviſion with the peculiar weapons of their reſpective countries, incapable of being harmonized by general movements, or united into any uniform ſyſtem of military arrangement. Darts and arrows were their uſual inſtruments of attack; and even the moſt completely armed truſted to ſome ſpecies of miſſile weapon. They carried in their left hands light targets of reed or oſier, and their bodies were covered with thin plates of ſcaly metal; but they had not any defenſive armour worthy of being compared with the firm corſelets, the brazen greaves, the maſſy bucklers, of their Athenian opponents. The braveſt of the barbarians fought on horſeback; but in all ages the long Grecian ſpear has proved the ſureſt defence againſt the attack of cavalry; inſomuch that even the Romans, in fighting againſt the Numidian horſemen, preferred the ſtrength of the phalanx to the activity of the legion.

Miltiades allowed not, however, his contempt of the enemy, or his confidence in his own troops, to ſeduce him into a fatal ſecurity. But the Athenians, as already obſerved, having elected ten generals, who were inveſted, each in his turn, with the ſupreme command, was extremely unfavourable to that unity of deſign which ought to pervade all the ſucceſſive operations of an army; an inconvenience which ſtruck the diſcerning mind of Ariſtides, who on this occaſion diſplayed the firſt openings of his illuſtrious character. The day approaching when it belonged to him to aſſume the command, he generouſly yielded his authority to the approved valour and experience of Miltiades. The other generals followed this magnanimous example; and the commander in chief thus enjoyed an opportunity of exerting the utmoſt vigour of his genius. Leſt he ſhould be ſurrounded by a ſuperior force, he choſe for his camp the declivity of a hill, diſtant about a mile from the encampment of the enemy. The intermediate ſpace he cauſed to be ſtrewed in the night with the branches and trunks of trees, in order to interrupt the motion, and break the order, of the Perſian cavalry, which in conſequence of this precaution, ſeem to have been rendered incapable of acting in the engagement. In the morning his troops were drawn up in battle array, in a long and full line; the braveſt of the Athenians on the right, on the left the warriors of Platæa, and in the middle the ſlaves, who had been admitted on this occaſion to the honour of bearing arms. By weakening his centre, the leaſt valuable part, he extended his front equal to that of the enemy: his rear was defended by the hill above-mentioned, which, verging round to meet the ſea, likewiſe covered his right; his left was flanked by a lake or marſh. Datis, although he perceived the ſkilful order of the Greeks, was yet too confident in the ſuperiority of his numbers to defer the engagement, eſpecially as he now enjoyed an opportunity of deciding the conteſt before the expected auxiliaries could arrive from Peloponneſus. The inſtant the Athenians ſaw the enemy in motion, they ran down the hill with unuſual ardour to encounter them; a circumſtance which proceeded perhaps from their eagerneſs to engage, but which muſt have been attended with the good conſequence of ſhortening the time of their expoſure to the ſlings and darts of the enemy.

The two armies cloſed; the battle was rather fierce than long. The Perſian ſword and Scythian hatchet penetrated, or cut down, the centre of the Athenians; but the two wings, which compoſed the main ſtrength of the Grecian army, broke, routed, and put to flight, the correſponding diviſions of the enemy. Inſtead of purſuing the vanquiſhed, they cloſed their extremities, and attacked the barbarians who had penetrated their centre. The Grecian ſpear overcame all oppoſition: the braveſt of the Perſians periſhed in the field; the remainder were purſued with great ſlaughter; and ſuch was their terror and ſurpriſe, that they ſought for refuge, not in their camp, but in their ſhips. The tyrant Hippias fell in the engagement: two Athenian generals, and about two hundred citizens, were found among the ſlain: the Perſians left ſix thouſand of their beſt troops in the field of battle; and probably a ſtill greater number were killed in the purſuit. The Greeks followed them to the ſhore; but the lightneſs of the barbarian armour favoured their eſcape. Seven ſhips were taken; the reſt ſailed with a favourable gale, doubled the cape of Sunium; and, after a fruitleſs attempt to ſurpriſe the harbour of Athens, returned to the coaſt of Aſia, A. C. 490.

The loſs and diſgrace of the Perſians on this memorable occaſion, was compenſated by only one conſolation. They had been defeated in the engagement, compelled to abandon their camp, and driven ignominiouſly to their ſhips; but they carried with them to Aſia the Eretrian priſoners, who, in obedience to the orders of Darius,

MILTIADES.

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Darius, were ſafely conducted to Suſa. Theſe unhappy men had every reaſon to dread being treated as victims of royal reſentment; but, when they were conducted in chains to the preſence of the great king, their reception was very different from what their fears naturally led them to expect. Whether reflection ſuggeſted to Darius the pleaſure which he might derive in peace, and the aſſiſtance which he might receive in war, from the arts and arms of the Eretrians, or that a ray of magnanimity for once enlightened the ſoul of a deſpot, he ordered the Greeks to be immediately releaſed, and aſſigned them for their habitation the fertile diſtrict of Anderica, lying in the province of Ciſſia in Suſiana, at the diſtance of only forty miles from the capital. There the colony remained in the time of Herodotus, preſerving their Grecian language and inſtitutions; and after a revolution of ſix centuries, their deſcendants were viſited by Apollonius Tyaneus, the celebrated Pythagorean philoſopher, and were ſtill diſtinguiſhed from the ſurrounding nations by the indubitable marks of European extraction.

The death of Darius retarded for ten years a reſolution which he had formed, and which was adopted by his ſon and ſucceſſor Xerxes, of reſtoring the luſtre of the Perſian arms, not only by taking vengeance on the Athenians, but by effecting the complete conqueſt of Europe. The joy excited in the mean time among the Athenians by a victory, which not only delivered them from the dread of their enemies, but raiſed them to diſtinguiſhed pre-eminence among their rivals and allies, was conſpicuous in every part of Attica; and the magnificent encomiums beſtowed on Miltiades in the preſence of his aſſembled countrymen, fired with emulation the young candidates for fame, while they enabled the general to obtain that mark of public confidence and eſteem which was the utmoſt ambition of all the Grecian leaders. But though theſe leaders, while they remained within the territories of their reſpective ſtates, were entruſted with only that moderate authority which ſuited the equal condition of freedom; yet, when they were appointed to the command of the fleet in foreign parts, they obtained almoſt unlimited power, and might acquire immenſe riches. To this exalted ſtation Miltiades was now advanced; and having ſailed with a fleet of ſeventy gallies, the whole naval ſtrength of the republic, he determined to expel the Perſian garriſons from the iſles of the Ægean; to reduce the ſmaller communities to the obedience of Athens, and to ſubject the more wealthy and powerful to heavy contributions.

The firſt operations of the Athenian fleet were crowned with ſucceſs: ſeveral iſlands were ſubdued, conſiderable ſums of money were collected. But the fleet arriving before Paros, every thing proved adverſe to the Athenians. Miltiades, who had received a perſonal injury from Tiſagoras, a man of great authority in that iſland, yielded to the dictates of private reſentment, and confounding the innocent with the guilty, demanded from the Parians the ſum of an hundred talents, near twenty thouſand pounds ſterling. If the money were not immediately paid, he threatened to lay waſte their territory, to burn their city, and to teach them by cruel experience the ſtern rights of a conqueror. The exorbitancy of the demand rendered compliance with it impoſſible; and the Parians prepared for their defence. For twenty-ſix days they maintained poſſeſſion of the capital of the iſland, which the Athenians, after ravaging all the adjacent country, beſieged by ſea and land. The time now approached when Paros muſt have ſurrendered; but it was the good fortune of the iſlanders, that an extenſive grove, which happened to be ſet on fire in one of the Sporades, was believed by the beſiegers to indicate the approach of the Perſian fleet. The ſame opinion gained ground among the Parians, who determined, by their utmoſt efforts, to preſerve the place, until they ſhould be relieved by the aſſiſtance of their protectors. Miltiades had received a dangerous wound during the ſiege; and the weakneſs of his body impairing the faculties of his mind, he gave orders to draw off his troops, and returned with the whole fleet to Athens. His conduct in this expedition ill correſponded to his former fame; and he ſoon experienced the inſtability of popular favour. The Athenian citizens, and particularly the more eminent and illuſtrious, had univerſally their rivals and enemies. Xantippus, a perſon of great diſtinction, and father of the celebrated Pericles, eagerly ſeized an opportunity of depreſſing the character of a man which had ſo long eclipſed that of every competitor. Miltiades was accuſed of being corrupted by a Perſian bribe to raiſe the ſiege of Paros; the precipitancy with which he abandoned the place, ſo unlike to the general firmneſs of his manly behaviour, gave a probable colour to the accuſation; and his enemies loudly inſiſted that the crime deſerved death. But his judges were contented with fining him the ſum of fifty talents, or ten thouſand pounds ſterling, which being unable to pay, he was thrown into priſon, where he ſoon expired of his wounds. But the glory of Miltiades ſurvived him; and the Athenians, however unjuſt to his perſon, were not unmindful of his fame. At the diſtance of half a century, when the battle of Marathon was painted by order of the ſtate, they directed the figure of Miltiades to be placed in the fore-ground, animating the troops to victory; a reward which, during the virtuous ſimplicity of the ancient commonwealth, conferred more real honour than all that magnificent profuſion of crowns and ſtatues, which in the later times of the republic were rather extorted by fear, than beſtowed by admiration.

Ariſtides and Themiſtocles, who were now looked up to as beſt qualified to ſucceed Miltiades, were nearly of the ſame age, and of equal dignity in the firſt rank of citizens. Ariſtides was eminently diſtinguiſhed by valour and moderation; and he had learned to prefer glory to pleaſure; the intereſt of his country to his own perſonal advantage; and the dictates of juſtice and humanity, even to the intereſts of his country. The character of Themiſtocles was of a more doubtful kind. The trophy which Miltiades had raiſed at Marathon diſturbed his reſt. He was inflamed with a deſire to emulate the glory of this exploit; and while he enabled Athens to maintain a ſuperiority in Greece, he was ambitious to acquire for himſelf a ſuperiority in Athens; and hiſtory ſtill leaves it queſtionable, whether, had an opportunity offered, he would not have ſacrificed the happineſs of his country to his private intereſt and ambition. The diſcernment of Ariſtides perceived the danger of allowing a man of ſuch equivocal merit to be entruſted with the ſole government of the republic; and on this account, rather than from any motives of perſonal animoſity, he oppoſed every meaſure that might contribute to his elevation. In this patriotic view, he frequently ſolicited the ſame honours which were ambitiouſly courted by Themiſtocles; yet the intereſt of Themiſtocles ſo far prevailed over the authority of his opponent, that he procured his own nomination to the command of the fleet; with which he ſoon effected the conqueſt of the iſlands in the Ægean Sea, and thus completed the deſign undertaken by Miltiades. But while he acquired fame and fortune abroad, Ariſtides increaſed his popularity at home. The oppoſition to his power, ariſing from the ſplendid eloquence and popular manners of his rival, was now removed, and he became the chief leader of the people. His opinion gave law to the courts of juſtice, or rather ſuch was the effect of his equity and diſcernment, that he alone became ſovereign umpire in Athens.

On the triumphant return of Themiſtocles, however, from his naval expedition, the high reputation of Ariſtides began to ſink in the minds of the people. The admiral had acquired conſiderable riches; but wealth he

he deſpiſed, except as an inſtrument of ambition. The ſpoils of the conquered iſlanders were profuſely laviſhed in ſhows, feſtivals, dances, and theatrical entertainments, exhibited for the public amuſement. His generous manners and flowing affability were contraſted with the ſtern morality of his rival; and the reſult of the compariſon added great force to his inſinuation, that, ſince his own neceſſary abſence in the ſervice of the republic, Ariſtides had acquired a degree of influence inconſiſtent with the conſtitution, and, by arrogating to himſelf an unexampled juriſdiction in the ſtate, had eſtabliſhed a ſilent tyranny over the minds of his fellow-citizens. Ariſtides, truſting to the innocence and integrity of his own heart, diſdained to employ any unworthy means, either for gaining the favour, or for averting the reſentment, of the multitude. The conteſt, therefore, ended in his baniſhment for ten years, by a law intitled the *Oſtraciſm*, by which the majority of the Athenian aſſembly might expel any citizen, however inoffenſive or meritorious had been his paſt conduct, who, by his preſent power and greatneſs, ſeemed capable of diſturbing the equality of republican government. Thus only four years after the battle of Marathon, in which he had diſplayed uncommon valour and wiſdom, Ariſtides, the juſteſt and moſt reſpectable of the Greeks, became the victim of popular jealouſy; an example of cruel rigour, which will for ever brand the ſpirit of democratical policy.

The baniſhment of Ariſtides expoſed the Athenians ſtill more to the danger which they hoped to avoid by this ſevere meaſure. The removal of ſuch a formidable opponent enabled Themiſtocles to govern without controul. Army, navy, and revenue, all were ſubmitted to his inſpection. It happened, indeed, moſt fortunately for the fame of this great man, as well as for the liberty of Athens, that his active ambition was called to the glorious taſk of ſubduing the enemies of his country. The ſmaller iſlands in the Ægean were already reduced; but the poſſeſſion of them was uncertain while the fleet of Ægina covered the ſea, and bade defiance to that of the Athenians. This iſland, inhabited time immemorial by merchants and pirates, and ſituate in the Saronic Gulf, which divides the territories of Attica from the northern ſhores of Peloponneſus, was a formidable enemy to the republic, which Themiſtocles nobly offered to deſtroy. The propoſal was approved; an hundred gallies were equipped; the naval ſtrength of Ægina was broken, and ſucceſs animated the Athenians to aſpire at obtaining the unrivalled empire of the ſea. Corcyra formed the only remaining obſtacle to their ambition. This iſland, which, under the name of Phœacia, is celebrated by Homer for its amazing richneſs and fertility, had been ſtrengthened and improved by a colony of Corinthians, who became ſucceſſively the rivals, the enemies, and the ſuperiors, of Corinth, their mother-country. Their ſucceſsful cruiſers had long infeſted the coaſts of the iſlands and continent of Greece; it therefore belonged to Athens to chaſtiſe the inſolence of the Corcyrians; and Themiſtocles, when by ſeizing part of their fleet he broke the ſinews of their power, not only gratified the ambition of the republic, but performed a ſignal ſervice to the whole Grecian confederacy. Thus victorious by ſea and land, Athens now thought to enjoy the fruits of a glorious ſecurity, when the moſt formidable tidings arrived of the threatened attack of Xerxes, with a vaſt armament, and a more powerful fleet than any hitherto known in Greece.

Nine years after the battle of Marathon, and in the fourth year of his reign, Xerxes found himſelf poſſeſſed of an armament adequate to the extent of his ambition. Twelve hundred ſhips of war, and three thouſand ſhips of burthen, were ready to receive his commands. The former were of a larger ſize and firmer conſtruction than any hitherto ſeen in the ancient world. When the army had attained its perfect complement, we are told that it conſiſted of ſeventeen hundred thouſand infantry, and four hundred thouſand cavalry; which, joined to the fleet above-mentioned, made the whole forces amount to near two millions of fighting men. An immenſe crowd of women and eunuchs followed the camp of this effeminate people. Theſe inſtruments of pleaſure and luxury, together with the ſlaves neceſſary in tranſporting the baggage and proviſions, equalled, perhaps exceeded, the number of the ſoldiers; ſo that, according to the univerſal teſtimony of ancient hiſtorians, the army of Xerxes appears the greateſt that was ever collected.

Xerxes, having wintered at Sardis, ſent ambaſſadors early in the ſpring of the year before Chriſt 480, to demand earth and water, as a mark of ſubmiſſion, from the ſeveral Grecian republics. With regard to Athens and Sparta, he thought it unneceſſary to obſerve this ceremony, as they had cruelly treated and put to death the meſſengers formerly intruſted with a ſimilar commiſſion by his father Darius. The ſlow march of his immenſe army, and, ſtill more, its tedious tranſportation acroſs the ſea, induced Xerxes to order a bridge of boats to be raiſed on the Helleſpont, which, in the narroweſt part, is only ſeven ſtadia, or ſeven-eighths of a mile, in breadth; but whether owing to the awkwardneſs of its conſtruction, or to the violence of a ſucceeding tempeſt, it was no ſooner built than deſtroyed. The great king ordered the directors of the work to be beheaded; and, proud of his tyrannic power over feeble man, diſplayed an impotent rage againſt the elements. In the madneſs of deſpotiſm he commanded the Helleſpont to be puniſhed with three hundred ſtripes, and a pair of fetters to be dropped into the ſea, adding theſe ridiculous expreſſions: "It is thus, thou ſalt and bitter water, that thy maſter puniſhes thy unprovoked injury, and he is determined to paſs thy treacherous ſtreams notwithſtanding all the inſolence of thy malice." After this ceremony, a new bridge was made of a double range of veſſels, fixed by ſtrong anchors on both ſides, and joined together by cables faſtened to immenſe beams driven into the oppoſite ſhores. The decks of the veſſels, which exceeded ſix hundred in number, were ſtrewed with trunks of trees and earth, and their ſurface ſmoothed by a covering of planks. The ſides were then railed with wicker-work, to prevent the fear and impatience of the horſes; and, upon this ſingular edifice, the main ſtrength of the army paſſed in ſeven days and nights, from the Aſiatic city of Abydos to that of Seſtos in Europe.

A conſiderable part of the Perſian forces had been ſent to the coaſt of Macedonia, in order to dig acroſs the iſthmus which joins to that coaſt the promontory of Athos. The diſaſter which befel the fleet commanded by Mardonius, in doubling the cape of this peninſula, was ſtill freſh in the mind of Xerxes. The neck of land, only a mile and a half in breadth, contained the Grecian city of Sana; and the promontory being rich and fertile, was well inhabited by both Greeks and barbarians. The cutting through this narrow iſthmus, by a canal of ſufficient width to allow two gallies to ſail abreaſt, was a matter by no means difficult to a potentate who commanded the labour of ſo many myriads.

Through the fertile plains of Leſſer Aſia the whole army had kept in a body; but the difficulty of ſupplies obliged them to ſeparate into three diviſions in their march through the leſs cultivated countries of Europe. Before this ſeparation took place, the whole fleet and army were reviewed by Xerxes, near Doriſcus, a city of Thrace, at the mouth of the Hebrus. On this occaſion Xerxes converſed with Demaratus, the baniſhed king of Sparta, who had ſought refuge in the Perſian court from the perſecution of his countrymen. This memorable interview between them is deſcribed by Herodotus. The Perſian, diſplaying oſtentatiouſly the magnitude of his power, aſked the royal fugitive, Whether he ſuſ-

pected the Greeks would dare to take the field, in order to oppoſe the progreſs of his arms? Demaratus replied, that "Greece had been trained in the ſevere but uſeful ſchool of neceſſity; poverty was her nurſe and her mother; ſhe had acquired patience and valour by the early application of diſcipline; and ſhe was habituated to the practice of virtue by the watchful attention of the law. All the Greeks were warlike, but the Spartans were peculiarly brave. It was unneceſſary to aſk their number, for if they exceeded not a thouſand men, they would defend their country and their freedom againſt the aſſembled myriads of Aſia. Xerxes was rather amuſed than inſtructed by this diſcourſe. His hopes of ſucceſs were built on too ſolid principles to be ſhaken by the opinion of a prejudiced Greek. Every day meſſengers arrived with the ſubmiſſion of new nations. The inhabitants of the rocky country of Doris, many tribes of Theſſaly, the mountaineers of Pindus, Oſſa, Pelion, and Olympus, which like a lofty rampart ſurround that country, offered the uſual preſent of earth and water, as the ſymbol of ſurrendering their territories to a power which it ſeemed vain to reſiſt. Theſe diſtricts formed only the northern frontier of Greece. But what gave peculiar pleaſure to Xerxes, the Thebans who inhabited the central parts, and all the cities of Bœotia, except Theſpiæ and Platæa, privately ſent ambaſſadors to teſtify their ſubmiſſion, and to requeſt the honour of his friendſhip.

Meanwhile thoſe Grecians, unmoved by the terrors of invaſion, reſolutely obeyed the voice of liberty and their country. By one common conſent they ſuſpended their domeſtic animoſities, recalled their fugitives, conſulted their oracles, and diſpatched ambaſſadors, in the name of united Greece, to demand aſſiſtance from the iſlands of Crete, Cyprus, and Corcyra, as well as from the Grecian colonies on the coaſts of Italy and Sicily. All their meaſures were carried on with unanimity and concord. Even the Thebans, careful to conceal their treachery, had ſent repreſentatives to the common council. The general danger ſeemed to unite and harmonize the moſt diſcordant members: and although the perpetual diſſenſions between rival ſtates, frequently weakened the authority of the Amphictyonic confederacy, it appeared on the preſent, as on many other occaſions, that the Greeks acknowledged the obligation of a tacit alliance to defend each other againſt domeſtic tyrants and foreign barbarians.

Before they had an opportunity of learning the will of the gods, or of diſcovering the intentions of their diſtant allies, ambaſſadors arrived from thoſe communities of Theſſaly which ſtill adhered to the intereſt of Greece, praying a ſpeedy and effectual aſſiſtance to guard the narrow paſſes which lead into their country. It was natural for the Theſſalians to expect that the troops of Xerxes would paſs by this inlet into their territories; and hither their ambaſſadors entreated the allied Greeks to ſend an army. The propoſal ſeemed juſt and uſeful; ſhips were prepared at the iſthmus; and a body of ten thouſand men were embarked under the command of Themiſtocles, with orders to ſail through the narrow Euripus, to land in the harbours of Tempè, and remain there in order to guard that important paſs. They had not continued in thoſe parts many days, when a meſſenger arrived from Alexander, ſon of Amyntas, tributary prince of Macedonia, adviſing them to depart from that poſt, unleſs they meant to be trampled under foot by the Perſian cavalry. It is not probable that this menace could have changed their reſolution. But they had learned that there was another paſſage into Theſſaly, through the territory of the Perræbians, near the city Gonnus in Upper Macedonia. Their army was inſufficient to guard both; and the defending of one only, could not be of eſſential advantage to themſelves, or to the Theſſalians. Meantime, the dangers which thickened over the reſpective republics, rendered it neceſſary to return ſouthward. Their diſtant colonies, particularly thoſe of Sicily, which were the moſt numerous and powerful, could not afford any aſſiſtance, being themſelves threatened with a formidable invaſion from the Carthaginians. The oracles were doubtful, or terrifying. To the Spartans they announced, as the only means of ſafety, the voluntary death of a king of the race of Hercules. The Athenians were commanded to ſeek refuge within their wooden walls. The reſponſes given to the other ſtates are not recorded; but it appears in general, that all were dark, ambiguous, or frightful. The Grecian army returned therefore to their ſhips, repaſſed the Euripus, and arrived in ſafety at Corinth; while the Theſſalians, thus abandoned by their allies, were compelled to ſubmit to the common enemy.

The terror inſpired by the critical ſituation of affairs, rendered the preſence of the leaders neceſſary in their reſpective communities. Themiſtocles found the Athenians divided about the meaning of the oracle, the greater part aſſerting, that by wooden walls was underſtood the incloſure of the citadel, which had been formerly ſurrounded by a palliſade. Others gave the words a different conſtruction, and each according to his fears or his intereſt; but Themiſtocles aſſerted that all of them had miſtaken the advice of the god, who deſired them to truſt for ſafety to their fleet. This opinion, ſupported by all the force of his eloquence, and the weight of his authority, at length prevailed. The Athenian gallies were fitted out with all convenient ſpeed, and being joined with thoſe of Eubœa, Ægina, Corinth, and the maritime allies of Peloponneſus, amounted to a fleet of three hundred ſail. They proceeded to the narrow ſea which divides the northern ſhore of Eubœa from the coaſt of Theſſaly, rendezvouſed at the promontory of Artemiſium, and patiently waited the arrival of the Perſians.

Beſides the force neceſſary for manning this fleet, the confederates could raiſe an army of about ſixty thouſand freemen, beſides a ſtill greater proportion of armed ſlaves. As the paſſes leading from Theſſaly to the territories of Phocis and Locris were ſtill narrower and more difficult of acceſs than thoſe from Macedon into Theſſaly, it ſeems extraordinary, that they did not immediately direct their whole military ſtrength towards that quarter. As they were acquainted with only one paſs, by which the Perſians could arrive from Theſſaly, they thought that a body of eight thouſand pike-men might be equally capable with a larger proportion of troops to defend it againſt every invader. This narrow defile was called the Straits of Thermopylæ, in alluſion to the warm ſprings in that neighbourhood, and was deemed the gate or entrance into Greece. It was bounded on the weſt by high and inacceſſible precipices which join the lofty ridge of mount Oeta; and on the eaſt terminated by an impracticable moraſs, bordered by the ſea. Near the plain of the Theſſalian city of Trachis, the paſſage was fifty feet broad; but at Alpené, there was not room for one chariot to paſs another. Even theſe paſſes were defended by walls, formerly built by the Phocians to protect them againſt the incurſions of their enemies in Theſſaly, and ſtrengthened, on this occaſion, with as much care as time would allow. The troops ſent to Thermopylæ, which was only fifteen miles diſtant from the ſtation of the Grecian fleet at Artemiſium, conſiſted chiefly of Peloponneſians, commanded by Leonidas the Spartan king, who was prepared, in obedience to the oracle, to devote his life for the ſafety of his country.

In the warmth of indignation, the Spartans, as already obſerved, had put to death the Perſian heralds ſent to demand their ſubmiſſion; but, upon cool reflection, they were prompted to make atonement for this violation of the ſacred law of nations. When proclamation was made in the aſſembly, "Who would die for

Sparta?" two citizens, of great rank and eminence, offered themſelves as willing ſacrifices for the good of the community. Sperthies and Bulis, (for theſe were their names,) ſet out for Suſa on this ſingular errand. When they came to Suſa, the guards told them, that, when admitted into the preſence of Xerxes, they muſt obſerve the uſual ceremony of proſtrating themſelves on the ground. But the Spartans declared, "That no degree of violence could make them ſubmit to ſuch mean adulation: that they were not accuſtomed to adore a man, and came not thither for ſuch an impious purpoſe." They approached Xerxes, therefore, in an erect poſture, and told him with firmneſs they were ſent to ſubmit to any puniſhment which he might think proper to inflict on them, as an atonement for the death of his heralds. Xerxes, admiring their virtue, replied, "That he certainly ſhould not repeat the error of the Greeks, nor, by ſacrificing individuals, deliver the ſtate from the guilt of murder and impiety." The Spartans having received this anſwer, returned home, perſuaded that they had done their duty in offering private ſatisfaction; which, though not accepted, ought ſufficiently to atone for the public crime. The example of theſe diſtinguiſhed patriots probably gave Xerxes a very favourable idea of the general character of their community. As he had not any particular quarrel with the Spartans, whoſe oppoſition, though it could not prevent, would certainly retard, his intended puniſhment of Athens, he ſent meſſengers to deſire them to lay down their arms; to which they replied, "Let him come, and take them." The meſſengers then offered them lands, on condition of their becoming allies to the great king; but they anſwered, "That it was the cuſtom of their republic to conquer lands by valour, not to acquire them by treachery." The meſſengers of Xerxes, equally aſtoniſhed at what they ſaw and heard, returned to the Perſian camp, and deſcribed the unexpected event of their commiſſion, as well as the extraordinary behaviour of the Spartans; of which Xerxes deſired an explanation from their countryman Demaratus. The latter declared in general, that their whole carriage and demeanour announced a determined reſolution to fight to the laſt extremity; but he found it difficult to make the Perſian conceive the motives of men, who fought, at the certain price of their own lives, to purchaſe immortal renown for their country.—That a few individuals ſhould be animated, on ſome extraordinary occaſions, with this patriotic magnanimity, may eaſily be underſtood; but that a whole nation ſhould be impreſſed with the ſame generoſity of character, could not readily be believed, without reflecting on the inſtitutions and manners of the Spartans; whereby it may be ſeen, that as the law which commanded them to die rather than break their ranks, or abandon their poſts in battle, was, like all the ordinances of Lycurgus, conceived to be of divine authority, the influence of ſuperſtition conſpired with the ardour of patriotiſm, in preparing them to meet certain death in the ſervice of the public.

Xerxes could not however be made to enter into theſe motives, or to believe, as Herodotus obſerves with inimitable ſimplicity, "that the Grecians were come to Thermopylæ only as men deſirous to die, and to deſtroy as many of their enemies as they could;" though nothing was more true. He therefore waited four days, continually expecting they would either retreat into their own country, or ſurrender their arms agreeably to his meſſage. But as they ſtill continued to guard the paſſage, he aſcribed this conduct to obſtinacy or folly; and on the fifth day determined to chaſtiſe their inſolence.

The Medes and Ciſſians, who, next to the Sacæ and Perſians, formed the braveſt part of his army, were commanded to attack theſe obſtinate Greeks, and bring them alive into his preſence. The barbarians marched with confidence to the engagement, but were repulſed with great ſlaughter. The places of thoſe who fell were inceſſantly ſupplied with freſh troops, but they could not make the ſmalleſt impreſſion on the firm battalions of the Greeks; and the great loſs which they ſuſtained in the attempt, proved to all, and particularly to the king, that he had indeed many men, but few ſoldiers. The Sacæ, armed with their hatchets, next marched to the attack, but without better ſucceſs; and, laſt of all, the choſen band of Perſians, headed by Hydarnes, a ſon of Darius, deigned to diſplay their valour in what appeared to them a very trifling conteſt. But they ſoon changed their opinion when they came to cloſe with the enemy; for, ſays Herodotus, their numbers were uſeleſs, as they fought in a narrow paſs, and their ſhort-pointed weapons were ill calculated to contend with the long Grecian ſpear. The Greeks had the advantage ſtill more in the ſuperiority of their diſcipline, than in the excellence of their armour. Tired with deſtroying, they retreated in cloſe order, and when purſued unguardedly by the barbarians, they faced about on a ſudden, and killed an incredible number of the Perſians, with ſcarcely any loſs to themſelves. Xerxes, who was ſeated on an eminence to behold the battle, frequently ſtarted in wild emotion from his throne; and, fearing leſt he ſhould be deprived of the flower of his army, he ordered them to be drawn off from the attack. But as the Grecian numbers were ſo extremely inconſiderable, and as it ſeemed probable that the greateſt part of them muſt have ſuffered much injury in theſe repeated aſſaults, he determined next day to renew the engagement. Next day he fought without better ſucceſs; and after vainly endeavouring to force the paſs, both in ſeparate bodies and with the collected vigour of their troops, the Perſians were compelled to abandon the enterpriſe, and diſgracefully to retire to their camp.

It was a ſpectacle which the world had never ſeen before, and which it was never again to behold, the perſevering intrepidity of eight thouſand men reſiſting the impetuous fury of an army compoſed of millions. The unconquerable valour of Leonidas, and of his little troop, oppoſed, and might have long retarded, the progreſs of the barbarians. But it was the fate of Greece, always to be injured rather by the treachery of falſe friends, than by the force of open enemies. When Xerxes knew not what meaſures to purſue in order to effect his purpoſe, and felt the inconvenience of remaining long in the ſame quarters with ſuch an immenſe number of men, a perfidious Greek, induced by the hopes of reward, offered to remove his difficulties. The name of the traitor was Epialtes, a native of the obſcure diſtrict of Mœlis, which ſeparates the frontiers of Theſſaly and Phocis. His experience of the country made him acquainted with a paſſage through the mountains of Oeta, ſeveral miles to the weſt of that guarded by Leonidas. Over this unfrequented path he undertook to conduct a body of twenty thouſand Perſians, who might aſſault the enemy in the rear, while the main body attacked them in front. By this means whatever prodigies of valour the Greeks might perform, they muſt be finally compelled to ſurrender, as they would be incloſed on all ſides among barren rocks and inhoſpitable deſerts. The plan thus judiciouſly concerted, was carried into immediate execution. On the evening of the ſeventh day after Xerxes arrived at the Straits, twenty thouſand choſen men left the Perſian camp, commanded by Hydarnes, and conducted by Epialtes. All night they marched through the thick foreſts of oak which abound in thoſe parts; and by day-break they advanced near to the top of the hill. But how much were they ſurpriſed to ſee the firſt rays of the morning reflected by the glittering brightneſs of Grecian ſpears and helmets! Hydarnes was afraid that this guard, which ſeemed at no great diſtance, had been alſo compoſed of Lacedæmonians; but a nearer approach

ſhewed that they conſiſted of a thouſand Phocians, whom the foreſight of Leonidas had ſent to defend this important but unknown paſs, which chance or treachery might diſcover to the Perſians. The thick ſhade of the trees long concealed the enemy from the Greeks; at length the ruſtling of the leaves, and the tumult occaſioned by the motion of twenty thouſand men, diſcovered their approach. The Phocians with great intrepidity flew to their arms, and prepared, if they ſhould not conquer, at leaſt to die gallantly. The compact firmneſs of their ranks, which might have reſiſted the regular onſet of the enemy, expoſed them to ſuffer much from the immenſe ſhower of darts which the Perſians poured upon them. To avoid this danger, they too raſhly abandoned the paſs which they had been ſent to guard, and retired to the higheſt part of the mountain, not doubting that the enemy, whoſe ſtrength ſo much exceeded their own, would follow them thither. But in this they were diſappointed; for the Perſians, prudently omitting the purſuit of this inconſiderable party, whom to defeat they conſidered as a matter of little moment, immediately ſeized the paſſage, and marched down the mountain with the utmoſt expedition, in order to accompliſh the deſign ſuggeſted by Epialtes.

Meanwhile, obſcure intimations from the gods had darkly announced ſome dreadful calamity impending on the Greeks at Thermopylæ; but when, or by what means, it did not clearly appear, until a Grecian deſerter, named Tyraſtiades, arrived with information of the march of the Perſians acroſs the mountain. Animated by the love of his country, this generous fugitive had no ſooner diſcovered the treacherous deſign of Epialtes, than he determined, at the riſk of his life, and ſtill more at the riſk of being ſubjected to the moſt excruciating tortures, to communicate his diſcovery to the Spartan king. Zeal for the ſafety of Greece gave ſwiftneſs to his ſteps, and he appeared in the Grecian camp a few hours after the Perſians, conducted by Epialtes, had left the plains of Trachis. Leonidas immediately called a council of war, to deliberate upon the meaſures neceſſary to be taken. All the confederates of Peloponneſus, except the Spartans, declared their opinion that it was neceſſary to abandon a poſt, which, after the double attack announced to them ſhould take place, it would be impoſſible with any hopes of ſucceſs to maintain. As their exertions could not be of any avail to the public cauſe, it was prudent to conſult their private ſafety; and while time was yet allowed them, to retire to the iſthmus of Corinth, where joining the reſt of the auxiliaries, they might be ready to defend the Grecian peninſula againſt the fury of the barbarians. It belonged to Leonidas to explain the ſentiments of the Spartans. The other inhabitants of Peloponneſus, he obſerved, might follow the dictates of expediency, and return to the iſthmus, in order to defend their reſpective territories; but glory was the only voice which the Spartans had learned to obey. Placed in the firſt rank by the general conſent of their country, they would rather die than abandon the poſt of honour; and they were determined, therefore, at the price of their lives, to purchaſe immortal renown, to confirm the pre-eminence of Sparta, and to give an example of patriotiſm worthy of being admired, if not imitated, by poſterity.

The dread of unavoidable and immediate death deterred the other allies from concurring with this magnanimous reſolution. The Theſpians alone, amounting to ſeven hundred men, declared they would never forſake Leonidas. They were conducted by the aged wiſdom of Demophilus, and the youthful valour of Dithyrambus. As the Theſpians remained at Thermopylæ from principles of diſtinguiſhed bravery, the Thebans were detained by the particular deſire of Leonidas, who was not unacquainted with the intended treachery of their republic. The four hundred men whom that perfidious community had ſent to accompany his expedition, he regarded rather as hoſtages than auxiliaries; nor was he unwilling to employ their doubtful fidelity in a deſperate ſervice. He thought that they might be compelled by force, or ſtimulated by a ſenſe of ſhame, to encounter the ſame dangers to which the Spartans and Theſpians voluntarily ſubmitted; and without diſcovering his ſuſpicion of their treachery, he had a ſufficient pretence for retaining them, while he diſmiſſed his allies of Peloponneſus, becauſe the Theban territories, lying on the north ſide of the iſthmus of Corinth, would neceſſarily be expoſed to hoſtility and devaſtation, whenever the barbarians ſhould paſs the ſtraits of Thermopylæ. Beſides the Theſpians and Thebans, the troops who remained with Leonidas conſiſted of three hundred Spartans, all choſen men.

It was now the dead of night, when the Spartans, headed by Leonidas, marched in a cloſe battalion towards the Perſian camp, with reſentment heightened by deſpair. Their fury was terrible, and rendered ſtill more deſtructive through the defect of barbarian diſcipline; for the Perſians having neither advanced guards, nor a watch-word, nor confidence in each other, were incapable of adopting ſuch meaſures for defence, as the ſudden emergency required. Many fell by the Grecian ſpear, but much greater multitudes by the miſtaken rage of their own troops, by whom, in the midſt of this blind confuſion, they could not be diſtinguiſhed from enemies. The Greeks, wearied with ſlaughter, penetrated to the royal pavilion; but there the firſt alarm of noiſe had been readily perceived, amidſt the profound ſilence and tranquillity which uſually reigned in the tent of Xerxes; the great king had eſcaped, with his favourite attendants, to the farther extremity of the encampment. Even there, all was tumult, and horror, and deſpair; the obſcurity of night increaſing the terror of the Perſians, who no longer doubted that the detachment conducted by Epialtes had been betrayed by that perfidious Greek; and that the enemy, reinforced by new numbers, now co-operated with the traitor, and ſeized the opportunity of aſſailing their camp, after it had been deprived of the diviſion of Hydarnes, its principal chieftain.

The approach of day diſcovered to the Perſians a dreadful ſcene of carnage; but it alſo diſcovered to them that their fears had multiplied the number of the enemy, who now retreated in cloſe order to the ſtraits of Thermopylæ. Xerxes, ſtimulated by the fury of revenge, gave orders to purſue them; and his terrified troops were rather driven than led to the attack. The Grecians, animated by their late ſucceſs, and perſuaded that they could not poſſibly eſcape death on the arrival of thoſe who approached by way of the mountain, bravely halted in the wideſt part of the paſs, to receive the charge of the enemy. The ſhock was dreadful, and the battle was maintained on the ſide of the Greeks with perſevering intrepidity and deſperate valour. After their ſpears were blunted or broken, they attacked ſword in hand, and their ſhort but well-tempered weapons made an incredible havoc. Their progreſs was marked by a line of blood, when a barbarian dart pierced the heart of Leonidas. The conteſt was no longer for victory and glory, but for the ſacred remains of their king. Four times they diſpelled the thickeſt globes of Perſians; but as their unexampled valour was carrying off the prize, the hoſtile battalions were ſeen deſcending the hill, under the conduct of Epialtes. It was now time to prepare for the laſt effort of generous deſpair. With cloſe order and reſolute minds, the Greeks, all collected in themſelves, retired to the narroweſt part of the ſtrait, and took poſt behind the Phocian wall, on a riſing ground, where a lion of ſtone was afterwards erected in honour of Leonidas. As they performed this movement, fortune, willing to afford every occaſion to diſplay their illuſtrious merit, obliged them to contend at once againſt open force and ſecret treachery.

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The Thebans, whom fear had hitherto reſtrained from defection, ſeized the preſent opportunity to revolt; and approaching the Perſians with outſtretched arms, declared that they had always been their friends; that *their* republic had ſent earth and water, as an acknowledgment of their ſubmiſſion to Xerxes; and that it was with the utmoſt reluctance they had been compelled to reſiſt the progreſs of his arms. As they approached to ſurrender themſelves, many periſhed by the darts of the barbarians; the remainder ſaved a periſhing life, by ſubmitting to eternal infamy. Meanwhile the Lacedæmonians and Theſpians were aſſaulted on all ſides. The neareſt of the enemy beat down the wall and entered by the breaches. Their temerity was puniſhed by inſtant death. In this laſt ſtruggle every Grecian ſhewed the moſt heroic courage; yet if we believe the unanimous report of ſome Theſſalians, and others who ſurvived the engagement, the Spartan Dioneces deſerved the prize of valour. When it was obſerved to him, that the Perſian arrows were ſo numerous, that they intercepted the light of the ſun, he ſaid it was a favourable circumſtance, becauſe the Greeks now fought in the ſhade. The brothers Alpheus and Maron are likewiſe particularized for their generous contempt of death, and for their diſtinguiſhed valour and activity in the ſervice of their country. What theſe and other virtues could accompliſh, the Greeks, both as individuals and in a body, had already performed; but it became impoſſible for them longer to reſiſt the impetuoſity and weight of the darts, and arrows, and other miſſile weapons, which were continually poured upon them; and they were finally not deſtroyed or conquered, but buried under a trophy of Perſian arms. Two monuments were erected near the ſpot where they fell; the inſcription of the firſt announced the valour of a handful of Greeks, who had reſiſted three millions of barbarians: the ſecond was peculiar to the Spartans, and contained theſe memorable words: "Go, ſtranger, and declare to the Lacedæmonians, that we died here in obedience to their divine laws."

Ω ξεινε αγγειλον Λακεδαιμονιοις οτι τηδε
Κειμεθα τοις κεινων ρημασι πειθομενοι. Herodot. vii. ccxxviii.

During the military operations at Thermopylæ, the Grecian fleet was ſtill ſtationed in the harbour of Artemiſium. That of the Perſians, too numerous for any harbour to contain, had anchored in the road that extends between the city of Caſtanæa and the promontory of Sepias, on the coaſt of Theſſaly. The firſt line of their fleet was ſheltered by the heights on the coaſt; but the other lines, to the number of ſeven, rode at anchor, at ſmall intervals, with the prows of the veſſels turned to the ſea. When they adopted this arrangement, the waters were ſmooth, the ſky clear, the weather calm and ſerene; but on the morning of the ſecond day, the ſky began to lour, and the appearance of the heavens grew threatening and terrible. A dreadful ſtorm ſucceeded, which laſted for ſeveral days. The neareſt veſſels were ſaved by hauling under the ſhore: of the more remote many were driven from their anchors; ſome foundered at ſea, others ſplit on the promontory of Sepias, and ſeveral bulged on the ſhallows of Melibæa. Three days the tempeſt raged with unabating fury. Four hundred gallies were deſtroyed by its violence, beſide ſuch a number of ſtoreſhips and tranſports, that the Perſian commanders, ſuſpecting this diſaſter might occaſion the revolt of the Theſſalians, fortified themſelves with a rampart of conſiderable height, wholly compoſed of the ſhattered fragments of the wreck. This bulwark was ſufficient to protect them againſt the irruptions of the Greeks; but it could not defend them againſt the more dangerous fury of the waves. In a ſhort time, therefore, they quitted their inſecure ſtation at Sepias, and with eight hundred ſhips of war, beſides innumerable veſſels of burden, ſailed into the Pegaſean bay, and anchored in the road of Apheté, which lies directly oppoſite to the harbour of Artemiſium.

The Perſians, having now recovered from the terrors of the ſtorm, reſolved to prepare for the engagement. As they entertained no doubt of the victory, they determined not to begin the attack, until they had ſent two hundred of their beſt ſailing veſſels around the iſle of Eubœa, to intercept the expected flight of the enemy through the narrow Euripus. Thus weakened by a conſiderable diminution of their fleet, in addition to their loſſes by the ſtorm, the Grecians conſidered it as a favourable opportunity to diſplay their courage and ſkill in commencing the action. About ſun-ſet they approached in a line, and offered battle to the Perſians. They did not chuſe to decline the engagement, as their ſhips were ſtill ſufficiently numerous to ſurround thoſe of their opponents. At the firſt ſignal the Greeks formed into a circle, at the ſecond they began the fight. Though crowded into a narrow compaſs, and having the enemy on every ſide, they ſoon took thirty of their ſhips, and ſunk many more. Night came on, accompanied with an impetuous ſtorm of rain and thunder; the Greeks retired into the harbour of Artemiſium; the enemy were driven to the coaſt of Theſſaly. As the wind blew from the ſouth, the dead bodies and wrecks daſhed with violence againſt the ſides of their ſhips; ſome were driven on-ſhore; but the principal part had the good fortune again to reach the Pegaſean Bay. *Their* calamities were thought great and unexpected; but the ſhips ordered to ſail round Eubœa were overtaken by the ſtorm; and after continuing during the greateſt part of the night the ſport of the elements, they all periſhed miſerably, amidſt the ſhoals and rocks of that dangerous coaſt.

The morning roſe with different proſpects and hopes to the Perſians and Greeks. To the former it diſcovered the extent of their misfortunes; to the latter it brought a reinforcement of fifty-three Athenian ſhips. Encouraged by this favourable circumſtance, they determined again to attack the enemy, at the ſame hour as on the preceding day, becauſe their knowledge of the coaſt, and their ſkill in fighting their ſhips, rendered the duſk peculiarly propitious to their deſigns. At the appointed time, they ſailed towards the road of Apheté, and having cut off the Cilician ſquadron from the reſt, totally deſtroyed it, and returned at night to Artemiſium. The Perſian commanders, deeply affected with their repeated diſaſters, and greatly alarmed at the much-dreaded reſentment of their king, determined to make one vigorous effort for reſtoring the glory of their arms. By art and ſtratagem, and under favour of the night, the Greeks had hitherto gained many important advantages. It now belonged to the Perſians to chuſe the time for action. On the third day at noon, they ſailed forth in the form of a creſcent, ſufficiently extenſive to infold the whole Grecian line. The Greeks, animated by former ſucceſs, were averſe to decline the battle; yet it is probable that Themiſtocles would much rather have delayed it to a more favourable opportunity. Rage, reſentment, and indignation, ſupplied the defect of the barbarians in ſkill and courage. The battle was longer, and more doubtful, than on any former occaſion; many Grecian veſſels were deſtroyed; five were taken by the Egyptians, who particularly ſignalized themſelves on the ſide of the barbarians, as the Athenians did on that of the Greeks. The perſevering valour of the latter at length prevailed, and the enemy retired; but the victory coſt them dear; ſince their veſſels, particularly thoſe of the Athenians, were reduced to a ſhattered condition; and their great inferiority in the number and ſize of their ſhips, made them feel more ſenſibly every diminution of ſtrength. This circumſtance determined them to retire to the ſhores of the Corinthian iſthmus. The inclination to this meaſure received

LEONIDAS.

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received additional force from the arrival of Abronycus, with an account of the heroical death of Leonidas. The engagements by ſea and land had been fought on the ſame day. In both the Greeks defended a narrow paſs againſt a ſuperior power; and in both the Perſians had determined, by ſurrounding, to conquer them.

Before they left Artemiſium, Themiſtocles, watchful to promote the intereſt of his country, endeavoured to alienate from the great king the affections of his braveſt auxiliaries, namely, the Ionians. For this purpoſe he engraved on the rocks, near the watering-place of Artemiſium, the following words: "Men of Ionia, your conduct is moſt unjuſt in fighting againſt your anceſtors, and in attempting to enſlave Greece; reſolve, therefore, while it is yet in your power, to repair the injury. You ought to remember, that yourſelves gave occaſion to the quarrel between us and the barbarians; and farther, that the ſame duties which children owe to their parents, colonies owe to their mother-country."

When news arrived that the Grecian fleet had abandoned Artemiſium, Xerxes regarded their retreat as equal to a victory. He therefore iſſued orders that his naval force ſhould proceed to take poſſeſſion of the harbours of Athens; while, at the head of his numerous army, he reſolved to march into the Attic territory. Having entered the country of Phocis, the Perſian army ſeparated into two diviſions, with a view to obtain more plentiful ſupplies, as well as to deſtroy more completely the poſſeſſions of their enemies. The moſt numerous diviſion followed the courſe of the river Cephiſſus, which flows from the Theſſalian mountains to the lake Copais in Bœotia. The fertile banks of that river were adorned by Charadra, Neon, Elatæa, and other populous cities, all of which were burned or demoliſhed by the fury of Xerxes. After committing theſe dreadful ravages, one diviſion of the army marched into Bœotia; while the other ſtretched along the weſtern ſkirts of mount Parnaſſus, and traced a line of devaſtation from the banks of the Cephiſſus to the temple of Delphi. The Delphians conſulted the oracle, "Whether they ſhould hide their treaſures under ground, or tranſport them to ſome neighbouring country?" The Pythia replied, "That the arms of Apollo were ſufficient for the defence of his ſhrine." The Delphians, therefore, confined their attention only to the means of perſonal ſafety. The women and children were tranſported to Achaia; the men climbed to the craggy tops of mount Cirphis, or deſcended to the deep caverns of Parnaſſus. Only ſixty perſons, miniſters of Apollo, kept poſſeſſion of the ſacred city. But, could we credit the teſtimony of ancient hiſtorians, it ſoon appeared that the gods had not abandoned Delphi: ſcarcely had the Perſians reached the temple of Minerva the Provident, ſituated at a little diſtance from the town, when the air thickened, a violent ſtorm aroſe, the thunder and lightning were inceſſant. At length the tempeſt burſt on mount Parnaſſus, and ſeparated from its ſides two immenſe rocks, which rolling down with increaſed violence, overwhelmed the neareſt ranks of the Perſians. The ſhattered fragments, which long remained in the grove of Minerva, were regarded by the credulity of the Greeks as a ſtanding proof of the miracle. But without ſuppoſing any ſupernatural intervention, we may believe that an extraordinary event, happening on an extraordinary occaſion, would produce great terror and conſternation in the barbarian army, ſince many of the nations which compoſed it acknowledged the divinity of Apollo, and muſt therefore have been ſenſible of their intended impiety, in deſpoiling his temple. The awful ſolemnity of the place conſpired with the horrors of the tempeſt, and the guilty feelings of their own conſciences. An univerſal panic ſeized them; and they fled with terror and deſpair. The Delphians, who perceived their confuſion, and who believed that the gods, by the moſt manifeſt ſigns, defended their favourite abode, ruſhed impetuouſly from their faſtneſſes, and deſtroyed great numbers of the unreſiſting enemy. The remainder took the road of Bœotia, in order to join the diviſion under Xerxes, which having deſtroyed the cities of Theſpiæ and Platæa, was marching to inflict complete vengeance on the Athenians.

The united army arrived in the Attic territory three months after their paſſage over the Helleſpont. They laid waſte the country, burned the cities, and levelled the temples with the ground. At length they took poſſeſſion of the capital; but the inhabitants, by a retreat no leſs prudent than magnanimous, had withdrawn from the fury of their reſentment. The Athenians, by the advice of Themiſtocles, embraced a reſolution which eclipſed the glory of all their former exploits. They abandoned to the Perſian rage their villages, their territory, their walls, nay, Athens itſelf, with the revered tombs of their anceſtors; their wives and children, and aged parents, were tranſported to the iſles of Salamis and Ægina, and to the city of Træzonè. The embarkation was made with ſuch haſte, that the inhabitants were obliged to leave behind them their houſhold furniture, their ſtatues and pictures, and in general the moſt valuable part of their property. But they were willing to relinquiſh all for the ſake of their country, which they well knew conſiſted not in their houſes, lands, and effects, but in that equal conſtitution of government which they had received from their anceſtors, and which it was their determination to tranſmit unimpaired to poſterity.

The Athenians capable of bearing arms or of handling an oar, embarked on-board the fleet ſtationed at Salamis. The whole Grecian fleet amounted to three hundred and eighty veſſels. That of the Perſians, which now took poſſeſſion of the Athenian harbours lying to the ſouth of the ſtrait occupied by the Greeks, had alſo received a powerful reinforcement. We are not exactly informed of the number or ſtrength of the additional ſquadron; but it was ſuppoſed fully to compenſate the loſs occaſioned by ſtorms and ſea-fights, and to reſtore the Perſian fleet to its original complement of twelve hundred ſail.

Truſting to the immenſe ſuperiority of his armament, Xerxes was ſtill deſirous to make trial of his fortune at ſea, notwithſtanding his recent diſaſters on that element. But before he came to a final reſolution, he ſummoned a council of war, in order to hear the opinion of his maritime ſubjects and allies. The tributary kings of Tyre and Sidon, the leaders of the Egyptians, Cyprians, and Cilicians, ever ready to flatter the paſſions of their ſovereign, offered many frivolous reaſons in favour of the alternative to which they perceived him inclined. But in the fleet of Xerxes there was a Grecian queen named Artemiſia, widow of the prince of Halicarnaſſus, who had aſſumed the government of that territory for the benefit of her infant ſon. Compelled by the order of Xerxes, or perhaps irritated againſt the Athenians for ſome reaſons which hiſtory does not record, ſhe not only fitted out five ſhips to attend the Perſian expedition, but took upon herſelf the command of her little ſquadron, and on every occaſion conducted it with equal ſkill and bravery. Such vigour of mind, united with ſo delicate a form, excited the higheſt admiration; but the heroic ſpirit of Artemiſia becomes ſtill more intereſting, when we conſider the ſevere reſtraints which have been in all ages impoſed on the ſex. Her ſuperior genius recommended her to the favour of Xerxes, who was obliged to eſteem in a woman the virtues which he himſelf wanted ſpirit to practiſe. Truſting to his advantageous opinion of her courage and fidelity, Artemiſia diſſented from the general voice of the allies, and even oppoſed the inclination of the prince. Her judicious obſervations were however not heard; the moſt fatal opinion prevailed, becauſe it was adapted to flatter the vanity of Xerxes.

When the Grecian commanders obſerved that the enemy prepared to venture another engagement at ſea, they aſſembled to deliberate whether they ſhould continue in the ſtrait between Salamis and Attica, or proceed further up the gulf towards the Corinthian iſthmus. The latter propoſal was generally approved by the confederates of Peloponneſus, who anxiouſly deſired, in the preſent emergency, to approach as near as poſſible to their reſpective cities. But the experienced wiſdom of Mneſiphilus readily diſcerned, that ſhould the Greeks ſail from Salamis, it would be impoſſible to prevent the general diſperſion of their armament. He therefore exhorted Themiſtocles, to endeavour, by all means poſſible, to prevent this fatal meaſure; and particularly to perſuade the Spartan admiral, Euribiades, to alter his preſent intention. Themiſtocles readily embraced the opinion of his friend; and addreſſing himſelf to Euribiades, ſaid, "The fate of Greece depends on the deciſion of the preſent moment, and that deciſion on you; if you reſolve to ſail to the iſthmus, we muſt abandon Salamis, Megara, and Ægina; we ſhall be compelled to fight in an open ſea, where the enemy may fully avail themſelves of their ſuperior numbers; and, as the Perſian army will certainly attend the motions of their fleet, we ſhall draw their combined ſtrength towards the Grecian peninſula, our laſt and only retreat. But if you determine to retain the ſhips in their preſent ſtation, the Perſians will find it impoſſible, in a narrow channel, to attack us at once with their whole force: we ſhall preſerve Megara and Salamis, and we ſhall effectually defend Peloponneſus; for the barbarians being, as I firmly truſt, defeated in a naval engagement, will not penetrate further than Attica, but return home with diſgrace." The firmneſs of his ſpeech ſhook the reſolution of the confederates; and it was determined by the majority to continue at Salamis.

This reſolution was no ſooner formed, than a veſſel arriving from the iſthmus brought advice that the fortifications there were almoſt completed; if the fleet retired to the neighbouring ſhore, the ſailors might, even after a defeat at ſea, take refuge behind their walls; but if conquered near the coaſts of Salamis, they would be for ever ſeparated from their families and friends, and confined, without hope or reſource, within the narrow limits of a barren iſland. Leſt this information ſhould, as there was much reaſon to fear, again diſconcert his meaſures, Themiſtocles determined to prevent the Greeks from the poſſibility of acting upon it. There lived in his family a man named Sicinus, who at preſent accompanied him. He was originally a ſlave, and employed in the education of his children; but by the generoſity of his patron, had acquired the rank of citizen, with conſiderable riches. The firmneſs and fidelity of this man rendered him a proper inſtrument for executing a ſtratagem, which concealed, under the maſk of treachery, the enthuſiaſm of public virtue. Having received his inſtructions from Themiſtocles, he privately ſailed to the Perſian fleet, and obtaining admiſſion into the preſence of Xerxes, declared "That he had been ſent by the captain of the Athenians, who could no longer endure the inſolence of his countrymen, to acquaint the great king, that the Greeks, ſeized with conſternation at the near approach of danger, had determined to make their eſcape under cover of the night; that now it was the time for the Perſians to atchieve the moſt glorious of all their exploits, and, by intercepting the flight of their enemies, accompliſh their deſtruction at once." The deceit was believed; the whole day, and the greateſt part of the ſucceeding night, the Perſians employed in ſecuring the ſeveral paſſages between the iſlands and the adjacent coaſt.

The firſt intelligence of theſe operations was brought to the Grecian fleet by Ariſtides the Athenian, who ſeems not to have availed himſelf of the general act of indemnity to return from baniſhment, but who readily embraced every opportunity to ſerve his country. Having with difficulty eſcaped from the iſle of Ægina, the generous patriot immediately communicated an account of what he had ſeen there to his rival and enemy, Themiſtocles, who, meeting his generoſity with equal frankneſs, made him the confidant of his ſecret. Their interview was as memorable as the occaſion; and, after a continued life of oppoſition and hatred, they now firſt agreed to ſuſpend their private animoſities, in order to promote the common intereſt of their country. As the Peloponneſian commanders were either wavering and irreſolute, or had determined to ſet ſail, Ariſtides was deſired to inform them of the arrangement which he had ſeen; the conſideration of his country, however, rendered his evidence ſuſpected; but the arrival of a veſſel belonging to the iſle of Tenos confirmed his report, and the Peloponneſians reſolved to fight, becauſe it was impoſſible to fly.

Before the dawn of day the Grecian ſhips were drawn up in order of battle; and the Perſians, who had been ſurpriſed at not finding them attempt to eſcape during night, were ſtill more ſurpriſed when morning diſcovered their cloſe and regular arrangement. Themiſtocles delayed the attack until the ordinary breeze ſhould ſpring up, which was no leſs favourable to the experience of the Grecian mariners, than dangerous to the unwieldineſs of the Perſian ſhips. The ſignal was then given for the Athenian line to bear down againſt that of the Phœnicians, which rode on the weſt, off the coaſt of Eleuſis; while the Peloponneſians advanced againſt the enemy's left wing ſtationed on the eaſt, near the harbour of the Piræus. The Perſians, confiding in their number, and ſecure of victory, did not decline the fight. A Phœnician galley, of uncommon ſize and ſtrength, was diſtinguiſhed in the front of their line by every circumſtance of naval pomp. In the eagerneſs to engage, ſhe far outſtripped her companions; but her career was checked by an Athenian galley which ſailed forth to meet her. The firſt ſhock ſhattered her ſculptured prow, the ſecond buried her in the waves. The Athenians, encouraged by this auſpicious prelude, proceeded with their whole force, animating each other to the combat. The battle was bloody and deſtructive, and diſputed on the ſide of the Perſians with more obſtinate reſiſtance than on any former occaſion; for, from the Attic coaſt, ſeated on a lofty throne on the top of mount Ægialos, Xerxes obſerved the ſcene of action, and attentively remarked, with a view to reward and puniſh, the various behaviour of his ſubjects. The preſence of their prince operated on their hopes, and ſtill more powerfully on their fears. But neither the hope of acquiring the favour, nor the fear of incurring the diſpleaſure, of a deſpot, could furniſh principles of action worthy of being compared with the irreſiſtible bravery of the Greeks. The foremoſt ſhips of the Phœnicians were wholly diſperſed or ſunk. Such was the fate of the right wing; while the Ionians, who, on the left, oppoſed the fleets of Peloponneſus and Ægina, furniſhed them with an opportunity to complete the victory. Many of the Aſiatic Greeks, mindful of the advice given by Themiſtocles, abandoned the intereſt of the great king, and openly declared for their countrymen; others declined the engagement; the remainder were ſunk or put to flight. Among thoſe which eſcaped was the ſhip of queen Artemiſia, who in the battle of Salamis diſplayed ſuperior courage and conduct: ſhe was cloſely purſued by an Athenian galley, commanded by Amenias, brother of the poet Æſchylus. In this extremity, ſhe employed a ſucceſsful but very unwarrantable ſtratagem. The neareſt Perſian veſſel was commanded by Damaſithymus, a tributary prince of Calynda in Lycia, a man with whom Artemiſia was at variance. With great dexterity ſhe darted the beak of her galley againſt the Lycian veſſel. Damaſithymus was buried in the waves; and Amenias, deceived by this

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this meaſure, believed the veſſel of Artemiſia to be one of thoſe which had deſerted the Perſian intereſt. The Phœnician and Ionian ſquadrons formed the main ſtrength of the Perſian armament; after theſe were defeated, the ſhips at a diſtance haſtily changing ſail, meaſured back their courſe to the neighbouring harbours. The victors, diſdaining to purſue them, dragged the moſt valuable part of the wreck to the coaſts of Pſyttalea and Salamis. The narrow ſeas were covered with the floating carcaſes of the dead, among whom were few Greeks, as even thoſe who loſt their ſhips in the engagement, ſaved their lives by ſwimming to others.

Xerxes had ſcarcely time to conſider and deplore the deſtruction of his fleet, when a new ſcene of diſtreſs offered itſelf to his view. The flower of the Perſian infantry had taken poſt on the rocky iſland of Pſyttalea, in order to receive the ſhattered remains of the Grecian armament, which, after its expected defeat, would naturally take refuge on that barren coaſt. But equally fallacious and fatal was their conjecture concerning the event of the battle. The Greeks, diſembarking from their ſhips, attacked in the enthuſiaſm of victory thoſe aſtoniſhed troops, who, unable to reſiſt, and finding it impoſſible to fly, were cut down to a man. As Xerxes beheld this dreadful havoc, he ſtarted in wild agitation from his ſilver throne, rent his royal robes, and commanded the main body of his forces, poſted along the Athenian coaſt, to return to their reſpective camps.

From that moment he reſolved to return with all poſſible expedition into Aſia. Yet did his fears and his policy conceal, for a few days, the deſign, not only from the Grecian but from the Perſian generals. Mardonius alone was too well acquainted with the temper of his maſter, to believe that his concern for the ſafety of his illuſtrious perſon would allow him to remain longer than neceſſary in a country which had been the ſcene of ſo many calamities. The artful courtier availed himſelf of the important ſecret, to divert the ſtorm of royal reſentment which threatened the principal author of this inglorious undertaking. In his firſt interview with Xerxes, he exhorted him "not to be too deeply affected by the defeat of his fleet: that he had come to fight againſt the Greeks, not with rafts of wood, but with ſoldiers and horſes: that the valour of the Perſians had oppoſed all reſiſtance, and their invincible ſovereign was now maſter of Athens, the main object of his ambition: that having accompliſhed the principal end of the enterpriſe, it was time for the great king to return from the fatigues of war to the cares of government; for with three hundred thouſand choſen men, he would undertake to proſecute his deſigns, and to complete his victory." Such is the language of adulation, too often held to princes. The other courtiers confirmed, by their approbation, the advice of Mardonius; and the Perſian monarch, while he obeyed the dictates of his own puſillanimity, ſeemed to leave Greece in reluctant compliance with the anxious ſolicitude of his ſubjects.

The remains of the Perſian fleet, frightened from the coaſts of Greece, returned to the harbours of Aſia Minor, and afterwards aſſembled and rendezvouſed, during the enſuing winter, in the port of Cymè. The tranſports were ordered to the Helleſpont, on the banks of which Xerxes arrived with his troops in forty-five days, after intolerable hardſhips and fatigue. Famine and peſtilence filled up the meaſure of their calamities; and, excepting the three hundred thouſand choſen men committed to Mardonius, a detachment of whom guarded the royal perſon to the coaſt, ſcarcely a remnant was left of ſo many millions. The bridge oſtentatiouſly erected on the Helleſpont would have preſented, had it remained entire, a mortifying monument of paſt greatneſs. But this wonderful fabric had been deſtroyed by a tempeſt: and ſuch is the obſcurity with which Xerxes returned from Greece, compared with the blaze of grandeur in which he arrived there, that it is uncertain whether he croſſed the channel in a Phœnician ſhip of war, or only in a fiſhing veſſel.

The victory at Salamis terminated the ſecond Perſian expedition. The Greeks ſoon underſtood that, notwithſtanding the return of Xerxes, three hundred thouſand men, commanded by Mardonius, were cantoned for the winter in Thrace, Macedon, and Theſſaly, with a deſign to take the field early in the ſpring, and again to try the fortune of war. His army conſiſted of the Medes, Perſians, Scythians, and Indians; and, though reduced from the millions which followed Xerxes to about three hundred thouſand men, it was thereby rather delivered from an uſeleſs incumbrance, than deprived of any real ſtrength. But, upon marching from Theſſaly, Mardonius determined to try the effect of negociation, before he had recourſe to arms. He therefore ſent Alexander king of Macedon, an Argive prince, to treat with the Athenians. The republic of Athens refuſed to call an aſſembly, until the Spartans ſhould ſend ambaſſadors to aſſiſt at the deliberation. When all parties were convened, Alexander opened his miſſion, and concluded a long ſpeech by aſking, "What madneſs, O Athenians, can impel you to maintain war againſt a monarch, whom you cannot expect *ever* to conquer, nor hope *always* to reſiſt?" He therefore exhorted them "to reflect on the advantages which would accrue to them from being alone, of all the Greeks, admitted into the alliance of Xerxes; to reflect alſo on the dreadful conſequences which would attend their refuſal, ſince their country, placed as a prize between the contending parties, would thereby be expoſed to inevitable deſtruction."

As ſoon as Alexander had ended his diſcourſe, the Spartan ambaſſadors repreſented to the aſſembly, "That they had been ſent on the part of their republic, to oppoſe the meaſures of the barbarians, with whom, in order to reſent the quarrel of her Athenian allies, Sparta had engaged in a bloody and deſtructive war. Could the Athenians then, for whoſe ſake alone the war which now extended over all Greece was originally undertaken, abandon their friends and confederates, whoſe ſervices they might command, and whoſe invincible army was ready to take the field?" The Athenians, after a ſhort deliberation, anſwered both parties by the voice of Ariſtides, who, as chief magiſtrate, preſided in the aſſembly. To the Macedonian he replied, "That as they were ſufficiently acquainted with the ſtrength of Xerxes, he might have ſpared them the inſult of deſcribing its vaſt ſuperiority to their own. Yet, in defence of liberty, there was no power too great to oppoſe. Return then, and tell Mardonius, that the Athenians will never make peace with Xerxes, while the ſun performs his annual courſe in the heavens; but that, truſting to the aſſiſtance of the gods and heroes, whoſe temples and images he has impiouſly deſtroyed, we will reſiſt him to the laſt extremity." To the Lacedæmonian ambaſſadors he ſaid, "Know, that the richeſt poſſeſſions on earth, and all the treaſures of the great king, are not ſufficient to ſeduce our unalterable attachment to Greece. We acknowledge with gratitude your proffered kindneſs; and requeſt that your army march with all poſſible expedition towards Bœotia, that our united reſiſtance may ſtop the progreſs of the barbarian, who, as ſoon as he is appriſed of our determined hoſtility, will not fail to proceed ſouthward, to invade Attica a ſecond time."

This conjecture was juſtified by the event. The Perſians within a few weeks marched into Bœotia, but the Athenians looked in vain for the expected arrival of their Spartan auxiliaries. Inſtead of iſſuing forth in order to ſupport their allies, they remained within the iſthmus, and endeavoured to fortify the inlet into their territory with ſuch additional walls and bulwarks as might render it impenetrable. The work was now complete; and the Peloponneſians, ſecure, as they imagined, behind this ſolid rampart, equally diſregarded

the ſafety, and deſpiſed the reſentment, of their northern allies.

The Athenians, a ſecond time forſaken by their confederates, were obliged again to deſert their country. They had ſcarcely ſailed to their families in Salamis, when Attica was again invaded by the Perſians. While the fugitives continued in that iſland, they received another embaſſy from Mardonius, offering them the ſame terms which they had formerly rejected. They ſtill perſiſted in rejecting them; in conſequence of which, they beheld, without apparent uneaſineſs, from the ſhores of Salamis, their territories again laid waſte; their cities and temples devoted to the flames; and every thing that had eſcaped the fury of the firſt invaſion, deſtroyed by the ſecond. After committing theſe ravages, Mardonius returned into Bœotia, that his troops might be ſupplied with proviſions, and that, ſhould the enemy offer battle, they might engage in a country better adapted than Attica to the operations of cavalry. Whether the eloquence of the ambaſſadors ſent by the Athenians to the Spartan ſenate on this diſtreſſing occaſion, or the returning ſenſe of public utility, overcame the puſillanimous reſolutions formerly embraced by the Spartans, is uncertain; but they now firſt determined to take the field. Five thouſand Spartan pike-men were accompanied by thirty-five thouſand helots. Their Peloponneſian allies ſent their reſpective contingents; ſo that the heavy-armed men raiſed in the peninſula exceeded twenty thouſand, commanded by Pauſanias, the guardian and kinſman of Pliſtarchus, ſon of Leonidas. Having marched beyond the iſthmus, they were joined by Ariſtides at the head of eight thouſand Athenians, and by a ſuperior number of their allies of Megara, Theſpiæ, Platæa, Salamis, Eubœa, and Ægina. The whole heavy-armed troops amounted to nearly forty thouſand; the light-armed were the thirty-five thouſand helots, attendants on the Spartans, and about as many more, one to each ſoldier, attended the other diviſions of the army.

Mardonius, having marched into Bœotia, encamped on the banks of the Æſopus. His army of three hundred thouſand men, while they waited the enemy's approach, were employed in building a ſquare fortification, about five quarters of a mile in front; a work of little utility, ſince it could only defend a ſmall portion of a camp which extended many miles, from the Theban town of Erythræa, to the territory of the Platæans. The Greeks, having arrived in thoſe parts, took poſt at the foot of mount Citheron, directly oppoſite to the enemy. The hoſtile armies remained eleven days in their encampments, facing each other. The Medes and Perſians encamped on the plain, fronting the Spartans: the Grecian auxiliaries were placed in direct oppoſition to the Athenians. It is eaſy to perceive, even at this diſtance of time, the reaſon of ſuch an arrangement. The Perſians avoided to encounter the Athenian bravery, which they had already fatally experienced in the field of Marathon; and as the Thebans were the moſt powerful of their foreign allies, as well as the inveterate enemies of Athens, it was thought proper to oppoſe them to that ſide on which the Athenians were poſted.

The ſame reaſons which made Mardonius deſire to preſerve, made the ſagacious Pauſanias wiſh to alter, the relative diſpoſition of their reſpective troops. Excepting in the glorious conteſt at Thermopylæ, in which they devoted themſelves to death for the ſafety of their country, the Spartans had never contended with the Medes; but they had often fought and conquered the Bœotians. Pauſanias therefore deſired the Athenians to change places with his countrymen. This requeſt was cheerfully complied with; but other circumſtances ſowed diſſenſion in the Athenian camp. The quiet likewiſe of the Lacedæmonians was diſturbed by the quarrels between Pauſanias and Anompharetus, the Spartan next in command; and conſpiring with theſe internal animoſities, the Perſian horſe beat up their quarters, intercepted their convoys, and, by an unexpected incurſion, deſtroyed their watering-place. It thus became neceſſary again to decamp. The obſcurity of midnight was choſen as the moſt convenient time for effecting this purpoſe; and the deſtined place of retreat was a narrow ſlip of ground lying towards the ſource of the Æſopus, and confined between that river and mount Citheron. This poſt was at leaſt preferred by the majority; for the Greeks were by no means unanimous; ſo that, when the march was ordered, many of the allies abandoned their leaders; others took refuge in the neighbouring temples, to elude the purſuit of the horſe; while Anompharetus the Spartan declared, "That neither he, nor the diviſion under his command, ſhould ever fly from the enemy:" and in conſequence of its diſperſion in ſo many different directions, the Grecian army preſented next morning the appearance, not of a regular march, but of a flight or rout.

Mardonius was firſt appriſed that the Greeks had changed their order of battle; and he was next informed that they had abandoned their camp. Not doubting that fear had precipitated their retreat, he ordered his ſoldiers to purſue the fugitives, and to complete the victory. The Lacedæmonians and Athenians were ſtill within his reach; the former near the foot of the mountain, the latter in the middle of the plain. Having ſent his Grecian auxiliaries, amounting to fifty thouſand, againſt the Athenians, he advanced with the braveſt of the Perſian troops againſt that portion of the enemy which had ſhewn an anxious ſolicitude to avoid his arms. Never did the contraſt appear greater, than in the oppoſite appearance and behaviour of the hoſtile armies on this occaſion. The barbarians, ill armed, and totally ignorant of diſcipline, advanced without order, and with a loud inſulting noiſe. The Lacedæmonians, carefully covered with their ſhields, patiently received the darts and javelins which the enemy threw upon them. But as ſoon as Pauſanias, caſting his eyes towards a neighbouring temple of Juno, and devoutly entreating the protection of the goddeſs, gave the ſignal to engage, the Spartans proceeded with intrepidity to cloſe with their opponents. The Perſians, reinforced by the Sacæ, a Scythian tribe, ſuſtained the attack with great bravery. Immenſe numbers were ſlain; but new numbers ſucceeded, crowding together in tumultuous diſorder, and making an hideous outcry, as if they had intended to tear in pieces and devour the enemy. Mardonius, mounted on a white ſteed of uncommon ſwiftneſs, was diſtinguiſhed in every part of the battle by the ſplendour of his appearance, but ſtill more by deeds of ſignal valour. He was attended by a thouſand horſemen, conſiſting of the flower of the Perſian nobility, all alike ambitious to imitate the example, and to emulate the fame, of their leader. Had their ſkill been equal to their courage, or had they previouſly beſtowed as much pains in diſciplining their troops, as in improving their own agility and addreſs, either the Greeks muſt have been conquered, or the battle remained doubtful. But the barbarians acted without union or concert; and as they fought ſingly, were ſucceſſively defeated. It is the nature, and the greateſt diſadvantage, of cavalry, not to increaſe in force in proportion to the reduplication of their ranks. The Grecian phalanx, on the other hand, received an acceſſion of ſtrength from every addition to its depth; the ranks behind ſupported thoſe before; no power was miſ-ſpent or unexerted: and the effect might be continually augmented, till it became irreſiſtible. Availing themſelves of this circumſtance, the Lacedæmonians thickened their ranks, extended their ſpears, ſuſtained the ſhock, and penetrated the depth, of the braveſt Perſian ſquadron. Mardonius fell by the arm of the Spartan Aieimneſtus. The death of the general was immediately followed by the defeat of the

the Perſians, and the defeat of the Perſians by the flight of the barbarian army. Artabazus, the Parthian chief, had from the beginning condemned the raſh meaſures of Mardonius. He commanded forty thouſand men, who were prepared on every occaſion to follow the example of their leader. As ſoon as he perceived the confuſion of the Perſians, he made the ſignal for his troops to quit the field. He conducted them through the territory of the Phocians, and arriving by haſty marches at the Helleſpont, returned in ſafety to the Aſiatic coaſt.

The remainder of the diſcomfited barbarians ſought refuge in their camp; and the Spartans purſued them with great ardour, but were unable to force their encampment. The Tegeans and other troops ſeconded the attack, but no impreſſion could be made on the wall, till the arrival of the Athenians. Theſe generous defenders of the cauſe of liberty had repulſed the Grecian auxiliaries, who ungenerouſly aſſiſted the enemies of their country. The behaviour of the greater part of the traitors furniſhed the occaſion of an eaſy victory; for, unable to meet the juſt reproaches and indignant looks of their countrymen, they ſoon betook themſelves to flight, which, in the preſent caſe, ſeemed more honourable than reſiſtance. The Thebans alone oppoſed with great perſeverance the Athenian valour; they did not deſiſt from hoſtility till ſeveral hundreds were ſlain; and when compelled to quit the field, they fled towards Bœotia, and ſhut themſelves up within the ſtrong walls of their city. Inſtead of purſuing theſe fugitives, though their domeſtic and inveterate foes, the Athenians, with a laudable moderation, inſpired by Ariſtides, directed their march towards the Lacedæmonian forces, which had already engaged and put to flight the main ſtrength of the enemy. The Athenians, however, came in time to complete the glory of that memorable day. They attacked with redoubled vigour the fortification, which had been in vain aſſailed by their allies; and having effected a breach in the wall, entered the Perſian camp. They were followed by the brave ſoldiers of Tegea, and afterwards by the Spartans. The barbarians were ſeized with conſternation at ſeeing ſo many myriads confined within a narrow ſpace. The means of their expected ſafety became the principal cauſe of their deſtruction; and of nearly two hundred thouſand barbarians, not two thouſand eſcaped the fury of the Grecian ſpear.

The event of this ſignal engagement not only delivered the Greeks from the danger of ſervitude, but gave them poſſeſſion of greater wealth than they could ever have expected to poſſeſs. In his precipitate retreat from Greece, Xerxes left behind him all his riches and magnificence. His moſt valuable effects were beſtowed on Mardonius, the flatterer of his inclinations, and the miniſter of his revenge. The reſt was divided among his inferior favourites; and independent of the bounty of the prince, the tents of the Perſian nobles furniſhed a wide profuſion of elegance and ſplendour. Couches magnificently embroidered; tables of gold and ſilver; bowls and goblets of gold; ſtalls and mangers of braſs, curiouſly wrought and ornamented; chains, bracelets, ſcymitars, of ſolid gold, others adorned with precious ſtones; and, to crown all, many cheſts of Perſian money, which began at that time, and continued long afterwards, to be current in Greece. Among the common maſs of ſpoil, Herodotus mentions many Perſian women, beſides innumerable horſes and camels. The whole being collected into one place, the tenth was conſecrated to the gods. A tenth of the remainder was beſtowed on Pauſanias, as commander in chief. Peculiar preſents were offered to the temples of Olympian Jove, Iſthmian Neptune, and Delphian Apollo, the favourite divinities of the whole Grecian name; nor did the Athenians forget to ſhew particular gratitude to the goddeſs Minerva. Prizes were afterwards diſtributed among the braveſt of the ſurviving warriors; for though the victory had been obtained with little blood, yet ſeveral hundreds had fallen, eſpecially of the moſt generous and daring; among whom were ninety-one Spartans, fifty-two Athenians, and ſixteen men of Tegea. Callicratides, a Spartan, the braveſt and moſt beautiful of the Greeks, was ſlain by an arrow, before Pauſanias had given the ſignal of engagement. As he fell, he ſaid to thoſe around him, that he was contented to die for Greece, but regretted dying inglorioufly, having performed nothing worthy of himſelf, or the common cauſe. But in the battle none of the warriors behaved with ſuch diſtinguiſhed bravery as Ariſtodemus, who alone, of three hundred Spartans, ſurvived the action of Thermopylæ. This circumſtance had rendered him contemptible in the eyes of his countrymen. He was continually upbraided with the baſe deſertion of his companions. The moſt heroic deeds could not reſtore him to the good opinion of the public; and it was aſſerted by the Spartans, that even on the preſent occaſion, as he had determined to ſeek a voluntary death in order to efface the ſtain of his former infamy, he was not entitled to any of thoſe honours which are deſervedly beſtowed on the genuine efforts of ſpontaneous valour.

The Greeks buried their dead with every circumſtance of funeral pomp, erected in the field of battle conſpicuous trophies of their renown, and appropriated about twenty thouſand pounds for dedicating temples and ſtatues to the tutelary deities of Platæa, the illuſtrious ſcene of victory. A few days were ſpent in theſe tranſactions; after which it was determined to march into Bœotia, in order to chaſtiſe the perfidy of the Thebans. On the eleventh day after the battle they arrived in the neighbourhood of Thebes, ravaged the territory, and made approaches to the walls. The citizens, who were not all equally guilty or equally obnoxious, eſcaped general deſtruction by ſurrendering the leaders of the faction which abetted the intereſt of the Medes. The traitors were carried to Corinth, condemned without trial, and ſacrificed to the manes of their countrymen who had fallen at Marathon, Salamis, and Platæa, in defence of political liberty and national independence.

The battle of Platæa was fought the 22d of September, in the year before Chriſt 479; and on the ſame day another battle, not leſs glorious or leſs deciſive, was fought between the ſame nations at the promontory of Mycalè in Ionia, oppoſite to the iſle of Samos. The ſhattered remnant of the Perſian fleet, which had eſcaped deſtruction on the fatal 20th of October of the preceding year, took refuge in the friendly ports of Aſia Minor. The victorious armament had ſuffered too much in repeated ſhocks with a ſuperior force, to engage at that late ſeaſon in the purſuit of an enemy, whoſe ſtrength, amounting to above four hundred veſſels, was ſtill nearly double to their own. The little ſquadron of Themiſtocles had been employed, after the battle of Salamis, in laying the iſlands of the Ægean Sea under contribution. The great body of the fleet rendezvouſed in the harbours of Ægina. There the Grecians continued during the winter, and before the ſeaſon for action approached, the command was beſtowed on Xantippus the Athenian, and Leotychides, the Spartan king. To theſe commanders, whoſe abilities and influence in their reſpective republics were conſiderable, there arrived early in the ſpring a ſecret deputation from ſeveral cities of Ionia, entreating that the valour of the European Greeks, which had been ſo ſucceſsfully employed in their own defence, might be ſtill farther exerted in delivering from bondage their brethren in Aſia. In conſequence of this invitation, the fleet ſailed eaſtward, and had ſcarcely reached the coaſt of Delos, when a ſecond embaſſy came from the Samians, propoſing the ſame meaſures as the firſt, and farther adding, that the Perſian fleet now lying in the harbour of Samos, might be attacked and defeated without danger or difficulty. The Grecians ſeized this favourable opportunity of terminating the war; but before they arrived at Samos, the enemy ſuſ-

pecting their motions, and unwilling to hazard another engagement, had retired to the Ionic coaſt, and, according to the cuſtom of that age, not only drawn their ſhips on-ſhore, but ſurrounded them with a ſtone wall of conſiderable ſtrength. The veſſels thus ſecured, the ſailors, amounting to forty thouſand, commanded by Artayndes, formed a camp along the ſhore. They were reinforced by the Perſian army under Tigranes, computed at ſixty thouſand; and, though they had acknowledged their inferiority at ſea, they determined on land to hazard a general engagement. The Greeks did not decline the battle; and Leotychides, in order to encourage his troops, is ſaid to have induſtriouſly ſpread a report that their countrymen had obtained a ſignal victory at Platæa. This report, by whatever means it was raiſed, had doubtleſs a conſiderable effect in deciding the fortune of the day. Other circumſtances, not leſs powerful, were, the general revolt of the Aſiatic Greeks, and the ſilent conteſt of honour between the Spartans and Athenians. Among the barbarian troops, the Perſians behaved with uncommon bravery; and on the ſide of the Grecians, the battle of Mycalè was more bloody than any other fought in the courſe of the war. It deſerves notice, that in all theſe memorable actions, the Greeks had no reſource but in victory. But the barbarians had provided probable means of ſafety, even in caſe of a defeat. On the preſent occaſion they had endeavoured not only to ſecure a retreat within a ſtrongly fortified camp, but to acquire an undiſturbed paſſage through the narrow defiles of Mycalè. Yet all their precautions were rendered ineffectual by the valour and fortune of the Greeks. The Mileſians, poſted by the enemy to guard the paſſes of the mountain, inſtead of promoting, prevented their eſcape. The Spartans purſued them with great ſlaughter in that direction; while the Athenians, aſſiſted by the allies of Corinth, Sicyon, and Træzenè, advanced with undaunted bravery to attack their camp. The Aſiatic Greeks, who at all times acknowledged the warlike pre-eminence of their European brethren, emulated, in the preſent engagement alone, the admired valour of their anceſtors. Above forty thouſand Perſians periſhed in the field; many fell in the purſuit, or in defending their entrenchments: the remainder fled in diſorder, nor thought themſelves ſecure till they had reached the walls of Sardis. Their ſhips, their camp, the freedom of Ionia, and the undiſturbed poſſeſſion of the Aſiatic coaſt, formed the ineſtimable prize of the victors; and thus the expedition of Xerxes, undertaken with a view to enſlave Europe, reſtored liberty to the faireſt portion of Aſia.

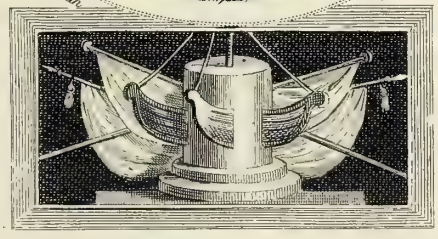
From the final overthrow of the Persian invasion, to the peace of Nicias.

After the deciſive victories of Platæa and Mycalè, it was the firſt care of the Athenians to bring home their wives, children, and moſt valuable effects, from the iſles of Ægina and Salamis. In the latter iſland they celebrated that important day, which proved alike glorious to Greece, and fatal to Perſia. But an attention to domeſtic concerns prevented not the Athenians from puſhing the war with vigour, though deſerted by the Spartans and other Peloponneſians, who ſailed home before winter. The Aſiatic colonies, animated by the recent recovery of freedom, ſeconded the Athenian ardour; and the confederates, having ſucceſsfully infeſted the territories of the great king, beſieged and took the rich city of Seſtos in the Cherſoneſus of Thrace, the only place of ſtrength which adhered to the Perſian intereſt in the fertile peninſula.

During the two following years the war languiſhed abroad, while the ſymptoms of jealouſy and diſcord broke out at home. The Athenians began the laborious taſk of rebuilding their city, which the Perſian ſpoils might contribute to enrich with uncommon magnificence, and which the acquaintance gained in the courſe of the war with the graceful forms of Ionic and Doric architecture might enable them to adorn with more beauty and elegance than had yet been diſplayed in Europe. But the weighty advice of Themiſtocles prevailed on them to ſuſpend this noble undertaking, and engaged them, inſtead of decorating their capital with temples, theatres, and gymnaſia, to fortify it by walls of ſuch ſtrength and ſolidity as might thenceforth bid defiance to every enemy, whether foreign or domeſtic. The meaſure was ſcarcely determined upon, when an embaſſy arrived from Sparta, remonſtrating againſt a deſign peculiarly dangerous to thoſe who owed their ſafety to the weakneſs of their cities. Themiſtocles eaſily unveiled the ſuſpicion concealed under this ſpecious maſk of public utility, and encouraged his countrymen to elude the Spartan artifice by ſimilar addreſs; in conſequence of which, Themiſtocles was immediately diſpatched to Sparta, to explain their intentions. Meanwhile the Athenian walls roſe up with unexampled celerity; nor did even the ſilent tranquillity of night abate the ardour of their diligence. The Athenian ambaſſadors artfully deferred opening their commiſſion till they had news from Athens that the walls were completed: they then appeared in the Lacedæmonian aſſembly; and Themiſtocles, ſpeaking for the reſt, declared, that his countrymen needed not to learn from their confederates, what meaſures were honourable to themſelves, and beneficial to the common cauſe; that, by his advice, they had firmly defended their city againſt the aſſaults of open enemies and jealous friends. Whatever ſecret indignation this ſpeech might excite, the Spartans thought proper to ſuppreſs their animoſity. Themiſtocles returned in peace to Athens, and ſet on foot the projection of that arduous work, the formation of the Piræus or harbour. The new walls were ſufficiently broad to admit two carriages abreaſt; the ſtones compoſing them were of an immenſe ſize, ſtrongly united by bars of iron. The Piræus, which was five miles diſtant from the citadel, ſoon grew into a town, containing many thouſand inhabitants. It was joined to the city by walls begun by Cimon, but finiſhed by Pericles, twenty years after the harbour itſelf had been erected. The new buildings of Cimon and Pericles are often mentioned in hiſtory under the name of the Long Walls. They extended forty ſtadia on either ſide; and, when added to the circumference of the ancient city, (about ſixty ſtadia,) give us for the whole circuit of the Athenian fortifications an extent of nearly eighteen Engliſh miles.

The altercations excited by theſe undertakings at home, prevented not their united arms from aſſaulting the dominions of the great king. Thirty Athenian and fifty Peloponneſian ſhips had been employed to expel the Perſian garriſons from the ſea-ports which they ſtill occupied in the Helleſpont, the Propontis, and the Ægean, iſles. The European fleet, being ſeaſonably joined by various ſquadrons from the Greek cities of Aſia, ſcoured the eaſtern ſhores of the Mediterranean, and delivered from oppreſſion in the year before Chriſt 476, the long enſlaved iſland of Cyprus. Their next operation was the ſiege of Byzantium, the modern Conſtantinople, firſt founded by a feeble colony of Megareans, which had gradually become populous and flouriſhing, but ſubject to Xerxes. The place was well ſupplied with proviſions, and commanded by Perſians of the firſt diſtinction, among whom were ſeveral kinſmen of the great king. The ſiege was obſtinate and bloody; the walls were ſtormed, and an immenſe booty, together with many Perſian princes and nobles, fell into the hands of the victors. And here ends the glory of Pauſanias, who ſtill commanded the forces of the confederacy; a man whoſe fame would rival the moſt illuſtrious names of antiquity, had he fallen in the ſiege of Byzantium. But grown too great to remain a ſubject, he was emulous to become a ſovereign, through the aſſiſtance of Xerxes, the inveterate enemy of his country.

To



THEMISTOCLES.

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To this prince he propoſed to enter into ſtrict friendſhip, to take his daughter in marriage, to ſecond his efforts in conquering Greece, and to hold that country as a dependent province of the Perſian empire. The Perſian king highly reliſhed theſe propoſals, the ſubjugation of Greece being the great object of his reign. He ſpeedily ſent Artabazus, a nobleman of confidence, to confer and co-operate with the traitor. But the treachery being timely diſcovered, Pauſanias took refuge in the temple of Minerva, from which it being unlawful to drag him, that aſylum was ſurrounded by guards, and all neceſſaries were denied the priſoner, and he thus periſhed by hunger.

The puniſhment of Pauſanias could but ill repair the ruinous effects of his miſconduct. All the confederates now loudly rejected the Spartan chiefs appointed to command them. They unanimouſly applied to Ariſtides, to whoſe approved wiſdom and virtue they not only entruſted the operations of the combined armament, but voluntarily ſubmitted their more particular concerns; and experience ſoon juſtified their prudent choice. While the merit of Ariſtides thus procured his countrymen the management of the national treaſury of Greece, Themiſtocles was equally ſucceſsful in improving the internal reſources of the ſtate. By yielding more protection to ſtrangers than they enjoyed in neighbouring cities, he augmented not only the populouſneſs, but the wealth of Athens, as that deſcription of men paid an annual contribution in return for their ſecurity. This, together with other branches of the revenue, he employed in building annually about ſixty gallies, the addition of which to the Athenian navy abundantly compenſated ſuch loſſes as were ſuſtained by the accidents of the ſea in foreign parts. Themiſtocles was faſt advancing to the attainment of the ſame authority at home, which Ariſtides enjoyed abroad, when a charge arrived from Sparta, that he had conſpired with Pauſanias to betray the public liberty. The known reſentment of the Spartans againſt this extraordinary man, ſufficiently explains the reaſon of their conduct. But it is not eaſy to conceive, how the Athenians could admit ſuch an accuſation againſt a citizen, whoſe ſingular valour and conduct had gained the deciſive victory at Salamis; whoſe counſels and addreſs had fortified their city with impregnable ſtrength; whoſe foreſight and activity had procured them a fleet which no nation in the world could reſiſt; and whoſe abilities and patriotiſm had not only ſaved his country from the moſt formidable invaſion recorded in hiſtory, but amidſt the terrors of this invaſion, the treachery of falſe friends, and the violence of open enemies, had ſo eminently contributed to raiſe his republic to the firſt rank in the Grecian confederacy. Yet ſuch, on the one hand, was the effect of that envy which, in republics, always accompanies excellence; and ſuch, on the other, the influence of Spartan bribery and intrigues, that Themiſtocles was firſt baniſhed, and afterwards condemned to ſuffer death. He eſcaped into Perſia, where his wonderful verſatility of genius, in acquiring the language and manners of that country, recommended him to the new king Artaxerxes Longimanus, who had lately ſucceeded the unſucceſsful invader of Greece. The ſuſpicion of treaſon throws a dark ſhade on the eminent luſtre of his abilities; nor does the diſintereſtedneſs of his private character tend to remove the imputation. A report prevailed in Greece, that Themiſtocles could never forgive the ingratitude of the Athenians, which he had determined to revenge at the head of a powerful army, raiſed by Artaxerxes. But deſpairing of being able to accompliſh his deſign, he ended his life by poiſon at the age of ſixty-five, in Magneſia, a town of Lydia, which had been beſtowed on him by the liberality of the Perſian monarch.

It is worthy of obſervation, that the three great commanders who had ſo nobly reſiſted the arms of Xerxes, quitted the ſcene almoſt at the ſame time, namely, in the year before Chriſt 472. While Pauſanias and Themiſtocles ſuffered the puniſhment of their real or pretended crimes, Ariſtides died of old age, univerſally regretted by the affectionate patriots of his country. He, who had long managed the treaſury of Greece, left not a ſufficient ſum to defray the expence of his funeral. His ſon Lyſimachus received a preſent of three hundred pounds from the public, to enable him to purſue and finiſh his education. His daughters were maintained and portioned at the expence of the government. This honourable poverty well correſponded with the manly elevation of his character, whoſe pure and unſullied ſplendour far eclipſes the doubtful fame of his heroic but unfortunate rival.

By the death of Ariſtides, the conduct of the Perſian war devolved on his colleague Cimon, who united the integrity of that great man to the valour of Miltiades and the boldneſs of Themiſtocles. His firſt operations were employed againſt the coaſt of Thrace. Amphipolis was ſoon taken, and ſecured by a garriſon of Athenians. But Eion ſtill oppoſed a vigorous reſiſtance; Boges, the Perſian governor, having determined rather to periſh than ſurrender. After long baffling the efforts of the beſiegers, this fierce barbarian was at length exaſperated by hunger. His companions and attendants, equally deſperate with their leader, followed his intrepid example; and mounting the ramparts with one accord, threw into the middle ſtream of the Strymon their gold, ſilver, and other precious effects. After thus atteſting their implacable hatred to the aſſailants, they calmly deſcended, lighted a funeral pile, butchered their wives and children, and again mounting the walls, precipitated themſelves headlong into the thickeſt of the flames. And with this ſignal act of deſpair ended the Perſian dominion over the coaſt of Europe, which finally ſubmitted to the victorious arms of Cimon.

After receiving conſiderable reinforcements, added to a fleet of three hundred ſail, Cimon ſtretched towards the coaſt of Caria, where his approach ſerved for the ſignal of liberty to the numerous Greek cities in that valuable province. The victorious armament then proceeded eaſtward to Lycia, and received the ſubmiſſion of that extenſive coaſt. The citizens of Phaſelis alone, defended by ſtrong walls, refuſed to admit the Grecian fleet, or to betray their Perſian maſter. Their reſiſtance was ſpirited and formidable; but the perſeverance of Cimon finally overcame all obſtacles, and obliged them to ſurrender.

Artaxerxes, having re-eſtabliſhed the Perſian authority in the iſle of Cyprus, conſidered that Pamphylia, being the next province to Lycia, would probably receive an early viſit from the victorious Greeks. That he might meet them with becoming vigour, he aſſembled a powerful army on the banks of the Eurymedon; a fleet likewiſe, of four hundred ſail, was collected, and ordered to rendezvous near the mouth of that river. The Greeks, conducted by the activity of Cimon, delayed not to undertake the enterpriſe which the prudence of Artaxerxes had foreſeen. Their fleet, amounting to two hundred and fifty gallies, fell in with the Perſian ſquadrons off the coaſt of Cyprus. The barbarians, confident in their ſuperior numbers, did not decline the engagement, which was obſtinate, fierce, and bloody. Many of their ſhips were ſunk; an hundred were taken; the reſt fled in diſorder towards the ſhore of Cyprus; but, being ſpeedily purſued, they were abandoned by the terror of their crews, to the victors; and thus the mighty fleet of ſhips, which the great king had raiſed with ſuch flattering hopes, were added in one day to the navy of Greece.

The captured veſſels contained above twenty thouſand Perſians. The ſoldiers encamped on the Eurymedon were ſtill ignorant of the battle. Theſe circumſtances inſtantly ſuggeſted to the quick diſcernment of Cimon a ſtratagem for ſurpriſing the Perſian camp, which

was

was executed in the evening of the same glorious day. The prisoners were stripped of their eastern attire; the bravest of the Greeks condescended to assume the tiara and scymitar, and thus disguised, embarked in the Persian ships, and sailed up the Eurymedon with a favourable gale. The unsuspecting barbarians received them with open arms into their camp, as their long-expected companions. But the Greeks had no sooner been admitted within the gates, than at once drawing their swords, they attacked, with disciplined valour, the defenceless security of their astonished adversaries. Before the Persians recovered from their surprise, Cimon had advanced to the tent of their general. Consternation and despair seized this numerous host. The few who were least overcome by the impressions of fear and amazement, betook themselves to flight; a panic suspended the powers of the rest; they fell, unarmed and unresisting, by the hands of an unknown enemy. The rich spoils of the camp rewarded the enterprise and celerity of the Greeks, who, loaded with wealth and glory, returned home during winter, and piously dedicated to Apollo a tenth of the plunder acquired by these memorable atchievements.

After these decisive victories, the Greeks, headed by the Athenians, carried on the war during twenty-one years, rather for plunder than glory. The manifest superiority which they enjoyed on all the eastern shores of the Mediterranean, might have rendered their maritime allies sufficiently secure. But the people of Athens, whose councils were now governed by the magnanimous ambition of Pericles, had the address to persuade their confederates that naval preparations and enterprises were still as necessary as ever. At length, however, most of those scattered islands which followed the fortune of Athens, grew weary of perpetual hostilities, of which they shared the toil and the danger, while their ambitious leaders alone reaped the advantage and the glory. The Athenians availed themselves of this disposition, to engage such states as appeared most backward in raising their contingents, to compound for personal service on shipboard, by an annual supply of money, which might enable Athens continually to keep in readiness a fleet of observation, to watch and check the motions of the common enemy. This contribution soon amounted to about an hundred thousand pounds. It was gradually augmented; and, at length, raised by Pericles to three times the original sum; an immense income, considering that the proportional value of money to labour was then ten times higher than at present; and considering also the very limited revenues of the greatest monarchs of antiquity; since, from all the various provinces of the Persian empire, scarcely four millions sterling entered the royal treasury!

In the year before Christ 450, the Athenians set on foot an expedition against the island of Cyprus, which had become subservient to the Persians. A fleet of two hundred sail was entrusted to Cimon, who enjoyed a prosperous voyage to the Cyprian coast. The towns of Malos and Citium opposed a feeble resistance, and the singular humanity with which Cimon treated his prisoners, would have facilitated more important conquests: but the Phœnician and Cilician fleets had again put to sea, and Cimon wisely determined to attack them as they approached the island, rather than wait their arrival, his countrymen being superior to their enemies, still more in naval than in military prowess. In the battle which followed, he took above a hundred gallies; the number of those sunk or destroyed is unknown; the remainder fled to the coast of Cilicia, in hopes of protection from the army of the Persian general Megabazus, encamped in that province; but that unwieldy body was unable to afford them any effectual relief. The Greeks, having pursued them on shore, totally destroyed them, as well as the Persian detachments who came to their succour, and returned loaded with spoil to Cyprus.

The Athenian general then prepared to form the siege of Salamis, which, though defended by a numerous Persian garrison, and well provided with all the necessaries of defence, must have soon yielded to his skill and valour, had not sickness, in consequence of a wound received before the walls of Citium, prevented him from exerting his usual vigour.

Meanwhile Artaxerxes, who perceived that the acquisition of Salamis would naturally draw after it the conquest of the whole island, and who had been continually disappointed in expecting to prepare fleets and armies able to contend with the Athenians, eagerly solicited for peace. His ambassadors were favourably heard in the Athenian assembly, and a peace was concluded on the following conditions: That all the Greek colonies in Lower Asia should be declared independent of the Persian empire; that the armies of the great king should not approach within three days' journey of the western coast; and that no Persian vessel should appear between the Cyanean rocks and the Chelidonian isles, that is, in the wide extent of the Ægean and Mediterranean seas, between the northern extremity of the Thracian Bosphorus and the southern promontory of Lycia. On such terms the Athenians and their allies stipulated to withdraw their armament from Cyprus, and to abstain thenceforward from molesting the territories of the Persian king. Such was the conclusion of this memorable war, which, since the burning of Sardis, the first decisive act of hostility, had been carried on, with little intermission, during fifty-one years. The same magnanimous republic, which first ventured to oppose the pretensions of Persia, dictated to that haughty empire the most humiliating conditions of peace; an important and illustrious era in Grecian history, which was often celebrated with pompous panegyric during the declining ages of Athenian glory. But from this era the Athenian laurels began to fade; internal discord and mutual jealousy burst forth into a raging flame, and laid the foundation of the long and sanguinary Peloponnesian war.

The powerful cities of Sparta, Thebes, and Argos, could not behold, without dissatisfaction and anxiety, the rapid growth of a republic which already eclipsed their splendour, and might eventually endanger their safety. The Spartans therefore determined to make war on the Athenians, expecting to be seconded by the fears of the weak, and the jealousy of the more powerful, states, on both sides the Corinthian isthmus. But their animosity, before it broke out into open action, was diverted by a calamity equally sudden and unforeseen. In the year 469 before Christ, Sparta was overwhelmed by an earthquake. Taygetus and the neighbouring mountains were shaken to the foundation, and twenty thousand Lacedæmonian citizens perished in this dreadful catastrophe. But, amidst the ruins of Sparta, one description of men beheld the public misfortunes not only without horror, but with a secret satisfaction. The oppressed Spartan slaves, known by the appellations of Helots and Messenians, assembled in crowds from the villages in which they were cantoned, and took measures for delivering themselves, during the cruelty of the elements, from the inexorable cruelty of their unfeeling tyrants. The prudent dispositions of king Archidamus, who foreseeing the revolt, had summoned the citizens to arms, prevented them from getting immediate possession of the capital; but they rendered themselves masters of the strong fortress of Ithomè, from which they continued many years to infest the Lacedæmonian territories. The Spartans, in vain exerted their utmost endeavours to expel this dangerous enemy; and in the third year of the war (for this revolt is dignified in history by the name of the Third Messenian War), they had recourse to the Athenians, who, of all the Greeks, were deemed the most skilful in sieges. The Athenians, either not sufficiently acquainted with the secret hostility of Sparta, or willing to dissemble their knowledge

of it, ſent them the required aſſiſtance. The beſiegers, however, met with ſo little ſucceſs, that the Spartans diſmiſſed their Athenian auxiliaries, on pretence indeed that their help was no longer neceſſary; but, in reality, from a ſuſpicion that they favoured the intereſt of the rebels; and, as they retained the troops of all the other allies, the Athenians were juſtly provoked by this inſtance of diſtruſt. Meanwhile the inhabitants of Piſa gave vigorous aſſiſtance to the beſieged. The place thus held out for ten years; and both parties muſt have been reduced to extremity, ſince the Helots and Meſſenians, though obliged to ſurrender, obtained from the weakneſs, a condition which they would have vainly ſolicited from the mercy, of Sparta, "that they ſhould be allowed, with their wives, children, and effects, to depart, unmoleſted, from the Peloponneſus." The Athenians, deeply reſenting the affront of ſuſpected fidelity, determined to mortify the Spartans by kindly receiving the fugitives, whom, in the year before Chriſt 459, they finally eſtabliſhed in Naupactus, a ſea-port on the Criſſean gulph. The Helots and Meſſenians repaid, by ſignal gratitude, the humane protection of Athens. During the long courſe of the Peloponneſian war, while their neighbours on every ſide eſpouſed the oppoſite intereſt, the inhabitants of Naupactus alone invariably exerted themſelves in defence of the declining power of their magnanimous benefactors.

While the earthquake and the ſervile war confined within a domeſtic ſphere the activity of Sparta, Argos, the ſecond republic of the Peloponneſus, underwent ſuch revolutions and misfortunes, as left her neither inclination nor power to oppoſe the Athenian greatneſs. Ever rivals and enemies of Sparta, the Argives had jealouſly declined the danger and glory of the Perſian war, to the ſucceſs of which their adverſaries had ſo eminently contributed. This ungenerous dereliction paſſed not unpuniſhed. As deſerters of the common cauſe, the Argives incurred the hatred and contempt of their public-ſpirited neighbours. Mycenæ, once the proud reſidence of the royal Agamemnon, with Epidaurus, and Træzenè, which formed reſpectively the greateſt ſtrength and ornament of the Argive territory, threw off the yoke of Argos, whoſe folly or baſeneſs rendered her unworthy to govern them. Sicyon, Nauplia, Heliæa, and other towns of leſs note, followed their example, and aſſumed independence. The rebels, (for as ſuch they were treated by the magiſtrates of Argos,) ſtrengthened themſelves by foreign alliance, and continued thenceforth to diſdain the authority of their ancient metropolis and ſovereign. At the commencement of the Peloponneſian war, they formed a reſpectable portion of the Lacedæmonian confederacy; while Argos alone, of all the cities in the Peloponneſus, ſupported the cauſe of the Athenians. The ancient city of Mycenæ, which had firſt ſounded the trumpet of ſedition, was the only victim of Argive reſentment. The men of Argos ſeized a favourable opportunity, while the allies of Mycenæ were occupied with their domeſtic concerns, to lead their whole forces againſt the place; and having taken it by ſtorm, they decimated the inhabitants, and demoliſhed not only the walls, but the town itſelf, which was never afterwards rebuilt.

The ſame cauſes which humbled the pride of Argos, operated alike fatally on Thebes, the ſecond republic beyond the iſthmus, and the only one that ever aſpired to rival the power of Athens. The Thebans, for ſimilar reaſons with thoſe which had reſtrained the Argives, had alſo withheld their aſſiſtance in the Perſian war; and by this mean ſelfiſhneſs had juſtly provoked the indignation of the cities of Bœotia. Not only Theſpiæ and Platæa, which had ever borne with impatience the Theban yoke, but the ſea-ports of Aulis, Anthemon, Larymna, and ſeveral other cities, rejected the ſovereignty of Thebes, which, during the invaſion of Xerxes, had ſo ſhamefully betrayed the common intereſt and glory of the nation. During ſeveral years, the Thebans patiently yielded to a ſtorm which they found it impoſſible to reſiſt. But when the Spartans began to recover from their recent diſtreſs, the Thebans warmly ſolicited them to take part in their quarrels, and enable them to regain their aſcendant in Bœotia; with aſſurance that they would employ the firſt moments of returning vigour to oppoſe the growing power of the Athenians. This propoſal was accepted, not only by the reſentment but by the policy of the Spartan ſenate, who perceived it to be their intereſt that Thebes, the neighbour and rival of Athens, ſhould recover her authority in Bœotia. They were applying themſelves with vigour and ſucceſs to effect this ſalutary purpoſe, when the active vigilance of Athens diſpatched an army, fifteen thouſand ſtrong, to maintain the independence of Bœotia. The valour and conduct of Myronides, the Athenian general, obtained a deciſive victory near the walls of Tanagra, one of the few places in the province which had preſerved its fidelity to the capital. This memorable battle, which no ancient writer has thought proper to deſcribe, although it is compared to the glorious trophies of Marathon and Platæa, confirmed the liberty of Bœotia; nor could the Thebans, notwithſtanding their partial ſucceſs againſt ſeveral of the revolted cities, recover their authority in that province until about fourſcore years afterwards, when they emerged into ſudden ſplendour under the conduct of their heroic Epaminondas.

The ambitious policy of Pericles was always ready to profit by every favourable turn of fortune. He took care to place Athenian garriſons in ſeveral Bœotian fortreſſes; he made the neighbouring republics of Corinth and Megara feel and acknowledge the ſuperiority of Athens; and after ſending Tolmidas, a commander endued rather with an impetuous than a well-regulated courage, to ravage the coaſt of the Peloponneſus, he ſailed thither in perſon, and made the Lacedæmonians and their allies deeply regret, that they had too ſoon diſcovered their animoſity againſt a republic, ſo capable of taking vengeance on its enemies. The meaſures of this daring leader were actually uncontrouled by any oppoſition, ſince his eloquence had prevailed over the innocence and merit of Cimon, and procured the baniſhment of that illuſtrious commander. But Cimon was recalled in two years; and his return was ſignaliſed by a ſuſpenſion of arms in Greece, which that real patriot had been as zealous to promote, as he was ambitious to purſue his Aſiatic triumphs. This treaty, however, was ſoon broke; but an ill-concerted and unfortunate enterpriſe againſt Thebes, in which the raſh Tolmidas loſt his army and his life, made the Athenians again liſten to terms of accommodation. They agreed to withdraw their garriſons from Bœotia; to diſavow all pretenſions againſt Corinth and Megara, and, on complying with theſe conditions, the Athenians recovered their citizens made priſoners in Bœotia through the miſconduct of Tolmidas.

This was the famous truce of thirty years concluded in the fourteenth year preceding the Peloponneſian war. The former treaty had been limited to a much ſhorter period; for it is worthy of obſervation, that even in their agreements of peace, the Greeks diſcovered that perpetual propenſity to war, which was the unhappy effect of their political inſtitutions. The terms of this accommodation, ſeemingly little favourable to the intereſt of Athens, were nevertheleſs dictated rather by the ambition than the equity of that republic; a concluſion that evidently reſults from examining the ſeries of events which completes the hiſtory of this memorable period. Amidſt the foreign expeditions of Cimon, and the domeſtic diſſenſions of Greece, the Athenian arms and policy had been gradually, during thirty years, eſtabliſhing the ſovereignty of the republic over her diſtant colonies and confederates. This bold undertaking was finally accompliſhed by Pericles, whoſe character con-

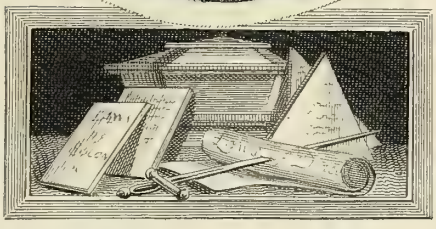
tributed, more than that of any one man, to the glory and greatneſs, as well as to the calamities and ruin, of his country. His father Xanthippus, who gained the illuſtrious victory at Mycalè, rejoiced in a ſon endued with the happieſt talents, and an innate love of glory; and who early learned to controul the tempeſt of youthful paſſions, which ſo often blaſt the promiſing hopes of manhood. Thus qualified by nature and education, he ſoon diſplayed, in the Athenian aſſembly, an eloquence nouriſhed by the copious ſpring of philoſophy, and ennobled by the manly elevation of his character. But the ſuperior talents of Pericles, which, in a well-regulated government, would have increaſed his influence, had well nigh occaſioned his ruin in a turbulent and ſuſpicious democracy. The alarmed jealouſy of the envious contrived a faction againſt the imagined tyranny of Pericles; who, to eſcape the diſgrace of the oſtraciſm, ſhunned the further admiration of the aſſembly.

The active vigour of his mind, thus withdrawn from politics, was totally directed to war; and his abilities, alike fitted to excel in every honourable purſuit, and gradually opening with every occaſion to diſplay them, carried off the palm of military renown from the moſt illuſtrious captains of the age. Under his influence, as noticed above, many of the maritime ſtates had conſented to pay an annual ſubſidy, inſtead of finding men and ſhips. But theſe communities had unwarily forged their own chains, when they conſented to raiſe an annual tax to maintain the guardian navy of Athens. They perceived not, that this temporary aid would ſoon be converted into a perpetual tribute, ſince, in proportion as they became unaccuſtomed to war, they laid themſelves at the mercy of that republic to which they had tamely entruſted the care of their defence. When the rigorous exactions of Athens ſpeedily warned them of their error, the wide intervals at which they were ſeparated from each other rendered it impoſſible for them to afford mutual aſſiſtance, or to act with united vigour. Naxos, Thaſos, Ægina, Eubœa, Samos, and other iſlands and cities of leſs importance, boldly ſtruggled to repel the uſurpation; but, each fighting ſingly, were ſucceſſively ſubdued; while new, and more grievous, burdens were cruelly impoſed on them. The leaſt patient again murmured, petitioned, rebelled, and taking arms to reſiſt oppreſſion, were treated with the ſeverity due to unprovoked ſedition. The puniſhment inflicted on them was uniformly rigorous. They were compelled to deliver up the authors of the revolt, to ſurrender their ſhipping, to demoliſh their walls, or receive an Athenian garriſon, and to pay the whole expences of the *ſocial* or thirty years' war, by which names it is known in hiſtory, and which was finiſhed by Pericles with every ſucceſs the moſt preſumptuous ambition of Athens could either expect or deſire. Samos, the capital of the iſland of that name, made the moſt vigorous reſiſtance; but at length ſurrendered to Pericles, after a ſiege of nine months, in the ninth year before the war of Peloponneſus.

The taking of Samos cloſed the long ſeries of Athenian conqueſts; and during the nine ſubſequent years, that magnanimous people alternately enjoyed and abuſed the bleſſings of peace and proſperity. Their oſtentatious diſplay of power increaſed the envy and terror of Greeks and Barbarians, and excited the obſtinate and bloody war of twenty-ſeven years, which was ſoon to follow, and which was exerted to demoliſh or uphold the ſtately edifice of empire that had been reared by the ambitious patriotiſm of Pericles. Aſſiſted by feeble or reluctant allies, Athens long ſtruggled againſt the combined ſtrength of Peloponneſus, Bœotia, Macedon, Sicily, and Perſia; and hence our curioſity is more forcibly attracted towards the internal reſources and moral character of a people, who, with few natural advantages, could make ſuch memorable efforts, and who, amidſt the din of arms, ſtill cultivating and improving their favourite arts, produced thoſe inimitable monuments of taſte and genius, which, ſurviving the deſtruction of their walls, have ever atteſted the glory of Athens over the united vengeance of her enemies. But her progreſs in the ſcience of government and laws, which gives ſecurity to all other ſciences, merits the foremoſt place in our attention; nor, at this diſtance of time, will the enlightened reader contemplate with indifference the laws of Athens, which having been incorporated into the Roman juriſprudence about the middle of the fifth century before Chriſt, ſerved, after an interval of above ſixteen hundred years, to ſoften and ameliorate the rugged diſcipline of the Gothic legiſlation, and to introduce juſtice, ſecurity, and refinement, among the modern nations of Europe.

The very imperfect laws of Draco, who flouriſhed thirty years before Solon, proved that the Athenians felt the want of a ſcience, which they knew not how to acquire or cultivate. This want was deſtined to be ſupplied from the ſuperior ſtores of juſtice and equity, which dignified the mental endowments of Solon. He maintained the ancient diviſion of property, but aboliſhed debts. He eſtabliſhed the rate of intereſt at twelve per cent. at which it afterwards remained; but forbade, that the inſolvent debtor ſhould become the ſlave of his creditor, or be compelled to ſell his children into ſervitude. After theſe preliminary regulations, he divided the Athenians into four claſſes, according to the produce of their eſtates. The firſt claſs conſiſted of thoſe whoſe lands annually yielded five hundred meaſures of liquid as well as dry commodities, and the minimum of whoſe yearly income may be calculated at ſixty pounds ſterling; which is equivalent, if we eſtimate the relative value of money by the price of labour, and of the things moſt neceſſary to life, to about ſix hundred pounds ſterling of the preſent age. The ſecond claſs conſiſted of thoſe whoſe eſtates produced three hundred meaſures; the third of thoſe whoſe eſtates produced two hundred; the fourth, and by far the moſt numerous claſs, either poſſeſſed no landed property, or at leaſt enjoyed not a revenue in land equal to twenty-four pounds ſterling, or, agreeably to the above proportion, two hundred and forty pounds of our preſent currency. But all ranks of citizens were alike admitted to vote in the public aſſembly, and to judge in the courts of juſtice, whether civil or criminal, which were properly ſo many committees of the aſſembly. But the three firſt claſſes were excluſively entitled to ſit in the ſenate, to decide in the Areopagus, or to hold any other office of magiſtracy. To theſe dignities they were elected by the free ſuffrages of the people, to whom they were accountable for their adminiſtration, and by whom they might be puniſhed for malverſation or negligence, although they derived no emolument from the diligent diſcharge of their duty.

The ſenate of four hundred, which, eighty-ſix years after its inſtitution, was augmented to five hundred by Cliſthenes, enjoyed the prerogatives of convoking the popular aſſembly; of previouſly examining all matters before they came to be decided by the people, which gave them a negative before debate in all public reſolutions; and of making laws which had force during a year, without requiring the conſent of the populace. Beſides this general authority, the ſenate was excluſively inveſted with many particular branches of the executive power. The preſident of that council had the cuſtody of the public archives and treaſury. The ſenate alone built ſhips; equipped fleets and armies; ſeized and confined ſtate criminals; examined and puniſhed ſeveral offences, which were not expreſsly forbidden by any poſitive law. The weight of ſuch a council, which aſſembled every day, except feſtivals, infuſed a large mixture of ariſtocracy into the Athenian conſtitution; and this was ſtill farther increaſed by the authority of the Areopagus, a court ſo named from the place where it was held; a hill ſacred to Mars, adjoining to the citadel.



SOLON.

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The principal magiſtrates erected in Athens were the nine archons, the firſt of whom gave his name to the year, and preſided in the civil courts of juſtice, where a committee of the people, choſen from all claſſes by lot, ſat as judges and jury. The archon next in dignity, who had the appellation of king, preſided in cauſes reſpecting religion, and things ſacred. The archon third in dignity, with his aſſeſſors the generals, preſided in military matters; and the ſix remaining, who were known by the appellation of *theſmothetæ*, heard criminal pleas of various kinds, or rather directed the proceedings of the ſix courts where criminal cauſes were examined and determined. Theſe nine archons, like all other Athenian magiſtrates, were, at the expiration of their annual office, accountable to the people; and when their conduct, after a ſevere ſcrutiny, appeared to merit public approbation and gratitude, they were received, and remained for life, members of the Areopagus, which, in dangerous emergencies, was entitled to aſſume a ſort of dictatorial power.

Such is the great outline of the conſtitution eſtabliſhed by Solon, according to which every Athenian citizen enjoyed the ineſtimable privilege of being judged by his peers, and tried by laws to which he himſelf had conſented. Although the legiſlative and judicial powers were thus lodged with the people, men of property and ability were alone entruſted with the adminiſtration of government; and as power in ſome meaſure followed property, the ſame expedient which ſerved to maintain a due diſtinction of ranks in ſociety, tended alſo to promote the induſtry and frugality of the multitude, that they might thereby become entitled to ſhare thoſe honours and offices, to which perſons of a certain eſtate only could aſpire. Hence the laws of Solon were of the moſt extenſive nature, comprehending not only rules of right, but maxims of morality, regulations of commerce, and precepts of agriculture. To deſcribe his inſtitutions reſpecting ſuch matters as are properly the objects of legiſlation, would be explaining thoſe great but familiar principles, concerning marriage, ſucceſſion, teſtaments, the rights of *perſons* and of *things*, which, through the medium of the Roman law, have been conveyed into the juriſprudence of all the civiliſed nations of Europe. His laws concerning education and manners prove that drunkenneſs and unnatural love were the predominant vices of thoſe early times. It was a particular duty of the archons, to prevent or puniſh offences committed in conſequence of intoxication; and the regulations concerning ſchools, which were not to be opened till ſun-riſe, which were ordered to be ſhut before night, and into which none but ſuch relations of the maſter, as were particularly ſpecified by law, could on any pretence be admitted, marked the utmoſt ſolicitude to root out an evil which infected and diſgraced the Athenian character.—It was for the purification and amelioration of which character, added to his ſuperior ſagacity and contempt of earthly grandeur, that Solon was dignified with the epithet of one of the wiſe men of Greece; yet was he doomed, like the celebrated lawgiver Lycurgus, not to reſt his aſhes where he had acquired his fame: he died in the iſland of Cyprus, when about eighty years of age.

The uſurpation of Piſiſtratus, though it deſtroyed for a time the political liberty of Athens, gave ſtability to moſt of the laws introduced by Solon. That extraordinary *tyrant* was not more diſtinguiſhed by the loftineſs of his genius than the humanity of his diſpoſition; and had not the violence of contending factions, and the fury of his enemies, inflamed his natural love of power, the name of Piſiſtratus might ſtand the foremoſt in the liſt of Grecian patriots and heroes. His valour and conduct were ſignalized in the conqueſt of Niſæa, Salamis, Naxos, Delos, and Sigæum; and if he diſplayed boldneſs and addreſs in acquiring ſovereignty, he diſplayed ſtill more moderation and virtue in adminiſtering it. He aſſumed, indeed, the royal dignities of prieſt and general, and took care that the chief offices of magiſtracy ſhould be filled by his partiſans. But he maintained the regular courſe of law and juſtice, not only by his authority, but by his example. He not only enforced the laws of Solon againſt idleneſs, but endeavoured to give them more efficacy by introducing new arts and manufactures into Attica. He was the firſt who brought into that country the complete collection of Homer's poems, which he commanded to be ſung at the Panathenæan feſtival; nor can we ſuppoſe that he ſhould have been zealous to diffuſe the liberal and manly ſentiments of that divine poet, if his government had not reſembled the moderation and equity of the heroic ages, rather than the deſpotiſm of tyrants.

His ſon Hipparchus imitated and ſurpaſſed the mild virtues of his father; and, amidſt the turbulence of the later democracy, it was acknowledged with a ſigh by the Athenians, that their anceſtors were indeed happy under Solon and Piſiſtratus, but that the reign of the tyrant Hipparchus brought back on earth the golden days of Saturn. The father had required a tenth part of the produce of Attica, to ſupport his guards, and the other appendages of royalty: his more generous ſon remitted one half of this impoſition. While he alleviated the burdens, yet encouraged the induſtry, of his ſubjects, by building the temple of Olympian Jupiter, he was ſolicitous to diſpel their ignorance and barbarity by erecting pillars in every part of the city, engraved with elegiac verſes, containing leſſons of wiſdom and precepts of morality. He collected the firſt library in Athens; and his liberal rewards, and ſtill more his agreeable manners and winning affability, attracted to that city the moſt diſtinguiſhed poets of the age. The murder of Hipparchus exaſperated the temper of his brother and ſucceſſor Hippias; but notwithſtanding the calamities which the latter inflicted and ſuffered, it muſt be allowed that the government of Piſiſtratus and his family, which, with various interruptions, laſted ſixty-eight years, increaſed the ſtrength and promoted the refinement of Athens. See ATTICA, vol. ii. p. 502.

But for the ſuperiority of her progreſs in the arts, Athens was chiefly indebted to the laudable efforts of Pericles and Phidias. It was the peculiar felicity of Pericles, to find Athens provided not only with all the materials of art, but with artiſts capable of employing them to the beſt advantage. In the inaccurate, but expreſſive, language of Pliny, ſculpture and painting then firſt aroſe, under the plaſtic hands of Phidias and his brother Panænus. Both arts, however, are known to have exiſted at a much earlier date; but in the age of Pericles they firſt aſſumed their due honours. The inventive genius of man tried a new and nobler flight. The ſuperiority of Phidias and his contemporaries obſcured, and almoſt obliterated, the memory of their predeceſſors, and produced that ſublime ſtyle, which, having flouriſhed about an hundred and fifty years, decayed with the glory of Greece, and diſappeared ſoon after the reign of Alexander.

It appears from the gems and medals, and the few remains in marble, preceding the age of Pericles, that the mechanical part of engraving and ſculpture had already attained a high degree of perfection. But in ſtatuary, the ſuperior merit of Phidias was acknowledged by the unanimous admiration of independent and rival communities. Intruſted by Pericles with the ſuperintendence of the public works, his own hands added to them their laſt and moſt valuable ornaments. Before he was called to this diſtinguiſhed employment, his ſtatues had adorned the moſt celebrated temples of Greece. His Olympian Jupiter, his ſtatues of Apollo and Diana, his Minerva of twenty-ſix cubits high, his group of twelve Grecian heroes ſurrounding the Trojan horſe, his ſtatue of the goddeſs of Vengeance, his Venus Urania, and Parthenopean Apollo, his three Minervas

ſculptured

ſculptured for the Pallenians, Platæans, and Lemnians, preſent ſo many aſſemblages of inimitable works, which at once confound and ſilence the voice of envy. During the ſhort period of fifteen years he completed the Odeum, or theatre of muſic; the Parthenon, or temple of Minerva; the Propylæa or veſtibule, and the porticoes belonging to the citadel, together with the pictureſque ornaments of many other immortal works; which, when new, expreſſed the mellowed beauties of time and maturity; and when old, ſtill preſerved the freſh charms and alluring graces of novelty. Even their ruins have continued to be prized, up to the preſent day, as the beſt and moſt invaluable models for modern artiſts.

By the luſtre of the elegant arts, the magnificence of Pericles had diſplayed and ennobled the military glory of his country; and the pre-eminence of Athens ſeemed eſtabliſhed on the ſolid foundation of internal ſtrength and external grandeur. But this abundant meaſure of proſperity ſatisfied neither the active ambition of the republic, nor the enterpriſing genius of its miniſter. The Greeks beheld and admired, but had not yet formally acknowledged, the full extent of Athenian greatneſs. In order to extort this reluctant tribute, Pericles diſpatched ambaſſadors to the different republics and colonies in Europe and in Aſia, requiring the preſence of their deputies in Athens, to concert meaſures for rebuilding their ruined temples, and for performing the ſolemn vows to the immortal gods, who had wonderfully protected the Grecian arms, during their long and dangerous conflict with the Perſian empire. This propoſal, which tended to render Athens the common centre of deliberation and of union, was readily accepted in ſuch foreign parts as had already ſubmitted to the authority of that republic. But in moſt aſſemblies of the Peloponneſus the ambaſſadors were heard with ſecret diſguſt; and the pride of the Spartan ſenate openly derided the inſolence of their demands. When, at their return home, they explained the behaviour of the Spartans, Pericles exclaimed, in his bold ſtyle of eloquence, that he "beheld war advancing with wide and rapid ſteps from the Peloponneſus."

But before we relate the events which immediately occaſioned this memorable war of twenty-ſeven years, it is impoſſible, (if the calamities of our own times have taught us to compaſſionate the miſerable,) not to drop a tear over the continual diſaſters which ſo long and ſo cruelly afflicted the moſt valuable and enlightened portion of mankind, and whoſe immortal genius was deſtined to enlighten the remoteſt ages of the world. When rude illiterate peaſants are ſummoned to mutual hoſtility, and, unaffected by perſonal motives of intereſt or honour, expend their ſtrength and blood to gratify the ſordid ambition of their reſpective tyrants, we may lament the general ſtupidity and wretchedneſs of human nature without ſympathiſing with men who have ſo little ſenſibility, who ſeem unwilling or unable to reliſh pleaſure. But the war of Peloponneſus preſents a different ſpectacle. The adverſe parties took arms, not to ſupport the unjuſt pretenſions of a tyrant, whom they had reaſon to hate or to deſpiſe, but to vindicate their civil rights, and to maintain their political independence. The meaneſt Grecian ſoldier knew the duties of the citizen, the magiſtrate, and the general. His life had been equally divided between the moſt agreeable amuſements of leiſure, and the moſt honourable employments of activity. Trained to thoſe exerciſes and accompliſhments which gave ſtrength and agility to the limbs, beauty to the ſhape, and grace to the motions, the dignity of his external appearance announced the liberal greatneſs of his mind; and his language, the moſt harmonious and expreſſive ever ſpoken by man, comprehended all that variety of conception, and all thoſe ſhades of ſentiment, that characteriſe the moſt exalted perfection of human manners.

Ennobled by ſuch actors, the ſcene itſelf was highly important, involving not only the ſtates of Greece, but the greateſt of the neighbouring kingdoms; and, together with the extent of a foreign war, exhibited the intenſeneſs of domeſtic ſedition. As it exceeded the ordinary duration of human power or reſentment, it was accompanied with unuſual circumſtances of terror, which, to the pious credulity of an unfortunate age, naturally announced the wrath of heaven, juſtly provoked by human cruelty. While peſtilence and famine multiplied the actual ſufferings, eclipſes and earthquakes increaſed the conſternation and horror, of that lamentable period. Several warlike communities were expelled from their hereditary poſſeſſions; others were not only driven from Greece, but utterly extirpated from the earth; ſome fell a prey to party rage, others to the vengeance of foreign enemies; ſome were ſlowly exhauſted by the contagion of a malignant atmoſphere, others overwhelmed at once by ſudden violence; while the combined weight of calamity aſſailed the power of Athens, and precipitated the downfal of that republic from the pride of proſperous dominion, to the dejection of dependence and miſery.

The general but latent hoſtility of the Greeks was firſt called into action by a rupture between the ancient republic of Corinth, and its flouriſhing colony Corcyra. The origin and proſperity of the Carthaginians have been already detailed under the article CARTHAGE, vol. iii. p. 836, to which the reader is referred. It appears that this ancient and celebrated people, even long before the invaſion of Xerxes, were the moſt powerful commercial nation in the world. The centre of their empire was ſurrounded by a cluſter of colonies and tributary cities, which extended above a thouſand miles along the coaſt of Africa. They were maſters of Sardinia and the northern coaſt of Sicily. They had eſtabliſhed colonies in Corſica, in Malta, and the Baleārian iſles; and their commercial ambition was diſtinguiſhed by an excluſive and jealous ſpirit, which ſought to ſtifle and depreſs the growing improvements of the Grecian colonies in Italy, which, within the courſe of ſixty years, had received ſuch acceſſions of ſtrength and ſplendour, as entitled thoſe countries to the appellation of Magna Græcia, of which the modern city of Naples was deemed the capital. See MAGNA GRÆCIA, p. 381, of this volume.

Beſides their powerful colonies in Corcyra, Leucas, Anactorium, Ambracia, whoſe tranſactions form ſuch an important part of the hiſtory of ancient Greece, the Corinthians had founded Syracuſe, the capital of Sicily. Among all theſe eſtabliſhments, it happened that the haughty ſpirit of Corcyra, elated with the pride of wealth and naval greatneſs, diſdained thoſe marks of deference and reſpect which practice had exacted from colonies towards their mother-country. At the Olympic and other ſolemn feſtivals, they yielded not the place of honour to the Corinthians; they appointed not a Corinthian high-prieſt to preſide over their religion; and when they eſtabliſhed new ſettlements on diſtant coaſts, they requeſted not the auſpicious guidance of a Corinthian conductor. This was the origin of a war, in which Athens was induced to take a decided part againſt the Corinthians, and in conſequence laid ſiege to Potidæa. While theſe hoſtile tranſactions were carrying into effect, the centre of Greece was ſhaken by the murmurs and complaints of the Corinthians and their Peloponneſian confederates, who loſt all patience when their citizens were blocked up by an Athenian army. Accompanied by the deputies of ſeveral republics beyond the iſthmus, they had recourſe to Sparta, whoſe actual power and ancient renown juſtly merited a high rank in the confederacy, but whoſe meaſures were rendered ſlow and cautious by the foreſight of Archidamus, who exhorted his countrymen not to ruſh blindly on war, without examining the reſources of the enemy and their own. The Athenians were powerful in ſhips,

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in money, in cavalry, and in arms; of all which the Lacedæmonians were deſtitute, or, at leaſt, but feebly provided. Whatever provocation, therefore, they had received, they ought in prudence to diſſemble their reſentment, until they could effectually exert their vengeance. Had this moderate language made any impreſſion on the aſſembly, it would have been ſpeedily obliterated by the blunt boldneſs of Sthenelaides, one of the ephori, who cloſed the debate. "Men of Sparta! Of the conduct of the Athenians I underſtand not the drift. If we would maintain our character, we muſt not overlook their injuſtice. *They* have ſhips, money, and horſes; but *we* have good allies, whoſe intereſts we muſt not abandon. Why do we deliberate, while our enemies are in arms? Let us take the field, with ſpeed, and fight with all our might." The acclamations of the people followed, and war was reſolved.

This reſolution was taken in the fourteenth year after the concluſion of the thirty years' peace, and in the year before Chriſt 431; but near a twelvemonth elapſed before the proper meaſures for invading Attica could be finally adjuſted among the diſcordant members of ſo numerous a confederacy. It conſiſted of all the ſeven republics of the Peloponneſus, except Argos and Achaia, the firſt of which from ambition, and the ſecond perhaps from moderation, preſerved, in the beginning of the war, a ſuſpicious neutrality. Of the nine northern republics, Acarnania alone declined joining the allies, its coaſt being particularly expoſed to the ravages of the Corcyrean fleets. The cities of Naupactus and Platæa, were totally devoted to their Athenian protectors; whoſe cauſe was likewiſe embraced by ſeveral princes of Theſſaly. But all the other ſtates beyond the iſthmus reſolved to follow the ſtandard of Sparta, and to humble the aſpiring ambition of their powerful neighbour.

The repreſentatives of theſe various communities having, according to the received practice of Greece, aſſembled in the principal city of the confederacy, were ſtrongly encouraged by the Corinthians, who, as their colony of Potidæa was cloſely beſieged, laboured to accelerate repriſals on Attica, by exhibiting the moſt advantageous proſpect of the approaching war. In order to gain time, however, for ſettling all matters among themſelves, the confederates diſpatched to Athens various overtures of accommodation, which they well knew would be indignantly rejected. In each embaſſy they roſe in their demands, ſucceſſively requiring the Athenians to raiſe the ſiege of Potidæa; to repeal their prohibitory decree againſt Megara; to withdraw their garriſon from Ægina; in fine, to declare the independence of their colonies. Theſe demands were heard at Athens with a mixture of rage and terror. The capricious multitude, who had hitherto approved and admired the aſpiring views of Pericles, now trembled on the brink of the precipice to which he had conducted them. They had hitherto puſhed the ſiege of Potidæa with great vigour, but without any near proſpect of ſucceſs. They muſt now contend with a numerous confederacy, expoſe their boaſted grandeur to the doubtful chance of war, and exchange the amuſements and pleaſures of the city for the toils and hardſhips of a camp. Of theſe diſcontented murmurs, the rivals and enemies of Pericles greedily availed themſelves to traduce the character and adminiſtration of that illuſtrious ſtateſman. Diopeithes, Dracontides, and other demagogues, derided the folly of taking arms on every frivolous pretence; and, preparatory to the impeachment of Pericles, the courts of juſtice were fatigued with proſecutions of his faithful friends.

The accuſation of Pericles himſelf ſoon followed. He was reproached with embezzling the public treaſure; but, on this occaſion, plain facts confounded the artifices of his enemies. It was proved, that his private expences were juſtly proportioned to the meaſure of his patrimony; many inſtances were brought of his generous contempt of wealth in the ſervice of his country; and it appeared, after the ſtricteſt examination, that his fortune had not increaſed ſince he was intruſted with the exchequer. This honourable diſplay of unſhaken probity, which had ever formed the baſis of the authority of Pericles, again reconciled to him the affections of his countrymen, and gave irreſiſtible force to that famous and fatal ſpeech, which unalterably determined the war of Peloponneſus.

"Often have I declared, Athenians! that we muſt not obey the unjuſt commands of our enemies. I am ſtill firmly of that mind, convinced as I am of the dangerous viciſſitudes of war and fortune; and that human hopes, deſigns, and purſuits, are all fleeting and fallacious. Yet, in the preſent criſis, neceſſity and glory ſhould alike fix us to this immoveable reſolution. The decree againſt Megara, which the embaſſy required us to repeal, is not the cauſe of that hoſtile jealouſy which has long ſecretly envied our greatneſs, and which has now more openly conſpired our deſtruction. Yet that decree, of which ſome men have ſpoken ſo lightly, involved the honour of our councils and the ſtability of our empire. By puſillanimouſly repealing it, we ſhould have emboldened that malignant enmity, which, notwithſtanding our proper firmneſs in the firſt inſtance, has yet ſucceſſively riſen to higher and more arbitrary demands; demands which merit to be anſwered, not by embaſſies, but by arms.

"The flouriſhing reſources, and actual ſtrength, of the republic, afford us the moſt flattering proſpect of military ſucceſs. Impregnably fortified by land, our ſhores are defended by three hundred gallies; beſides a body of cavalry, to the number of twelve hundred, together with two thouſand archers, we can immediately take the field with thirteen thouſand pikemen, without draining our foreign garriſons, or diminiſhing the complete number of ſixteen thouſand men who defend the walls and fortreſſes in Attica. The wealthy ſea-ports of Thrace and Macedon; the flouriſhing colonies of Ionia, Eolia, and Doria; in a word, the whole extenſive coaſt of the Aſiatic peninſula, acknowledge, by annual contributions, the ſovereignty of our guardian navy, whoſe ſtrength is increaſed by the ſhips of Chios, Leſbos, and Corcyra, while the ſmaller iſlands furniſh us, according to their ability, with money and troops. Athens thus reigns queen of a thouſand tributary republics; and notwithſtanding the expences incurred by the ſiege of Potidæa, and the architectural ornaments of the city, ſhe poſſeſſes ſix thouſand talents in her treaſury.

"The ſituation of our enemies is totally the reverſe. Animated by rage, and emboldened by numbers, they may be rouſed to a tranſient deſultory aſſault; but deſtitute of reſources, and divided in intereſts, they are totally incapable of any ſteady perſevering exertion. With ſixty thouſand men they may enter Attica; and if our unſeaſonable courage gives them an opportunity, may win a battle; but unleſs our raſh imprudence aſſiſts and enables them, they cannot poſſibly proſecute a ſucceſsful war. Indeed, Athenians! I dread leſs the power of the enemy, than your own ungovernable ſpirit. Inſtead of being ſeduced from your ſecurity, by a vain deſire to defend, againſt ſuperior numbers, your plantations and villas in the open country, you ought to deſtroy thoſe ſuperfluous poſſeſſions with your own hands. To you, who receive the conveniences of life from ſo many diſtant dependencies, the devaſtation of Attica is a matter of ſmall moment; but how can your enemies repair, how can they ſurvive, the devaſtation of the Peloponneſus? How can they prevent, or remedy, this fatal, this intolerable, calamity, while the ſquadrons of Athens command the ſurrounding ſeas? If theſe conſiderations be allowed their full weight; if reaſon, not paſſion, conducts the war; it ſeems ſcarcely in the

power of fortune to rob you of victory. Yet let us anſwer the Peloponneſians with moderation, "that we will not forbid the Megareans our ports and markets, if the Spartans, and other ſtates of Greece, aboliſh their excluſive and inhoſpitable laws: that we will reſtore independent governments to ſuch cities as were free at the laſt treaty of peace, provided the Spartans engage to follow our example: that we are ready to ſubmit all differences to the impartial deciſion of any equitable tribunal: and that, although theſe condeſcending overtures be rejected, we will not commence hoſtilities, but are prepared to repel them with our uſual vigour." The aſſembly murmured applauſe; a decree was propoſed and ratified; the ambaſſadors returned home with the reply dictated by Pericles; which, moderate as it ſeemed to the Athenian ſtateſman, founded like an immediate declaration of war to the Spartans and their allies.

The ſword was now drawn, and both parties ſeemed eager to exert their utmoſt ſtrength. The Spartans ſummoned their confederates to the iſthmus; demanded money and ſhips from their Italian and Sicilian colonies; and ſolicited aſſiſtance from the Perſian monarch Artaxerxes, and from Perdiccas king of Macedon; both of whom regarded the Athenians as dangerous and ambitious invaders of their coaſts. The people of Athens, on the other hand, contracted an alliance with Sitalces, the warlike chief of the Odryſians, who formed the moſt powerful tribe in Upper Thrace. They required at the ſame time an immediate ſupply of cavalry from their Theſſalian allies, while the fleet already cruiſed along the coaſt of Peloponneſus, to confirm the fidelity of the ſurrounding iſlands. Such was the ardour of preparation, that only a few weeks after the ſurpriſe of Platæa, the Lacedæmonian confederates, to the number of ſixty thouſand, aſſembled from the north and ſouth, at the Corinthian iſthmus, and the general conduct of the war was intruſted to Archidamus, the Spartan king.

In a council of the chiefs, that prince warmly approved their alacrity in taking the field, and extolled the greatneſs and bravery of an army, the moſt numerous and beſt provided that had ever followed the ſtandard of any Grecian general. Yet their preparations, however extraordinary, were not greater than their enterpriſe required. They waged war with a people not leſs powerful than active and daring; who had diſcernment to perceive, and ability to improve, every opportunity of advantage; and whoſe reſentment would be as much inflamed, as their pride would be wounded, by the approach of invaſion and hoſtility. It ſeemed probable, that the Athenians would not allow their lands to be waſted, without attempting to defend them. The confederates, therefore, muſt be always on their guard; their diſcipline muſt be ſtrict, regular, and uniform; to elude the ſkill, and to oppoſe the ſtrength, of Athens, demanded their utmoſt vigilance and activity.

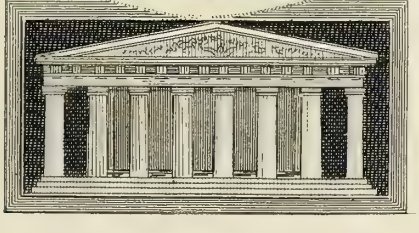
Archidamus, after leading his army into Attica, ſeems blameable in allowing their martial ardour to evaporate in the fruitleſs ſiege of Oenoè, the ſtrongeſt Athenian town towards the ſouthern frontier of Bœotia. This tedious and unſucceſsful operation enabled the Athenians to complete, without interruption the ſingular plan of defence ſo ably traced by the bold genius of Pericles. They haſtened the deſolation of their own fields; demoliſhed their delightful gardens and villas, which it had been their pride to adorn; and tranſported, either to Athens or the iſles, their valuable effects, their cattle, furniture, and even the frames of their houſes. This induced the confederate army to raiſe the ſiege of Oenoè, and to advance along the eaſtern frontier of Attica; and, having laid waſte that valuable diſtrict with fire and ſword, they proceeded to Eleuſis, and from thence to Acharnæ, only eight miles diſtant from the capital. But the Athenian ſquadron of an hundred and fifty ſail was now ravaging the defenceleſs coaſt of Peloponneſus, intelligence of which, and ſtill more the ſcarcity of proviſions, obliged the confederates to return home to defend their reſpective republics.

The winter was not diſtinguiſhed by any important expedition on either ſide; but the return of ſummer brought back into Attica the Peloponneſian invaders; and it likewiſe introduced a far more dreadful calamity. A deſtructive peſtilence, engendered in Ethiopia, infected Egypt, and ſpread over great part of the dominions of the king of Perſia. Hiſtory does not explain by what means this fatal diſorder was communicated to Greece. The diſeaſe firſt appeared in the Piræus; and the inhabitants ſuſpected that the enemy had poiſoned their wells. But it ſoon extended over the adjoining diſtricts, and raged with peculiar violence in the populous ſtreets which ſurrounded the citadel. All remedies, human and divine, were employed in vain to ſtop the progreſs of this fatal contagion. The miſerable crowds expired in the temples, preferring unavailing prayers to the gods. A ſhocking ſpectacle was ſeen round the ſacred fountains, where multitudes lay dead, or periſhed in agoniſing tortures.

While the city fell a prey to this cruel malady, the country was laid waſte by an implacable enemy. On the preſent occaſion, the confederates advanced beyond Athens; deſtroyed the works of the miners on mount Laurium; and, having ravaged all that ſouthern diſtrict, as well as the coaſt oppoſite to Eubœa and Naxos, they traced a line of devaſtation along the Marathonian ſhore, the glorious ſcene of the immortal victory obtained by the valour of Athens, in defence of thoſe very ſtates by which her own territories were now deſolated.

If conſcious wiſdom and rectitude were not ſuperior to every aſſault of fortune, the manly ſoul of Pericles muſt have ſunk under the weight of ſuch multiplied calamities. But his fortitude ſtill ſupported him amidſt the flood of public and domeſtic woe. With decent and magnanimous compoſure, he beheld the unhappy fate of his numerous and flouriſhing family, ſucceſſively ſnatched away by the rapacious peſtilence. At the funeral of the laſt of his ſons, he dropped, indeed, a few reluctant tears of paternal tenderneſs; but, aſhamed of this momentary weakneſs, he bent his undejected mind to the defence of the republic. Having collected an hundred Athenian, together with fifty Chian or Leſbian, veſſels, he ſailed through the Saronic gulph, and ravaged the coaſts of Elis, Argos, and Laconia. While this armament weighed anchor in the Piræus, there happened an eclipſe of the ſun, which terrified the ſuperſtitious mariners, whoſe minds were already clouded by calamity. The pilot of the admiral galley betrayed the moſt unmanly cowardice, when Pericles, throwing a cloak before his eyes, aſked, "whether the obſcurity ſurpriſed him?" the pilot anſwering him in the negative, "Neither," rejoined Pericles, "ought an eclipſe of the ſun, occaſioned by the intervention of a revolving planet, which intercepts its light."

Having arrived on the Argolic coaſt, the Athenians laid ſiege to the ſacred city of Epidaurus, whoſe inhabitants gloried in the peculiar favour of Æſculapius. The plague again breaking out in the fleet, was naturally aſcribed to the vengeance of that offended divinity. They raiſed the ſiege of Epidaurus; nor were their operations more ſucceſsful againſt Troezenè, Hermionè, and other Peloponneſian cities. They took only the ſmall fortreſs of Praſiæ, a ſea-port of Laconia; after which they returned to the Piræus, afflicted with the peſtilence, and without having performed any thing that correſponded to the greatneſs of the armament, or the public expectation. The Athenian expedition into Thrace was ſtill more unfortunate. Into that country Agnon conducted a body of four thouſand men, to cooperate with Phormio in the ſiege of Potidæa. But in the ſpace of forty days, he loſt one thouſand and fifty men in the plague; and the only conſequence of his expedition



PERICLES.

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pedition was, to infect the northern army with that dreadful diſorder.

Theſe multiplied diſaſters reduced the Athenians to deſpair. Their ſufferings exceeded example and belief, while they were deprived of the only expected conſolation, the pleaſure of revenge. The bulk of the people deſired peace on any terms. Ambaſſadors were ſent to Sparta, but not admitted to an audience. The orators clamoured, and traduced Pericles. The undiſcerning populace aſcribed their misfortunes to the unhappy effect of his counſels: but his magnanimity did not yet forſake him; and, for the laſt time, he addreſſed the aſſembly with his uſual ſucceſs. The integrity and manly firmneſs of his mind reſtored the fainting courage of the republic. They reſcued the dignity of Pericles from the rage of popular frenzy; but they could not defend his life againſt the infectious malignity of the peſtilence, which carried him off two years and ſix months after the commencement of the war. He expired, teaching an invaluable leſſon to human kind, that in the laſt important hour, when all other objects diſappear, or loſe their value, the recollection of an innocent life is ſtill preſent to the mind, and ſtill affords conſolation, more valuable than Pericles could derive from his nine trophies erected over the enemies of his country, from his long and proſperous adminiſtration of forty years, the depth of his political wiſdom, the perfection of his military and naval ſkill, and the immortal fame of his unrivalled eloquence.

The dignity and vigour of the republic ſeemed to periſh with Pericles, and ſeveral years elapſed, ſcarcely diſtinguiſhed by any event that tended to vary the uniformity, much leſs to decide the fortune, of the war. While the Peloponneſians invaded Attica, the Athenian fleet annually ravaged the coaſt of Peloponneſus. In vain the inhabitants of that country, little accuſtomed to the ſea, collected ſhips and uſed their utmoſt endeavours to contend with the experienced ſkill of the Athenian mariners. They were always defeated, and often by an inferior force; one proof among many, that naval ſuperiority is ſlowly acquired, and ſlowly loſt. Neither the Athenians nor the Peloponneſians derived any effectual aſſiſtance from their reſpective alliances with Sitalces and Perdiccas. The former, reinforced by many independent tribes of Thrace, who were allured to his ſtandard by the hopes of plunder, poured down an hundred and fifty thouſand men on the Macedonian coaſt. But a haſty agreement between the two kings diſſipated that numerous and deſultory band with the ſame rapidity with which it had been collected.

The ſucceſs of the adverſe parties was equally balanced in the ſieges of Potidæa and Platæa. The former, having ſurrendered on capitulation, was occupied by new inhabitants. The expelled citizens retired to Olynthus and other places of the Chalcidice, where they ſtrengthened and exaſperated the foes of Athens. Platæa alſo capitulated, after a long and ſpirited reſiſtance during five years. Notwithſtanding the warm and affecting remonſtrances of the citizens who had acted ſuch an illuſtrious part in the Perſian war, when the Thebans behaved moſt diſgracefully, the capitulation was ſhamefully violated by the Spartans, who ſacrificed to the reſentment of Thebes, the eternal enemy of Platæa, two hundred brave men, whoſe courage and fidelity merited a better fate. But the youth of Platæa ſtill flouriſhed in the boſom of Athens, and were deſtined, in a future age, to re-aſſume the dignity of independent government, which always formed the higheſt ambition of their ſmall but magnanimous community.

If the Peloponneſian war had not been carried on with an animoſity unknown to the mildneſs of modern times, the long ſufferings of the contending parties would have diſpoſed them eagerly to deſire the bleſſings of tranquillity. But ſuch virulent paſſions rankled in Athens and Sparta, that while calamities were equally balanced, and the capitals of both republics were ſecure, no combination of adverſe circumſtances ſeemed ſufficient to determine either ſide to purchaſe peace by the ſmalleſt diminution of honour. Yet to this neceſſity, Sparta in the following year was reduced by a train of events, equally ſudden and ſingular. Demoſthenes, a general of merit and enterpriſe, commanded the Athenian forces at Naupactus. This town, as related above, had been beſtowed on the unfortunate Helots and Meſſenians; by whoſe aſſiſtance, together with that of the Athenian allies in Acarnania, Cephallenia, and Zacynthus, Demoſthenes undertook to reduce the hoſtile provinces of Ætolia, Ambracia, and Leucadia.

The Ætolians and Ambraciots, the moſt formidable enemies of the republic on the weſtern coaſt of Greece, ſolicited and obtained aſſiſtance from Lacedæmon and Corinth, vigorouſly attacked the towns of Naupactus and Amphilochian Argos, and threatened to reduce the whole province of Acarnania. The vigilance and activity of Demoſthenes not only ſaved theſe important cities, but obtained the moſt ſignal advantages over the aſſailants. With profound military ſkill he divided the ſtrength of the enemy, and, by a well-conducted ſtratagem, totally defeated the Ambraciots among the heights of Idomenè. Demoſthenes then attacked the camp of the Ambraciots, who were yet in their beds. The camp was no ſooner aſſaulted than the rout began. Many were ſlain on the ſpot; the reſt fled; but the paſſes were beſet, and the purſuers light-armed. Some ran to the ſea, and beheld a new object of terror, in ſome Athenian ſhips then cruiſing on the coaſt. Amidſt this complication of calamities, they plunged into the water, and ſwam to the hoſtile ſquadron, chooſing rather to be deſtroyed by the Athenians, than by the enemies from whom they had eſcaped. Theſe important ſucceſſes enabled Demoſthenes to return with honour to Athens, the term of his military command having expired.

During a long and deſultory war of ſeveral years, the Athenians were chiefly crowned with ſucceſs, and ſeveral times brought the Spartans to ſue for peace; but which, in the pride of victory, they choſe not to grant. Fortune firſt deſerted them in Bœotia, in the year before Chriſt 424. During ſeveral months their generals, Demoſthenes and Hippocrates, availing themſelves of the political factions of that country, had been carrying on ſecret intrigues with Chæronæa, Siphæ, and Orchomenus, places abounding in declared partizans of democracy, and eternally hoſtile to the ambition of Thebes. The inſurgents had agreed to take arms, in order to betray the weſtern parts of Bœotia to Demoſthenes, who ſailed with forty gallies from Naupactus; while Hippocrates, at the head of ſeven thouſand heavy-armed Athenians, and a much greater proportion of light-armed auxiliaries, invaded the eaſtern frontier of that province. It was expected, that, before the Thebans could bring a ſufficient force into the field, the invaders and inſurgents, advancing from oppoſite extremities of the country, might unite in the centre, and perhaps ſubdue Thebes itſelf, the moſt powerful, as well as moſt zealous, ally of Sparta. This plan, though concerted with ability, was found too complicated for execution. Demoſthenes ſteered towards Siphæ, before his coadjutor was ready to take the field; and the whole contrivance was betrayed by Nichomachus, a Phocian, to the Spartans, and by them communicated to the Bœotians. Demoſthenes at length entered the eaſtern frontier of Bœotia; and, as the principal deſign had miſcarried, contented himſelf with taking and fortifying Delium, a place ſacred to Apollo. Having garriſoned this poſt, he prepared for returning home. But while his army ſtill lay in the neighbourhood of Delium, the Thebans, encouraged by Pagondas, a brave and ſkilful leader, marched with great rapidity from Tanagra, in order to intercept his retreat. Their forces

amounted to eighteen thouſand; the Athenians were little leſs numerous. An engagement enſued, which national emulation rendered bloody and obſtinate. Before the battle Pagondas had detached a ſmall ſquadron of horſe, with orders to ride up after the commencement of the action. This ſtratagem was deciſive. The Athenians, terrified at the ſight of a reinforcement, which their fears magnified into a new army, were thrown into diſorder, and put to flight. Approaching darkneſs ſaved them from total deſtruction. They eſcaped diſgracefully into Attica, after leaving in the field of battle a thouſand pikemen, with their commander Hippocrates.

The Athenians had ſcarcely time to lament their loſſes in Bœotia, when they received intelligence of a calamity in another quarter, equally unexpected, and ſtill more alarming. This event is the more remarkable, becauſe it naturally aroſe out of the preceding proſperity of Athens, and the paſt misfortunes of Sparta. The train of ſucceſs which had attended the arms of Nicias and Demoſthenes in the eighth year of the war, alarmed the citizens of Olynthus and other places of the Chalcidicè, which, having embraced the earlieſt opportunity of revolting from the Athenians, now dreaded the vengeance of an incenſed and victorious people. Every ſoutherly wind threatened them with the approach of an Athenian fleet. But, as none of theſe dreaded dangers were realiſed, the inhabitants of the Chalcidicè gradually reſumed courage, put their towns in a poſture of defence, and craved aſſiſtance from their Peloponneſian allies. At the ſame time Perdiccas, king of Macedon, who regarded the Athenians as his ancient and natural enemies, ſent money into the ſouth of Greece, for the purpoſe of hiring ſoldiers, whom he intended to employ in reſiſting the encroachments of that ambitious people.

Such were the enemies whom Athens had rouſed; while the calamities of Sparta prompted her to ſupply the reinforcement of troops, which Perdiccas and the Chalcidians demanded. They ſent ſeven hundred Helots to the ſtandard of Braſidas, the Spartan chief, whoſe merit had recommended him to Perdiccas and the Chalcidians, as the general beſt qualified to manage the Macedonian war. About a thouſand ſoldiers where levied in the neighbouring cities of Peloponneſus; ſeveral Spartans cheerfully accompanied a leader whom they admired; and with this inconſiderable force Braſidas undertook an expedition highly important in its conſequences, and conducted with conſummate prudence and bravery.

Having traverſed the friendly countries of Bœotia and Phocis, he arrived at the foot of Mount Oëta, and penetrated through the narrow defiles confined between that ſteep and woody range of hills, and the boiſterous waves of the Malian gulf. The ſight of Thermopylæ animated the enthuſiaſm of the Spartans, and encouraged them to force their way through the hoſtile plains of Theſſaly; a country actually torn by domeſtic diſcord, but always friendly to the Athenians. The celerity of Braſidas anticipated the ſlow oppoſition of a divided enemy. Having reached the Macedonian town of Dium, he joined forces with Perdiccas, who propoſed directing the firſt operations of the combined army againſt Arribæus, leader of the barbarous Lynceſtæ. But even this barbarian knew the valour of the Spartans, and the equity of Braſidas. To the deciſion of the Grecian general he ſubmitted the difference between Perdiccas and himſelf, and engaged to abide by the award, however unfavourable to his intereſt.

Braſidas now haſtened to join the Chalcidians, by whom he was received with a degree of joy ſuitable to the impatience with which he had been expected. Amidſt the general defection of their neighbours, the towns of Acanthus and Stagirus ſtill maintained their allegiance to Athens. Braſidas appeared before the gates of Acanthus, while the peaceful inhabitants were preparing for the labours of the vintage. He ſent a meſſenger, craving leave to enter the place, and to addreſs the aſſembly. The Acanthians were divided in opinion; but the majority, fearing to expoſe their ripe fields and vineyards to the reſentment of his army, agreed to admit the general alone and unattended, and impartially to weigh whatever he propoſed for their deliberation. Braſidas, though a Spartan, was an able ſpeaker. He engaged the Acanthians to accept the friendſhip of Sparta. Stagirus, another city on the Strymonic gulf, readily followed the example, and opened its gates to the deliverer. During the enſuing winter, the meaſures of the Spartan general were conducted with equal ability and enterpriſe. His ſucceſsful operations againſt the inland towns facilitated the ſurrender of ſuch places as, by their maritime or inſular ſituation, were moſt expoſed to the vengeance of Athens, and therefore moſt averſe to revolt. His moderate uſe of victory enſured the good-will of the vanquiſhed. The various parts of a plan, thus artfully combined, mutually aſſiſted each other; the ſucceſs of one undertaking contributed to that of the next which followed it; and, at length, without any conſiderable miſcarriage, he had rendered himſelf maſter of moſt places in the peninſulas of Acta, Sithonia, and Pallenè.

The loſs of Amphipolis was that which moſt deeply afflicted the Athenians, and which at once ſhewed the ſuperior addreſs and dexterity of Braſidas. He formed a conſpiracy with the malcontents in the place, ſkilfully diſpoſed his army before the walls, and harangued the aſſembly of the people. A moſt ſeaſonable promptitude diſtinguiſhed all his meaſures; yet the Athenian Eucleus, who commanded the garriſon, found time to ſend a veſſel to Thaſos, requeſting immediate and effectual relief. The Athenians had committed the government of that iſland, as well as the direction of the mines on the oppoſite continent, to the celebrated hiſtorian of a war, in which he was a meritorious, though unfortunate, actor. Without a moment's delay, Thucydides put to ſea with ſeven gallies, and arrived in the mouth of the Strymon on the ſame day on which his aſſiſtance had been demanded. But it was too late to ſave Amphipolis. The Spartan general, who had exact information of all the meaſures of the beſieged, well knew the importance of anticipating the arrival of Thucydides, whoſe name was highly reſpected by the Greek colonies in Thrace, and whoſe influence was conſiderable among the native barbarians. Braſidas, therefore, propoſed ſuch a capitulation to the Amphipolitans as it ſeemed imprudent to refuſe. They were to be releaſed from the tribute which they had hitherto paid the Athenians; to enjoy the utmoſt degree of political independence, not inconſiſtent with the alliance of Sparta; even the Athenian garriſon, if they continued in the place, were to be entitled to all the rights of citizens; and ſuch perſons as choſe to leave it, were granted a reaſonable time to remove their families and their property. The laſt condition was embraced by the Athenians, and their more determined partizans. They retired to the neighbouring town of Eion, ſituate near the ſea, on the northern branch of the Strymon; a place ſecured againſt every hoſtile aſſault by the ſkill and activity of Thucydides.

Towards the end of winter, the full extent of Braſidas's ſucceſs was made known at Athens. The aſſembly was in commotion; and the populace were the more enraged at their loſſes, as it now appeared ſo eaſy to have prevented them, either by guarding the narrow defiles which led to their Macedonian poſſeſſions, or by ſending their fleet with a ſeaſonable reinforcement to their feeble garriſons in thoſe parts. Their own neglect had occaſioned the public diſgrace; but, with the uſual injuſtice and abſurdity accompanying popular diſcontents, they exculpated themſelves, and baniſhed their generals.

generals. Thucydides was involved in this cruel ſentence. In theſe propitious moments of general ſucceſs, the Spartans ſent an embaſſy to Athens to ſue for a truce, as a preliminary to a general peace. The Athenians readily entered into their views; it was determined that matters of ſuch importance ſhould be diſcuſſed with leiſure and impartiality; a truce was therefore agreed on for a year between the contending republics.

This tranſaction was concluded in the ninth ſummer of the war, and in the year 423 before Chriſt; but it was totally unexpected by Braſidas, who received the voluntary ſubmiſſion of Scionè and Menda, two places of conſiderable importance in the peninſula of Pallenè, before he was acquainted with the ſuſpenſion of hoſtilities. While the active valour of this general prevented the confirmation of peace, the conſcious worthleſsneſs of the Athenian general Cleon, promoted the renewal or rather the continuance of war. The glory of Athens was the perpetual theme of his diſcourſe. He exhorted his countrymen to puniſh the perfidy of Sparta, in abetting the inſolent revolt of Menda and Scionè; and to employ his own ſkill and bravery to repair their declining fortune in Macedonia. The Athenians liſtened to the ſpecious advice of this turbulent declaimer, who, in the enſuing ſpring, ſailed to the Macedonian coaſt with a fleet of thirty gallies, twelve hundred citizens heavy-armed, a ſquadron of three hundred horſe, and a powerful body of light-armed auxiliaries. The ſurrender of Menda and Torana, whoſe inhabitants were treated with every exceſs of cruelty, encouraged him to attack Amphipolis. With this deſign, having collected his forces at Eion, he waited the arrival of ſome Macedonian troops, promiſed by Perdiccas, who, having quarrelled with the Spartan general, now flattered the hopes of his antagoniſt.

The army of Cleon contained the flower of the Athenian youth, whoſe ardent valour diſdained a precarious dependence on barbarian aid. They accuſed the cowardice of their leader, which was only equalled by his incapacity, and lamented their own hard fate in being ſubjected to the authority of a man ſo unworthy to command them. The impatient temper of an arrogant demagogue was ill fitted to endure theſe ſeditious complaints. He haſtily led his troops before the place, without previouſly examining the ſtrength of the walls, the ſituation of the ground, the number or diſpoſition of the enemy. Braſidas, meanwhile, had taken proper meaſures to avail himſelf of the known imprudence of his adverſary. A conſiderable body of men had been concealed in the woody mountain Cerdylium, which overhangs Amphipolis. The greater part of the army were drawn up ready for action, at the ſeveral gates of the city. Clearidas, who commanded there, had orders to ruſh forth at a given ſignal, while Braſidas in perſon, conducting a ſelect band of intrepid followers, watched the firſt opportunity for attack. The plan, contrived with ſo much ſkill, was executed with equal dexterity and preciſion. Confounded with the rapidity of ſuch an unexpected and complicated charge, the enemy fled in all directions, abandoning their ſhields, and expoſing their naked backs to the ſwords and ſpears of the purſuers. The forces on either ſide amounted to about three thouſand; ſix hundred Athenians fell victims to the folly of Cleon, who, though foremoſt in the flight, was killed by the hand of a Myrcinian targeteer. His death was more than compenſated by the loſs of Braſidas, who received a mortal wound while he advanced to the attack. He was conveyed alive to Amphipolis, and enjoyed the conſolation of his laſt victory, in which only ſeven men had periſhed on the Spartan ſide.

The battle of Amphipolis, fought in the year before Chriſt 421, removed the principal obſtacles to peace. There was not any Spartan general qualified to accompliſh the deſigns of Braſidas. The Athenians, dejected by defeat, and humbled by diſgrace, wanted the bold impoſing eloquence of Cleon, to diſguiſe their weakneſs, and varniſh their misfortunes. With the diſheartened remains of an enfeebled armament, they deſpaired of recovering their Macedonian poſſeſſions; and the greater part returned home, well diſpoſed for an accommodation with the enemy. Theſe diſpoſitions were confirmed by the pacific temper of Nicias, who ſucceeded to the command, and fortunately diſcovered in the moderation of Pleiſtoanax, king of Sparta, a coadjutor extremely ſolicitous to promote his views. During winter, ſeveral friendly conferences were held between the commiſſioners of the two republics; and, towards the commencement of the enſuing ſpring, a treaty of peace, and ſoon afterwards a defenſive alliance, for fifty years, was ratified by the kings and ephori of Sparta on the one ſide, and by the archons and generals of Athens on the other. In conſequence of this negociation, which was intended to comprehend the reſpective allies of the contracting powers, all places and priſoners, taken in the courſe of the war, were to be mutually reſtored; the revolted cities in Macedon were ſpecified by name; and it was regulated that the Athenians ſhould not require from them any higher revenue than that apportioned by the juſtice of Ariſtides.

From the PEACE of NICIAS, to the fall of ATHENS, and TERMINATION of the PELOPONNESIAN WAR.

The turbulent citizens of Corinth have the odium of renewing a war, which their intrigues and animoſities had firſt kindled. Under pretence of having taken an oath never to abandon the Macedonian cities, they declined being parties in the general treaty of peace. Fully bent on war, they haſtened to Argos, in order to animate that republic with the ſame paſſions which rankled in their own breaſts. The Argives wanted neither power nor inclination to enter upon hoſtilities; and the Eleans, long hoſtile to Sparta, eagerly promoted the Argive alliance, which was farther ſtrengthened by the ſpeedy acceſſion of the Macedonian allies. But this democratical aſſociation ſoon acquired an acceſſion ſtill more important, even the republic of Athens. This extraordinary event happened in the year following the negociation between Athens and Sparta, and was effected through the intereſt of Alcibiades. Though he had not yet reached his thirtieth year, the age required by the wiſdom of Solon for being entitled to ſpeak in the aſſembly; yet he poſſeſſed every advantageous circumſtance of birth and fortune, talents natural and acquired, accompliſhments of mind and body, that pleaded an exception in favour of this extraordinary character, which, producing at once flowers and fruit, united with the blooming vivacity of youth the ripened wiſdom of experience. His father, the rich and generous Clinias, derived his extraction from the heroic Ajax, and had diſtinguiſhed his own valour and patriotiſm in the glorious ſcenes of the Perſian war. The tender years of Alcibiades were at firſt committed to the illiberal diſcipline of mercenary preceptors; he became, however, the pupil and favourite of the immortal Socrates. The ſage, whoſe company was courted by his other diſciples, himſelf courted the company of Alcibiades. At the battle of Potidæa he ſaved the life of his pupil; and, in order to gratify the love of military glory which already animated his youthful boſom, the ſage obtained for Alcibiades the prize of valour, which the univerſal conſent of the Athenians thought due to himſelf. At the fatal engagement of Delium, Alcibiades, it is ſaid, had an opportunity of returning the more ſubſtantial favour, by ſaving the life of Socrates; and it may well be ſuppoſed that an interchange of ſuch important favours would ſtraiten the bands of their mutual friendſhip, during which the

powers of reaſon and fancy were directed, with unabating diligence, to improve the underſtanding and excite the virtue of Alcibiades. But this favourite youth laboured under a defect, which could not be compenſated by the higheſt birth, the moſt ſplendid fortune, the nobleſt endowments of mind and body, and even the ineſtimable friendſhip of Socrates. He wanted an honeſt heart; as will appear from the ſubſequent events of the Peloponneſian war.

In compliance with the peace of Nicias, the Spartans withdrew their troops from Amphipolis; but they could reſtore neither that city, nor the neighbouring places in Macedon, to the dominion of Athens. Mutual unwillingneſs, or inability, to comply with the articles of peace, ſowed the ſeeds of animoſity, which found a favourable ſoil in both republics. The Spartan youth wiſhed, by new hoſtilities, to cancel the memory of a war, which had been carried on without profit, and terminated with diſhonour. But the wiſer part perceived that better ſucceſs could not be expected while the Athenians poſſeſſed Pylus. In their eagerneſs to recover that fortreſs, they renewed their alliance with the Thebans, from whom they received Panactum, which they hoped to exchange for Pylus; forgetting, in this tranſaction, an important clauſe in their treaty with Athens, "that neither of the contracting powers ſhould, without mutual communication and conſent, conclude any new alliance." The Thebans rejoiced in the proſpect of embroiling the affairs of Athens and Sparta; and the Corinthians, guided by the ſame hoſtile views, readily concurred with the Thebans, and openly re-entered into the Lacedæmonian confederacy.

Having concluded this negociation, the Spartans, who yielded to none in the art of diſſembling, diſpatched ambaſſadors to Athens, excuſing what they termed an apparent infringement of the treaty, and requeſting that ſtate to accept Panactum in exchange for Pylus. The ſenate of Athens heard their propoſal without ſuſpicion, eſpecially as they declared themſelves inveſted with full powers to embrace every reaſonable plan of preſent accommodation and permanent friendſhip. It now remained for the ambaſſadors to propoſe their demand in the popular aſſembly, which they had reaſon to hope might be deceived ſtill more eaſily than the ſenate. But in this expectation they were diſappointed by a contrivance of Alcibiades, no leſs ſingular than audacious. Having invited the ambaſſadors to an entertainment, during which he talked of their republic with more than his wonted reſpect, and teſtified the utmoſt ſolicitude for the ſucceſs of their negociation, he obſerved to them, that one circumſtance gave him much concern, their having mentioned *full powers*. They muſt beware of repeating that error in the aſſembly, becauſe the natural rapacity of the populace, appriſed of that circumſtance, would not fail to inſiſt on ſuch conditions as the honour of Sparta could not poſſibly comply with. When they appeared next day in the aſſembly, Alcibiades demanded, with a loud voice, the object and extent of their commiſſion. According to the concerted plan, they denied their having full powers. The artful Athenian, affecting a tranſport of indignation, arraigned the audacity and baſeneſs of a people by whom his own unſuſpecting temper had been egregiouſly abuſed. "But yeſterday they declared their full powers in the ſenate; they denied to-day what yeſterday they diſplayed with oſtentation. Such is the uſual duplicity of their republic. It is thus they have reſtored Amphipolis. It is thus, Athenians! they have reſtored the neighbouring towns in Macedon: it is thus they have, indeed, put you in poſſeſſion of Panactum, but with demoliſhed walls; and after concluding an alliance with Athens, ratified by ſolemn oath, moſt treacherouſly and daringly infringed it, by entering into a league with Thebes, your determined and inveterate enemy. Can you ſtill, men of Athens! tamely ſubmit to ſuch indignities? Do you not expel ſuch traitors (pointing to the ambaſſadors) from your preſence, and from your city?" This extraordinary harangue totally diſconcerted the Spartans. Had their confuſion allowed them to extenuate their fault by declaring the truth, the leaſt reflection muſt have ſuggeſted, that Alcibiades would repreſent their ſimple ſtory as a new turn of ingenious artifice. They retired abruptly from the aſſembly; Nicias, and the other partizans of Sparta, ſhared their diſgrace; and the Athenians were ſoon afterwards perſuaded by Alcibiades to embrace the Argive alliance.

The Peloponneſian war was now renewed with double inveteracy: the Spartans entruſted the command to Agis, their king, and all Lacedæmonians of the military age were ſummoned to the field. The dangerous expedient of arming the Helots was alſo adopted on this emergency. The Spartan allies ſhewed unuſual ardour in their cauſe. The Thebans ſent ten thouſand foot, and one thouſand horſemen: the Corinthians two thouſand heavy-armed men; the Megarians almoſt an equal number; the ancient cities of Pallenè and Sicyon in Achaia gave a powerful and ready aſſiſtance; while the ſmall but generous republic of Phlius, whoſe territory, bordering on Argolis, was appointed for the rendezvous of the confederates, took the field with the whole body of citizens and ſlaves capable of bearing arms.

The men of Argos obſerved the approaching ſtorm, and prepared to reſiſt it. The Eleans and Mantineans joined them; and, although the Athenians were long expected in vain, the Argives did not loſe courage, but boldly took the field to oppoſe the invaders. The ſkilful movements of king Agis intercepted their return to Argos; the high grounds above them were occupied by the Corinthians and Phliaſians; their retreat towards Nemea was cut off by the Bœotians and Megarians. A battle ſeemed inevitable in the winding vale of Argos; but it is eaſier to admire, than to explain, the ſubſequent conduct of either army. Whether the Argive commanders were diſconcerted by the judicious poſition of the enemy, or that compaſſion touched their minds on perceiving ſuch numerous bodies of men, chiefly natives of the ſame peninſula, ſprung from the ſame blood, and ſpeaking the ſame language, prepared to embrue their hands in kindred blood; or that, being ſecretly partizans of ariſtocracy, they were unwilling to come to extremities with Sparta; it is certain that, inſtead of joining battle, they entered into a conference with the Lacedæmonian king. In conſequence of this unexpected meaſure, a truce was concluded betwen the chiefs, without the concurrence or knowledge of the officers or troops in either army. The Argives, Thraſyllus and Alciphron, engaged that their countrymen ſhould give complete ſatisfaction for the injuries of which they were accuſed; and Agis, whoſe authority was abſolute in the field, led off the Spartan army. In the mean time Alcibiades was ſent on an embaſſy to Argos. His activity would not fail to promote the popular tumult, in which his own and the Athenian intereſt was concerned. Encouraged by him, the Argives, regardleſs of the truce, attacked the ancient and wealthy city of Orchomenus in Arcadia, which, after a feeble reſiſtance, ſubmitted to their arms; after which they proceeded to lay ſiege to the neighbouring town of Tegea.

The Lacedæmonians heard with indignation of the ſubmiſſion of Orchomenus, the ſiege of Tegea, and the open infraction of the treaty. They had formerly murmured againſt the imprudent or perfidious meaſures of king Agis; but, when they felt the effects of his miſconduct, their reſentment became outrageous. Yet his known talents for war recommended him again to the command of the army; and he aſſured his countrymen, that his future ſervices ſhould ſpeedily wipe off the ſtain from his character. The Spartans, however, firſt elected

elected on this occaſion ten counſellors to attend their kings in the field, to reſtrain their too precipitate reſolves, and control their too abſolute authority. Having taken this precaution, they ſummoned the aſſiſtance of their allies, whoſe ardour to renew hoſtilities was equal to their own. They proceeded with a numerous army to the town of Mantinæa, expecting either to take that place, or to oblige the enemy to defend it by withdrawing their troops from the ſiege of Tegea. The approach of the Argives prevented the ſurpriſe of Mantinæa; and both armies, whoſe ambition or reſentment had been ſo lately diſappointed of an opportunity to diſplay their valour or their fury, eagerly prepared for an engagement. The Spartans exhorted their followers, and each other, "to exert that innate valour which had ever animated their breaſts, and which could receive no additional force from a tedious diſplay of uſeleſs words." Thus ſaying, they marched into action with a ſlow and firm ſtep, regulated by the ſound of the flute, to meet the impetuous onſet of the Argives and Athenians. Above a thouſand of the former, choſen from the flower of the nobleſt youth of Argos, had been employed, ſince the firſt diſſenſions occaſioned by the peace of Nicias, in the conſtant exerciſe of arms, in order to maintain the honourable pretenſions of their country. They behaved with ſignal bravery. The Athenians were not wanting in the ſupport of their ancient fame. The Mantinæans ſtrenuouſly defended every thing moſt dear to them. But the allied army had been conſiderably weakened by the deſertion of the Eleans; and the martial enthuſiaſm of king Agis, ſeconded by the perſevering valour of the Spartans, decided the fortune of the battle. The Athenians and their allies were repulſed, broken, thrown into diſorder, and put to flight. The Spartans, unwilling to irritate their deſpair, did not continue the purſuit, but ſpeedily returned home to celebrate the Carnean feſtival, rejoicing in having reſtored the luſtre of their arms, and recovered their authority in the Peloponneſus. The battle of Mantinæa was fought in the year before Chriſt 418.

The Spartans had now a numerous party in Argos, who, emboldened by the victory of their friends, immediately took arms, aboliſhed the popular government, deſtroyed the partiſans of Athens, abjured the league with that ſtate, and entered into a new confederacy with Sparta. This event happened a few weeks after the engagement, and towards the cloſe of the fourteenth winter of the Peloponneſian war. During the two following years, Argos paid dearly for a moment of tranſient ſplendour, having undergone three bloody revolutions, which ended, as in Corcyra, in favour of the Athenians and democracy. The Athenians alſo reduced the rebellious city of Scionè, in the peninſula of Pallenè, againſt which their reſentment had been provoked to the utmoſt fury, becauſe the Scioneans, though inhabiting a country almoſt ſurrounded by the ſea, had defied the naval power of Athens, and, amidſt the misfortunes of that ſtate, revolted to her enemies. The citizens of Scionè became the victims of a revenge equally cruel and imprudent. The males, above the age of puberty, were put to the ſword; the women and children dragged into ſervitude; the name and honours of the city extinguiſhed for ever; and the territory planted with a new colony, conſiſting chiefly of Platæan exiles. A further and more cruel inſtance of the Peloponneſian war, was fatally experienced, in the year following, by the unfortunate iſland of Melos, one of the largeſt of the Cyclades, lying directly oppoſite to the Cape of Malea, the ſouthern promontory of Laconia. This beautiful iſland, ſixty miles in circumference, and bleſſed with the uſual productions of a fine climate, had early invited the colonization of the Spartans; and had enjoyed political independence for ſeven hundred years. The ſtrength and importance of the capital, which had the ſame name with the iſland, may be underſtood by the armament of thirty ſhips, and near three thouſand ſoldiers, which the Athenians brought againſt it. Before they commenced hoſtilities, either by attacking the city, or by ravaging the country, they ſent ambaſſadors to the Melians, in order to perſuade them to ſurrender, without incurring the danger or the puniſhment of an unequal, and probably a fruitleſs, reſiſtance. The iſlanders, however, true to the Spartan intereſt, refuſed to ſurrender; and the Athenians, irritated by oppoſition, inveſted, without delay, the capital of Melos, which was blocked up for ſeveral months by ſea and land. The beſieged, after ſuffering cruelly by famine, made ſeveral deſperate ſallies, ſeized the Athenian magazines, and deſtroyed part of their works. But towards the end of winter, their reſiſtance was defeated by the vigorous efforts of the enemy, combined with domeſtic treaſon. The males above the age of fourteen ſhared the unhappy fate of the Scioneans. The women and children were ſubjected to perpetual ſervitude, and five hundred new inhabitants, drawn from the neighbouring colonies of Athens, were ſent to occupy the vacant lands, which had been cultivated and adorned for ſeven centuries by the labour of the exterminated Melians.

Previous to the capture of Melos, the Grecian colonies in Sicily had experienced the diſorders of that tumultuous liberty, which had ſo long prevailed in the mother-country. Diſtracted by internal diſcord, and haraſſed by external hoſtility, they had neither leiſure nor inclination to attend to the politics of Greece. The republic of Syracuſe, which was alone capable of interpoſing with effect in the quarrels of that country, imitated, inſtead of oppoſing, the ambition of Athens. Moſt of the Dorian ſettlements had become tributaries to the Syracuſans; and towards the commencement of the Peloponneſian war, that aſpiring people, though torn by domeſtic factions, ſtrenuouſly exerted their valour againſt the Ionic ſettlements of Leontium, Catana, and Naxos. The active fermentation of popular aſſemblies had given the eloquence of a Gorgias to Leontium, and the abilities of an Hermocrates to Syracuſe. In the ſixth year of the Peloponneſian war, Gorgias came to Athens to ſolicit the protection of that republic againſt the unjuſt uſurpation of the Sicilian capital. His arguments convinced the judgment, and the brilliant harmony of his ſtyle tranſported the ſenſibility, of the Athenians. They immediately diſpatched twenty ſhips of war to the aſſiſtance of their Ionic brethren. Two years afterwards a ſimilar requeſt was made, and as readily complied with; and the Athenians ſeemed diſpoſed to engage with vigour in the war, when the foreſight of Hermocrates, alarmed by the intruſion of theſe ambitious ſtrangers, promoted a general peace among the ſtates of Sicily.

But within a few years after this event, war was renewed, Leontium was taken and deſtroyed, its inhabitants reduced to the condition of exiles, and its confederates, the Egeſtæans, cloſely beſieged by the arms of Syracuſe. The unfortunate communities again ſent an embaſſy to Athens, pleading the rights of conſanguinity, and addreſſing not only the paſſions but the intereſt of their powerful allies. This application had the deſired effect: the conqueſt of Syracuſe became a captivating object; and no prudential conſiderations were able to cool the ardour of the Athenian aſſembly, inflamed by the breath of the ambitious Alcibiades, whoſe waking and ſleeping dreams graſped at the wide extent of thoſe diſtant poſſeſſions, which were only to lead the way to the empire of the world. Allured by theſe extravagant proſpects of grandeur, the Athenians, in two ſucceſſive aſſemblies, held at the ſhort interval of five days, agreed to the reſolution of making war againſt Sicily, and of raiſing ſuch naval and military force as ſeemed neceſſary for carrying it on with vigour and ſucceſs.

While

While they ſtill deliberated on the latter object, the virtuous Nicias, who had been named with Alcibiades and Lamachus to the command of the projected armament, omitted nothing that prudence could ſuggeſt, to deter his countrymen from ſuch a dangerous experiment: but the utmoſt force of argument was in vain.

The magnitude of the preparations increaſed the hopes and the ardour of all ranks of men in the republic. The old expected that nothing could reſiſt ſuch a numerous and well-equipped armament. The young eagerly ſeized an occaſion to gratify their curioſity and love of knowledge in a diſtant navigation, and to ſhare the honours of ſuch a glorious enterpriſe. The rich exulted in diſplaying their magnificence; the poor rejoiced in the immediate aſſurance of pay ſufficient to relieve their preſent wants, and in the proſpect of obtaining by their arms the materials of future eaſe and happineſs. Inſtead of finding any difficulty to complete the levies, the great difficulty conſiſted in deciding the preference of valour and merit among thoſe who ſolicited to ſerve; and the whole complement of forces, to be employed by ſea and land, conſiſted of choſen men.

When the appointed day arrived, the whole inhabitants of Athens, whether citizens or ſtrangers, aſſembled early in the Piræus, to admire the greateſt ſpectacle ever beheld in a Grecian harbour. An hundred gallies were adorned with all the ſplendour of naval pomp: the troops deſtined to embark, vied with each other in the elegance of their dreſs and the brightneſs of their arms: the alacrity painted in every face, and the magnificence diſplayed with profuſion in every part of the equipage, repreſented a triumphal ſhow, rather than the ſtern image of war. Yet the ſolidity and greatneſs of the armament proved that it was intended for uſe, not for oſtentation. Amidſt this glare of external pageantry which accompanied the adventurous youth, their friends and kinſmen could not ſuppreſs a few parting tears, when they conſidered the length of the voyage, the dangers of the ſea, and the uncertainty of beholding again the deareſt pledges of their affections. But theſe partial expreſſions of grief were ſpeedily interrupted by the animating ſounds of the trumpet, which iſſued at once from an hundred ſhips, and provoked ſympathetic acclamations from the ſhore. The captains then offered ſolemn prayers to the gods, which were anſwered by correſponding vows from the ſpectators: the cuſtomary libations were poured out in gob lets of gold and ſilver; and, after the triumphant Pæan had been ſung in full chorus, the whole fleet at once ſet ſail, and contended for the prize of naval ſkill and celerity, until they reached the lofty ſhores of Ægina, from whence they enjoyed a proſperous navigation to the rendezvous of their confederates at Corcyra. The fleet conſiſted of an hundred and thirty-four ſhips of war, with a proportional number of tranſports and tenders. The heavy-armed troops, exceeding five thouſand, were attended with a ſufficient body of ſlingers and archers. The army, abundantly provided in every other article, was extremely deficient in horſes, which amounted to no more than thirty. But, at a moderate computation, we may eſtimate the whole military and naval ſtrength, including ſlaves and ſervants, at twenty thouſand men.

With this powerful hoſt, the Athenians arrived at Catana, which at firſt refuſed to admit the ſhips into the harbour, or the troops into the city. But on the reſpectful ſolicitation of Alcibiades, the Cataneans allowed him to addreſs the aſſembly, and propoſe his demands. The artful Athenian tranſported the populace, and even the magiſtrates themſelves, by the charms of his eloquence; the citizens flocked from every quarter, to hear a diſcourſe which was purpoſely protracted for ſeveral hours; the ſoldiers forſook their poſts; and the Athenians, who had prepared to avail themſelves of this negligence, burſt through the unguarded gates, and became maſters of the city. Thoſe of the Cataneans who were the moſt attached to the intereſts of Syracuſe, fortunately eſcaped death by flight. The reſt accepted the proffered friendſhip of the Athenians. This ſucceſs would probably have been followed by the ſurrender of Meſſenè, which Alcibiades had filled with diſtruſt and ſedition. But when the plot was ripe for execution, the man who had contrived, and who alone could conduct it, was diſqualified from ſerving his country. The arrival of the Salaminian galley recalled Alcibiades to Athens, that he might ſtand trial for his life.

It happened, that on the night preceding the intended navigation to Sicily, all the ſtatues of Mercury, which had been erected in the Athenian ſtreets, as the boundaries of different edifices and tenements, were thrown down, and defaced. One only image of the god, of uncommon ſize and beauty, was ſaved from the general wreck; it was afterwards called the ſtatue of Andocides, as it ſtood before the houſe of the Athenian orator of that name. This daring inſult was firſt aſcribed to the artifices of the Corinthians, who, it was ſuppoſed, might employ ſuch an abominable and ſacrilegious contrivance, to deter the Athenian armament from ſailing againſt their colony at Syracuſe. But the enemies of Alcibiades availed themſelves of the levity of his character, to direct the popular ſtorm againſt him. On the evidence of ſlaves, he was accuſed of having treated with rude familiarity other images of the gods; and Theſſalus, a degenerate ſon of the magnanimous Cimon, impeached him of impiety towards the goddeſſes Ceres and Proſerpine, whoſe awful ceremonies he had polluted and profaned.

Alcibiades defended himſelf, with his uſual eloquence and addreſs, againſt the malignity of a charge, unſupported by any adequate evidence. The ſoldiers and ſailors, whoſe eagerneſs already graſped the conqueſt of Sicily, interceded for the deliverance of their commander, whom they regarded as the ſoul of that glorious enterpriſe. A thouſand Argives and Mantinæans, who had enliſted, on this occaſion, under the Athenian banners, declared their unwillingneſs to ſail, unleſs they were accompanied by Alcibiades, whoſe valour and abilities alone had determined them to engage in ſuch an important but dangerous ſervice. This powerful combination in his favour diſappointed the preſent hopes, without diſconcerting the future meaſures, of his enemies. They perceived that, were he brought to an immediate trial, it would be impoſſible to obtain ſentence againſt him; but that, were his perſon and influence removed to a diſtance from Athens, every thing might be hoped from the weakneſs and credulity of the populace. It was therefore determined by this perfidious cabal, that ſuch orators as had hitherto diſguiſed, under the maſk of friendſhip or admiration, their envy and hatred of Alcibiades, ſhould declare in full aſſembly, that "it would be inconſiſtent with the cleareſt dictates of prudence and propriety, to involve in the tedious formalities of a judicial procedure a citizen who had been elected general by the unanimous ſuffrage of his country, and whoſe preſence was eagerly demanded by the affectionate ardour of his troops. The charges againſt him deſerved, doubtleſs, to be ſeriouſly examined; but the preſent was not a proper time for ſuch an inveſtigation, which muſt blunt the courage of his followers, and interrupt the ſervice of the republic. Let him ſail, therefore, for Sicily, and at his return home he will either vindicate his innocence, or ſuffer the puniſhment of his guilt." Alcibiades perceived the poiſon concealed under this affected lenity, and teſtified his reluctance to leave behind him ſuch abundant materials for the malice of informers. But his petition for an immediate trial was rejected by the aſſembly. He therefore ſet ſail, probably flattering

himſelf, that by the glory and ſucceſs of his arms, he ſhould ſilence the clamours, and defeat the machinations, of his accuſers.

Among the perſons who had been ſeized on ſuſpicion, were the crafty and intriguing Timæus, and the profligate and impious Andocides, the ſame whoſe ſtatue of Mercury had eſcaped the general mutilation. The known character of theſe men naturally marked them out as peculiar victims of popular fury. As they were confined in the ſame priſon, they had an opportunity of communicating their apprehenſions, and of contriving means of ſafety. Timæus perſuaded his friend, that it would be weakneſs to die by a falſe accuſation, when he might ſave himſelf by a lie. Andocides turned informer. The priſoners whom he named were baniſhed or put to death; the reſt were ſet at liberty. The abſent, among whom was Alcibiades, were recalled to ſtand trial. But they did not obey the ſummons ſent them by the Salaminian galley. The wanderings and misfortunes of more obſcure names are unknown: Alcibiades eſcaped to Thurium, and afterwards to Argos; and, when he underſtood that the Athenians had ſet a price on his head, he finally took refuge in Sparta; where his active genius ſeized the firſt opportunity to adviſe and to promote thoſe fatal meaſures, which, while they gratified his private reſentment, occaſioned the ruin of his country.

The removal of Alcibiades ſoon appeared in the languid operations of the Athenian armament. The cautious timidity of Nicias, ſupported by wealth, eloquence, and authority, gained an abſolute aſcendant over the more warlike and enterpriſing character of Lamachus, whoſe poverty expoſed him to contempt. Inſtead of making a bold impreſſion on Selinus or Syracuſe, Nicias contented himſelf with taking poſſeſſion of the inconſiderable colony of Hyccara; and of waſting the greateſt part of the ſummer in the inactive quarters of Naxos and Catana. He, however, determined to gratify the inclination of his troops, by the vigour of his winter campaign. The conqueſt of Syracuſe, againſt which he intended to lead them, might well excite the emulation of the combatants, ſince that powerful city formed the main obſtacle to their ambition, and the principal bulwark not only of Sicily, but of the Italian and African ſhores. Yet the dilatory operations of Nicias not only removed the terror and trepidation of the Syracuſans, but inſpired them with unuſual firmneſs. They requeſted their generals to lead them to Catana, that they might attack the hoſtile camp. Their cavalry haraſſed the Athenians by frequent incurſions, intercepted their convoys, deſtroyed their advanced poſts, and even proceeded ſo near to the main body, that they were diſtinctly heard demanding with loud inſults, Whether thoſe boaſted lords of Greece had left their native country, that they might form a precarious ſettlement at the foot of Mount Ætna?

Provoked by theſe indignities, and excited by the impatient reſentment of his own troops, Nicias was ſtill reſtrained from an open attempt againſt Syracuſe by the difficulties attending that enterpriſe. The diſtance between Catana and the Sicilian capital was more than thirty miles; but, after the moſt proſperous voyage, the Athenians could not expect, without extreme danger, to make a deſcent on the fortified coaſt of a powerful and vigilant enemy. If they determined to march by land, they muſt be haraſſed by the numerous cavalry of Syracuſe, which actually watched their motions, and with whoſe activity, in a broken and intricate country, the ſtrength of heavy-armed troops was exceedingly ill qualified to contend. To avoid both inconveniences, Nicias employed a ſtratagem. A citizen of Catana appeared in Syracuſe as a deſerter from his native city; the unhappy fate of which, in being ſubjected to the licentious diſorder of the Athenians, he lamented with perfidious tears, and with the plaintive accents of well-diſſembled ſorrow. "*He* was not the only man who bewailed, with filial compaſſion, the misfortunes and ignominy of his country. A numerous body of Cataneans, whoſe reſentment was repreſſed by fear, longed to take up arms, that they might repel the tyranny of the invaders. Nor could the deſign fail of ſucceſs, if Syracuſe ſhould ſecond their generous ardour. The Athenians, ſo liberally endowed with courage and ambition, were deſtitute of wiſdom and of diſcipline: their poſts were forſaken, their ſhips unguarded; they diſdained the duties of the camp, and indulged in the pleaſures of the city. On an appointed day it would be eaſy for the Syracuſans, aſſiſted by the conſpirators of Catana, to attack them unprepared, to demoliſh their encampment, and to burn their fleet." This daring propoſal well correſponded with the keen revenge which animated the inhabitants of Syracuſe. The day was named; the plan of the enterpriſe was concerted, and the treacherous Catanean returned home to revive the hopes of his pretended aſſociates.

The ſucceſs of this intrigue gave the utmoſt ſatisfaction to Nicias; and, after twelve hours ſail, the Athenian fleet arrived in the great harbour of Syracuſe, diſembarked their troops, and fortified a camp without the weſtern wall, near to the celebrated temple of Olympian Jupiter. Meanwhile the cavalry of Syracuſe, having proceeded to the walls of Catana, had diſcovered, to their infinite regret, the departure of the Athenians. The unwelcome intelligence was conveyed, with the utmoſt expedition, to the infantry, who immediately marched back to protect Syracuſe. The rapid return of the warlike youth reſtored the courage of the aged Syracuſans. They were joined by the forces of Gela, Selinus, and Camarina; and it was determined, without loſs of time, to attack the hoſtile encampment.

Only a few days elapſed before the Athenians gave them a fairer opportunity of revenge. The two armies prepared to engage, reſpectively inflamed by reſentment and ambition; the one formidable in courage and numbers, the other elated by ſuperior diſcipline and habitual victory. The Syracuſan generals drew up their troops ſixteen, and the Athenians only eight, deep: but the latter had, in their camp, a body of reſerve, which was kept ready for action on the firſt ſignal. Nicias led on his troops to the enemy, who did not decline the engagement. The light-armed archers ſkirmiſhed in the van: the prieſts brought forth the accuſtomed ſacrifices: the trumpets ſummoned for a general charge. The attack was begun with fury, and continued with perſeverance for ſeveral hours. Both ſides were animated by every principle that could inſpire the utmoſt vigour of exertion; and victory was ſtill doubtful, when a tempeſt ſuddenly aroſe, accompanied with unuſual peals of thunder. This event, which little affected the Athenians, confounded the unexperienced credulity of the enemy, who were broken and put to flight. Nicias reſtrained the eagerneſs of his men in the purſuit, leſt they ſhould be expoſed to danger from a body of twelve hundred Syracuſan cavalry, who had not engaged in the battle, but who impatiently watched an opportunity to aſſault the diſordered phalanx. The Syracuſans eſcaped to their city, and the Athenians returned their camp. In ſuch an obſtinate conflict the vanquiſhed loſt two hundred and ſixty, the victors only fifty, men. The voyage, the encampment, and the battle, employed the dangerous activity, and gratified the impetuous ardour, of the Athenians, but did not facilitate the conqueſt of Syracuſe. Without more powerful preparations, Nicias, deſpaired of taking the place, either by aſſault, or by a regular ſiege. Soon after his victory he returned with the whole armament to Naxos and Catana; a meaſure which ſufficiently proves that the late enterpriſe had been undertaken, not in conſequence of any permanent ſyſtem of operations formed by the general, but in compliance with the ungovernable temper

temper of his troops, whoſe ideas of military ſubordination were confined to the field of battle.

Meanwhile Nicias ſolicited and obtained freſh reinforcements from Athens. In addition to his original force, he had collected a body of ſix hundred cavalry, and the ſum of four hundred talents; and, in the eighteenth ſummer of the war, which was in the year before Chriſt 414, the activity of the troops and workmen had completed all neceſſary preparations for renewing the ſiege of Syracuſe. The Athenian armament enjoyed a proſperous voyage to the northern harbour of Trogilè, and the troops were no ſooner diſembarked than they ſeized an opportunity of ſignaliſing their valour againſt a body of ſeven hundred men, who marched to reinforce the garriſon of Labdalus, a fortreſs ſituate on the higheſt of the mountains which overlook the city. Three hundred Syracuſans were killed in the purſuit; the reſt took refuge behind their walls; and the caſtle of Labdalus was taken, and ſtrongly guarded by the victors. The plan which Nicias adopted for conquering the city, was to draw a wall on either ſide from the neighbourhood of Labdalus, towards the port of Trogilè on the north, and towards the gulph, called the Great Harbour, on the ſouth. When theſe circumvallations had ſurrounded the place by land, he expected, by his numerous fleet, to block up the wide extent of the Syracuſan harbours. The whole ſtrength of the Athenian armament was employed in the former operations; and, as all neceſſary materials had been provided with due attention, the works roſe with a rapidity which ſurpriſed and terrified the beſieged. Their former as well as their recent defeat deterred them from oppoſing the enemy in a general engagement; but the advice of Hermocrates perſuaded them to raiſe walls which might traverſe and interrupt thoſe of the Athenians. The imminent danger urged the activity of the workmen; the hoſtile bulwarks approached each other; frequent ſkirmiſhes took place, in one of which the brave Lamachus unfortunately fell a victim to his raſh valour; but the Athenian troops maintained their uſual ſuperiority, and the Syracuſans prepared to capitulate.

But, while the aſſembly were deliberating on the terms, Gongylus arrived from Carthage, announcing a ſpeedy and effectual relief to the beſieged city. He acquainted the Syracuſans that his countrymen had fitted out a conſiderable fleet, the arrival of which might be expected every hour. The Lacedæmonians alſo had ſent a ſmall ſquadron, and the whole armament was conducted by the Spartan Gylippus, an officer of tried valour and ability. While the deſponding citizens of Syracuſe liſtened to this intelligence with pleaſing aſtoniſhment, a meſſenger arrived by land from Gylippus himſelf. That experienced commander, inſtead of purſuing a direct courſe to Sicily, which might have been intercepted by the Athenian fleet, had landed on the weſtern coaſt of the iſland. The name of a Spartan general determined the wavering irreſolution of the Sicilians. The troops of Himera, Selinus, and Gela, flocked to his ſtandard; and he approached Syracuſe on the ſide of Epipolè, where the line of contravallation was ſtill unfiniſhed, with a body of ſeveral thouſand men. The moſt courageous of the citizens ſallied forth to meet their protector; their junction was effected; the ardour of the troops was kindled into enthuſiaſm; they ſurpriſed ſeveral Athenian poſts; and after a vigorous ſally, deprived the enemy of the ſtrong caſtle of Labdalus. Nicias, perceiving that the intereſt of the Athenians in Sicily would be continually weakened by delay, wiſhed to bring the fortune of the war to the deciſion of a battle. Nor did Gylippus decline the engagement. The firſt action was unfavourable to the Syracuſans, who had been imprudently poſted in the defiles between their own and the enemy's walls, which rendered of no avail their ſuperiority in cavalry and archers. The magnanimity of Gylippus acknowledged this error, for which he completely atoned by his judicious conduct in the ſucceeding engagement. His forces were drawn up in a more ſpacious ground. The pikemen received the ſhock of the enemy's front. The horſes and light-armed troops aſſailed and haraſſed their undefended flanks. The Athenians were thrown into diſorder, repulſed and purſued to their camp with conſiderable loſs, and with irreparable diſgrace.

Nicias, whoſe ſenſibility deeply felt the public diſtreſs, wrote a moſt deſponding letter to the Athenians. He honeſtly deſcribed, and lamented, the misfortunes and diſorders of his army. The ſlaves deſerted in great numbers; the mercenary troops, who fought only for pay and ſubſiſtence, preferred the more ſecure and lucrative ſervice of Syracuſe; even the Athenian citizens, diſguſted with the unexpected length and intolerable hardſhips of the war, abandoned the care of the gallies to unexperienced hands. He therefore exhorted the aſſembly, either to call them home without delay, or to ſend immediately a ſecond armament, more powerful than the firſt.

Gylippus and Hermocrates were well acquainted with the diſtreſs of the beſiegers, and therefore determined to preſs the enemy on every ſide, and at once to aſſail them by ſea and land. The principal ſquadrons of Syracuſe lay in the harbour of Ortygia, ſeparated, by an iſland of the ſame name, from the ſtation of the Athenian fleet. While Hermocrates ſailed forth with eighty gallies, to venture a naval engagement, Gylippus attacked the hoſtile fortifications at Plemmyrium, a promontory oppoſite to Ortygia, which confined the entrance of the Great Harbour. The defeat of the Syracuſans at ſea, whereby they loſt fourteen veſſels, was balanced by their victory at land, in which they took three fortreſſes, containing a large quantity of military and naval ſtores, and a conſiderable ſum of money. In ſome ſubſequent actions, which ſcarcely deſerve the name of battles, their fleet was ſtill unſucceſsful; but as they engaged with great caution, and found every where a ſecure retreat on a friendly ſhore, their loſs was extremely inconſiderable. The want of ſucceſs, in their firſt attempt, did not abate their reſolution to gain the command at ſea. The hopes of defending their country ſharpened their invention, and animated their activity. By unexampled aſſiduity, therefore, the Syracuſans at length prevailed in a naval engagement, which was fought in the Great Harbour. Seven Athenian ſhips were ſunk, many more were diſabled, and Nicias ſaved the remains of his ſhattered armament by retiring behind a line of merchantmen and tranſports, from the maſts of which had been ſuſpended huge maſſes of lead, ſufficient to cruſh, by their falling weight, the ſtouteſt gallies of antiquity. This unexpected obſtacle arreſted the progreſs of the victors; but the advantages already obtained elevated them with the higheſt hopes, and reduced the enemy to deſpair.

But the Athenians ſuſtained misfortunes at home ſtill more dreadful. Alcibiades, now an exile, took a decided part againſt his native city. He ſuggeſted to the Spartan king, that the town of Decelia was ſituated on the Attic frontier, at an equal diſtance of fifteen miles from Thebes and Athens. This place, which commanded an extenſive and fertile plain, might be ſurpriſed and fortified by the Spartans, who, inſtead of haraſſing their foes by annual excurſions, might thus infeſt them by a continual war. This advice was adopted in the commencement of the year 413 before Chriſt, and the warlike Agis led a powerful army into Attica. The defenceleſs inhabitants fled before his arms; but inſtead of purſuing them into the heart of the country, he ſtopped ſhort at Decelia. As all neceſſary materials had been provided in great abundance, the place was fortified as ſoon as it was taken; and now the walls of Decelia, which might be diſtinctly ſeen acroſs the intermediate plain,

plain, bade defiance to thoſe of Athens. Theſe domeſtic calamities did not, however, prevent the moſt vigorous exertions abroad. Twenty gallies, ſtationed at Naupactus, watched the motions of the Peloponneſian fleet deſtined to the aſſiſtance of Syracuſe: thirty carried on the war in Macedonia, to reduce the rebellion of Amphipolis; a conſiderable ſquadron collected tribute, and levied ſoldiers, in the colonies of Aſia; another, ſtill more powerful, ravaged the coaſt of Peloponneſus. Never did any kingdom or republic equal the magnanimity of Athens; never, in ancient or modern times, did the courage of any ſtate entertain an ambition ſo far ſuperior to its power, or exert efforts ſo diſproportionate to its ſtrength. Amidſt the difficulties and dangers which encompaſſed them on every ſide, the Athenians perſiſted in the ſiege of Syracuſe, a city little inferior to their own; and, undaunted by the actual devaſtation of their country, unterrified by the menaced aſſault of their walls, they ſent, without delay, ſuch a reinforcement into Sicily, as afforded the moſt promiſing hopes of ſucceſs to Nicias.

The Syracuſans had ſcarcely time to rejoice at their victory, when a numerous and formidable armament appeared on the Sicilian coaſt. The Syracuſans employed not unavailing efforts to check the progreſs, or to hinder the approach, of the hoſtile armament; which, beſides innumerable foreign veſſels and tranſports, conſiſted of ſeventy-three Athenian gallies, commanded by the experienced valour of Demoſthenes and Eurymedon. The pikemen on-board exceeded five thouſand; the light-armed troops were nearly as numerous; and, including the rowers, workmen, and attendants, the whole amounted to above twenty thouſand men. The misfortunes hitherto attending the operations in Sicily had lowered the character of Nicias; and this circumſtance, as well as the ſuperior abilities of Demoſthenes, entitled him to aſſume the principal authority in their deliberations. His advice, which Eurymedon highly approved, was clear and ſimple. "They ought to avail themſelves of the alarm which the unexpected arrival of ſuch a powerful reinforcement had ſpread among the enemy; and inſtead of ſubmitting to the tedious formalities of a ſiege, at once aſſault the walls of Syracuſe. He truſted, by the valour of his troops, to obtain in one day the valuable reward of long and ſevere labours. But if the gods had otherwiſe determined, it would be time to deſiſt from an enterpriſe, in which delay was equal to defeat, and to employ the bravery of the Athenian youth in repelling the invaders of their country."

Demoſthenes choſe the firſt hour of a moonſhine night, to proceed with the flower of the army to ſeize the fortreſſes in Epipolè. The march was performed with ſucceſsful celerity; the outpoſts were ſurpriſed; the guards put to the ſword; and three ſeparate encampments, of the Syracuſans, the Sicilians, and allies, formed a feeble oppoſition to the Athenian ardour. Meanwhile, the vigilant activity of Gylippus had aſſembled the whole force of Syracuſe. At the approach of the enemy his vanguard retired. The Athenians were decoyed within the intricate windings of the walls, and their irregular fury was firſt checked by the firmneſs of a Theban phalanx. A reſiſtance ſo ſudden and unexpected might alone have been deciſive; but other circumſtances were adverſe to the Athenians: their foremoſt ranks were repelled; and, as they retreated to the main body, encountered the advancing Argives and Corcyreans, who ſinging the Pœan in their Doric dialect and accent, were unfortunately taken for enemies. Fear, and then rage, ſeized the Athenians, who, thinking themſelves encompaſſed on all ſides, determined to force their way, and committed much bloodſhed among their allies, before the miſtake could be diſcovered. To prevent the repetition of this dreadful error, their ſcattered bands were obliged at every moment to demand the watch-word, which was at length betrayed to their adverſaries. The conſequence of this was doubly fatal. At every rencounter the ſilent Athenians were ſlaughtered without mercy, while the enemy, who knew their watch-word, might at pleaſure join or decline the battle, and eaſily oppreſs their weakneſs, or elude their ſtrength. The terror and confuſion increaſed; the rout became general. Gylippus purſued in good order with his victorious troops. Several thouſands were left dead or wounded on the ſcene of action; and in the morning the greater part of the ſtragglers were intercepted and cut off by the Syracuſan cavalry.

This unexpected diſaſter ſuſpended the operations of the ſiege. The Athenian generals ſpent the time in fruitleſs deliberations concerning their future meaſures; and while the army lay encamped on the marſhy and unhealthy banks of the Anapus, a general ſickneſs broke out in the camp. Demoſthenes urged this calamity as a new reaſon for haſtening their departure, while it was yet poſſible to croſs the Ionian ſea, without riſking the danger of a winter's tempeſt. But Nicias diſſuaded the deſign of leaving Sicily, until they ſhould be warranted to take this important ſtep by the poſitive authority of the republic. The colleagues of Nicias were confounded with the firmneſs of an oppoſition ſo unlike the flexible timidity of his ordinary character, and ſo inconſiſtent with the ſentiments which he had often expreſſed concerning the Sicilian expedition. They imagined that he might rely on ſome more important ground of confidence, which his caution was unwilling to explain; they ſubmitted therefore to his opinion, an opinion equally fatal to himſelf and to them, and to the armament which they commanded.

Gylippus, in order to follow up his victory, drew a powerful reinforcement from the Sicilian cities; and the tranſports, ſo long expected from Peloponneſus, now arrived in the harbour of Ortygia. Theſe powerful auxiliaries increaſed their eagerneſs to attack the enemy again by ſea and land. During three days there was a perpetual ſucceſſion of military and naval exploits. On the firſt day fortune hung in ſuſpenſe; the ſecond deprived the Athenians of a conſiderable ſquadron commanded by Eurymedon; and this misfortune was embittered, on the third, by the loſs of eighteen gallies, with their crews. It was now reſolved by Hermocrates to throw a chain of veſſels acroſs the mouth of the Great Harbour, about a mile in breadth. This point was accompliſhed before Nicias, totally occupied by other objects, attempted to interrupt it. The Athenian gallies were refitted, and again prepared, to the number of a hundred and ten, to riſk the event of another battle. As they had ſuffered greatly, on former occaſions, by the ſolidity of the Syracuſan prows, Nicias provided them with grappling-irons, fitted to prevent the recoil of their oppoſents, and the repetition of the hoſtile ſtroke. The decks were crowded with armed men, and the contrivance to which the enemy had hitherto chiefly owed their ſucceſs, of introducing the firmneſs and ſtability of a military into a naval engagement, was adopted in turn by the Athenians. When the fleet was ready, Nicias recalled the troops from the various poſts ſtill occupied by their arms, and formed them into one camp on the ſhore, where, on the day of battle, their ranks might be extended as widely as the vicinity of the Syracuſan ramparts could ſafely permit; that a ſpacious retreat might be ſecured to the Athenian ſhips, if perſecuted by their uſual bad fortune; in which fatal alternative, nothing remained but to retire by land with the miſerable remnant of the army.

With a cheerful and magnanimous firmneſs, he removed the dejection of the Athenians, exhorting them, before they embarked, to call forth every exertion of ſkill and courage on this important occaſion. When the Syracuſans were appriſed of the deſigns of the enemy, they haſtened to the defence of the bar which had been thrown acroſs the entrance of the harbour. Gylippus, after

after animating the ſailors to deeds of valour, returned to take the conduct of the land forces, leaving Sicanus, Agatharcus, and Pythen, the two firſt to command the wings, and the laſt, a citizen of Corinth, to command the centre, of the Syracuſan fleet, which fell ſhort of the Athenian by the number of twenty gallies.

Nicias, after again cheering his wearied troops, returned to the camp with an enfeebled body and an anxious mind, committing the laſt hope of the republic to the active valour of Demoſthenes, Eudemus, and Menander. The firſt impreſſion of the Athenians was irreſiſtible; they burſt through the paſſage of the bar, and repelled the ſquadrons on either ſide. As the entrance widened, the Syracuſans, in their turn, ruſhed into the harbour, which was more favourable than the open ſea to their mode of fighting. Thither the foremoſt of the Athenians returned, either compelled by ſuperior force, or that they might aſſiſt their companions. The engagement became general in the harbour's mouth; and in this narrow ſpace two hundred gallies fought, during the greateſt part of the day, with an obſtinate and perſevering valour. The battle was not long confined to the ſhock of adverſe prows, and to the diſtant hoſtility of darts and arrows. The neareſt veſſels grappled, and cloſed with each other, and their decks were ſoon covered with blood. While the heavy-armed troops boarded the enemy's ſhips, they left their own expoſed to a ſimilar misfortune; the fleets were divided into maſſive cluſters of adhering gallies; and the confuſion of their mingled ſhouts overpowered the voice of authority; the Athenians exhorting, not to abandon an element on which their republic had ever acquired victory and glory, for the dangerous protection of an hoſtile ſhore; and the Syracuſans encouraging each other not to fly from an enemy, whoſe weakneſs or cowardice had long meditated flight.

The ſingular and tremendous ſpectacle of an engagement more fierce and obſtinate than any that had ever been beheld in the Grecian ſeas, reſtrained the activity, and totally ſuſpended the powers, of the numerous and adverſe battalions which encircled the coaſt. The ſpectators and the actors were equally intereſted in the important ſcene; but the former, the current of whoſe ſenſibility was undiverted by any exertion of mind or body, felt more deeply, and expreſſed more forcibly, the various emotions by which they were agitated. Hope, fear, the ſhouts of victory, the ſhrieks of deſpair, the anxious ſolicitude of doubtful ſucceſs, animated the countenances, the voice, and the geſture, of the Athenians, whoſe whole reliance centered in their fleet. When at length their gallies evidently gave way on every ſide, the contraſt of alternate, and the rapid tumult of ſucceſſive, paſſions, ſubſided in a melancholy calm. This dreadful pauſe of aſtoniſhment and terror was followed by the diſordered trepidation of flight and fear: many eſcaped to the camp: others ran, uncertain whither to direct their ſteps: while Nicias, with a ſmall but undiſmayed band, remained on ſhore, to protect the landing of their unfortunate gallies. In this well-fought battle, the vanquiſhed had loſt fifty, and the victors forty, veſſels.

On the third morning after the battle, the Athenians broke up their camp. Forty thouſand men, of whom many were afflicted with wounds and diſeaſe, and all exhauſted by fatigue, and dejected by calamity, exhibited the appearance, not of a flying army, but of a great and populous community, driven from their ancient habitations by the cruel vengeance of a conqueror. Inſtead of leading the army towards Naxos and Catana, in which direction there was reaſon to apprehend many ſecret ambuſhes of the enemy, he conducted them by the weſtern route towards Gela and Camerina; expecting, by this meaſure, to find proviſions in greater plenty, as well as to elude the ſnares of the Syracuſans. The troops were then divided into two ſquares, as the moſt ſecure and capacious arrangement. Nicias led the van; Demoſthenes conducted the rear; the baggage, and unarmed multitude, occupied the centre. In this order of march they paſſed the river Anapus, the ford of which was feebly diſputed by an inconſiderable guard; and having proceeded the firſt day only five miles, they encamped in the evening on a riſing ground, after being much haraſſed during the latter part of their journey by the Syracuſan cavalry and archers, who galled them at a diſtance, intercepted the ſtragglers, and avoided, by a ſeaſonable retreat, to commit the ſecurity of their own fortune with the dangerous deſpair of the Athenians. Next day, having marched only twenty furlongs, they reached a ſpacious plain, the convenience of which invited them to repoſe; eſpecially as they needed a ſupply of water and proviſions, which might be eaſily obtained from the ſurrounding country.

Before this time, the enemy were appriſed of their line of march; and, in order to interrupt it, they ſent a numerous detachment to fortify the mountain of Acræum. It was diſtant only a few miles from the Athenian encampment. In vain the Athenians attempted, on three ſucceſſive days, to force the paſſage. They were repelled with loſs in every new attack, which became more feeble than the preceding. In the evening after the laſt unſucceſsful conteſt, the condition of the Athenians was peculiarly deplorable. The numbers of the wounded had been increaſed by theſe fruitleſs attempts to paſs the mountain; the adjacent territory could no longer ſupply them with the neceſſaries of life; and they muſt be compelled, after all their hardſhips and fatigues, to make a long circuit by the ſea-ſhore, if they expected to reach, in ſafety, the places of their reſpective deſtination. Even this reſolution, (for there was no alternative,) was recommended by Nicias, who, to conceal his deſign from the enemy, cauſed innumerable fires to be lighted in every part of the camp. The troops then marched out under cover of the night, and in the ſame order which they had hitherto obſerved. But they had not proceeded far in this nocturnal expedition, when the obſcurity of the ſkies, the deceitful tracks of an unknown and hoſtile country, filled the timid or unfortunate with imaginary terrors. Their panic was ſpeedily communicated to thoſe around them; and Demoſthenes, with above one-half of his diviſion, fatally miſtook the road, and quitted, never more to rejoin, the reſt of the army.

The ſcouts of Gylippus immediately brought intelligence of this important event, which furniſhed an opportunity to attack the divided ſtrength of the Athenians. His ſuperior knowledge of the country enabled him, by the celerity of his march, to intercept the ſmaller diviſion, and to ſurround them on every ſide, in the difficult and intricate defiles which led to the ford of the Erinios. There he aſſaulted them with impunity, during a whole day, with darts, arrows, and javelins. When the meaſure of their ſufferings was complete, he proclaimed towards the evening, by the ſound of the trumpet, and with the loud voice of the herald, freedom, forgiveneſs, and protection, to all who ſhould deſert and abandon the bad fortune of their leaders; an offer which was accepted by the troops of ſeveral Aſiatic iſlands, and other dependent and tributary countries. At length he entered into a treaty with Demoſthenes, whoſe ſoldiers laid down their arms, and delivered their money, on condition that they ſhould not ſuffer death, impriſonment, or famine. Notwithſtanding the number of the deſerters and of the ſlain, the remainder ſtill amounted to ſix thouſand, who were ſent to Syracuſe with their captive general, under a powerful and vigilant eſcort, while the activity of Gylippus followed the flying battalions of the enemy, which had been conducted by Nicias to the diſtance of twenty miles, towards the banks of the Aſſinaros. The Syracuſans overtook the rear before the van could arrive at the

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lofty margin of this rapid ſtream; and a herald was ſent to Nicias, exhorting him to imitate the example of his colleague, and to ſurrender, without farther bloodſhed, to the irreſiſtible valour of his victorious purſuers. Nicias diſbelieved, or affected to diſbelieve, the report; but when a confidential meſſenger, whom he was allowed to diſpatch for information, brought certain intelligence of the ſurrender and diſgrace of Demoſthenes, he alſo condeſcended to propoſe terms, in the name of the Athenians, engaging, on the immediate ceſſation of hoſtilities, to reimburſe the magiſtrates of Syracuſe for the expence of the war, and to deliver Athenian hoſtages until the debt ſhould be liquidated.

Theſe terms were rejected by the Syracuſans with diſdain; and Gylippus, having occupied the moſt advantageous poſts on every ſide, attacked the army of Nicias with the ſame mode of warfare, which, two days before, had proved ſo deſtructive to their unfortunate companions. During the whole day they bore, with extraordinary patience, the hoſtile aſſault, ſtill expecting, under cover of the night, to eſcape the cruel vigilance of the enemy. But that hope was vain: Gylippus perceived their departure; and although three hundred men of determined courage gallantly broke through the guards, and effected their eſcape, the reſt were no ſooner diſcovered than they returned to their former ſtation. Yet the return of the morning brought back their courage. They marched towards the river, miſerably galled by the hoſtile archers and cavalry. Their diſtreſs was moſt lamentable and incurable: yet hope did not totally forſake them; they ſtill entertained an idea that their ſufferings would end, could they but reach the oppoſite banks of the neighbouring river. The deſire of aſſuaging their thirſt encouraged this bold deſign. They ruſhed into the rapidity of the ſtream; the purſuing Syracuſans, who had occupied the rocky banks, deſtroying them with innumerable volleys of miſſile weapons. In the Aſſinaros, many were borne down the ſtream. At length the weight of their numbers reſiſted the violence of the torrent; but a new horror preſented itſelf to the eyes of Nicias. His ſoldiers turned their fury againſt each other, diſputing, with the point of the ſword, the unwholeſome draughts of the turbid current. This ſpectacle melted the firmneſs of his ſoul. He ſurrendered to Gylippus, and aſked quarter for the miſerable remnant of his troops. Before the commands of the Lacedæmonian general could pervade the army, many of the ſoldiers had, according to the barbarous practice of the age, ſeized their priſoners and ſlaves; ſo that the Athenian captives were afterwards diſtributed among ſeveral communities of Sicily. The reſt, upon laying down their arms, were entitled to the protection of Gylippus; who, after ſending proper detachments to intercept and collect the ſtragglers, returned in triumph to Syracuſe, with the unfading trophies of his valour and conduct.

Nicias had little to expect from the humanity of a proud and victorious Spartan; but Demoſthenes might naturally flatter himſelf with the hope of juſtice. He urged with energy, but urged in vain, the obſervance of the capitulation which had been ratified in due form, on the faith of which he had ſurrendered himſelf and the troops entruſted to his command. The public priſoners, conducted ſucceſſively to Syracuſe, and exceeding together the number of ſeven thouſand, were treated with the ſame inhuman cruelty. They were univerſally condemned to labour in the mines and quarries of Sicily: their whole ſuſtenance was bread and water: they ſuffered alternately the ardours of a ſcorching ſun, and the chilling damps of autumn. For ſeventy days and nights they languiſhed in this dreadful captivity, during which, the diſeaſes incident to their manner of life were rendered infectious by the ſtench of the dead bodies, which corrupted the purity of the ſurrounding air. At length an eternal ſeparation was made between thoſe who ſhould enjoy the happier lot of being ſold as ſlaves into diſtant lands, and thoſe who ſhould for ever be confined to their terrible dungeons. The Athenians, with ſuch Italians and Sicilians as had embraced their cauſe, were reſerved for the latter doom. Their generals, Nicias and Demoſthenes, had not lived to behold this melancholy hour. Gylippus would have ſpared their lives, not from any motives of humanity and eſteem, but that his joyous return to Sparta might have been graced by their preſence. But the reſentment of the Syracuſans loudly demanded the immediate execution of the captive generals. The Athenian ſtate juſtly regretted the loſs of Demoſthenes, a gallant and enterpriſing commander; but poſterity will for ever lament the fate of Nicias, the moſt pious, the moſt virtuous, and the moſt unfortunate, man of the age in which he lived.

Amidſt this dreadful ſcene of cruelty, we muſt not omit to mention one ſingular example of humanity, which broke forth like a meteor in the gloom of a nocturnal tempeſt. The Syracuſans, who could puniſh their helpleſs captives with ſuch unrelenting ſeverity, had often melted at the affecting ſtrains of Euripides, an Athenian poet, who was regarded as the moſt tender and pathetic of all the tragic writers. The pleaſure which the Syracuſans had derived from his inimitable poetry, made them long to hear it rehearſed by the flexible voices and harmonious pronunciation of the Athenians, ſo unlike, and ſo ſuperior, to the rudeneſs of their own Doric dialect. They deſired their captives to repeat the plaintive ſcenes of their favourite bard. The captives obeyed; and affecting to repreſent the woes of ancient kings and heroes, moſt faithfully expreſſed their own. Their taſte and ſenſibility endeared them to the Syracuſans, who releaſed their bonds, received them with kindneſs into their families, and, after treating them with all the honourable diſtinctions of ancient hoſpitality, reſtored them to their afflicted country, as a ſmall but precious wreck of the moſt formidable armament that had ever ſailed from a Grecian harbour. At their return to Athens, the grateful captives walked in ſolemn proceſſion to the houſe of Euripides, whom they hailed and thanked as their deliverer from ſlavery and death.

The diſtreſs of the Athenian nation was too great to admit the comfort of ſympathy; yet with one mind and reſolution they determined to brave the ſeverity of fortune, and to withſtand the aſſaults of their enemies. In the year following the unfortunate expedition into Sicily, the Spartans prepared a fleet of an hundred ſail, deſtined to tempt and encourage the revolt of the Aſiatic ſubjects of the Athenians. The iſlands of Chios and Leſbos, as well as the city of Erythræ, at once ſolicited the Spartans to join them with their naval force. Their requeſt was enforced by the Perſian general Tiſſaphernes, who promiſed to pay the ſailors, and to victual the ſhips. At the ſame time, an ambaſſador from Cyzicus, entreated the Lacedæmonian armament to ſail to the capacious harbours which had long formed the wealth of that city, and to expel the Athenian garriſons, to whom the Cyzicenes and their neighbours reluctantly ſubmitted. The Perſian general Pharnabazus ſeconded their propoſal; offered the ſame conditions with Tiſſaphernes; and ſo little harmony ſubſiſted between the two lieutenants of the great king, that each urged his particular demand with a total unconcern about the important intereſts of their common maſter. The Lacedæmonians held many conſultations among themſelves, and with their allies; heſitated, deliberated, reſolved, and changed their reſolution; and at length were perſuaded by Alcibiades to prefer the overture of Tiſſaphernes and the Ionians, to that of the Helleſpontines and Pharnabazus.

The delay occaſioned by this deliberation was the principal, but not the only, cauſe which hindered the allies from acting expeditiouſly, at a time when expedi-

tion was of the utmoſt importance. A variety of private views diverted them from the general aim of the confederacy; and the ſeaſon was far advanced before the Corinthians, who had been diſtinguiſhed by exceſs of antipathy to Athens, were prepared to ſail. They determined, from pride perhaps, as well as ſuperſtition, to celebrate, before leaving their harbours, the Iſthmian games conſecrated to Neptune, the third of the Grecian feſtivals in point of dignity and ſplendour. From this ceremony the Athenians, though enemies, were not excluded by the Corinthian magiſtrates; nor did they exclude themſelves, though oppreſſed by the weight of paſt misfortunes, and totally occupied by the thoughts of providing againſt future evils. While their repreſentatives ſhared the amuſements of this ſacred ſpectacle, they neglected not the commiſſion recommended by their country. They ſecretly informed themſelves of the plan and particular circumſtances of the intended revolt, and learned the preciſe time fixed for the departure of the Corinthian fleet. In conſequence of this important intelligence, the Athenians anticipated the deſigns of the rebels of Chios, and carried off ſeven ſhips as pledges of their fidelity. The ſquadron which returned from this uſeful enterpriſe, intercepted the Corinthians as they ſailed through the Saronic gulph; and having attacked and conquered them, purſued and blocked them up in their harbours.

Meanwhile the Spartans and their allies ſent to the Ionian coaſt ſuch ſquadrons as were ſucceſſively ready for ſea, under the conduct of Alcibiades, Chalcideus, and Aſtyochus. The firſt of theſe commanders ſailed to the iſle of Chios, which was diſtracted by contending factions. The Athenian partiſans were ſurpriſed, and compelled to ſubmit; and the city, which poſſeſſed forty gallies, and yielded in wealth and populouſneſs to none of the neighbouring colonies, became an acceſſion to the Peloponneſian confederacy. The ſtrong and rich town of Miletus followed the example: Erythræ and Clazomenè ſurrendered to Chalcideus; ſeveral places of leſs note were conquered by Aſtyochus.

When the Athenians received the unwelcome intelligence of theſe events, they voted the expenditure of a thouſand talents, which, in more proſperous times, they had depoſited in the citadel, under the ſanction of a decree of the ſenate and people, to reſerve it for an occaſion of the utmoſt danger. This ſeaſonable ſupply enabled them to increaſe the fleet, which ſailed, under Phrynichus and other leaders, to the iſle of Leſbos. Having ſecured the fidelity of the Leſbians, who were ripe for rebellion, they endeavoured to recover their authority in Miletus, anciently regarded as the capital of the Ionic coaſt. A bloody battle was fought before the walls of that place, between the Athenians and Argives on one ſide; and the Peloponneſians, aſſiſted by the troops of Tiſſaphernes and the revolted Mileſians, on the other. The Athenian bravery defeated, on this occaſion, the ſuperior numbers of Greeks and barbarians to whom they were oppoſed; but their Argive auxiliaries were repulſed by the gallant citizens of Miletus: ſo that, in both parts of the engagement, the Ionic race, commonly called the leſs warlike, prevailed over their Dorian rivals and enemies. Elevated with the joy of victory, the Athenians prepared to aſſault the town, when they were alarmed by the approach of a fleet of fifty-five ſail, which advanced in two diviſions, the one commanded by the celebrated Hermocrates from Syracuſe, the other by Theramenes the Spartan. Phrynichus prudently conſidered, that his own ſtrength only amounted to forty-eight gallies, and refuſed to commit the laſt hope of the republic to the danger of an unequal combat; and he calmly retired with his whole force to the iſle of Samos.

The retreat of the Athenian fleet acknowledged the naval ſuperiority of the enemy; a ſuperiority which was alone ſufficient either to acquire or to maintain the ſubmiſſion of the neighbouring coaſts and iſlands. In other reſpects too, the Peloponneſians enjoyed the moſt deciſive advantages. Their gallies were victualled, their ſoldiers were paid, by Tiſſaphernes, and they daily expected a reinforcement of a hundred and fifty Phœnician ſhips, which, it was ſaid, had already reached Aſpendus, a ſea-port of Pamphylia. But in this dangerous criſis, fortune ſeemed to reſpect the declining age of Athens, and, by a train of accidents, ſingular and almoſt incredible, enabled Alcibiades, ſo long the misfortune and the ſcourge, to become, for a time, the preſerver, of his country. During his reſidence in Sparta, he aſſumed the outward gravity of deportment, and conformed himſelf to the ſpare diet, and laborious exerciſes, which prevailed in that auſtere republic; but his character and his principles remained as licentious as ever. His intrigue with Timea, the conſort of king Agis, was diſcovered by an exceſs of female levity. The queen, vain of the attachment of ſo celebrated a character, familiarly gave the name of Alcibiades to her ſon Leotychides; a name which, firſt confined to the privacy of her female companions, was ſoon ſpread abroad in the world. Alcibiades puniſhed her folly by a moſt mortifying but well-merited declaration, boaſting that he had ſolicited her favours from no other motive but that he might indulge the ambitious deſire of giving a king to Sparta. The offence itſelf, and the ſhameleſs avowal, more provoking, if poſſible, than the offence, excited the keeneſt reſentment in the breaſt of the injured huſband; and orders were ſent to Aſtyochus, who commanded the Peloponneſian forces in Aſia, ſecretly to deſtroy Alcibiades, who defied thoſe laws which in every Grecian republic condemned adulterers to death. But the ſubtle Athenian had gained intelligence of this execrable deſign.

Baniſhed from Athens, perſecuted by Sparta, and in danger of aſſaſſination, he had recourſe to the friendſhip of Tiſſaphernes, who admired his accompliſhments, and reſpected his abilities. Alcibiades, therefore, began to flatter his avarice, that he might enſure his protection; and by ſowing the ſeeds of diſcord between Tiſſaphernes and the Peloponneſians, he hoped to pave the way to return to his country: with this view he applied ſecretly to Piſander, Theramenes, and other perſons of diſtinction in the Athenian camp. To them he deplored the deſperate ſtate of public affairs, expatiated on his own credit with Tiſſaphernes, and inſinuated that it might be yet poſſible to prevent the Phœnician fleet at Aſpendus from ſailing to aſſiſt the enemy. Aſſuming gradually more boldneſs as he perceived the ſucceſs of his intrigues, he finally declared that the Athenians might obtain not merely the neutrality, but perhaps the aſſiſtance, of Artaxerxes, ſhould they conſent to aboliſh their turbulent democracy, ſo odious to the Perſians, and entruſt the adminiſtration of government to men worthy to negociate with ſo mighty a monarch.

When the illuſtrious exile propoſed this meaſure, it is uncertain whether he was acquainted with the ſecret cabals which had been already formed, both in the city and in the camp, for executing the deſign which he ſuggeſted. Many prompted by ambition, ſeveral moved by inconſtancy, a few directed by a juſt ſenſe of the incurable defects of democracy, were prepared to encounter every danger, that they might overturn the eſtabliſhed conſtitution. In the third and moſt honourable claſs was Antiphon, a man of an exalted character, and endowed with extraordinary talents. The irreſiſtible energy of his eloquence was ſuſpected by the people. He appeared not in the courts of juſtice, or in the aſſembly; but his artful and elaborate compoſitions often ſaved the lives of his friends. He was the inviſible agent who governed all the motions of the conſpiracy; and when compelled, after the ruin of his party, to ſtand trial for his life, he diſcovered an activity and force of mind that aſtoniſhed the moſt diſcerning of his contemporaries.

poraries. Pifander, Theramenes, and the other leaders of the ariſtocratical party, warmly approved the views of Alcibiades. The Athenian ſoldiers likewiſe, though they deteſted the impiety, admired the valour, of the illuſtrious exile, and longed to ſee him reſtored to the ſervice of his country. Phrynichus, the perſonal enemy of Alcibiades, alone oppoſed the general current. When he perceived that his colleagues were deaf to every objection againſt recalling the friend of Tiſſaphernes, he ſecretly informed the Spartan admiral Aſtyochus, of the intrigues which were carrying on to the diſadvantage of his country. Daring as this treachery was, Phrynichus addreſſed a traitor not leſs perfidious than himſelf. Aſtyochus was become the penſioner and creature of Tiſſaphernes, to whom he communicated the intelligence. The Perſian again communicated it to his favourite Alcibiades, who complained in ſtrong terms to the Athenians of the baſeneſs and villany of Phrynichus. The latter exculpated himſelf with conſummate addreſs; but as the return of Alcibiades might prove fatal to his ſafety, he ventured, a ſecond time, to write to Aſtyochus, reproaching him with his breach of confidence, and explaining by what means he might ſurpriſe the whole Athenian fleet at Samos; an exploit that muſt for ever eſtabliſh his fame and fortune. Aſtyochus again betrayed the ſecret to Tiſſaphernes and Alcibiades; but before their letters could be conveyed to the Athenian camp, Phrynichus, who by ſome unknown channel was informed of this ſecond treachery, anticipated the dangerous diſcovery, by appriſing the Athenians of the enemy's deſign to ſurpriſe their fleet. They had ſcarcely employed the proper means to counteract that purpoſe, when meſſengers came from Alcibiades to announce the horrid perfidy of a wretch who had baſely ſacrificed to private reſentment the laſt hope of his country. But the meſſengers arrived too late; the prior information of Phrynichus, as well as the bold and ſingular wickedneſs of his deſign, which no common degree of evidence was thought ſufficient to prove, were ſuſtained as arguments for his exculpation; and it was believed that Alcibiades had made uſe of a ſtratagem moſt infamous in itſelf, but not unexampled among the Greeks, for deſtroying a man whom he deteſted.

The oppoſition of Phrynichus, though it retarded the deſigns of Alcibiades, prevented not the meaſures of Piſander and his aſſociates for aboliſhing the democracy. The ſoldiers at Samos were induced to acquieſce in the reſolution of their generals; and Piſander headed the deputation which was ſent from the camp to the city to effect this important revolution. He acquainted the extraordinary aſſembly, ſummoned on that occaſion, with the meaſures which had been adopted by their ſoldiers and fellow-citizens at Samos; but loud murmurs of diſcontent reſounded in different parts of the aſſembly. Piſander aſked the reaſon of this diſapprobation. "Had his opponents any thing better to propoſe? If they had, let them come forward and explain the grounds of their diſſent: but, above all, let them explain how they could ſave themſelves, their families, and their country, unleſs they complied with the demand of Tiſſaphernes. The imperious voice of neceſſity was ſuperior to law; and when the actual danger had ceaſed, they might re-eſtabliſh their ancient conſtitution." The opponents of Piſander were unable or afraid to reply: the cabal alone acted with union and with vigour; and difficult as it ſeemed to ſubvert the Athenian democracy, yet this deſign was accompliſhed by the enterpriſing activity of Piſander, the artful eloquence of Theramenes, the firm intrepidity of Phrynichus, and the ſuperintending wiſdom of Antiphon, after it had ſubſiſted a hundred years with unexampled glory.

In a deliberation concerning the means of retrieving the affairs of the republic, Piſander propoſed the electing of ten men, who ſhould be charged with the important truſt of preparing and digeſting reſolutions, to be on an appointed day laid before the aſſembly of the people. When the day arrived, the commiſſioners had but one reſolution to propoſe: "That every citizen ſhould be free to offer his opinion, however contrary to law, without fear of impeachment or trial;" a matter eſſential to the intereſts of the cabal, ſince, by a ſtrange contradiction in government, the Athenian orators and ſtateſmen were liable to proſecution before the ordinary courts of juſtice, for ſuch ſpeeches and decrees as had been approved and confirmed by the aſſembly. In conſequence of this act of indemnity, Piſander and his party boldly declared, that neither the ſpirit nor the forms of the eſtabliſhed conſtitution ſuited the preſent dangerous and alarming criſis. That it was neceſſary to new-model the whole fabric of government; for which purpoſe five perſons (whoſe names he read) ought to be appointed by the people, to chooſe an hundred others; each of whom ſhould ſelect three aſſociates; and the four hundred thus choſen, men of dignity and opulence, who would ſerve their country without fee or reward, ought immediately to be inveſted with the guidance of the republic. This extraordinary propoſal was accepted without oppoſition: the partiſans of democracy dreaded the ſtrength of the cabal; and the undiſcerning multitude perceived not that they ſurrendered their liberties to the artifice of an ambitious faction. But the conduct of the four hundred tyrants ſoon opened the eyes and underſtanding of the moſt thoughtleſs. They aboliſhed every veſtige of ancient freedom; employed mercenary troops to overawe the multitude, and to intimidate or deſtroy their real or ſuſpected enemies. Inſtead of ſeizing the opportunity of annoying the Peloponneſians, they ſent ambaſſadors to ſolicit peace from the Spartans on the moſt diſhonourable terms. Their tyranny rendered them odious in the city, and their cowardice made them contemptible in the camp at Samos. Their cruelty and injuſtice were deſcribed, and exaggerated, by the fugitives who continually arrived in that iſland. The generous youth, employed in the ſea and land ſervice, were impatient of the indignities offered to their fellow-citizens. The ſame indignities might be inflicted on themſelves, if they did not vindicate their freedom. Theſe ſecret murmurs broke out into loud and licentious clamours, which were encouraged by the approbation of the Samians. Thraſybulus and Thraſyllus, two officers of high merit and diſtinction, though not actually entruſted with a ſhare in the principal command, gave activity and boldneſs to the inſurgents. The abettors of the new government were attacked by ſurpriſe: thirty of the moſt criminal were put to death, democracy was reeſtabliſhed in the camp, and the ſoldiers were bound by oath to maintain their hereditary government againſt the conſpiracy of domeſtic foes, and to act with vigour and unanimity againſt the public enemy.

Thraſybulus, who headed this ſucceſsful ſedition, exhorted the ſoldiers not to deſpair of effecting in the capital the ſame revolution which they had produced in the camp. Their moſt immediate concern was to recal Alcibiades, who had been deceived and diſgraced by the tyrants, and who not only felt with peculiar ſenſibility, but could reſent with becoming dignity, the wrongs of his country and his own. The advice of Thraſybulus was approved; he immediately ſailed to Magneſia, and returned with Alcibiades. Near four years had elapſed ſince the eloquent ſon of Clinias had ſpoken in an Athenian aſſembly. Being preſented by Thraſybulus to his fellow-citizens, he began by accuſing his fortune, and lamenting his calamities. "Yet his baniſhment ought not to affect him with permanent ſorrow, ſince it had furniſhed him with an opportunity

to ſerve the cauſe of his country. This event, otherwiſe unfortunate, had procured him the acquaintance and friendſhip of Tiſſaphernes; who, moved by his entreaties, had withheld the ſtipulated pay from the Peloponneſian forces, and who, he doubted not, would continue his good offices to the Athenians, ſupply them with every thing requiſite for maintaining the war, and even ſummon the Phœnician fleet to their aſſiſtance." Theſe were magnificent but flattering promiſes. In making them, Alcibiades however did not conſult merely the dictates of vanity. They raiſed his credit with the army, who immediately ſaluted him general; they widened the breach between Tiſſaphernes and the Spartans; and they ſtruck terror into the tyrants of Athens, who had provoked the reſentment of a man capable to ſubvert their uſurpation.

Alcibiades left the care of the troops to his colleagues Thraſybulus and Thraſyllus, and withdrew himſelf from the applauſes of his admiring countrymen, on pretence of concerting with Tiſſaphernes the ſyſtem of their future operations. But his principal motive was to ſhew himſelf to the Perſian, in the new character with which he was inveſted. Before he returned to the camp, ambaſſadors had been ſent by the tyrants, to attempt a negociation with the partiſans of democracy, who, inflamed by continual reports of the indignities and cruelties committed in Athens, prepared to ſail thither to protect their friends and take vengeance on their enemies. Alcibiades judiciouſly oppoſed this raſh reſolution, which muſt have left the Helleſpont, Ionia, and the iſlands, at the mercy of the hoſtile fleet. But he commanded the ambaſſadors to deliver to their maſters a ſhort but deciſive meſſage: "That they muſt diveſt themſelves of their illegal power, and reſtore the ancient conſtitution. If they delayed obedience, he would ſail to the Piræus, and deprive them of their authority and their lives." When this meſſage was reported at Athens, it added to the diſorder and confuſion in which that city was involved. The four hundred, who had acted with unanimity in uſurping the government, ſoon diſagreed about the adminiſtration, and ſplit into factions, which perſecuted each other as furiouſly as both had perſecuted the people. Theramenes and Ariſtocrates condemned and oppoſed the tyrannical meaſures of their colleagues. The perfidious Phrynichus was ſlain: both parties prepared for taking arms: when the old men, the children, the women, and ſtrangers, interpoſed for the ſafety of a city which had long been the ornament of Greece, the terror of Perſia, and the admiration of the world.

Had the public enemy availed themſelves of this opportunity to aſſault the Piræus, Athens could not have been ſaved from immediate deſtruction. But the Peloponneſian forces at Miletus had broke out into open mutiny, when they heard of the recal of Alcibiades, and the hoſtile intention of Tiſſaphernes. Their reſentment was violent and implacable. They deſtroyed the Perſian fortifications in the neighbourhood of Miletus; they put the garriſons to the ſword; their treacherous commander Aſtyochus ſaved his life by flying to an altar; nor was the tumult appeaſed until the guilty were removed from their ſight, and Myndarus, an officer of approved valour and fidelity, arrived from Sparta to aſſume the principal command. The dreadful conſequences which muſt have reſulted to the Athenians, if, during the fury of their ſedition, the enemy had attacked them with a fleet of an hundred and fifty ſail, may be conceived by the terror inſpired by a much ſmaller Peloponneſian ſquadron of only forty-two veſſels, commanded by the Spartan Hegeſandridas. The friends of the conſtitution had aſſembled in the ſpacious theatre of Bacchus. Meſſengers paſſed between them and the partiſans of Antiphon and Piſander, who had convened in a diſtant quarter of the city. The moſt important matters were in agitation, when the alarm was given that ſome Peloponneſian ſhips were on the coaſt. Both aſſemblies were immediately diſſolved. All ranks haſtened to the Piræus; manned the veſſels in the harbour; launched others; and prepared thirty-ſix for taking the ſea. When Hegeſandridas perceived the ardent oppoſition which he muſt encounter in attempting to land, he doubled the promontory of Sunium, and ſailed towards the iſland of Eubœa. The Athenians reſolutely ſet ſail in purſuit of the enemy, and obſerved them next day near the ſhore of Eretria. The Eubœans, who had long watched an opportunity to revolt, ſupplied the Peloponneſian ſquadron with all neceſſaries in abundance; but, inſtead of furniſhing the Athenians, they retired from the coaſt on their approach. The commanders were obliged to weaken their ſtrength, by detaching ſeveral parties into the country to procure proviſions; Hegeſandridas ſeized this opportunity to attack them: moſt of the Athenian ſhips were taken; the crews ſwam to land; many were cruelly murdered by the Eretrians; and ſuch only ſurvived as took refuge in the Athenian garriſons ſcattered over the iſland.

This misfortune was very alarming to the Athenians; but the magnanimous firmneſs of Theramenes did not allow the friends of liberty to deſpair. He encouraged them to diſburden the republic of thoſe domeſtic foes, who had ſummoned the aſſiſtance of the Lacedæmonian fleet, that they might enſlave their fellow-citizens. Antiphon, Piſander, and others moſt obnoxious, ſeaſonably eſcaped; the reſt ſubmitted. A decree was paſſed, recalling Alcibiades, and approving the conduct of the troops at Samos. The ſedition ceaſed; the democracy, which had been interrupted four months, was reſtored; and the Athenians reſolved to defend, to the laſt extremity, the ancient glory of the republic.

The doubtful Tiſſaphernes heſitated between the part of an open enemy, or a treacherous ally; the Spartans, who had formerly rejected the friendſhip, now courted the protection, of his rival Pharnabazus; to whoſe northern province they ſailed with the principal ſtrength of their armament, leaving only a ſmall ſquadron at Miletus, to defend their ſouthern acquiſitions. The Athenians, animated by the manly counſels of Thraſybulus and Thraſyllus, proceeded northwards in purſuit of the enemy; and the important ſtraits, which join the Euxine and Ægean ſeas, became the ſcene of conflict. In the twenty-firſt winter of the war, and in the year before Chriſt 411, the Athenians prevailed in three ſucceſſive engagements, the event of which became continually more deciſive. In the firſt, which was fought in the narrow channel between Seſtos and Abydus, the advantages were in ſome meaſure balanced, ſince Thraſybulus took twenty Peloponneſian ſhips, with the loſs of fifteen of his own. But the glory remained entire to the Athenians, who repelled the enemy, and offered to renew the battle. Not long afterwards, they intercepted a ſquadron of fourteen Rhodian veſſels, near Cape Rhegium. The iſlanders defended themſelves with their uſual bravery. Myndarus beheld the engagement from the temple of Ilium; and haſtened with great diligence to the ſhore, that he might launch his ſhips, and prevent, by ſpeedy aſſiſtance, the capture or deſtruction of the Rhodians. The principal Athenian ſquadron attacked him near the ſhore of Abydus. The engagement was fought from morning till night, and ſtill continued doubtful, when the arrival of eighteen gallies, commanded by Alcibiades, turned the ſcale of victory. The eſcape of the Peloponneſians was favoured by the bravery of Pharnabazus, who, at the head of his Perſian troops, had been an impatient ſpectator of the combat. He gallantly rode into the ſea, encouraging his men with his voice and his example. The Spartan admiral drew up the greateſt part of his fleet along the ſhore, and prepared to reſiſt the aſſailants; but the Athenians, ſatisfied with the advantages already obtained, ſailed to Seſtos, carrying with them

them thirty Peloponnefian galleys, as well as fifteen of their own which they had loſt in a former engagement. Thraſyllus was ſent to Athens to communicate the good news, and raiſe further ſupplies of men and money.

The Spartans, thus compelled to yield poſſeſſion of the ſea, retired to Cyzicus to repair their ſhattered fleet; while the Athenians profited by the fame of their victory to demand contributions from the wealthy towns in that neighbourhood. It was then determined, by the advice of Alcibiades, to follow the enemy to Cyzicus; for which purpoſe they ſailed, with eighty galleys, to the iſland of Proconneſus, ten miles diſtant from the ſtation of the Peloponneſian fleet. Alcibiades ſurpriſed ſixty veſſels in a dark and rainy morning, as they were manœuvring at a diſtance from the harbour, and ſkilfully cut off their retreat. As the day cleared up, the reſt ſailed forth to their aſſiſtance; the action became general; the Athenians obtained a complete victory, and their valour was rewarded by the capture of the whole Peloponneſian fleet, except the Syracuſan ſhips, which were burnt, in the face of a victorious enemy, by the enterpriſing Hermocrates. The circumſtances of this important action were related in few but expreſſive words, to the Spartan ſenate, in a letter written by Hippocrates, the ſecond in command, and intercepted by the Athenians: "All is loſt; our ſhips are taken; Myndarus is ſlain; the men want bread; we know not what to do."

The fatal diſaſter at Cyzicus prevented the Peloponneſians from obſtructing, during the following year, the deſigns of the enemy, who took poſſeſſion of that wealthy ſea-port, as well as of the ſtrong city Perinthus; raiſed a large contribution on Selembra; and fortified Chryſopolis, a town of Chalcedonia, only three miles diſtant from Byzantium. In this new fortreſs they placed a conſiderable body of troops; and guarded the neighbouring ſtrait with a ſquadron of thirty ſail, commanded by Theramenes and Eubulus, and deſtined to exact, as tribute, a tenth from all ſhips which ſailed through the Boſphorus into the Euxine ſea. The Peloponneſians were aſſiſted by Pharnabazus in equipping a new fleet; but were deprived of the valuable counſels of Hermocrates, whoſe commiſſion was ſuperſeded by the folly of the government of Syracuſe.

Meanwhile Thraſyllus obtained at Athens the ſupplies which he had gone to ſolicit. They conſiſted of a thouſand heavy-armed men, an hundred horſe, and fifty galleys, manned by five thouſand experienced ſeamen. With theſe forces, Thraſyllus ſailed to Samos, hoping to render the twenty-third campaign not leſs glorious than the preceding; and ambitious to rival, by his victories in the central and ſouthern parts of the Aſiatic coaſt, the fame acquired by Alcibiades and Thraſybulus in the north. His firſt operations were ſucceſsful. He took Colophon, with ſeveral places of leſs note, in Ionia, penetrated into the heart of Lydia, and returned to the ſhore, driving before him a numerous body of ſlaves, and other valuable booty. His courage was increaſed by the want of reſiſtance on the part of Tiſſaphernes, whoſe province he had invaded; of the Peloponneſian forces at Miletus; and of the revolted colonies of Athens. He reſolved therefore to attack the beautiful and flouriſhing city of Epheſus, which was then the principal ornament of the Ionic coaſt. While his ſoldiers, in ſeparate diviſions, were making their approaches to the walls, the enemy aſſembled from every quarter to defend the ſacred temple of Epheſian Diana. A vigorous ſally of the townſmen increaſed the ſtrength of Tiſſaphernes and the Peloponneſians, the latter of whom had been reinforced by a conſiderable ſquadron from Sicily. The Athenians were defeated with the loſs of three hundred men; and retiring from the field of battle, they ſought refuge in their ſhips, and ſailed towards the Helleſpont. During the voyage thither, they fortunately fell in with twenty Sicilian galleys, of which they took four, and purſued the reſt to Epheſus. Having ſoon afterwards reached the Helleſpont, they found the Athenian armament at Lampſachus, where Alcibiades thought proper to muſter the whole military and naval forces: but, on this occaſion, the northern army gave a remarkable proof of pride and ſpirit. They, who had ever been victorious, refuſed to rank with the ſoldiers of Thraſyllus, who had been ſo ſhamefully foiled before the walls of Epheſus. They ſubmitted, however, to live in the ſame winter quarters; from whence they made an expedition againſt Abydus. Pharnabazus defended the place with a numerous body of Perſian cavalry. The diſgraced troops of Thraſyllus rejoiced in an opportunity to retrieve their honour. They attacked, repelled, and routed, the enemy. Their victory decided the fate of Abydus, and their courage was approved by the army of Alcibiades, who now embraced them as fellow-ſoldiers and friends.

For ſeveral years the meaſures of the Athenians had been almoſt uniformly ſucceſsful; but the twenty-fourth campaign was diſtinguiſhed by peculiar favours of fortune. The invaſion of Sicily by the Carthaginians prevented that iſland from ſending any effectual aſſiſtance to their Peloponneſian allies. The dangerous revolt of the Medes withheld the Perſian reinforcements, which were neceſſary to ſupport the arms of Pharnabazus. Both nations were repeatedly defeated by the Athenians, driven from their encampments and fortreſſes near the ſhore, and purſued into the inland country, which was plundered and deſolated by the victors. The Athenians returned in triumph to attack the fortified cities, which ſtill declined ſubmiſſion; an undertaking in which Alcibiades diſplayed the wonderful reſources of his extraordinary genius. By gradual approaches, by ſudden aſſaults, by ſurpriſe, by treaſon, or by ſtratagem, he in a few months became maſter of Chalcedon, Salembria, and, at laſt, of Byzantium itſelf. His naval ſucceſs was equally conſpicuous. The Athenians had again the ſovereignty of the ſea. The ſmall ſquadrons fitted out by the enemy ſucceſſively fell into their power; and theſe multiplied captures, which were made with little difficulty, accumulated the trophies of the well-fought battles which we have already deſcribed. It was computed by the partiſans of Alcibiades, that, ſince aſſuming the command, he had taken or deſtroyed two hundred Syracuſan and Peloponneſian galleys; and his ſuperiority of naval ſtrength enabled him to raiſe ſuch contributions, both in the Euxine and Mediterranean, as abundantly ſupplied his fleet and army with every neceſſary article of ſubſiſtence and accommodation.

Yet while the Athenian arms were crowned with ſuch glory abroad, the Attic territory was continually haraſſed by king Agis and the Lacedæmonian troops poſted at Decelia. Their bold and ſudden incurſions frequently threatened the city itſelf; the deſolated lands afforded no advantage to the ruined proprietors; nor could the Athenians venture without their walls, to celebrate their accuſtomed feſtivals. Alcibiades, animated by his foreign victories, wiſhed to relieve the domeſtic ſufferings of his country; and after an abſence of many years, diſtinguiſhed by ſuch a variety of fortune, eagerly longed to reviſit his native city, and to enjoy the rewards and honours uſually beſtowed by the Greeks on ſucceſsful valour. This celebrated voyage to Athens, was performed in the twenty-fifth ſummer of the war. Notwithſtanding all his ſervices, the cautious ſon of Clinias, inſtructed by adverſity, declined to land in the Piræus, until he was informed that the aſſembly had repealed the decrees againſt him, formally revoked his baniſhment, and prolonged the term of his command. Even after this agreeable intelligence, he was ſtill unable to conquer his well-founded diſtruſt of the capricious humours of the people; nor would he approach

the crowded ſhore, till he obſerved, in the midſt of the multitude, his principal friends and relations inviting him by their voice and action. He then landed amidſt the univerſal acclamations of the ſpectators, who, inattentive to the naval pomp, and regardleſs of the other commanders, fixed their eyes only on Alcibiades. Next day an extraordinary aſſembly was ſummoned, in order that he might explain and juſtify his apparent miſconduct, and receive the rewards due to his acknowledged merit. The public anticipated his apology, by contraſting the melancholy ſituation of affairs when Alcibiades aſſumed the command, with the actual condition of the republic. "At the former period Athens yielded the command of the ſea; the enemy were every where victorious; the ſtate was oppreſſed by foreign war, torn by ſedition, without reſources, and without hope. The addreſs and dexterity of Alcibiades was alone capable to have diſunited the councils, to have weakened and afterwards repelled the efforts, of a powerful confederacy; his activity and courage could alone have animated the dejection of the citizens to purſue the meaſures of offenſive war; his abilities, his virtue, and his fortune, could alone have rendered thoſe meaſures ſucceſsful." Before judges ſo favourably diſpoſed to hear him, Alcibiades found no difficulty to make his defence, and to win upon the affections of the people; he was appointed commander in chief by ſea and land; and a hundred galleys were equipped, and tranſports were prepared for fifteen hundred heavy-armed men, with a proportional body of cavalry, waiting his orders, and wholly at his diſpoſal.

While Alcibiades was thus concentrating the ſtrength and ſinews of the Athenians, Lyſander, a hero of the Herculean ſtock, was appointed to the command of the Peloponneſian forces in the eaſt; and ſince the deciſive action at Cyzicus, the Peloponneſians, unable to reſiſt the enemy, had been employed in preparing ſhips on the coaſt of their own peninſula, as well as in the harbours of their Perſian and Grecian allies. The moſt conſiderable ſquadrons had been equipped in Cos, Rhodes, Miletus, and Epheſus; in the laſt of which the whole armament, amounting to ninety ſail, was collected by Lyſander. But the aſſembling of ſuch a force was a matter of little conſequence, unleſs proper meaſures ſhould be taken for enabling it to act with vigour. It was neceſſary, above all, to ſecure pay for the ſeamen; for this purpoſe, Lyſander, accompanied by ſeveral Lacedæmonian ambaſſadors, repaired to Sardis, to congratulate the happy arrival of Cyrus, a generous and valiant youth of ſeventeen, who had been entruſted by his father Darius Nothus, with the government of the inland parts of Leſſer Aſia. Lyſander complained to the young prince, "of the perfidious duplicity of Tiſſaphernes, by which the Athenians had been enabled to re-aſſume that aſcendant in the eaſt, which had formerly proved ſo dangerous to the Perſian name. Pharnabazus had more effectually ſerved the cauſe of his maſter, by his active valour in the field; by detaining the Athenian ambaſſadors, who had been ſent to ſurpriſe the unſuſpecting generoſity of Darius; and by ſupplying the Peloponneſians, after the unfortunate engagement at Cyzicus, with the means of preparing a new fleet, and with the neceſſaries and conveniences of life, while they were employed in this uſeful undertaking. But Tiſſaphernes was unwilling, and Pharnabazus was perhaps unable, to diſcharge the ſtipulated pay, without which the Grecian ſeamen and ſoldiers could not be kept together, or engaged to act with vigour againſt the common enemy." Cyrus replied, "That he had been commanded by his father to aſſiſt the Lacedæmonians, and to pay their troops with punctuality. That, for this purpoſe, he had carried with him five hundred talents (near an hundred thouſand pounds ſterling); and if ſuch a ſum ſhould be found inſufficient, he would expend his own private fortune, and even melt down and coin into money the golden throne on which he ſat." Thus elated, Lyſander returned to Epheſus, diſcharged the arrears due to his troops, gave them a month's pay in advance, raiſed their daily allowance, and ſeduced innumerable deſerters from the Athenian fleet.

While Lyſander was thus anxiouſly employed in manning his ſhips, and preparing them for action, Alcibiades attacked the iſland of Andros. The reſiſtance was more vigorous than he had reaſon to expect: and the immediate neceſſity of procuring pay and ſubſiſtence for the fleet, obliged him to leave his work imperfect. With a ſmall ſquadron he ſailed to raiſe contributions on the Ionian or Carian coaſt, committing the principal armament to Antiochus, a man totally unqualified for ſuch a truſt. Even the affectionate partiality of Alcibiades ſeems to have diſcerned the unworthineſs of his favourite, ſince he gave him ſtrict orders to continue, during his abſence, in the harbour of Samos, and by no means to riſk an engagement. This injunction, as it could not prevent the raſhneſs, might perhaps provoke the vain levity, of the vice-admiral, who, after the departure of his friend, ſailed towards Epheſus, approached the ſterns of Lyſander's ſhips, and with the moſt licentious inſult challenged him to battle. The prudent Spartan delayed the moment of attack, until the preſumption of his enemies had thrown them off their guard. He then commanded the Peloponneſian ſquadrons to advance. His manœuvres were judicious, and executed with ſtrict obedience. The battle was not obſtinate, as the Athenians, who ſcarcely expected any reſiſtance, ſunk at once from the inſolence of temerity into the deſpondency of fear. They loſt fifteen veſſels, with a conſiderable part of their crews. The remainder retired diſgracefully to Samos; while the Lacedæmonians profited of their victory by the taking of Eion and Delphinium. Though fortune thus favoured the prudence of Lyſander, he declined to venture a ſecond engagement with the ſuperior ſtrength of Alcibiades, who, having reſumed the command, employed every artifice to bring him again to action. But ſuch an opportunity he could never again find; and the people of Athens, who expected to hear of nothing but victories and triumphs, were mortified to the laſt degree, when they received intelligence of ſuch a ſhameful defeat. As they could not ſuſpect the abilities, they diſtruſted the fidelity, of their commander. Their ſuſpicions were increaſed and confirmed by the arrival of Thraſybulus, who, whether animated by zeal for the intereſt of the public, or actuated by a ſelfiſh jealouſy, formally impeached Alcibiades in the Athenian aſſembly. "His miſconduct had totally ruined the affairs of his country. A talent for low buffoonery was a ſure recommendation to his favour. His friends were partially ſelected from the meaneſt and moſt abandoned of men, who poſſeſſed no other merit than that of being ſubſervient to his paſſions. To ſuch unworthy inſtruments the fleet of Athens was entruſted; while the commander in chief reveiled in debauchery with the harlots of Abydus and Ionia, or raiſed exorbitant contributions on the dependent cities, that he might defray the expence of a fortreſs on the coaſt of Thrace, which he had erected to ſhelter himſelf againſt the juſt vengeance of the republic." Were it neceſſary to point out by example the inſtability of popular favour, this ſubject might be copiouſly illuſtrated from the hiſtory of the Athenians. The ſame man, whom a few months before they found it impoſſible ſufficiently to reward, was now expoſed to the rage of diſappointment and the fury of revenge. They regretted the loſs of every moment which intervened between the progreſs of their reſentment and the execution of their vengeance. In the ſame aſſembly, and on the ſame day, Alcibiades was accuſed, and almoſt unanimouſly condemned; and, that the affairs of the republic might not again ſuffer by the abuſe

ALCIBIADES.

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abuſe of undivided power, ten commanders were ſubſtituted in his room; among whom were Thraſyllus, Leon, Diomedon, Conon, and Pericles, who inherited the name and merit of his illuſtrious father. The new generals ſailed to Samos; and Alcibiades ſought refuge in his Thracian fortreſs.

They had ſcarcely aſſumed the command, when an important alteration took place in the Peloponneſian fleet. Lyſander's term in the command had expired, and Callicratidas, a Spartan of a very oppoſite character, was ſent to ſucceed him. An univerſal clamour aroſe, when Callicratidas diſplayed his commiſſion in the council of the confederates. The friends of Lyſander affirmed, "That it was imprudent and ungenerous to check the victorious career of a deſerving and fortunate commander; that the important charge of the fleet ought not to be entruſted to men who were deſtitute of experience, and perhaps of abilities; nor would it be juſt to ſacrifice the intereſt of ſuch a numerous and powerful confederacy to a punctilious obſervance of the Lacedæmonian laws." Lyſander maintained a decent ſilence concerning the character of his ſucceſſor, only obſerving that he reſigned to him a fleet which commanded the ſea. The noiſy acclamations of the aſſembly confirmed his aſſertion. But Callicratidas had a heart untainted with reproach, and incapable of fear. Unabaſhed by the turbulence of his opponents, he replied, That he muſt withhold his aſſent to the magnified ſuperiority of the Peloponneſian fleet, unleſs Lyſander ſhould ſet ſail from Epheſus, coaſt along the iſle of Samos, (where the Athenians then lay,) and ſurrender his victorious ſquadrons in the harbour of Miletus. The pride of Lyſander might have been confounded by this judicious obſervation; but his ingenuity ſuggeſted a plauſible, or rather an illuſive, reply, "That he was no longer admiral."

Callicratidas then addreſſed the aſſembly, with the manly ſimplicity of an honeſt heart, which diſdains the artifice of words, defies the inſolence of power, and defeats the intrigues of policy. "Lacedæmonians and allies! I ſhould have been content to ſtay at home; nor does it greatly affect me that Lyſander, or any other, ſhould be held a better ſeaman than myſelf. Hither I have been ſent by my countrymen to command the fleet, and my chief concern is to execute their orders, and to perform my duty. It is my earneſt deſire to promote the public intereſt; but you can beſt inform me whether I ought to continue here, or to return to Sparta." Wonderful is the power of honeſt and unaffected firmneſs. The aſſembly liſtened with admiration; the partiſans of Lyſander were abaſhed; none ventured to ſpeak; and, after a conſiderable pauſe, all unanimouſly acknowledged that it became both Callicratidas and themſelves to obey the orders of the Spartan government.

His firſt operations were directed againſt the ſtrong and populous towns of Methymna and Mitylenè, which reſpectively commanded the northern and ſouthern diviſions of the iſle of Leſbos. Beſides the numerous citizens of an age to bear arms, Methymna was defended by an Athenian garriſon. The place made a brave reſiſtance; but the perſevering efforts of Callicratidas exhauſted its ſtrength: Methymna was taken by ſtorm, and ſubjected to the ravages of the Peloponneſian troops. The garriſon and the ſlaves were treated as part of the booty. The confederates adviſed, that the Methymneans alſo ſhould be ſold into ſervitude; but Callicratidas aſſured them, that, while *he* enjoyed the command, there ſhould not any Grecian citizen be reduced to the condition of a ſlave, unleſs he had taken arms to ſubvert the public freedom.

Meanwhile Conon, the moſt active and enterpriſing of the Athenian commanders, had put to ſea with a ſquadron of ſeventy ſail, in order to protect and defend the coaſt of Leſbos. But the force of Conon was inſufficient to accompliſh the purpoſe it intended. Callicratidas obſerved his motions, diſcovered his weakneſs, and, with a far ſuperior fleet, intercepted his retreat to the armament at Samos. The Athenians ſailed towards the coaſt of Mitylenè, but were prevented from entering the harbour of that place by the reſentment of the inhabitants, who rejoiced in an opportunity to puniſh thoſe who had ſo often conquered, and ſo long oppreſſed, their city. In conſequence of this unexpected oppoſition, the Athenian ſquadron was overtaken by the enemy. The engagement was more ſharp and obſtinate than might have been expected under ſuch an inequality of ſtrength. Thirty empty ſhips (for moſt of their crews ſwam to land) were taken by the Peloponneſians; the remaining forty were hauled up under the walls of Mitylenè: Callicratidas recalled his troops from Methymna, received a reinforcement from Chios, and blocked up the Athenians by ſea and land.

The condition of Conon was highly diſtreſſing. He was ſurrounded on all ſides by a ſuperior force; the town of Mitylenè was hoſtile; his men were deſtitute of proviſions, incapable of reſiſtance, yet unwilling to ſurrender. In this ſituation he attempted the only enterpriſe which could admit of relief. The braveſt and moſt experienced ſeamen were embarked in two ſwift-ſailing veſſels, one of which, eluding the vigilance of the enemy, eſcaped in ſafety to the Helleſpont, and informed the Athenians of the misfortunes and blockade at Leſbos. The intelligence was immediately communicated to Samos and to Athens; and the importance of the object, which was no leſs than the ſafety of forty ſhips, and above eight thouſand brave men, excited uncommon activity. The Athenians reinforced their domeſtic ſtrength with the aſſiſtance of their allies; all able-bodied men were preſſed into the ſervice; and in a few weeks they had aſſembled at Samos an hundred and fifty ſail, which immediately took the ſea, with a reſolution to encounter the enemy. Callicratidas did not decline the engagement. Having left fifty ſhips to guard the harbour of Mitylenè, he proceeded with an hundred and twenty to Cape Malea, the moſt ſouthern point of Leſbos. The Athenians had advanced, the ſame evening, to the iſlands of Arginuſſæ, four miles diſtant from that promontory. The night paſſed in bold ſtratagems for mutual ſurpriſe, which were rendered ineffectual by a violent tempeſt of rain and thunder. At the dawn of day both armaments were eager to engage; but Hermon and Megareus, two experienced ſeamen, and the chief counſellors of Callicratidas, exhorted him not to commit the weakneſs of the Peloponneſians with the ſuperior ſtrength and numbers of the enemy. The generous and intrepid Spartan deſpiſed danger and death in compariſon of glory; but either his magnanimity had not overcome the laſt imperfection of virtuous minds, and was averſe to ſacrifice perſonal glory to public utility, or he imagined that this utility could not be ſeparated from an inflexible adherence to the martial laws of Lycurgus. He anſwered the prudent admonitions of his friends in theſe memorable words, which, according to the conſtruction that is put on them, deſerve our admiration or our pity: "My death cannot be deſtructive to Sparta, but my flight would be diſhonourable both to Sparta and myſelf." So ſaying, he gave the ſignal for his ſhips to advance. The fight was long and bloody; paſſing, ſucceſſively, through all the different gradations, from diſciplined order and regularity to the moſt tumultuous confuſion. The Spartan commander was ſlain in the ſevereſt part of the action. The hoſtile ſquadrons fought with various fortune, and promiſcuouſly conquered, purſued, ſurrendered, or fled. Thirteen Athenian veſſels were taken by the Peloponneſians; but, at length, the latter gave way on all ſides; ſeventy of their ſhips were captured, the reſt eſcaped to Chios and Phocæa.

The Athenian admirals, though juſtly elated with their good fortune, cautiouſly deliberated concerning the

the beſt means of improving their victory. Several adviſed that the fleet ſhould ſteer its courſe to Mitylenè, to ſurpriſe the Peloponneſian ſquadron which blocked up the harbour of that city. Diomedon recommended it as a more eſſential object to recover the bodies of the ſlain, and to ſave the wreck of twelve veſſels which had been diſabled in the engagement. Thraſybulus obſerved, that by dividing their ſtrength, both purpoſes might be effected. His opinion was approved. The charge of preſerving the wrecks, and collecting the bodies of the dead, was committed to Theramenes and Thraſybulus. Fifty veſſels were deſtined to that ſervice, doubly recommended by humanity and religion. The remainder ſailed to the iſle of Leſbos, in queſt of the Peloponneſians on that coaſt, who narrowly eſcaped deſtruction, through the good management of Eteonicus, the Spartan vice-admiral. Soon after the engagement, a brigantine arrived at Mitylenè, acquainting him with the death of Callicratidas, and of the defeat and flight of the Peloponneſian fleet. The ſagacity of Eteonicus foreſaw the probable conſequences of thoſe events. The Athenians would naturally ſail from Arginuſſæ to purſue their good fortune, and Conon, who was ſhut up at Mitylenè, would be encouraged to break through the harbour, that he might join his victorious countrymen. In order to anticipate thoſe meaſures, and to facilitate his own retreat, the Spartan commander ordered the brigantine privately to leave the harbour, and to return, at the diſtance of a ſhort time, with joyous acclamations and muſic, the rowers crowned with garlands, and calling out that Callicratidas had deſtroyed the laſt hope of Athens, and obtained a glorious and deciſive victory. The contrivance ſucceeded; the Spartans thanked heaven for the good news by hymns and ſacrifices; the ſailors were enjoined to refreſh themſelves by a copious repaſt, and to profit of a favourable gale to ſail to the iſle of Chios; while the ſoldiers burned their camp, and marched northward to Methymna, to reinforce the garriſon there, which was threatened by the enemy.

While the prudent foreſight of Eteonicus ſaved the Peloponneſian ſquadron at Mitylenè, the violence of a ſtorm prevented Theramenes and Thraſybulus from ſaving their unfortunate companions, all of whom, excepting one of the admirals, and a few others who eſcaped by their extraordinary dexterity in ſwimming, were overwhelmed by a tempeſtuous ſea; nor could their dead bodies ever be recovered. The Athenians were likewiſe diſappointed of the principal advantages which ought to have reſulted from the engagement. Methymna was too ſtrongly fortified to be taken by aſſault; they could not ſpare time for a regular ſiege; and when they proceeded to Chios in queſt of the Peloponneſian fleet, they found it carefully ſecured in the principal harbour of that iſland, which had been put in a vigorous ſtate of defence. Theſe unforeſeen circumſtances were the more mortifying to the commanders, becauſe, immediately after the battle, they had ſent an advice-boat to Athens, acquainting the magiſtrates with the capture of ſeventy veſſels; mentioning their intended expeditions to Mitylenè, Methymna, and Chios, from which they had reaſon to hope the moſt diſtinguiſhed ſucceſs; and particularly taking notice that the important charge of recovering the bodies of the drowned or ſlain had been committed to Theramenes and Thraſybulus, captains of approved conduct and fidelity.

The joy which the Athenians received from this flattering intelligence was converted into rage and diſappointment, when they underſtood that their fleet had returned to Samos, without reaping the expected fruits of victory. They were afflicted beyond meaſure with the loſs of the wreck, by which their brave countrymen had been deprived of the ſacred rites of funeral; a circumſtance viewed with peculiar horror, becauſe it was ſuppoſed, according to a ſuperſtition conſecrated by the belief of ages, to ſubject their melancholy ſhades to wander an hundred years on the gloomy banks of the Styx, before they could be tranſported to the regions of light and bliſs. The relations of the dead lamented their private misfortunes; the enemies of the admirals exaggerated the public calamity; both demanded an immediate and ſerious examination into the cauſe of this diſtreſsful event, that the guilty might be diſcovered and puniſhed. Amidſt this general ferment, Theramenes ſailed to Athens, with a view to exculpate himſelf and his colleague Thraſybulus. The letter ſent thither before them had excited their fear and their reſentment; ſince it rendered them reſponſible for a duty which they found it impoſſible to perform. Theramenes accuſed the admirals of having neglected the favourable moment to ſave the periſhing, and to recover the bodies of the dead; and, after the opportunity of this important ſervice was irrecoverably loſt, of having devolved their charge on others, in order to ſkreen their own miſconduct. The Athenians greedily liſtened to the accuſation, and caſhiered the abſent commanders. Conon, who during the action remained blocked up at Mitylenè, was intruſted with the fleet. Protomachus and Ariſtogenus choſe a voluntary baniſhment. The reſt returned home to juſtify meaſures which appeared ſo criminal.

Archedemus, an opulent and powerful citizen, and Callixenus, a ſeditious demagogue, partly moved by the intreaties of Theramenes, and partly excited by perſonal reſentment, impeached the admirals to the ſenate. The accuſation was ſupported by the relations of the deceaſed, who appeared in mourning robes, their heads ſhaved, their arms folded, their eyes bathed in tears, piteouſly lamenting the loſs and diſgrace of their families, deprived of their protectors, who had been themſelves deprived of thoſe laſt and ſolemn rites to which all mankind are entitled. A falſe witneſs ſwore that he had been ſaved almoſt by miracle from the wreck, and that his companions, as they were drowning, charged him to acquaint his country how they had fallen victims to the cruel neglect of their commanders. Callixenus called out for ample and condign puniſhment to be immediately inflicted on the devoted admirals; this was vociferated by the noiſy rabble; and the ſenators were intimidated into a reluctant compliance with meaſures which they diſapproved, and by which they were for ever to be diſgraced. Yet the philoſophic firmneſs of Socrates diſdained to ſubmit. He proteſted againſt the tameneſs of his colleagues, and declared that neither threats, nor danger, nor violence, ſhould compel him to conſpire with injuſtice for the deſtruction of the innocent.

But what could avail the voice of one virtuous man amidſt the licentious madneſs of thouſands? The commanders were accuſed, tried, condemned, and, with the moſt irregular precipitancy, delivered to the executioner. Before they were led to death, Diomedon addreſſed the aſſembly in a ſhort but ever-memorable ſpeech. "I am afraid, Athenians! leſt the ſentence which you have paſſed on us prove hurtful to the republic. Yet I would exhort you to employ the moſt proper means to avert the vengeance of heaven. You muſt carefully perform the ſacrifices which, before giving battle at Arginuſſæ, we promiſed to the gods in behalf of ourſelves and of you. Our misfortunes deprive us of an opportunity to acquit this juſt debt, and to pay the ſincere tribute of our gratitude. But we are deeply ſenſible that the aſſiſtance of the gods enabled us to obtain that glorious and ſignal victory." The diſintereſtedneſs, the patriotiſm, and the magnanimity, of this diſcourſe, muſt have appeaſed (if any thing had been able to appeaſe) the tumultuous paſſions of the vulgar. But their headſtrong fury defied every reſtraint of reaſon or of reſentment. They perſiſted in their bloody purpoſe, which was executed without pity: yet their cruelty was followed by a ſpeedy repentance, and puniſhed

by the ſharp pangs of remorſe, the intolerable pain of which they vainly attempted to mitigate by inflicting a well-merited vengeance on the worthleſs and deteſtable Callixenus.

The removal of the Athenian admirals, and the defeat and death of the Spartan Callicratidas, ſuſpended for ſeveral months the military and naval operations on both ſides. The behaviour of Philocles and Adimanthus, who had been joined in authority with Conon, were better fitted to obſtruct than promote the meaſures of that brave and prudent commander. The Spartans, in the mean while, at the requeſt of their allies, reſtored Lyſander to the command of the Peloponneſian fleet. He was again received at Sardis by the Perſian prince, with the warmeſt demonſtrations of joy. He was ſupplied with money to ſatisfy the immediate wants of the troops; and, as Cyrus at that time happened to make a journey into Upper Aſia, the revenues of his wealthy province were conſigned to the management of his Spartan friend. Such powerful reſources could not remain unemployed in the active hands of Lyſander. His emiſſaries aſſiduouſly engaged or preſſed the Ionian and Carian ſeamen. The harbours of Aſia Minor, particularly the port of Epheſus, glowed with the ardour of naval preparation, and in a few months Lyſander ſailed to the Helleſpont with an hundred and fifty gallies, and attacked the important town of Lampſacus. The place, though vigorouſly defended by the Athenian garriſon, was taken by ſtorm; and according to the barbarous practice of the age, abandoned to the licentious rapacity, the avarice, the luſt, and fury, of the conquerors.

The languid and indeciſive meaſures of the Athenians at Samos accuſe the abilities of Tydeus, Menander, and Cephiſodotus, who had been joined in command with Conon and his unworthy colleagues. They ſailed too late to ſave Lampſacus; but as they poſſeſſed an hundred and eighty gallies, a force ſuperior to Lyſander's, they anchored on the oppoſite or European ſide of the Helleſpont, at the diſtance of fifteen furlongs, in order to provoke the enemy to an engagement. Their ſtation was injudiciouſly taken at the mouth of the Ægos Potamos, diſtant two miles from Seſtos, the neareſt town from which the fleet could be provided with neceſſaries. Alcibiades, who in his Thracian retirement was unable to withdraw his attention from the war in which he had ſo long acted a diſtinguiſhed part, modeſtly admoniſhed his countrymen of their imprudence; but he was arrogantly reproached for preſuming, while an exile and an outlaw, to give advice to the admirals of Athens. Deſpiſing the inferiority of the Peloponneſian fleet, they advanced in order of battle to the harbour of Lampſacus; and when the enemy moved not from their ſtation, they returned in triumph as acknowledged maſters of the ſea. The prudence of Lyſander perceived and indulged their preſumption. During four days he bore, with extraordinary patience, their repeated inſults, affecting the utmoſt diſinclination to an engagement, carefully retaining his fleet in a place of ſecurity, and regularly diſpatching a few ſwift-ſailing veſſels to obſerve the motions and behaviour of the Athenians, when they returned from their daily cruiſe to the road of Ægos Potamos.

The fifth day they again bore up to the Peloponneſians, and provoked them to battle by more daring menaces than on any former occaſion. As they flattered themſelves with an undoubted proſpect of ſucceſs, they yielded without reſerve to the idle petulance of proſperity, and debated in what manner they ſhould treat the Lacedæmonian priſoners who muſt ſoon fall into their power. The cruel Philocles propoſed to cut off their right hands, that thoſe enemies of Athens might be equally incapable to manage the oar and to brandiſh the ſpear; and this baſe reſolution, though oppoſed by Adimantus, was approved by the majority of his colleagues. After inſulting the enemy in a manner the moſt mortifying and diſgraceful, they retired with an air of exultation mingled with contempt. The Peloponneſian ſpy-boats followed them as uſual at a convenient diſtance, and obſerved that they had no ſooner reached their ſtations than the ſeamen landed, ſtraggled about the ſhore, advanced into the inland country in queſt of proviſions or amuſement, indulged in indolence, or revelled in diſorder. The advice-boats returned with uncommon celerity to convey the welcome intelligence to Lyſander, who had embarked the troops, cleared his ſhips, and made every neceſſary preparation to avail himſelf of the favourable opportunity to effect by ſtratagem what it might have been dangerous to attempt by force. When his ſcouts approached the middle of the channel, they hoiſted their ſhields, which was the appointed ſignal, and at the ſame moment the Peloponneſian ſquadrons were commanded to ſet ſail that they might ſurpriſe the hoſtile fleet, and indulge that reſentment which had been rendered more violent by the long and repeated inſults of the enemy. The victory was complete, if that can be called a victory where there was ſcarcely any reſiſtance. The vigilant activity of Conon endeavoured to aſſemble the ſtrength of the Athenians; but his advice was diſdained by officers incapable and unworthy of command, and his orders were deſpiſed by ſeamen unaccuſtomed and unwilling to obey. At length they became ſenſible of the danger when it was impoſſible to reſiſt it. Their ſhips were taken, either altogether empty, or manned with ſuch feeble crews as were unable to work, much leſs to defend, them. The troops and ſailors who flocked to the ſhore from different quarters, and with diſordered precipitation, were attacked by the diſciplined valour of the Peloponneſians. Thoſe who fought were ſlain; the remainder fled into the inmoſt receſſes of the Cherſoneſus, or took refuge in the Athenian fortreſſes which were ſcattered over that peninſula. When Lyſander reviewed the extent of his well-merited ſucceſs, he found that of a fleet of an hundred and eighty ſail, only nine veſſels had eſcaped, eight of which were conducted by Conon to the friendly iſland of Cyprus, while the ninth carried to Athens the melancholy news of a diſaſter equally unexpected and fatal. An hundred and ſeventy one gallies, and three thouſand priſoners (among whom were Philocles and Adimantus), rewarded the patience and fortitude of Lyſander, who returned with his ſpoil to Lampſacus, amidſt the acclamations of naval triumph.

Before purſuing the natural conſequences of an event the moſt important that had hitherto happened in all the Grecian wars, it was neceſſary for Lyſander to decide the fate of the Athenian priſoners, againſt whom the confederates were animated by all that unrelenting hatred which is congenial to the ſtern character of republicans exaſperated by continual provocation and inſult. The injuſtice and cruelty of that ambitious people were carefully deſcribed and maliciouſly exaggerated in the tribunal of their enemies. "It would be tedious to enumerate, though it was impoſſible ever to forget, their multiplied and abominable crimes, of which ſo many individuals, and ſo many communities, had been the innocent and unhappy victims. Even of late they had deſtroyed without remorſe, and without the ſhadow of neceſſity, the helpleſs crews of a Corinthian and an Andrian veſſel. The gods had averted the atrocious reſolution propoſed by the bloody Philocles, of which the author and the approvers were equally criminal; nor could thoſe deſerve pardon who were incapable of pity." Such diſcourſe, which reſounded from every quarter of the aſſembly, declared, without the neceſſity of a formal vote, the unanimous decree of the confederates. As the priſoners had been ſtripped of their arms, there was nothing to be feared from their numbers and deſpair. They were conducted into the preſence of their armed judges; and, as a prelude to the inhuman maſſacre, Lyſander ſternly demanded of

Philocles what he deſerved to ſuffer for his intended cruelty. The Athenian replied with firmneſs, "Accuſe not thoſe whom you are entitled to judge, but inflict on us the ſame puniſhment which we, in a different fortune, would have inflicted on our enemies." The words were ſcarcely ended, when Lyſander hacked him in pieces. The Peloponneſian ſoldiers followed the ſavage example of their commander. Of three thouſand Athenians, Adimantus alone was ſpared, becauſe he had oppoſed the deteſtable reſolution of Philocles.

During his various triumphs, Lyſander never loſt ſight of the reduction of Athens; an object important in itſelf, and neceſſary to the completion of his extenſive plan. The vigilance of the Peloponneſian ſquadrons prevented the uſual ſupplies of foreign grain from reaching that diſtreſſed city. In all the towns which ſurrendered, or which were taken by ſtorm, the Athenian garriſons were ſaved from immediate death, only on condition that they returned to their native country. By ſuch contrivances the crafty Spartan expected that the ſcarcity of proviſions would ſoon compel the growing multitude of inhabitants to ſubmit to the Lacedæmonian army at Decelia. But the Athenians, who deſpiſed the aſſaults of the enemy, braved the hardſhips of famine. Even after Lyſander had blocked up their harbours with an hundred and fifty ſail, they ſtill vigorouſly defended their walls and ramparts; patiently endured fatigue and hunger; and beheld with obſtinate unconcern, the affliction of their wives and children. Amidſt the ravages of death and diſeaſe, which advanced with increaſing horror, they puniſhed, with the utmoſt ſeverity, the ignoble cowardice of Archeſtratus, who firſt mentioned capitulation, and declared that the ſame moment ſhould put an end to their independence and their lives.

But notwithſtanding the melancholy firmneſs of the popular aſſembly, a numerous and powerful party in the ſtate was governed rather by intereſt than by honour; and the greateſt enemies of Athenian liberty flouriſhed in the boſom of the republic. The ariſtocratical leaven of the Four Hundred had infected the whole body of the ſenate; and not only the inconſtant Theramenes, but ſeveral other men of abilities and influence, who had been moſt active in ſubverting that cruel tyranny, regretted the reſtoration of democracy to a people, who, as appeared from their conduct, were unable to enjoy, without abuſing, the invaluable gift of freedom. In republican governments, the misfortunes which ought to bind all ranks of men in the firmeſt and moſt indiſſoluble union, have often little other tendency than to exaſperate the political factions which rend and diſtract the community. Amidſt every form of public diſtreſs, the Athenians caballed, clamoured, accuſed and perſecuted each other; and the faction of the nobles, who acted with ſuperior concert, vigour, and addreſs, deſtroyed, by dark inſinuations, falſe witneſſes, perjury, and every other ſpecies of legal fraud and cruelty, the ſeditious Cleophon, and other turbulent demagogues, who might moſt effectually have oppoſed their meaſures. In the midſt of this confuſion and diſtreſs, Theramenes propoſed an embaſſy to Lacedæmon, which ſhould requeſt a ſuſpenſion of hoſtilities, and obtain, if poſſible, ſome moderate terms of accommodation. He named himſelf, with nine colleagues, as the perſons beſt qualified to undertake this important commiſſion; flattering the people in the cleareſt and leaſt ambiguous terms, with an undoubted proſpect of ſucceſs. A decree was immediately paſſed, inveſting the ambaſſadors with full powers. They aſſumed the ſacred badge of their inviolable character, reached in ſafety the Spartan camp, held a conference with king Agis, and afterwards repaired to the Lacedæmonian capital. During four months they carried on their pretended negociation with the ſenate, the ephori, and eſpecially with Lyſander, whoſe authority, being unknown to the ancient conſtitution of Sparta, was far more extenſive than that of all the other magiſtrates together. With him, principally, the plan was concerted for compelling the Athenians to ſubmit to terms of diſgrace. The fortifications of their harbours were to be demoliſhed, as well as the long walls which joined them with the city: they were to ſurrender all their ſhips but twelve; to reſign every pretenſion to their ancient poſſeſſions in foreign parts; to recal from baniſhment the ſurviving members of the late tyrannical ariſtocracy; to follow the ſtandard of Sparta in war; and, in peace, to mould their political conſtitution after the model which that victorious republic might think fit to preſcribe. When Theramenes produced theſe humiliating fruits of his boaſted negociation, the Athenians had no longer either ſtrength to reſiſt, or courage to die. During the long abſence of their ambaſſadors, the ſiege had been carried on with redoubled vigour. The Lacedæmonians, reinforced by the Thebans, as well as by their numerous allies of Peloponneſus, had inveſted the city on every ſide; the harbours were cloſely blocked up by Lyſander, who had become maſter of Melos, Ceos, Ægina, and Salamis; iſlands ſo near to Athens that they were almoſt regarded as a part of the Attic territory. The greateſt miſery prevailed within the walls; the famine was intolerable, and the diſeaſes more intolerable than the famine.

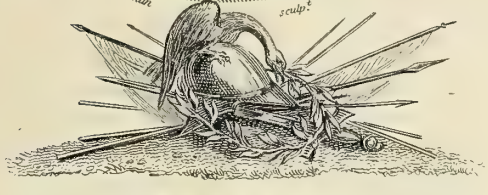
On the 16th of May, in the year before Chriſt 404, the day on which the Athenians had been accuſtomed to celebrate the anniverſary of the immortal victory of Salamis, the hoſtile armament took poſſeſſion of their harbours; the combined army entered their gates. The walls and fortreſſes of the city of Minerva, which the generous magnanimity of its inhabitants, preferring the public ſafety to their own, had abandoned in defence of Greece to the fury of a barbarian invader, were ungratefully levelled to the ground by the implacable reſentment of the Greeks themſelves; who executed their deſtructive purpoſe with all the eagerneſs of emulation, boaſting, amidſt the triumphs of martial muſic, that the demolition of Athens would be regarded, in ſucceeding ages, as the true era of Grecian freedom. Yet, after they had gratified their vengeance, they ſeemed to regret its effects. The day was concluded with a magnificent feſtival, in which the recitation of the poets formed, as uſual, the principal ornament of the entertainment. Among other pieces was rehearſed the Electra of Euripides, and particularly that affecting chorus, "We come, O daughter of Agamemnon! to thy ruſtic and humble roof." The words were ſcarcely uttered, when the whole aſſembly melted into tears; the forlorn condition of that young and virtuous princeſs, expelled the royal palace of her father, and inhabiting a miſerable cottage, in want and wretchedneſs, recalling the dreadful viciſſitude of fortune which had befallen Athens, once miſtreſs of the ſea, and ſovereign of Greece, but deprived, in one fatal hour, of her ſhips, her walls, and her ſtrength, and reduced, from the pride of power and proſperity, to miſery, dependence, and ſervitude, without exerting one memorable effort to brighten the laſt moment of her deſtiny, and to render her fall illuſtrious.

Thus did the fall of Athens, and the acknowledged ſuperiority of Sparta, terminate the memorable Peloponneſian war, of twenty-ſeven years duration. Lacedæmon, allied to Perſia, became decidedly the leading power of Greece; and ariſtocracy triumphed over the democratical form of government in almoſt every commonwealth of the Grecian ſtates.

From the FALL of ATHENS to the PEACE of ANTALCIDAS.

The Athenians had ſurrendered their fleet; their walls and harbours were demoliſhed; the citadel was occupied by a Lacedæmonian garriſon; their government was uſurped by thirty men, the dependants and creatures of Sparta! The furious and profligate Critias formed

J. Chapman sculp.t



LYSANDER.

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formed a proper head for this ariſtocratical council, whoſe members have been juſtly branded in hiſtory with the epithet of the Thirty Tyrants. On pretence of delivering the ſtate from the malice of ſeditious men, they deſtroyed the moſt valuable portion of the community. Niceratus, the ſon of Nicias, who inherited not only the opulence, but the virtues, of his father, was condemned to death; Leon, the moſt public-ſpirited, and Antiphon, the moſt eloquent, of his contemporaries, ſhared the ſame fate; Thraſybulus and Anytus were baniſhed. Whoever was known to be powerful, was regarded as dangerous; whoever was ſuppoſed to be rich, was accuſed as criminal. Strangers and citizens were involved in one promiſcuous ruin. Amidſt this general wreck, the perſecution of Lyſias and his family, merits particular notice: Cephalus, the father of that ingenious orator, was by birth a Syracuſan. The friendſhip of Pericles perſuaded him to ſettle in Athens, where, under the protection of that powerful ſtateſman, he obtained wealth and honours. His inoffenſive character eſcaped the enmity to which the opulent Athenians were too commonly expoſed. His ſons, Lyſias and Polemarchus, inherited his generoſity, and his good fortune. Though poſſeſſed of the moſt valuable accompliſhments, the brothers prudently kept aloof from the dangerous paths of public life; contented with their domeſtic felicity, they aſpired not to the rank of Athenian citizens; but liberally contributed to ſupply the exigencies of the ſtate from the profits of a flouriſhing manufacture of ſhields, which they carried on by the labour of an hundred and twenty ſlaves. The cruelty of the thirty tyrants, from whoſe rapacious eye neither obſcurity could conceal, nor merit defend, occaſioned the death of Polemarchus, and the immediate misfortunes, as well as the future glory, of his brother Lyſias, who lived to act a diſtinguiſhed part in overturning that deteſtable tyranny, and in bringing its authors to condign puniſhment. The particulars of this diabolical tranſaction are related by Lyſias with perſpicuous preciſion: "The tyrants Theognis and Piſo acquainted their aſſociates, that many ſtrangers eſtabliſhed at Athens were diſaffected to the government. This was a plauſible pretext for rifling the effects of theſe unhappy men; a meaſure to which the thirty were not only excited by avarice, but prompted by fear. Money was become neceſſary for the preſervation of their power, which, being founded on uſurpation, could only be maintained by the influence of corruption, and the mercenary aid of foreign troops. The life of man, therefore, they regarded as a matter of little moment; the amaſſing of wealth was the principal object of their deſire; to gratify which, ten ſtrangers were at once devoted to deſtruction. In this number, indeed, were two poor men; a baſe and cruel artifice to perſuade you, Athenians! that the remaining eight had been condemned, not for the ſake of their riches, but in order to preſerve the public tranquillity; as if the intereſt of the public had ever been the concern of that tyrannical cabal! Their infamous deſign was executed with inhuman cruelty. Their victims were taken in their beds, at ſupper, in the privacy of domeſtic retirement. Me they ſeized exerciſing the rites of hoſpitality; my gueſts were rudely diſmiſſed; I was delivered into the cuſtody of the worthleſs Piſo. I aſked him, 'Whether money could ſave my life?'—'Yes, a conſiderable ſum.'—'I will give you a talent of ſilver.' This he conſented to accept, as the price of my ſafety; and to ſuch a melancholy ſituation was I reduced, that it afforded me a momentary conſolation to depend on the precarious faith of a man, who (as I well knew) deſpiſed every law, human and divine. But my comfort was of ſhort duration; for I had no ſooner opened my coffer to pay him the talent, than he ordered his attendant to ſeize the contents, conſiſting of three talents of ſilver, an hundred darics, three hundred cyzicenes, and three ſilver cups. I entreated Piſo to allow me a ſmall ſum to defray the expence of my journey. But he deſired me to be thankful to eſcape with my life. Going out together, we met his aſſociates Melobius and Mneſitheides. They inquired where we were going. Piſo anſwered, to examine the houſe of my brother Polemarchus. They deſired him to proceed; but commanded me to follow them to the houſe of Damaſippus. Piſo whiſpered me to be ſilent, and to fear nothing, becauſe he would immediately come there. Upon our arrival, we found Theognis guarding ſeveral of my companions in calamity. I increaſed the number of his priſoners; but obtained an opportunity to repreſent my innocence and misfortunes to Damaſippus, entreating him, by our paſt friendſhip, to employ his influence in my behalf. He aſſured me of his intention to intercede with Theognis, whoſe avarice would eaſily perſuade him to betray his truſt. While they converſed on this ſubject, I took advantage of my knowledge of the houſe to eſcape through three ſecret paſſages, which all happened to be open and unguarded; and fortunately reaching the country-houſe of my friend Archimaus, I ſent him to the city, that he might bring me intelligence of my brother. He diſcovered, that the tyrant Eratoſthenes had dragged him from the road, and conducted him to priſon, where he was ordered to drink hemlock. At this melancholy news, I ſailed to Megara, under cover of the night. Our effects became the property of the tyrants, whoſe mean avarice ſpared not the ſmalleſt trifle belonging to us. Even the gold ear-rings of Polemarchus's wife were forcibly torn away by the brutal Melobius."

The Thirty juſtified theſe abominable acts of cruelty by the authority of a ſervile ſenate, which they ſtill allowed to ſubſiſt as the inſtrument and accomplice of their tyranny. It could not be expected, however, that in a city accuſtomed to the utmoſt liberty of opinion and freedom of debate, a body of five hundred, or even of thirty men, ſhould continue to agree in the ſame odious and oppreſſive meaſures. The firſt ſeeds of diſcord appeared in the ſpeeches and behaviour of the bold and active Theramenes; who, though the principal author of the uſurpation, was diſpoſed by the humanity of his nature, or by the ſingular inconſtancy of his temper, to deſtroy the work of his own hands. But he was ſpeedily ſtopped in his career; he was brought before his tyrants; the ſenate was aſſembled for his trial; and the tribunal was ſurrounded by armed men. When the criminal appeared, Critias addreſſed the court in a ſpeech too remarkable ever to be forgotten.

"Should you imagine, O ſenators! conſidering the great numbers who have ſuffered death, that we have been guilty of unneceſſary cruelty, you will alter that opinion on reflecting that revolutions of government muſt always be attended with bloodſhed; but particularly when a populous city like Athens, which has been long pampered with liberty, is reduced under the dominion of a few. The actual form of adminiſtration was impoſed by the Lacedæmonians as the condition of the public ſafety. In order to maintain its authority, we have removed thoſe ſeditious demagogues, whoſe democratical madneſs hath occaſioned all our paſt calamities. It is our duty to proceed in this uſeful work, and to deſtroy, without fear or compaſſion, all who would diſturb the public tranquillity. Should a man of this dangerous diſpoſition be found in our own order, he ought to be puniſhed with double rigour, and treated not only as an enemy but as a traitor. That Theramenes is liable to this accuſation, appears from the whole tenour of his conduct. He concluded the treaty with the Lacedæmonians; he diſſolved the popular government; he directed and approved the firſt and boldeſt meaſures of our adminiſtration: but no ſooner did difficulties ariſe, than he deſerted his aſſociates, declared his oppoſition

to

to their deſigns, and undertook the protection of the populace. When the weather was fair and favourable, he purſued the ſame courſe with his companions, but, on the firſt change of wind, he thought proper to alter his navigation. With ſuch an irreſolute ſteerſman it is impoſſible to govern the helm of the republic, and to guide the veſſel to her deſtined harbour. This dangerous inconſiſtency ought, indeed, to have been expected from a man to whoſe character perfidy is congenial. He began his political career under the direction of his father Hagnon, a violent partiſan of democracy. He afterwards changed his ſyſtem, in order to obtain the favour of the nobles. He both eſtabliſhed and diſſolved the government of the four hundred; and the whole ſtrain of his behaviour proves him unfit to govern, and unworthy to live." The tyrant then made a ſignal to the armed men, to ſhew the points of their daggers; and ſtepping forward, ſaid, "It is the duty, O ſenators! of a prudent magiſtrate, to prevent the deception and danger of his friends. The countenance of thoſe brave youths (pointing to his armed partiſans) ſufficiently diſcovers that they will not permit you to ſave a man who is manifeſtly ſubverting the government: I, therefore, with the approbation of my colleagues, condemn him to immediate death." Rouſed by this unexpected and ſevere ſentence, Theramenes ſtarted from his ſeat, and ſprang to the altar of the ſenate-houſe, at once imploring the compaſſion and urging the intereſt of the ſpectators, whoſe lives might be ſacrificed as unjuſtly and cruelly as his own. But the terror of armed violence prevented any aſſiſtance; and he was dragged from the altar, and hurried to execution.

In exerciſing ſuch abominable acts of cruelty, the Thirty probably conſulted the immediate ſafety of their perſons, but they precipitated the downfal of their power. The oppreſſed Athenians, whoſe ſufferings ſeemed no longer tolerable, required only a leader to rouſe them to arms, and to conduct them to victory and to vengeance. This danger the tyrants had greater reaſon to apprehend, ſince they could not expect a reinforcement to the garriſon, while the efforts of Lyſander and the Spartans were principally directed towards the extenſion of their Aſiatic conqueſts. The abilities and reſentment of Alcibiades pointed him out as the perſon beſt qualified to undertake the arduous and honourable deſign of re-aſſembling the fugitives, and of animating them with courage to recover their loſt country; but the cruel fears of the tyrants purſued him to his laſt retreat, where he was moſt iniquitouſly aſſaſſinated. Although the life of Alcibiades had been highly pernicious to his country, his death, at this particular juncture, might be regarded as a misfortune, had not the Athenian exiles been headed by a man who poſſeſſed his excellencies, unmingled with his defects and vices. The enterpriſing courage of Thraſybulus was animated by the love of liberty; and, while he generally followed the rules of juſtice and humanity, he had magnanimity to conceive, abilities to conduct, and perſeverance to accompliſh, the boldeſt and moſt arduous deſigns. Having communicated his intentions to the unhappy fugitives in Thebes and Megara, he encouraged a body of ſeventy intrepid followers to ſeize the important fortreſs of Phyla, ſituate on the Bœotian and Athenian frontier. Meanwhile the orator Lyſias, whoſe domeſtic ſufferings are above deſcribed, collected three hundred men to take vengeance on the murderers of his brother, and the authors of his own baniſhment. Theſe and other uſeful ſupplies encouraged Thraſybulus to ſurpriſe and attack the Piræus. This enterpriſe was crowned with ſucceſs, although the tyrants brought forth their whole force to oppoſe it. The battle was neither long nor bloody; but Critias and Hippomachus, the two moſt violent of the tyrants, were happily among the ſlain. Ten magiſtrates (one elected from each tribe) were now appointed to govern Athens; and the ſurviving tyrants, with thoſe who were united with them in guilt, fled to Eleuſis.

It might be expected that the Decemvirs, who aſſumed the government, ſhould have been deterred from injuſtice by the fatal example of their predeceſſors. But in the turbulent republics of Greece, however free in theory, men were little acquainted with the benefits of practical liberty. Whether the nobles, or people, or a prevailing faction of either, whatever party in the ſtate, obtained the chief adminiſtration, their authority was almoſt alike oppreſſive and tyrannical. Alternately maſters and ſlaves, thoſe fierce republicans were either unable or unwilling to draw that deciſive and impervious line between the power of government and the liberty of the ſubject; a line which forms the only ſolid barrier of an uniform, conſiſtent, and rational, freedom. The ten had no ſooner been inveſted with the enſigns of command, than they ſhewed an equal inclination with the thirty to obey the Lacedæmonians, and to tyranniſe over their fellow-citizens. After various ſkirmiſhes, which happened in the courſe of two weeks, and generally proved honourable to the bravery and conduct of Thraſybulus, the tyrants both in Eleuſis and in Athens diſpatched meſſengers to ſolicit aſſiſtance from Sparta and Lyſander. That enterpriſing leader employed his uſual diligence to protect the government which he had eſtabliſhed. At the head of a powerful body of mercenaries, he marched to the Piræus, which he inveſted by land; while his brother Libys, who commanded a conſiderable ſquadron, blocked up the harbour.

Theſe vigorous exertions reſtored the hopes of the tyrants; nor can it be doubted that Thraſybulus and his followers muſt have been compelled to ſurrender, had the Spartan commanders been allowed to act without controul. But the arrogance of Lyſander, and the rapacity of his dependants, provoked the indignation and reſentment of whatever was moſt reſpectable in his country. The kings, magiſtrates, and ſenate, conſpired to humble his ambition; and, leſt he ſhould enjoy the glory of conquering Athens a ſecond time, Pauſanias, the moſt popular and beloved of the Spartan princes, haſtily levied the domeſtic troops, and a conſiderable body of Peloponneſian allies, and marching through the iſthmus of Corinth, encamped in the neighbourhood of Athens, determined to anticipate and thwart the meaſures of Lyſander. Pauſanias ſent a deputation to the Athenians, to appriſe them that, inſtead of deſtroying their perſons, he wiſhed to protect their liberties; and, fifteen commiſſioners were appointed, who, in conjunction with Pauſanias, were empowered to ſettle the affairs of Athens. With the approbation, or rather by the command, of thoſe miniſters, the Athenian factions ceaſed from hoſtility; the tyrants were diveſted of their power; the foreign garriſon was withdrawn; and the popular government re-eſtabliſhed. This important revolution was remarkable for its ſingular mildneſs. The authors of the moſt oppreſſive uſurpation recorded in the annals of any people, were allowed to retire in ſafety to Eleuſis. Thraſybulus conducted a military proceſſion to the temple of Minerva in the citadel, where the acknowledgments of thanks and ſacrifice were offered to that protecting divinity, who had reſtored the virtuous exiles to their country, and healed the diviſions of the ſtate. The citizens who had been baniſhed, and thoſe who had driven them into baniſhment, joined in this religious duty; after which, convening in full aſſembly, they were addreſſed by Thraſybulus in theſe memorable words:

"The experience of your paſt tranſactions may enable you, men of Athens! to know each other, and to know yourſelves. On what pretence could you, who drove us from the city, abet a tyrannical faction?

Why would you have enſlaved your fellow-citizens? On what ſuperiority of merit could you found your claim of dominion? Is it that you are moſt honeſt and virtuous? Yet the people whom you inſulted never relieved their poverty by unjuſt gain; whereas the tyrants, whom you ſerved, increaſed their wealth by the moſt oppreſſive rapacity. Is it that you are more brave and warlike? Yet this injured people, alone and unaſſiſted, and almoſt unarmed, have overcome your ſuperior numbers, reinforced by the Lacedæmonian garriſon, the powerful ſuccours of Pauſanias, and the experienced mercenaries of Lyſander. As you muſt yield the prize both of probity and of proweſs, ſo neither can you claim the honour of ſuperior prudence and ſagacity. You have been not only conquered in war, but overcome in negociation, by the people whom you deſpiſed; to whom your Lacedæmonian maſters have delivered you, like biting curs, bound and muzzled, to be juſtly puniſhed for your unprovoked inſolence and audacity. But as to you, my fellow-ſufferers and fellow-exiles! you, who ſhared the hardſhips of my baniſhment, and who now ſhare the triumph of my victorious return, I exhort you to forgive and forget our common injuries. Let the dignity of your ſentiments adorn the ſplendour of your actions. Prove yourſelves ſuperior to your enemies, not only in valour but in clemency, that moderation may produce concord, and concord ſtrength."

The effect of this generous enthuſiaſm, excited and diffuſed by Thraſybulus, appeared in a very extraordinary reſolution of the aſſembly. During the uſurpation of the Thirty, an hundred talents had been borrowed from the Lacedæmonians, to ſupport the rigorous cruelty of a government which had baniſhed five thouſand, and put to death, untried, fifteen hundred citizens. The repayment of this ſum was not to be expected from the people at large, againſt whoſe intereſt and ſafety it had been ſo notoriouſly employed. Yet the Athenians unanimouſly reſolved, on this occaſion, that the money ſhould be charged indiſcriminately on them all. This unexampled generoſity might have encouraged even the enfeebled party of the tyrants to return from Eleuſis. But they were too ſenſible of their guilt to expect forgiveneſs or impunity. Having fortified their inſecure reſidence, in the beſt manner that their circumſtances could permit, they began to prepare arms; to collect mercenaries; and to try, anew, the fortune of war. But their unequal hoſtility, the effect of rage and deſpair, was eaſily defeated by the vigour of the new republic. The moſt obnoxious leaders ſealed, with their blood, the ſafety of their adherents, who ſubmitted to the clemency of Thraſybulus. That fortunate and magnanimous commander generouſly undertook their cauſe, and obtained a decree of the people for reſtoring them to the city, for reinſtating them in their fortunes and privileges, and for burying in oblivion the memory of their paſt offences. The aſſembly even ratified, by oath, this godlike amneſty, of which both the idea and the name have been adopted by moſt civiliſed nations, and extolled by all hiſtorians, ancient and modern.

It were well for the honour of Athens, if none but the cruel abettors of an ariſtocratical faction had experienced the unjuſt rigour of its tribunals. But among the firſt memorable tranſactions, after the re-eſtabliſhment of democracy, happened the trial and condemnation of Socrates; a man guiltleſs of every offence but that of diſgracing, by his illuſtrious merit, the vices and follies of his contemporaries. His death ſealed the inimitable virtues of his uſeful life; it ſeemed to be beſtowed as a favour, not inflicted as a puniſhment; ſince, had Socrates, who had already paſſed his ſeventieth year, yielded to the decays of nature, his fame would have deſcended leſs ſplendid, certainly more doubtful, to poſterity. In the phrenzy of their perſecution, they condemned him to die by the bitter cup of hemlock. But this perſecution of philoſophy was accidental and tranſient. Mingled ſentiments of pity, ſhame, and reſentment, ſoon gave a new direction to the popular fury, which raged with more deſtructive, yet far juſter, cruelty, againſt the accuſers and judges of Socrates. Many were driven into exile; many were put to death; ſeveral periſhed by their own hands. The illuſtrious ſage was honoured by ſignal monuments of public admiration; his fame, like the hardy oak, derived vigour from years; and increaſed from age to age, till the ſuperſtition of the Athenians at length worſhipped, as a god, him whom their injuſtice had condemned as a criminal.—See the article SOCRATES.

The operations of war now again conſpired with the revolutions of government, to connect the tranſactions of Greece with the annals of the Perſian empire. The ſame memorable year which terminated the Peloponneſian war, brought to a concluſion the active reign of Darius Nothus. He named as his ſucceſſor Artaxerxes, ſtyled Mnemon, from the ſtrength of his memory; and perſiſted in this choice, notwithſtanding the oppoſition of the artful Paryſatis, who employed all her influence to obtain the kingdom for Cyrus, the younger brother of Artaxerxes, and the peculiar favourite of his mother. The rivalſhip of the young princes, both of whom were at court during the laſt illneſs of Darius, unhappily degenerated into enmity; and a circumſtance, which would be thought immaterial in the preſent age, increaſed the indignation of Cyrus. The birth of Artaxerxes had happened before the acceſſion of his father to the throne, but Cyrus was born the ſon of a king; a diſtinction which, however frivolous it may appear in modern times, had engaged Darius Hyſtaſpes to prefer Xerxes, the younger of his ſons, to his elder brother Artabazanes.

The magnanimity of Cyrus naturally impelled him into the road of danger and glory; he immediately prepared to uſurp the throne of Artaxerxes though defended by a million of Perſian ſoldiers. But the generous ardour and liberal ſentiments of Cyrus acquired him the firm attachment and willing obedience of all his barbarian ſubjects, in the populous provinces which he commanded in his own right, and whoſe united ſtrength exceeded an hundred thouſand fighting men. This armament, aſſiſted by the Greeks, encouraged Cyrus to undertake a grand expedition for acquiring the empire of the Eaſt. By a variety of important ſervices he had deſerved the gratitude of the Lacedæmonian republic; which had been raiſed, chiefly by his aſſiſtance, to the firſt ſtate in Greece, and to the ſovereignty of the ſea.

In return for that favour, the Spartans readily complied with his requeſt, by ſending into Aſia eight hundred heavy-armed men, under the command of the intrepid Cheiriſophus; and they charged their admiral, Samius, who had ſucceeded Lyſander in the government of the Ionian coaſt, faithfully to co-operate with Cyrus, by employing his powerful fleet in whatever ſervice the Perſian prince might think proper to recommend. Had they done nothing more than this, Cyrus might well have praiſed their generous gratitude; but the friendſhip of the Spartans carried them ſtill farther. They allowed him to recruit his forces in every part of their dominions; and the liberal munificence of Cyrus had acquired numerous partiſans well qualified to raiſe and to command thoſe valuable levies. Clearcus the Spartan, Menon the Theſſalian, Proxenus the Bœotian, Agias the Arcadian, and Socrates the Acæan, all alike devoted to the intereſt and glory of the Perſian prince, collected, chiefly from their reſpective republics, above ten thouſand heavy-armed men, and near three thouſand archers and targeteers.

In the beginning of the year 400 before Chriſt, Cyrus marched from the Ionian coaſt into Upper Aſia, at the head of an hundred thouſand barbarians, and about

thirteen thouſand Greeks. His journey towards Babylon, his defeat and death in the plain of Cynaxa, the diſperſion of his followers, and the memorable retreat of the Greeks to their native country, have been related by the admired diſciple of Socrates, with ſuch deſcriptive beauty, with ſuch profound knowledge of war and of human nature, and with ſuch inimitable eloquence, as never were re-united in the work of any one man but that of Xenophon the Athenian. The retreat was principally conducted by Xenophon himſelf; which has enabled him to adorn his narrative with ſuch an affecting variety of incidents and characters, as will always ſerve to prove that the force of truth and nature is far ſuperior to the powers of the moſt fertile fancy. For particulars of this very intereſting expedition of the Greeks into Babylonia, ſee the article ATTICA, vol. ii. p. 527–530.

Trebizond, one of the ancient Greek colonies, was the firſt friendly city at which the Grecians arrived, after ſpending more than a twelvemonth in almoſt continual travelling and war. The numerous inhabitants of this once flouriſhing ſea-port, now decayed into the neglected harbour of Platana, received them with open arms, generouſly ſupplied their neceſſities, and treated them with all the endearing hoſpitality of kinſmen, who commiſerated their ſufferings and admired their virtue. The Grecians, on their part, diſplayed a very becoming ſenſe of the evils which they had eſcaped, and of their actual ſecurity. In the fervour of religious gratitude, they paid the ſolemn vows and ſacrifices which they had promiſed to Jupiter the Preſerver, and the other gods and heroes, whoſe bountiful protection had hitherto conducted them through ſo many known and ſo many concealed dangers. It might be expected, that the army, having reached the country of their friends and kinſmen, ſhould have been diſpoſed peaceably to enjoy the fruits of their paſt labours and dangers. But it is more eaſy for men to repel the aſſaults of external violence, than to elude the effects of their own ungovernable paſſions. The Greeks were involved in real danger, in proportion as they attained apparent ſecurity. During the long courſe of their laborious journey, the terror of unknown barbarians hanging over them, maintained their diſcipline and their union. But the air of a Grecian colony at once diſſolved both. They, who in remote regions of the Eaſt had acted with one ſoul, and regarded each other as brethren, again felt the unhappy influence of their provincial diſtinctions. The army was divided by ſeparate intereſts, as well as by partial attachments. Thoſe who had acquired wealth, deſired to return home to enjoy it. Thoſe who were deſtitute of fortune, longed to plunder friends and foes, Greeks and barbarians. The commanders deſpiſed and deceived the troops; the troops clamoured againſt, and inſulted, the commanders. Both were really in the wrong; and both ſuſpected and accuſed each other of imaginary crimes, of which none were guilty.

Xenophon, who, with wonderful addreſs, has juſtified himſelf from every reproach that can reflect either on his underſtanding or his heart, does not deny an imputation to which he was expoſed by diſcovering (ſomewhat, perhaps, unſeaſonbly) the extenſive views of a philoſopher. When he ſurveyed the ſouthern ſhores of the Euxine, covered with tall and majeſtic foreſt-trees, admirably adapted to ſhip-building; when he conſidered the convenience of the harbours, and the productions of the neighbouring territory, conſiſting in flax, iron, and every commodity neceſſary in raiſing a naval power, he was ambitious of eſtabliſhing a new ſettlement, which the numbers, the valour, and the activity, of his followers, muſt ſoon render ſuperior to the other Grecian colonies on the Euxine, or perhaps in any part of Aſia. But this noble deſign, which might have proved ſo uſeful and honourable to the army, was blaſted by the jealouſy of his enemies. Xenophon was reproached with forming projects equally romantic and dangerous; and accuſed of an intention to keep the ſoldiers from home, that they might continue dependent on himſelf, and that he might increaſe his own fame and fortune at the riſk of the public ſafety.

The mutinous and diſtracted ſpirit of the troops rendered all their future meaſures weak and wavering. The terror which they inſpired, and their wants, which it was neceſſary to ſupply, made them very unwelcome gueſts at Cotyora, Sinopè, and Heraclea, at which places they continued ſeveral months, under pretence of waiting for tranſports, but meanwhile plundering the neighbouring country, laying the cities under contribution, and threatening them with burdens that exceeded their faculties. Meanwhile Cheiriſophus had procured ſome veſſels from Anaxibius, the Spartan admiral, but not ſufficiently numerous to tranſport ſo great an army. The ſoldiers thus diſappointed of their hopes, and diſcontented with their commanders, raſhly undertook, in ſeparate bodies, the dangerous journey through Bithynia, a country extending two hundred miles from Heraclea to Byzantium, and totally inhabited by the Thynians, a Thracian tribe, the moſt cruel and inhoſpitable of the human race. In this expedition they loſt above a thouſand men; and the deſtruction muſt have been much greater, had not the generous activity of Xenophon ſeaſonably led his own diviſion to the aſſiſtance of thoſe who had deſerted his ſtandard. Cheiriſophus was ſoon afterwards killed by a violent medicine; and the ſole command devolved on Xenophon; not by appointment, but by the voluntary ſubmiſſion of the troops to his ſuperior mind. He at length taught them to defeat the irregular fury of the Thynians; and, after taking many ſlaves, and much booty, conducted them in ſafety to Chryſopolis, now known by the name of Scutari, and conſidered as the Aſiatic ſuburb of Conſtantinople.

The neighbourhood of Greece ſeemed infectious to the temper of the troops. At Byzantium their mutinous ſpirits were again thrown into fermentation. Cleander, the governor of that city, who had come down to meet them, narrowly eſcaped death during the fury of a military ſedition. Their behaviour rendered them the objects of terror to all the inhabitants of thoſe parts. The Lacedæmonians even dreaded the aſſiſtance of ſuch dangerous allies, though their own countrymen; and Pharnabazus, alarmed for the ſafety of his province, practiſed with Anaxibius, who commanded in the Helleſpont, to allure them, by fair promiſes, into Europe. Gained by the bribes of the Perſian, not only Anaxibius, but his ſucceſſor Ariſtarchus, made propoſals of advantage to the army, which he had not any intention to fulfil. The troops, enraged at this diſappointment, would have attacked and plundered Byzantium, had they not been reſtrained by the wiſdom and authority of Xenophon, who, ſtruggling like a ſkilful pilot againſt the violence of a tempeſt, prevented the execution of a meaſure which muſt have covered them with eternal infamy.

The ſeaſonable remonſtrances of Xenophon ſaved Byzantium; but it is probable that neither the weight of argument, nor the power of eloquence, would have long reſtrained the diſcontented troops from attempting other enterpriſes of a ſimilar nature, if an opportunity had not preſented itſelf of employing their activity in the ſervice of Seuthes, a bold and ſucceſsful adventurer of Lower Thrace. Mæſades, the father of Seuthes, reigned over the Melandeptans, the Thynians, and the Thranipſans, who inhabited the European ſhores of the Propontis and Euxine ſea. The licentious turbulence of his ſubjects had driven him from his dominions. He took refuge with Medocus, king of the Odryſians, the moſt powerful tribe in Upper Thrace, with whoſe family his own had long been connected by the ſacred ties of hoſpitality. Medocus kindly received, and generouſly

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nerouſly entertained, the father; and, after his deceaſe, continued the ſame protection and bounty to his ſon, Seuthes. But the independent ſpirit of the young prince diſdained, as he himſelf expreſſes it, "to live like a dog at another man's table." He deſired horſes and ſoldiers from Medocus, that he might acquire ſubſiſtence for himſelf. His requeſt was granted; his incurſions were ſucceſsful; the terror of his name filled all the maritime parts of Thrace; and there was reaſon to believe that, if he could join the Grecian forces to his own, he might eaſily regain poſſeſſion of his hereditary dominions. For this purpoſe he ſent to Xenophon Medoſades, a Thracian, who, underſtanding the Greek language, uſually ſerved him as ambaſſador. The terms of the treaty were ſoon agreed on. Seuthes promiſed each ſoldier a cyzicene, (about eighteen ſhillings ſterling,) the captains two cyzicenes, and the generals four, of monthly pay. The money, it was obſerved, would be clear gain, as they might ſubſiſt by plundering the country.

Having communicated their deſigns to the army, the Grecian commanders followed Medoſades to the camp of Seuthes, which was diſtant about ſix miles from the coaſt of Perinthus, a city of conſiderable note in the neighbourhood of Byzantium. They arrived after ſunſet, but found the barbarians awake and watchful. Seuthes himſelf was poſted in a ſtrong tower; horſes ready bridled ſtood at the gate; large fires blazed at a diſtance, while the camp itſelf was concealed in darkneſs. The Greeks were permitted to enter. Seuthes received them with ruſtic hoſpitality; before entering on buſineſs, challenged them to drink in large horns full of wine; then confirmed the promiſes of his ambaſſador; and ſtill farther allured Xenophon by the hopes of receiving, beſides the ſtipulated pay, lands and cattle, and an advantageous eſtabliſhment on the ſea-ſhore. Seuthes knew how far to indulge, and when to reſtrain, the joys of feſtivity. Without allowing his revels to diſturb the ſtillneſs of the night, he roſe with a martial ſhout; and addreſſing the Grecian captains, deſired them to have their men ready to march in a few hours, that the enemy, who were as yet unacquainted with the powerful reinforcement which he had received, might be taken unprepared, and conquered by ſurpriſe.

The camp was in motion at midnight; it was the middle of winter, and the ground was in many parts covered with a deep ſnow. But the Thracians, clothed in ſkins of foxes, were well prepared for ſuch nocturnal expeditions. The Greeks ſuffered much by the cold; but the rapidity of their march, animated by the proſpect of ſucceſs, made them forget their ſufferings. Wherever they arrived, the villages were attacked and plundered, the houſes were burned, many captives and cattle were taken, and the ravages of that bloody night ſufficiently repreſent the uniform ſcene of cruelty, by which, in the courſe of a few weeks, Seuthes compelled into ſubmiſſion the inhabitants of that fertile and populous ſlip of land that lies between the Euxine and Propontis. But the poſſeſſion of this territory, which formed the moſt valuable portion of his hereditary dominions, could not ſatisfy his ambition. In the ſpace of two months after his junction with the Greeks, Seuthes extended his poſſeſſions ſeveral days march from the ſea; his numerous but unſkilful enemies, fighting ſingly, were ſucceſſively ſubdued; each vanquiſhed tribe increaſed the ſtrength of his army; the Odryſians, allured by the hopes of plunder, flocked to his ſtandard, and the growing proſperity of his fortune, no longer requiring the ſupport, diſpoſed him to neglect the ſervices, of his Grecian auxiliaries. The ungrateful levity of the barbarian was encouraged by the perfidious counſels of his favourite Heraclides, who ſtrongly exhorted his maſter to defraud the Greeks of their pay, and to deliver himſelf from their troubleſome importunities, by diſmiſſing them from his ſervice. But the fears, rather than the delicacy, of Seuthes, prevented him from complying with this advice; he loſt his honour without ſaving his money; and the Grecian generals had an early opportunity to reproach his perfidy and ingratitude, being ſoon called to engage in a more honourable war, kindled by the reſentment of Artaxerxes againſt the preſumption of the Spartans, who had ſo ſtrenuouſly ſupported the unfortunate rebellion of Cyrus.

Without any formal declaration of war, which the late hoſtilities in the Eaſt ſeemed to render unneceſſary, Tiſſaphernes, by order of the Perſian king, attacked the Æolian cities; and Pharnabazus readily, entering into his views, zealouſly concurred with all his meaſures. The Lacedæmonian garriſon, ſupported by the townſmen, defended themſelves with their uſual courage, earneſtly ſoliciting, however, a reinforcement from home, which might enable them to ſurmount ſuch an unexpected danger. On this occaſion, the Spartan ſenate were not wanting to the aſſiſtance of their garriſons, or to the hopes of their Æolian allies. They immediately levied a body of five thouſand Peloponneſian troops, and demanded a conſiderable ſupply from the Athenians. The latter ſent them three hundred horſemen, who having ſerved under the thirty tyrants, were cheerfully ſacrificed to this dangerous duty by the partiſans of the new democracy. The command of the joint forces was entruſted to the Spartan Thimbron, who had orders, as ſoon as he arrived in Æolis, to take into pay the Greeks who had returned from the expedition of Cyrus, and who were then employed in the diſhonourable ſervice of an ungrateful barbarian. The mean and perfidious behaviour of Seuthes, who, in his new character of prince, ſtill retained his original manners of a Thracian robber, rendered the propoſal of joining Thrimbron extremely agreeable to Xenophon, who conducted to the Lacedæmonian ſtandard ſix thouſand men, the venerable remains of an army exhauſted and ennobled by unexampled toils, and unexampled and unimitated perſeverance.

With this powerful reinforcement Thimbron opened the campaign againſt the lieutenant of Artaxerxes, at the diſtance of two years after Cyrus had marched from Epheſus to diſpute the crown of Perſia. The firſt impreſſions of the Grecian arms were attended with conſiderable ſucceſs. Thimbron took the towns of Pergamus, Teuthrania, Haliſarnia, Myrina, Cymè, and Grynium. But the walls of Lariſſa, a ſtrong city in the Troade, defied his aſſault: the vigilant garriſon baffled all his contrivances for depriving them of freſh water; and, aſſiſted by the inhabitants of the place, made a vigorous ſally, repelled the beſiegers, and burned or demoliſhed their works.

Nothing but continual action, and an uninterrupted career of victory, could reſtrain the licentious paſſions of the troops, compoſed of a motley aſſemblage from ſo many different communities. Their ſeditious ſpirit rendered them formidable to each other, and to the Greeks of Aſia. Their rapacity ſpared not the territories of the Lacedæmonian allies, who loudly complained to the ſenate, aſcribing the violence of the troops to the weakneſs of the general. In conſequence of this repreſentation, Thimbron was recalled and diſgraced, and the command, for which he ſeemed ſo ill qualified, was beſtowed on Dercyllidas, a man who, to the talents of an able general, added the reputation of being the beſt engineer of his times. By a judicious direction of the machines of war which he invented, or improved, Dercyllidas overcame the obſtinacy of Lariſſa; and, in the ſpace of eight days, reduced eight other cities in the province of Pharnabazus. The rapidity of his conqueſts recommended him to the Spartan ſenate, and his moderate uſe of victory endeared him to the Aſiatic colonies. He leſſened their taxes, encouraged their induſtry, heard their complaints with candour, and decided their

differences with the moſt impartial juſtice. Diſdaining the cruel example of his predeceſſors, he impoſed not any arbitrary exactions on the peaceful citizens and huſbandmen; and, leſt the maintenance of his troops ſhould prove burdenſome to the allies and ſubjects of Sparta, he fixed his winter-quarters in Bithynia, where the valour of Xenophon and his followers had lately ſpread the terror of the Grecian name.

Early in the ſpring, commiſſioners were ſent from Sparta, to inſpect the affairs of Aſia, and to re-appoint, for another year, the authority of Dercyllidas, provided their obſervations and inquiries confirmed the very favourable accounts that had been given of his adminiſtration. Dercyllidas had ſcarcely reſumed the command, when the combined forces of Pharnabazus and Tiſſaphernes appeared in the neighbourhood of Epheſus. The general collected his whole ſtrength in order to give them battle; the European ſoldiers diſplayed a noble ardour for action; but the inhabitants of the Aſiatic coaſt, who had flocked to his ſtandard, were intimidated by the ſight of an enemy whoſe numbers far exceeded their own. This panic might have proved fatal, had not the troops of Tiſſaphernes felt the ſame terror which they themſelves inſpired. They recollected the bravery of the ten thouſand who accompanied Cyrus; they perceived that the forces with whom they now had to contend exceeded that number; but they did not reflect that the army of Dercyllidas was ſwelled by the degenerate Greeks of Æolis and Ionia, whoſe minds had been enfeebled and degraded by a long ſeries of oppreſſion. The cowardice of the Perſians engaged Tiſſaphernes, much againſt the inclination of Pharnabazus, to propoſe a conference; the cowardice of the Ionians engaged Dercyllidas to accept the propoſal. Hoſtilities were thus ſuſpended; mutual hoſtages were given; overtures of peace were made; and meſſengers were diſpatched for inſtructions to the Spartan council, and to the court of Perſia.

The deſign of Tiſſaphernes, however, was only to gain time by amuſing the enemy. The moſt ſolemn engagements had long loſt their power over his perfidious mind. He treacherouſly watched an opportunity to renew the war, waiting with impatience for reinforcements from the Eaſt, and eſpecially for the equipment of a fleet, which Artaxerxes was preparing in the ports of Phœnicia. Theſe ſecret preparations were communicated to Sparta by the diligence of Herodas. The Spartan ſenate were alarmed with the danger, indignant at the treachery of Tiſſaphernes, and diſpleaſed with the too eaſy credulity of their general. But the death of Agis had given them, in the perſon of their firſt magiſtrate, a commander who equalled Dercyllidas in merit, and who far ſurpaſſed him in renown.

The memorable expedition againſt the Eleans was the laſt exploit of the long and warlike reign of Agis. On his death-bed he acknowledged for his ſon Leotychides, whoſe legitimacy the levity or the guilt of his mother Timea had expoſed to juſt ſuſpicion. But this late avowal of a ſucceſſor, whom he had ſo long diſowned, did not ſatisfy the partiſans of Ageſilaus, who was the brother of Agis on the ſide of his father Archidamus, but younger by many years, being born of a different mother, and, except Leotychides, the neareſt heir to the throne. Under a diminutive and ignoble form, Ageſilaus concealed a vigorous and fervid mind, a manly elevation of character, a generous and noble ſoul. Theſe high qualities, adorned by the milder virtues of modeſty, candour, and condeſcenſion, eaſily attracted the notice, and merited the eſteem, of the firſt ranks in Sparta; and of none more than Lyſander, who, as his own perſonal hopes of grandeur were blaſted, confined his ambition to the aggrandiſement of his friend. That eloquence and addreſs, which would have been ineffectual if employed for himſelf, ſucceeded in behalf of another; and by the influence and intrigues of Lyſander, Ageſilaus was declared ſucceſſor to the vacant throne; and thus became commander in chief of the Greek forces in Aſia.

In the interval of theſe ſucceſſive honours, he approved his attentive vigilance in the ſervice of the republic, of which the ſafety, and even the exiſtence, was endangered by a daring and bloody conſpiracy. A youth named Cinadon, diſtinguiſhed above his companions by extraordinary ſtrength and agility, was not leſs conſpicuous for undaunted courage and ambition. Deſcended of an obſcure family, Cinadon felt and regretted the mortifying partiality of the government under which he lived. His pride was deeply wounded with the reflection, that whatever abilities his youth might promiſe, and his manhood mature, the unfortunate circumſtances of his birth muſt for ever exclude him from the principal dignities of the ſtate, which circulated among a few Spartan families, without the poſſibility of being extended beyond that very limited ſphere. The warmth of his character, and the impetuoſity of his paſſions, prompted him to ſeek revenge: nor was his headlong ferocity alarmed by the means, however atrocious, that muſt lead to this favourite end. He communicated the horrid deſign to men of his own and of an inferior condition, exaggerating their cruel oppreſſion under a ſtern ariſtocracy, which he contraſted with the mild equality of the neighbouring communities; aſſerting, that even the ſubjects of a monarchy enjoyed greater equality and liberty than the members of the Spartan republic, ſince the former all equally participated in thoſe preferments and honours, to which not only the ſlaves, the Helots, and freedmen, but the whole body of the Lacedæmonian people, were forbidden to aſpire: nor did he forget to encourage them all with the certain proſpect of ſucceſs, by contraſting their own ſtrength and numbers with the weakneſs of an enemy, who might be taken unarmed, and cut off by ſurpriſe.

The time for action approached, and the author of the conſpiracy commanded his aſſociates to be ready at a certain call. Ageſilaus, meanwhile, performed the accuſtomed vows and ſacrifices for the ſafety of the republic; ſoon after which one of the conſpirators denounced Cinadon to the magiſtrates, as guilty of a treaſonable deſign, of which he had promiſed to become an accomplice. He told them, that Cinadon having conducted him to the great ſquare of the city, which being deſtined for the public aſſembly, was the uſual place of rendezvous, deſired him to count the number of Spartans whom he ſaw in that ſpacious reſort. That he counted the king, the ephori, the ſenators, and about forty others, and then aſked Cinadon, for what purpoſe he had required him to take that trouble? Becauſe, replied the conſpirator, I reckon the Spartans to be enemies, and all the reſt, whoſe great numbers you behold in the market-place, to be friends. Nor does this proportion apply to Sparta only; in the farms and villages adjacent to the city, we ſhall in each houſe and family have one enemy, the maſter, but all the ſervants will be our friends. Cinadon then acquainted him with the object and cauſe of the conſpiracy, which had been formed by men of probity and fortitude, and which was ſoon to be communicated to the ſlaves, peaſants, and the whole body of Lacedæmonian people, whoſe animoſity againſt the Spartans was too violent to be concealed. That the greateſt part of the conſpirators, being trained for war, had arms in their hands; that the ſhops of the armourers, the tools of thoſe artificers who wrought in metal, wood, and ſtone, and even the inſtruments of agriculture, might furniſh ſuch weapons to the reſt. This alarming intelligence rouſed the activity of the Spartan magiſtrates. It would have been imprudent to ſeize Cinadon in the capital, as they were unacquainted with the number of his aſſociates. On pretence of the public ſervice, they contrived to ſend him to Aulon (for in ſimilar expeditions they had often employed

employed his enterprising valour), that he might seize, in that licentious city, and bring within the reach of justice, several daring violators of the Spartan laws. The senate prepared waggons for conveying the prisoners, and furnished every thing necessary for the journey. A body of chosen horsemen was appointed to accompany Cinadon, who set out without suspecting that this long train of preparation was destined against himself. But no sooner had he reached a proper distance from the city, than he was seized as a traitor, and compelled, by the terror of immediate death, to discover his accomplices. Their names were sent to the senate, who instantly secured their persons. Cinadon, Tisamenes, a priest, and the other leaders of the conspiracy, were scourged through the city, gored with instruments of torture, and finally put to death.

The alarm occasioned by this rash enterprise of Cinadon had scarcely subsided, when intelligence arrived of the formidable preparations of Artaxerxes; against whom the persuasive influence of Lysander encouraged them to employ the heroic abilities of their young prince, Agesilaus. In the spring of the year 396 before Christ, he left Sparta, with three thousand Lacedæmonian freedmen, and a body of foreign troops, amounting to six thousand, chiefly collected from the confederate cities of Peloponnesus. Since the irregular and supine conduct of Agis, in his expedition against Argos, the Spartan kings were usually attended in the field by a council of ten senators, whose concurrence was held necessary in all public measures. Agesilaus demanded a council, not of ten, but of thirty, Spartans: a refined stroke of policy, which strongly indicates that artful dexterity with which, during a long administration, he uniformly promoted the views of his interest and ambition. By augmenting the number of the council, he diminished its importance. Each member, possessing less weight and influence, felt himself less concerned in the honour of the body; and the whole were more easily swayed and governed by the king. Lysander alone, whose name in Asia was illustrious or terrible, rivalled for a while the power of Agesilaus. But the colleagues of Lysander were the first to dispute his pretensions, and to controul his authority. Agesilaus availed himself of their envy, and listened to the dictates of selfishness, in humbling the arrogance of a man who had been the chief author of his own greatness. After a disgraceful rupture, which ended in an affected reconciliation, Lysander was sent by Agesilaus and his council to command the Lacedæmonian squadron in the Hellespont, an inactive and subordinate service, in which he could not expect an opportunity of performing any thing worthy of his ancient fame. He returned, therefore, in a few months to Sparta, covered with disgrace, and vowing implacable revenge against the cruel ingratitude of his friend, which he felt more deeply than the injustice of all his enemies together.

Agesilaus fixed his head-quarters at Ephesus; and thither Tissaphernes sent an embassy, demanding the reason of such mighty preparations. Agesilaus replied, "That the Greeks in Asia might enjoy the same liberty with their brethren in Europe." The messengers of Tissaphernes had orders to declare, that the great king was inclined to acknowledge the ancient freedom and independence of the Grecian colonies; that the report of his hostile intentions against either them or the mother-country was totally void of foundation; and that, in consequence of the recent transactions between Tissaphernes and Dercyllidas, ambassadors might shortly be expected from Susa, empowered to ratify a firm and lasting peace between Artaxerxes and the Greeks. Until this desirable work should be completed, Tissaphernes earnestly desired a continuation of the truce, which, on his side, he was ready to seal by whatever formalities Agesilaus thought proper to require. The Spartan king frankly avowed his suspicions of treachery; yet, unwilling to embroil his country in an unnecessary war, he dispatched Dercyllidas, with two members of the Spartan council, to renew his late engagements with Tissaphernes. The perfidious satrap now deceived for the last time. No sooner had he received the long-expected auxiliaries from the East, than he commanded Agesilaus to leave Ephesus, and to evacuate the coast of Asia; if he delayed to comply, the weight of the Persian arms would enforce obedience. The prudent Spartan, while his friends were alarmed with this unexpected declaration, assumed an unusual gaiety of countenance, observing, that he rejoiced to commence the war under such favourable auspices, since the treachery of Tissaphernes must render the gods his enemies.

Meanwhile he prepared to encounter the insidious arts of the satrap with equal address. It was industriously given out, that he intended to march into the province of Caria, the favourite residence of Tissaphernes, which was adorned by his voluptuous parks and palaces, and strengthened by a fortress, the repository of his treasures. The intervening cities were ordered to mend the roads, to furnish a market, and to prepare every thing necessary to facilitate the march of the Grecian army. Tissaphernes, not doubting that Caria was the intended scene of war, encamped with his numerous cavalry in the plains of the Meander, in readiness to intercept the passage of the enemy. But Agesilaus, having posted a sufficient garrison in Ephesus, left that city, and turning to the north, advanced by rapid marches into Phrygia, the rich plunder of which rewarded the active diligence of his soldiers. The selfish satrap was unwilling to relieve the province of Pharnabazus, by weakening the defence of his own; and accordingly remained inactive, still suspecting an invasion of the Greeks from Ephesus and the neighbouring seaports. During the greatest part of the summer Agesilaus ravaged Phrygia; the barbarians were totally defeated in several rencounters; and the victorious Greeks returned, loaded with spoil, to winter in Ephesus.

In the Phrygian expedition, Agesilaus shared, and surpassed, the toils of the meanest soldier, from whom he refused to be distinguished by his dress, his food, or his comforts by day or night. The inactive season of the year was most diligently and usefully employed. Ephesus and the neighbouring towns glowed with the ardour of military preparation. The Phrygian wealth was employed to urge the hand of industry. Shields, spears, swords, and helmets, filled every magazine; and the inhabitants of the country were allured by great rewards to form their best horses to the discipline of the field. The expectation of Xenophon, who beheld these interesting scenes at Ephesus, was fully gratified by the success of the ensuing campaign. Agreeably to the annual revolution of offices in the Lacedæmonian republic, a commission of thirty Spartans was sent early in the spring to supply the place of Lysander and his colleagues. Among the members of this new council Agesilaus distributed the various departments of military command. The superior abilities of Herippidas were entrusted with the veteran army which had served under Cyrus. Xenocles was appointed to conduct the cavalry. Mygdo commanded the Asiatic levies; Scythes, the Lacedæmonian freedmen; for himself, as his peculiar care, the general reserved the faithful and warlike body of Peloponnesian allies, chosen from the flower and vigour of many flourishing republics.

Agesilaus now declared, that he would be no longer satisfied with ravaging the extremities, but was determined to attack the centre, of the Persian power. He therefore marched towards the royal city of Sardis, and ravaged the adjoining territory without opposition. After several slight skirmishes, he defeated the Persians in a general engagement on the banks of the Pactolus, surrounded and took their camp, in which, beside other

riches, he found seventy talents of silver. Tissaphernes, after the battle, fortified himself, with a considerable body of troops, in the strong city of Sardis, where he continued, displaying the inglorious pride of pomp and luxury, while the provinces of Artaxerxes fell a prey to the hostile invader. The time of his punishment, however, was arrived. Tithraustes was sent from court to take off the head of the perfidious Tissaphernes, who, being allured to a conference, met with a just fate; although the author of his death was perhaps the only man in Persia with whom Tissaphernes had any claim of merit.

Tithraustes, who had come from Babylon escorted by a powerful body of cavalry, assumed the government of Lower Asia, and the conduct of the war. He immediately sent an embassy to Agesilaus, to declare, "That Tissaphernes, author of those troubles which embroiled Greece and Persia, had suffered a just death; and that the great king, who had been too long deceived by his artifices, was now ready to acknowledge the independence of the Grecian colonies, on condition that Agesilaus withdrew his troops from Asia." The Spartan king replied, "That the alternative of war or peace depended not on himself, but on the resolution of the assembly and senate; nor could he remove his forces from the east without the express command of his republic." The artful satrap, perceiving that it was impossible to interrupt, determined to divert, the course of hostilities. None knew better than Tithraustes the use of money as an instrument of negociation. He condescended to purchase from Agesilaus, by a very large sum, the tranquillity of Lydia; and, as it seemed a matter of indifference to the Spartan king whichever part of the Persian dominions felt the weight of his arms, he evacuated that province, and again entered Phrygia. There Agesilaus attacked, conquered, and pursued, Pharnabazus; who, flying from post to post, was successively driven from every part of his extensive province. The fame of the Grecian victories struck terror into the neighbouring countries. Corylas, the tyrant of Paphlagonia, who disdained the friendship of the great king, sent humbly to request that the native valour of his numerous and invincible cavalry might be associated with the Spartan arms. The inferior satraps, and especially their oppressed subjects, courted the protection of Agesilaus, expecting that the dominion of Greece would be lighter than the yoke of Persia, of which they had long felt and deplored the severity. The commotion became general in Lesser Asia; and, as Egypt had already rebelled, Agesilaus, at the head of about twenty thousand Greeks, and innumerable barbarian allies, might be led to entertain a rational expectation of being able to shake the throne of Artaxerxes; especially as the experience of his friend Xenophon, who was still the companion of his arms, must have powerfully encouraged him to that grand enterprise.

But an undertaking of which the success, however splendid, could not probably have been followed by any solid advantages, was blasted by intelligence equally unexpected and distressful. Tithraustes, who knew the power of gold over the Grecian councils, determined, with the approbation of the king his master, to give full play to this main-spring of politics. The instrument of his negociations was Timocrates of Rhodes, a man of an intriguing spirit, who carried with him no less a sum than fifty talents, (above nine thousand pounds sterling,) which he distributed, with lavish promises of future bounty, to Cyclon of Argos, to Timolaus and Polyanthes of Corinth, to Androclides, Ismenias, and Galaxadorus, of Thebes; names for the most part obscure in the annals of war, but important in the history of domestic faction. The tyranny of Sparta was the perpetual theme of these venal hirelings, not only in their respective communities, but in every quarter of Greece. Strong as these invectives may appear, they did not exceed the truth. Since the subversion of the Athenian power, the imperious government of Sparta had rendered her almost alike odious to her old and to her new confederates. Argos had long been the enemy, and Thebes aspired to become the rival, of Sparta. Above all, the Athenians, animated by the patriotism of Thrasybulus, their deliverer from the Spartan yoke, longed to employ the first moments of returning vigour to redeem their glory and renown.

Yet, notwithstanding the concurring causes which hastened a rupture, such was the terror of the Spartan name, increased by the recent glory of Agesilaus, that none of her numerous enemies had courage openly to take arms, and to avow their just animosity. After various but secret conferences, held in the principal cities, it was determined to wound that republic through her allies, the Phocians, who were distinguished, amidst the general discontent, by their unshaken attachment and fidelity. The Locri Ozolæ, a fierce and insolent people, who lived in the neighbourhood of Phocis, were easily persuaded to levy contributions from a district on their eastern frontier, to which they had not the smallest claim, and of which the dominion had been long a matter of dispute between the Phocians and Thebans. Both these states seem to have been injured, and exactly in the same degree, by this aggression; but the Phocians, who were the enemies of the Locri, took arms to revenge, while the Thebans, who were their friends, prepared to abet, their injustice. They expected that the Spartans would quickly interfere in a quarrel that affected their Phocian allies; a measure which tended precisely to that issue which policy required, since the Thebans would be compelled to arm in their own defence, and must appear to all the neutral states of Greece, and even to their Lacedæmonian enemies, to be undesignedly dragged into the war. Thus the pride of Sparta conspired with the most sanguine hopes of Thebes and her allies. Instead of condescending to remonstrate, or ordering the Thebans to evacuate the territory of Phocis, the Spartans flew to arms, and marched directly to invade Bœotia. On the first rumour of hostilities, the activity of Lysander had been employed to assemble their northern confederates. He penetrated into the Theban territory, gained Lebadea by force, Orchomenus by treachery; and prepared to assault the walls of Haliartus, which, next to Thebes, was the strongest of the Bœotian cities. The difficulty of this enterprise made him dispatch a messenger to hasten the arrival of Pausanias, who had led forth six thousand Peloponnesians, to co-operate with this experienced commander. The unfortunate messenger was taken by the Thebans, with the letter, in which Lysander had signified his purpose, and appointed the time of rendezvous with Pausanias, that they might surprise Haliartus with their combined forces.

Just as this intelligence was brought to Thebes, there arrived in that city a powerful reinforcement of Athenian troops, who, though their own capital was unwalled and defenceless, had been persuaded by Thrasybulus to brave the resentment of Sparta. To these generous auxiliaries the Thebans committed their city, while the warlike youth, and almost all those of a military age, assembled in complete armour, set out in the dead of night, and performing a journey of fifteen miles with silence and celerity, reached, while it was yet dark, the gates of Haliartus. Their unexpected arrival brought salvation to their friends; they sent a strong detachment to lie in ambush without the walls; the rest, reinforced by the townsmen, formed themselves in battle array, and stood to their arms behind the gates. Lysander arrived in the morning; but Pausanias, who had not received his message, still continued in the neighbourhood of Plataea. The soldiers, flushed by recent victory, disdained to wait for their allies, but requested Lysander to lead them against the place. He approached

approached the town, and boldly began the attack, perceiving the walls and battlements to be unguarded. But before any breach was made, the different gates at once flew open, while the Thebans and Haliartians rushed forth with irresistible fury. Lysander, with a priest who attended him, was slain on the first onset. His men began to rally, when the Thebans, posted in ambush without the city, occasioned a new terror. The enemy every where gave way; above a thousand fell in the field of battle, the rest were put to flight, and pursued with great slaughter.

The first intelligence of this defeat brought Pausanias to the scene of action, that he might examine the full extent of the calamity. It would have been fruitless to attempt the siege of Haliartus; but it was necessary to carry off the bodies of the slain. Pausanias held a council of war, and it was unanimously resolved to send a Spartan herald to Haliartus, requesting leave to bury the dead. The demand was granted, on condition that the Peloponnesian army should immediately evacuate Bœotia. Pausanias complied, and returned to Sparta. His want of success, rather than his demerit, subjected him to trial and condemnation. He escaped capital punishment by flying to Tegea, where he soon afterwards died.

The victory at Haliartus, which exasperated the Spartans, confirmed the courage of their enemies, and hastened the defection of their allies. The league was openly ratified and avowed by the republics of Thebes, Argos, Athens, and Corinth. The spirit of revolt seized Eubœa, pervaded the provinces of Acarnania, Leucas, Ambracia, the rich cities of Chalcis, and the warlike principalities of Thessaly. The whole fabric of the Spartan power, raised and cemented by a war of twenty-seven years, began to totter; and Agesilaus was recalled from his Asiatic victories, to sustain the fallen ruins of his country. He received the unwelcome tidings of his recal, at the important crisis of his fortune. He had completed his preparations for marching into Upper Asia, and his heart beat with the ardour of promised conquest and glory. Having assembled the confederates, he communicated the orders of the republic, with which he expressed his resolution immediately to comply. The generous troops, having associated their own honour with the renown of the general, testified their grief and their reluctance by tears and entreaties. But Agesilaus remained firm in his purpose to obey the command of Sparta, to which he was summoned by the danger of his country. The greater part of the army, and particularly the new levies of Ionians and Æolians, who had passed their apprenticeship in arms under his fortunate standard, declared that they would never abandon their beloved general. Agesilaus encouraged this disposition, which was extremely favourable to his views; and lest it might be nothing but a sally of temporary enthusiasm, artfully secured its permanence, by proposing the distribution of valuable rewards, in the Thracian Chersonesus, to such officers as brought the best companies of foot or cavalry for the service of his intended expedition. He was able to perform his promises with a generous munificence; since, after defraying the necessary expences of the war, he carried from Asia above a thousand talents, or a hundred and ninety-three thousand pounds sterling.

When the whole forces were assembled in the Chersonesus, they amounted to about ten thousand men. Their nearest route into Greece lay through the same countries that had been traversed near a century before by Xerxes; but the activity of Agesilaus accomplished in a month what, to eastern effeminacy, had been the journey of a year. Agesilaus descended without resistance into the plains of Thessaly, where his progress was stopped for a moment by the numerous cavalry of that country, whose petty princes had acceded to the alliance formed against the ambition of Sparta. By a judicious disposition of his forces, and by evolutions equally skilful and rapid, he speedily surmounted this obstacle. To the charge of the Thessalian cavalry he opposed the weight of his heavy-armed men, by whom the enemy were routed and put to flight. Then with his own horsemen he pursued them with great slaughter, took many prisoners, and erected a trophy of his victory between the mountains Prantes and Narthacium, which form the western boundary of the extensive plain of Coronæa.

Instead of continuing his journey through the hostile country of Locris, he marched through the friendly territories of Doris and Phocis, that he might turn the shock of the war against the rebellious Thebans. He found them in arms with their powerful allies, rather provoked than discouraged by a bloody but undecisive battle, which, soon after the disaster at Haliartus, had been fought against the Lacedæmonians at Epiecia, a small town on the common frontier of Corinth and Sicyon. The confederate army was still about twenty thousand strong; the forces of Agesilaus fully equalled that number, as he had received some considerable reinforcements. The hostile battalions approached; those of Agesilaus marching, in good order, from the banks of the Cephissus, while the Thebans impetuously descended from the mountains of Helicon. Before they arrived at the scene of action, in the Bœotian plain of Coronæa, a city thirty miles distant from Thebes, the superstition of both armies was alarmed by an eclipse of the sun; but Agesilaus was alarmed, far more justly, by most unexpected intelligence from the East.

Since the Lacedæmonian fleet had been entrusted to Pisander, the Persian and Phœnician squadrons had been committed to a far more able commander. After the decisive engagement at Ægos-Potamos, which was followed by the taking of Athens, and the conclusion of the Peloponnesian war, Conon, the Athenian admiral, escaped with a few gallies into the harbour of Salamis, the capital of the isle of Cyprus. That city, and a considerable part of the island, was then subject to Evagoras, a man whom the voice of panegyric represents as governing, with consummate wisdom, a kingdom which he had acquired by heroic valour. This prince boasted a descent from Teucer, who, returning from the siege of Troy eight hundred years before the reign of Evagoras, had founded the first Grecian colony on the Cyprian shore. During that long space of time, Salamis had undergone various revolutions. Evagoras was born and educated under the reign of an usurper, who fell by the dagger of an assassin, who in his turn assumed the crown. Evagoras fled to Cilicia, obtained the protection of the satrap of that province, returned to Salamis with a handful of men, surprised and dethroned the new tyrant, to whom he was not bound by any tie of allegiance. From the moment that he began to reign, he discovered a partial fondness for Athens, in whose language, arts, and institutions, his youth had been liberally instructed; and which afterwards formed the study and delight of his manhood, the amusement and consolation of his declining age. But unfortunately for the sensibility and gratitude of Evagoras towards a country to which he owed his education and his happiness, he lived at a period when, before the situation of his principality enabled him to afford any effectual assistance to Athens, he beheld that proud republic deprived of the splendour and dominion which she had enjoyed above seventy years. He lamented her misfortunes with a filial tenderness, and received with the kindest hospitality her afflicted citizens. The virtuous and enterprising Conon deserved his affection and esteem, and soon acquired the unlimited confidence of a mind congenial to his own. They acted with the happiest concert for the security and aggrandisement of the little kingdom, alluring new inhabitants from Greece, increasing their arts and industry, extending navigation and

and commerce; and, in a ſhort time, Salamis was able to fit out a conſiderable naval power, and to ſubdue and incorporate with her own ſubjects ſeveral of the neighbouring communities. The great king, who had long been conſidered as lord paramount of Cyprus, interfered not in the domeſtic concerns of the iſland, provided he received from thence his ſmall cuſtomary tribute. The flouriſhing ſtate of Evagoras's affairs might enable him to pay, and to exceed, the ſtipulated ſum; though it is probable that he early meditated, what he afterwards attempted to accompliſh, the deliverance of his country from bondage.

But a deſign which actually engaged him more deeply, and to which he was ſtrongly incited by the ardent ſolicitations of Conon, was the reſtoration of Athens to that ſtate of glory from which ſhe had ſo miſerably fallen. Conon had been already recommended to the great king by Evagoras; and the recommendation had been enforced by Pharnabazus, who knew and admired his merit. The experienced ſkill of the illuſtrious Athenian, and of his countrymen Hieronymus and Nicodemus, had aſſiſted in equipping the barbarian ſquadrons in the Cilician and Phœnician harbours. But the abilities of Pharax the Spartan admiral, and the negligence of the Perſian commanders, hitherto rendered uſeleſs a fleet of near three hundred ſail, which was ill manned, and worſe ſupplied. The activity of Conon undertook to remedy theſe evils. He left Cilicia, in order to procure an interview with the monarch of the Eaſt. Conon repreſented to the trembling monarch, ſtill agitated by the terror of Ageſilaus's victories, the neceſſity of oppoſing the Spartans vigorouſly by ſea. Their fleet alone had acquired and maintained the command of the Aſiatic coaſt. A ſingle defeat at ſea would excite their allies to revolt, and drive their armies from Aſia. But to obtain this advantage, the great king muſt employ an admiral worthy to command, and men willing to obey. In looking for the firſt, the valour of Pharnabazus could not eſcape his notice. The ſecond might be obtained by money. And ſhould Artaxerxes entruſt him with the requiſite ſum, he pledged his life that he would ſoon collect ſuch a number of ſailors as would enable him to defeat the fleet of Sparta, and compel that republic to abandon her eaſtern conqueſts. The propoſal pleaſed Artaxerxes, the money was raiſed, and Conon returned to Cilicia to accompliſh the undertaking.

From various ſea-ports of Aſia, but chiefly from the powerful iſlands of Rhodes and Cyprus, he ſoon collected a naval force exceeding his moſt ſanguine hopes. With their combined ſtrength, Conon and Pharnabazus ſailed weſtward in queſt of the hoſtile fleet, perſuaded that the raſh confidence of the Spartan admiral would not decline battle with a ſuperior enemy. As the united armament doubled the northern point of Rhodes, they perceived the Lacedæmonian ſquadron, amounting to near an hundred gallies, in the capacious bay which is formed between the projections of the Dorian ſhore, and the ſmall iſlands called Sporades, from the careleſs irregularity with which they ſeem to have been ſcattered by the hand of nature. The unexpected approach of ſuch a formidable fleet did not ſhake the ſullen obſtinacy of Piſander. He commanded his men to prepare for battle. They bore up againſt the enemy, but on a nearer ſurvey were alarmed and terrified with the great diſproportion of numbers. Piſander advanced in the admiral galley, and died fighting bravely in defence of the Spartan honour, vainly endeavouring to maintain by the vigour of his arm what had been betrayed by the weakneſs of his counſels. The victors purſued; and after deſtroying great numbers of the enemy, took and carried into port fifty galleys.

It was the intelligence of this victory that alarmed and afflicted the patriotic breaſt of Ageſilaus. He aſſembled the troops, honeſtly confeſſed the death of Piſander, but artfully declared that, though the admiral was ſlain, his fleet was victorious. This ſtratagem was attended with a very ſalutary effect; for in a ſkirmiſh between the advanced guards, immediately preceding the battle, the Lacedæmonian troops, animated by their imagined victory in the eaſt, defeated and repelled the enemy. Meanwhile the main bodies of either army advanced into the plain of Coronæa, at firſt in awful ſilence; but having approached within a furlong of each other, the Thebans raiſed an univerſal ſhout, and ran furiouſly to the charge. Their impetuoſity bore down every thing before them; but the troops immediately commanded by Ageſilaus repelled the left wing of the enemy, chiefly conſiſting of Argives and Athenians. Already thoſe who ſurrounded his perſon ſaluted him as conqueror, and adorned him with the crown of victory; when it was told, that the Thebans had broke and totally routed the Orchomenians, and were advancing to ſeize the baggage. Ageſilaus, by a rapid evolution, prepared to intercept them, in order to fruſtrate this deſign. The Thebans perceived this movement, wheeled about, and marched in an oppoſite direction, that they might join and rally their allies, who fled towards the mountains of Helicon. In the rencounter which followed, Xenophon is diſpoſed to admire rather the valour than the prudence of the Spartan king. Inſtead of allowing the Thebans to paſs, that he might attack their rear and flanks, he boldly oppoſed their progreſs, and aſſailed their front. The ſhock was terrible; their ſhields, meeting, claſhed; they fought, flew, and were ſlain. No voice was heard, yet none was ſilent; the field reſounded with the noiſe of rage and battle; and this was the moſt deſperate and bloody action of any in that age. At length the firmneſs of the Thebans effected their long-attempted paſſage to Helicon; but could not encourage their allies to renew the engagement.

Ageſilaus had received ſeveral wounds, yet did he not ſhrink from the battle in the moment of victory. When informed that about fourſcore of the enemy had taken refuge in the neighbouring temple of Minerva, he religiouſly reſpected the right of ſanctuary, ordered his ſoldiers to abſtain from hurting them, and even appointed a body of horſe to conduct them to a place of ſecurity. The next day was employed by the victors in erecting a trophy on the ſcene of this important action; while the enemy acknowledged their defeat, by requeſting the bodies of the ſlain. Notwithſtanding his fatigue and wounds, Ageſilaus travelled to Phocis, that he might dedicate the tenth of his ſpoil in the temple of Delphian Apollo. Having returned towards the Peloponneſus, he diſbanded his eaſtern troops, moſt of whom were deſirous to reviſit their reſpective cities; his Peloponneſian and Lacedæmonian forces inclined alſo to return home, that they might reap the fruits of harveſt; and Ageſilaus, probably to avoid a journey painful to his wounds, ſailed to Sparta, to join in the celebration of the Hyacinthian feſtival.

The ſea-fight of Cnidus, and the battle of Coronæa, were the moſt important and deciſive actions in the Bœotian or Corinthian war, which laſted eight years; namely, from the year 394, to the year 387, before Chriſt; and it is worthy of obſervation, that the partial actions, which happened on either element, generally followed the bias of thoſe important victories. Succeſs for the moſt part attended the ſailors of Athens, and the ſoldiers of Sparta; though the naval exploits of Teleutias, the kinſman of Ageſilaus, who ſurpriſed the Piræus with twelve galleys, took many merchantmen, deſtroyed ſeveral ſhips of war, and ſcoured the coaſt of Attica, formed an exception extremely honourable to that commander; and the military advantages of Iphicrates the Athenian, though unimportant in their conſequences, announced thoſe great talents for war, which afterwards rendered him ſo illuſtrious. But, in general, Ageſilaus

and the Spartans maintained their ſuperiority in the field; while Conon, Thraſybulus, and Chabrias, proved ſucceſsful againſt Thimbron, Anaxibius, and the other naval commanders of the enemy.

In the actual ſtate of Greece, the reſpective ſucceſſes of the contending powers were not accompanied by proportional advantages. The Lacedæmonians derived not any permanent benefit from their victory at Coronæa, while their defeat at Cnidus deprived them in one day of the fruit of many laborious campaigns, ſince, with the aſſiſtance of a ſuperior naval force, and with the command of the Perſian treaſury, Conon found little difficulty in detaching for ever from their dominion the whole weſtern coaſt of Leſſer Aſia. The importance of the ſervices performed by Pharnabazus and Conon, excited the warmeſt gratitude in the breaſt of Artaxerxes. The merit of the ſatrap was acknowledged by his obtaining in marriage the daughter of the great king; while the patriotic Conon neither deſired nor received any perſonal reward. He inflamed the reſentment which both Pharnabazus and his maſter had conceived againſt Sparta, and encouraged them, early in the ſpring, to ſend their victorious armament towards Greece, to retaliate the ravages which had been committed in the eaſt by the arms of Ageſilaus. But he inſtructed them, that if they would render their vengeance complete, and humble the Spartan pride, they muſt enable him to rebuild the walls and harbours of Athens; a meaſure by which they would inflict the deepeſt wound on the power, as well as on the pride, of their ambitious enemy. The propoſal was heard with approbation; the expence was liberally ſupplied; the Perſian fleet ſet ſail, reduced the Cyclades and Cythera, ravaged the coaſt of Laconia, and, after performing in detached ſquadrons whatever ſeemed moſt uſeful for the Perſian ſervice, aſſembled in the long-deſerted harbours of the Phalerus, Munichia, and Piræus. There, the important taſk of reſtoring the ancient ornaments and defence of the city of Athens, was carried on and accompliſhed with extraordinary diligence. The work was completed before the return of ſpring; and the mortifying intelligence, when brought to Sparta, affected the magiſtrates of that republic with the deepeſt anxiety; an anxiety which induced them to ſtoop to the moſt humiliating terms, in order to obtain an accommodation with Artaxerxes.

Among the miniſters employed by Sparta to forward this negociation, was Antalcidas, a man whoſe prior hiſtory is little known; but who appears to have ſerved under the ſtandard of Cyrus in the Eaſt. Antalcidas was bold and ſubtle, a maſter in all the arts of diſſimulation, and well qualified to execute an inſidious commiſſion at a corrupt court. His ſucceſs was almoſt enſured by the imprudent management of Conon. After rebuilding the walls and harbours of Athens, he requeſted Pharnabazus that he might be allowed to employ a ſquadron of Perſian ſhips, in conjunction with his own, to infeſt the territories of Sparta and her allies. The ſatrap readily granted this demand. But Conon, unmindful of the common enemy, thought only of promoting the ambition of his republic. He ſailed to the Cyclades, to Chios, to Leſbos, and even to the coaſt of Eolis and Ionia, diſplayed the ſtrength of his fleet, deſcribed the flouriſhing ſtate of Athens, and endeavoured to compel the Aſiatics and iſlanders to acknowledge the authority of their ancient metropolis or ſovereign, who, having riſen more ſplendid from her ruins, required only the attachment of her former allies and ſubjects, to reſume her wonted power and hereditary renown.

This abſurd or ambitious conduct furniſhed powerful weapons to the dexterity of Antalcidas, who repreſented Conon as guilty of the moſt unexampled audacity, aggravated by the ſin of ingratitude, in attempting to alienate the king's dominions, even by the aſſiſtance of the king's forces, to which both his country and himſelf owed ſo many ſignal benefits. Availing himſelf of the favourable impreſſions which reſulted from this remark, Antalcidas declared that he had been commanded to offer ſuch terms of peace, as were more ſuitable to the dignity and the intereſt of the great king. "The Spartans, he ſaid, reſigned all pretenſions to the Greek cities in Aſia, which they acknowledged to be dependencies of the Perſian empire. Why ſhould Artaxerxes, then, continue to laviſh his treaſure in vain? ſince the Spartans not only ceded to him the immediate object of diſpute, but earneſtly deſired to promote the future proſperity of his dominions, by ſettling the affairs of Greece as beſt anſwered his convenience. For this purpoſe they were ready to declare all the cities and iſlands, ſmall and great, totally independent of each other; in conſequence of which there would not be any republic ſufficiently powerful thenceforth to diſturb the tranquillity of Perſia." Theſe terms were tranſmitted to the court of Suſa, that they might be approved and ratified by Artaxerxes. The ſubtlety and condeſcenſion of Antalcidas was rewarded by a conſiderable ſum of money; while the patriotiſm of Conon was puniſhed by immediate death or, by an ignominious confinement. His fate is variouſly related; but his actions juſtly rank him with the firſt of Grecian names; and the fame of an illuſtrious father was ſupported and rivalled by that of his ſon Timotheus.

It might have been expected that a plan of accommodation ſo advantageous for Perſia, would have been readily accepted by Artaxerxes. But the negociation languiſhed for ſeveral years, partly on account of the temporary diſgrace of Teribazus, who was ſucceeded by Struthas; a man who, moved by ſome unknown motive, warmly eſpouſed the intereſt of the Athenians; and partly by the powerful ſolicitations and remonſtrances of the Bœotian and Argive ambaſſadors, who accuſed the ſincerity, and unveiled the latent ambition, of Sparta. Meanwhile the war went on with unremitting activity. The Lacedæmonians and their allies ſallied from their ſtrong garriſons in Sicyon and the Lechæum, to deſtroy the harveſts and the villages of their Peloponneſian enemies. The Bœotians and Argives retaliated theſe injuries by ſeveral hoſtile incurſions into the territories of Sparta; while the Athenians, as if they had again attained the command of the ſea, built the whole vigour of their republic upon an element long propitious to their anceſtors.

The recent ſplendour of Conon had for a time eclipſed the renown of Thraſybulus, whoſe extraordinary abilities had twice reſcued his country from the yoke of tyrants. But after the death or captivity of the former, the Athenian fleet, amounting to forty ſail, was entruſted to Thraſybulus; who, having ſcoured the Ægean ſea, ſailed to the Helleſpont, and compelled the inhabitants of Byzantium, and ſeveral other Thracian cities, to aboliſh their ariſtocratic government, and accept the alliance of Athens. His activity was next directed againſt the iſle of Leſbos, in which the Lacedæmonian intereſt was ſtill ſupported by a conſiderable body of troops. Having landed his men, he joined battle with the enemy in the neighbourhood of Methymna, and obtained a complete victory, after killing with his own hand Therimachus, the Spartan general. The principal cities of the iſland now acknowledged the Athenian power, and exerted every nerve to reinforce their fleet. Encouraged by this ſucceſs, Thraſybulus ſailed towards Rhodes, in order to aſſiſt the democratic faction, which uniformly contended for the intereſt of Athens. But before proceeding to that iſland, he determined to multiply the reſources of the fleet. For this purpoſe he raiſed conſiderable ſupplies from the maritime towns of Aſia, and at length entered the mouth of the Eurymedon, and levied a heavy contribution on Aſpendus, the capital of Pamphylia. But here his good fortune failed him. The patient timidity of the barbarians had for a

ong time endured the public depredation; but even their ſervility could not brook the private rapacity of the ſailors and troops. They attacked the Grecian camp in the night, and ſurpriſed the tent of Thraſybulus, who thus fell a ſacrifice to a very unjuſtifiable paſſion, which greatly debaſed the dignity of his otherwiſe illuſtrious character. This unjuſt treatment of Aſpendus would never perhaps have reached the ears of Artaxerxes, had it not been communicated through the vigilance of Antalcidas, who let ſlip no opportunity to rouſe the jealouſy of the great king againſt the Athenians. The ſevere exactions from Pamphylia, a province which acknowledged his authority, afforded a powerful argument with the Perſian monarch to concur with the wiſhes of the Spartans, at the very moment when his fluctuating irreſolution was completely decided by the Athenians themſelves, whoſe imprudence at once crowned the triumph of Antalcidas.

The ſignal victories of Conon and Thraſybulus, and the riſing fortune of Athens, encouraged Evagoras king of Salamis to execute his long-meditated deſign of revolting from Perſia. Egypt was actually in rebellion; Artaxerxes had undertaken a war againſt the Carduchians, who were by no means a contemptible enemy. Theſe were favourable circumſtances to Evagoras; although the Perſian fleet, which, after performing the ſervice for which it had been equipped, had continued to lie inactive in the Phœnician and Silician harbours, was ready to be employed in any new enterpriſe. The ſkilful and experienced bravery of the king of Salamis, ſeconded by the youthful ardour of his ſon Protagoras, obtained an eaſy victory over the firſt ſquadrons that were ſent to invade his iſland. But there was reaſon to dread the arrival of a far ſuperior force. In this danger, Evagoras requeſted, and obtained, the aſſiſtance of the Athenians. This extraordinary meaſure of a people, in preferring their gratitude to their intereſt; a gratitude which they might have foreſeen to be uſeleſs to him they meant to oblige, and pernicious to the moſt important intereſts of their republic; finally determined Artaxerxes to eſpouſe the cauſe of the Spartans; and to dictate the terms of a general peace, as propoſed by Antalcidas: "That the Greek cities in Aſia, with the iſland of Cyprus, and the peninſula of Clazomenè, ſhould be ſubject to Perſia; Athens ſhould be allowed to retain her immemorial juriſdiction in the iſles of Lemnos, Imbros, and Scyros; but all the other republics, ſmall and great, ſhould enjoy the independent government of their own hereditary laws. Whatever people rejected theſe conditions, ſo evidently calculated for preſerving the public tranquillity, muſt expect the utmoſt indignation of the great king, who, in conjunction with the republic of Sparta, would make war on their perverſe and dangerous obſtinacy, by ſea and land." Teribazus and Antalcidas returned from the eaſt, charged with theſe definitive reſolutions of Artaxerxes, which were confirmed by the unalterable ſanction of the royal ſignet, in the year before Chriſt 387.

There was reaſon to apprehend that Thebes, Athens, and Argos, would reject the terms of a peace ſo pernicious to their particular and immediate intereſts, and equally diſhonourable to the whole Grecian name. The remembrance of the glorious confederacy for defending the Aſiatic colonies againſt the oppreſſion of barbarians, could not, indeed, much influence the degenerate councils of thoſe republics; but the Thebans muſt reſign, with reluctance, their real or pretended authority over the cities of Bœotia; the Argives muſt unwillingly withdraw their garriſon from Corinth, and leave that important capital in the power of the Lacedæmonian faction; and the Athenians muſt abandon, with regret, the fruits of their recent victories, and the hopes of recovering their ancient grandeur. The oppoſition of theſe ſtates had been foreſeen by Antalcidas, who took the moſt effectual meaſures to render it impotent. By the aſſiſtance of Perſian money he equipped a fleet of eighty ſail, from the mercenary ſea-ports of Greece and Aſia, from the intermediate iſles, and even from the coaſts of Italy and Sicily. This armament was independent of the ſquadrons with which Teribazus prepared to attack the iſle of Cyprus, if the preſumption of Evagoras, unaſſiſted and alone, ſhould ſtill dare to provoke his hoſtility. The ſatrap alſo had collected a very conſiderable army, which was ready to co-operate with Ageſilaus, and to march, at the firſt ſummons, againſt any city or republic that might reject the peace of Antalcidas. Theſe vigorous preparations, intimidating the weakneſs of the confederates, compelled them into a reluctant compliance with the terms of the treaty. The Thebans made the ſtrongeſt and moſt obſtinate reſiſtance; but their pretenſions were finally ſilenced by the threats of the Spartan king, the inveterate enemy of their republic. The Bœotian cities were acknowledged to be independent, and admitted as parties in the peace. The Argives retired from Corinth, which, being deſerted by the leaders of the democratical faction, became the ally of Sparta. The military and naval operations ceaſed, tranquillity was reſtored, and the armies and fleets were, on both ſides, diſbanded and diſſolved.

But amidſt this univerſal ſubmiſſion to the court of Perſia, the article reſpecting Cyprus was nobly rejected by Evagoras, who aſſerted the independence of his native iſland; and, with a magnanimity that formed a ſtriking contraſt with the degenerate ſoftneſs of his Grecian allies, ſet the power of Artaxerxes at defiance. Evagoras truſted to the reſources of his own vigorous mind, to the ſuperior ſkill of his ſeamen, and to the aſſiſtance of Acoris king of Egypt. But the numerous ſquadrons of Teribazus prevailed over all his hopes. He was diſcomfited in a naval engagement; his territories were invaded and ravaged; he was driven into his capital, Salamis; and even Salamis was threatened with a ſiege. His reſiſtance had already exceeded what his ſtrength warranted, or what his dignity required; yet his enemies were unwilling to drive him to deſpair. He reſigned his numerous and recent conqueſts in Cyprus, but retained poſſeſſion of the ancient principality of Teucer, which his fortunate arms had recovered from an uſurper; and he ſubmitted, in the year before Chriſt 385, to imitate the example of other princes, and acknowledge himſelf the tributary of the king of Perſia.

Nearly all writers, both ancient and modern, have concurred in deſcribing the peace of Antalcidas as highly diſgraceful and injurious to the intereſts of Lacedæmon. Mr. Mitford, however, in his recent Hiſtory of Greece, has controverted this opinion. He ſays, "that king Ageſilaus highly approved the treaty of Antalcidas; and it would be difficult for thoſe who have declaimed moſt vehemently againſt it, to ſhew how peace could have been given to Greece in any other manner. The abandoning of the Aſian Greeks to ſubjection under Perſia, is indeed a ſpecious ground of reproach, ſince it was unqueſtionably a ſurrender of the proudeſt and faireſt claim of glory that Lacedæmon perhaps ever acquired. But this ſeems not juſtly imputed as a peculiar crime or diſhonour to Antalcidas; for, by conſidering the intereſt of Lacedæmon as diſtinct from the common intereſt of Greece, Antalcidas certainly ſerved his country very ably. Simple and conciſe as the terms of the peace are, not only they appear directly calculated to promote the intereſt of Lacedæmon, but they anſwered all the principal purpoſes of the Lacedæmonians completely. To break the growing power of Thebes by emancipating the Bœotian towns, and to divide Corinth from Argos, had been the great object of the war, and were the immediate effects of the peace; for the more ready and quiet production of which Athens was bribed with the permiſſion, contrary to the general ſpirit of the treaty, to retain the dominion

dominion of its three iſlands. Accordingly it is obſerved by Xenophon, that the Lacedæmonians eſtabliſhed their credit and influence in Greece much more completely, and put their commonwealth altogether in a much more ſplendid ſituation, by the peace which had its name from Antalcidas, than by that which had concluded the Peloponneſian war; ſo much alſo was Ageſilaus perſuaded that the intereſt of Lacedæmon was well conſidered in the treaty, that when an orator, reviling the peace of Antalcidas, ſaid, that Lacedæmon was gone over to the Perſian intereſt, 'Rather, he anſwered, Perſia to the Lacedæmonian;' and ſo in truth it ſeems to have been."

From the PEACE of ANTALCIDAS, to the TERMINATION of the THIRD SOCIAL WAR.

The peace of Antalcidas forms an important epoch in the Grecian hiſtory. The valuable colonies in Aſia, the cauſe, the object, and the ſcene, of ſo many memorable wars, were now to be abandoned to the power of a barbarian maſter. The king of Perſia diſmembered the diſtant dependencies, and controuled the domeſtic arrangements, of a people who had given the law to his anceſtors. Their ancient confederacies were diſſolved; and Greece felt the languor of peace without enjoying the benefits of ſecurity. But if the whole Grecian name was diſhonoured by accepting this ignominious treaty, what peculiar infamy muſt attach to the magiſtrates of Sparta, by whom it was propoſed and promoted? That intereſt and ambition, and not a generous deſire to promote the public tranquillity, had produced this perfidious treaty, could not long be kept a ſecret. Thebes and Argos were required to comply with the terms of the peace; but no mention was made of withdrawing the Lacedæmonian garriſons from the ſtrong holds which they occupied; and leſt this injuſtice might occaſion general diſcontent, the Athenians were allowed the ſame privilege. Meanwhile the Spartan emiſſaries negociated and intrigued in all the ſubordinate cities, encouraging the ariſtocratical factions, and fomenting the animoſities of the citizens againſt each other, and againſt their reſpective capitals. The jealouſies and complaints, which had been principally occaſioned by theſe cabals, were uſually referred to the Spartan ſenate; whoſe affected moderation, under pretence of defending the cauſe of the weak and the injured, always decided the conteſt in the way moſt favourable for themſelves. But the warlike diſciples of Lycurgus could not remain ſatisfied with theſe juridical uſurpations. They determined to take arms, which they hoped to employ with ſuch artful dexterity as might prevent any dangerous alarm, beginning with ſuch cities as had not entered into the late confederacy againſt them, gradually extending their hoſtilities to the more powerful members of that confederacy; and thus conquering ſucceſſively thoſe, whoſe entire and collective ſtrength it would have been vain to aſſail.

The firſt victim of this ambitious policy was the flouriſhing republic of Mantinæa, whoſe territory was ſituate almoſt in the centre of Arcadia, in the Peloponneſus. The origin of Mantinæa was the ſame with that of Tegea, Stymphalis, Heræa, Orchomenos, and other neighbouring cities, which had grown into populouſneſs and power from the ſcattered villages of ſhepherds inhabiting the valleys and mountains of Arcadia. The exuberant fertility and picturesque ſcenery of this delightful region ſeemed peculiarly adapted to inſpire and to gratify the love of rural happineſs; and to afford, in all their elegance and dignity, thoſe ſublime and ſacred joys of the country, which the genius of the ancient poets felt and deſcribed with ſo much ſenſibility. It was only in the year immediately following the treaty of Antalcidas, that Lacedæmonian ambaſſadors were ſent to Mantinæa, to expreſs the reſentment of their republic againſt a people, who, pretending to live in friendſhip with them, had in the late war repeatedly furniſhed with corn their avowed enemies the Argives. They added, that, on other occaſions, the Mantinæans had diſcovered a ſecret hatred to Sparta, rejoicing in her misfortunes, and envying her proſperity; and that it was time to anticipate this dangerous animoſity; for which purpoſe the Spartans commanded them to demoliſh their walls, to abandon their city, and return to thoſe peaceful villages in which their anceſtors had lived and flouriſhed. The Mantinæans received this propoſal with the indignation it merited; the ambaſſadors retired in diſguſt; the Spartans declared war; ſummoned the aſſiſtance of their confederates; and a powerful army, commanded by king Ageſipolis, invaded Arcadia, in the year before Chriſt 386.

But the moſt deſtructive ravages could not bend the ſtubborn heroiſm of the Mantinæans. The ſtrength and loftineſs of their walls ſeemed to bid defiance to aſſault; yet Ageſipolis prepared for a vigorous ſiege; and this tedious ſervice exhauſted the patience of the beſiegers, without ſhaking the firmneſs of the beſieged. The Spartans were afraid to detain longer in the field their reluctant confederates; but Ageſipolis propoſed a new meaſure, which was attended with ſucceſs. The river Ophis, formed by the collected torrents from mount Anchiſius, a river broad and rapid, which flowed through the plain, was, notwithſtanding the laborious undertaking, turned againſt the walls of Mantinæa, whereby they were ſapped to the foundation, and began to totter. The activity of the inhabitants propped them with wood, but without any permanent advantage; ſo that, deſpairing of being able to elude the enemy, they ſent to capitulate, requeſting that they might be permitted to keep poſſeſſion of their city, on condition that they demoliſhed their fortifications, and followed, in peace and war, the fortune of Sparta. But Ageſipolis refuſed to grant them any other terms than thoſe which had been originally propoſed by the republic. He inſiſted, therefore, that the Mantinæans ſhould deſtroy their houſes in the city; ſeparate into four diſtinct communities; and return to thoſe villages which their anceſtors had inhabited; and they were forced into a compliance with this humiliating demand.

Meanwhile ambaſſadors arrived from Acanthus and Apollonia, two cities of the Chalcidice, requeſting the Lacedæmonian aſſiſtance againſt the ambitious and overbearing citizens of Olynthus. Cleigenes, the Acanthian, ſpoke in the name of his colleagues: "We apprehend, O Lacedæmonians and allies! that amidſt the multiplied objects of your care and correction, you have overlooked a great and growing diſorder which threatens, like a peſtilence, to infect and pervade Greece. The ambition of the Olynthians has increaſed with their power. By the voluntary ſubmiſſion of the ſmaller cities in their neighbourhood, they have been enabled to ſubdue the more powerful. Emboldened by this acceſſion of ſtrength, they have wreſted from the king of Macedon his moſt valuable provinces. They actually poſſeſs Pella, the greateſt city in that kingdom; and the unfortunate Amyntas is on the point of abandoning the remainder of his dominions, which he is unable to defend. The preſent emergency, therefore, calls aloud for the activity and valour of your republic. By yielding a ſeaſonable aſſiſtance to Acanthus and Apollonia, you will ſave from oppreſſion two peaceful communities, and check the ambition of an uſurping tyrant." The Lacedæmonians, with an affected impartiality, deſired the opinion of their allies, before declaring their own. The confederates with one conſent, but eſpecially thoſe who wiſhed to ingratiate themſelves with Sparta, determined to undertake the expedition againſt Olynthus. The Spartans commended the facility of their reſolution, and it was reſolved immediately to furniſh ten thouſand effective men; and a liſt was prepared, containing the reſpective contingents to be ſupplied by the

ſeveral cities, which ſhould be ready to take the field within a limited time.

The ambaſſadors then roſe up, and Cleigenes, again ſpeaking for the reſt, declared that theſe were indeed noble and generous reſolutions; but, unfortunately, could not be executed with ſuch promptitude as ſuited the urgency of the preſent criſis. The dangerous ſituation of Acanthus and Apollonia demanded inſtant aid. He propoſed, therefore, that thoſe troops which were ready ſhould immediately take the field. The Lacedæmonians acknowledged the expediency of the advice; and commanded Eudamidas, with two thouſand men, to proceed without delay to Macedon, while his brother Phœbidas collected a powerful reinforcement, in order to follow him. But theſe auxiliaries were retarded until the ſeaſon for action had been nearly ſpent. Yet Eudamidas, with his little band, performed very eſſential ſervice. He ſtrengthened the garriſons of ſuch places as were moſt expoſed to aſſaults from the enemy; the appearance of a Spartan army encouraged the ſpirit of revolt among the allies and ſubjects of Olynthus; and ſoon after his march into the Chalcidice, Eudamidas received the voluntary ſurrender of Potidæa, a city of great importance in the iſthmus of Pallene. Such was the firſt campaign of a war which laſted four years, and was carried on under four ſucceſſive generals. Eudamidas, too much elated by his firſt ſucceſs, ravaged the Olynthian territory, and unguardedly approached the city; when he was intercepted, conquered, and ſlain, and his army diſperſed or loſt.

Teleutias, the brother of Ageſilaus, next aſſumed the conduct of this diſtant expedition with a body of ten thouſand men. He was aſſiſted by Amyntas king of Macedon, and ſtill more effectually by Derdas, the brother of that prince, and the governor of Elymea, the moſt weſtern province of Macedon, which abounded in cavalry. By the united efforts of theſe generals, the Olynthians, who had been defeated in various rencounters, were ſhut up within their walls, and prevented from cultivating their territory. Teleutias at length marched with his whole forces to aſſault the place. His ſurpriſe and indignation were excited by the boldneſs of the Olynthian horſe, who ventured to paſs the river Amnias in ſight of ſuch a ſuperior army; and he ordered the targeteers, who were commanded by Tlemonidas, to repel their inſolence. The cavalry made an artful retreat acroſs the Amnias, and were fiercely purſued by the Lacedæmonians. When a conſiderable part of the latter had likewiſe paſſed the river, the Olynthians ſuddenly faced about and charged them. Tlemonidas, with above an hundred of his companions, fell in the action. The Spartan general beheld with rage the ſucceſsful bravery of the enemy. Graſping his ſhield and lance, he commanded the cavalry, and the remainder of the targeteers, to purſue without intermiſſion; and, at the head of his heavy-armed men, advanced with leſs order than celerity. The Olynthians attempted not to ſtop their progreſs, till they arrived under the battlements. At that moment the townſmen mounted their ramparts, and aſſailed the enemy with a ſhower of darts and arrows, and every kind of miſſile weapon. The flower of the Olynthian troops, who had been purpoſely drawn up behind the gates, then ſallied forth with irreſiſtible violence; Teleutias, attempting to rally his men, was ſlain in the firſt onſet; the Spartans who attended him gave ground; the whole army was defeated, and purſued with great ſlaughter towards Acanthus, Apollonia, Spartolus, and Potidæa.

This diſaſter, however, did not cool the ardour of the Spartans. In the year 381 before Chriſt, which was the third of the war, they ſent Ageſipolis, with a powerful reinforcement, into Macedonia. The arrival of this prince early in the ſpring, revived the hopes of the vanquiſhed, and confirmed the attachment of the Lacedæmonian allies. He invaded and ravaged ſuch parts of the Olynthian territory as had been ſpared in former incurſions, and took by ſtorm the ſtrong city of Torona. But in the midſt of theſe ſucceſſes he was ſeized with a violent illneſs, and died on the ſeventh day of the diſeaſe. His brother Cleombrotus ſucceeded to the Spartan throne; and Polybiades, a general of experience and capacity, was inveſted with the command in Macedon.

Polybiades, after the example of his predeceſſors, conducted a powerful reinforcement againſt Olynthus, which was completely ſurrounded by land, while a ſquadron of Lacedæmonian gallies blocked up the neighbouring harbour of Mecyberna. The events of the ſiege were ſuch, that the Olynthians were exceedingly diſtreſſed by famine before their obſtinacy could permit them to capitulate. They formally relinquiſhed all claim to the dominion of the Chalcidice; they ceded the Macedonian cities to their ancient ſovereign; and engaged, by ſolemn oaths, to obey, in peace and war, their Spartan confederates and maſters. In conſequence of this humiliating treaty, Polybiades led off his victorious army, and Amyntas re-eſtabliſhed his court at Pella, which became thenceforth the capital of Macedon.

Such was the concluſion of the Olynthian war, which breathed the ſame ſpirit with the peace of Antalcidas, and proved the degenerate ambition of the Spartans to be wholly actuated by the view of extending their own dominion in Greece. This ſelfiſh policy merited the indignation of the whole Grecian name, who were at length excited againſt Sparta by a very unlooked-for event. When Eudamidas undertook the expedition againſt Olynthus, it was intended that his brother Phœbidas ſhould follow him at the head of eight thouſand men. This powerful reinforcement marched from Peloponneſus, and, in their journey northwards, encamped in the neighbourhood of Thebes, which was then divided by the inveterate hoſtility of contending factions. Iſmenias headed the democratical party; Leontiades ſupported the intereſt of Sparta and of ariſtocracy. It is not certain that Phœbidas had any orders to interfere in this diſſenſion, when he was accoſted by Leontiades, "who exhorted him to ſeize the opportunity, which fortune had thrown in his way, of performing a ſignal ſervice to his country." He then explained to the Lacedæmonian the diſtracted ſtate of Thebes, and the facility with which he might become maſter of the citadel; ſo that, while his brother Eudamidas was carrying on the war againſt Olynthus, he himſelf would acquire poſſeſſion of a much greater city. The mode of executing their plan was ſoon ſettled. To elude ſuſpicion, Phœbidas made the uſual preparations for continuing his journey, when he was ſuddenly recalled by his aſſociate. It was the month of July, when the Theban matrons celebrated the feſtival of Ceres, and prayed that bountiful divinity to preſerve the hope of a favourable harveſt. The appropriated ſcene of their female worſhip was the Cadmæa, or citadel, of which the gates had been purpoſely thrown open, and which was totally defenceleſs, as the males were univerſally excluded from this ceremony. Every circumſtance conſpired to facilitate the deſign of Leontiades, who conducted the Lacedæmonians to the fortreſs, without finding the ſmalleſt oppoſition. He immediately deſcended to the ſenate, which was then ſitting in the market-place; declared that the Lacedæmonians had acted by his advice, and without any purpoſe of hoſtility; ſeized Iſmenias as a diſturber of the public peace, and ordered the other leaders of the republican faction to be taken into cuſtody. Many were caught and impriſoned, and about four hundred eſcaped to Athens.

During five years the Spartans maintained, in the Cadmæa, a garriſon of fifteen hundred men; during which time moſt of the citizens ſuffered ſimilar calamities to thoſe which afflicted Athens under the thirty tyrants. The ſeverity of the government at length drove the Thebans to deſpair; and both the perſecuted exiles abroad, and the oppreſſed ſubjects at home, prepared to embrace

embrace any meaſures which promiſed them a faint hope of relief. Among the Theban fugitives who had taken refuge in Athens, was Pelopidas, the ſon of Hippocles, a youth whoſe diſtinguiſhed generoſity and courage had marked him out as gifted by Providence for the defender of his country. He had often conferred with his fellow-ſufferers at Athens about the means of returning to Thebes, and reſtoring the democracy; and while they ſecretly deliberated on this important object, Mello, one of the exiles, introduced Phyllidas, whoſe enterpriſing activity and ſingular boldneſs qualified him for the moſt arduous undertaking.

In Athens, the time and the means were adjuſted for executing the conſpiracy. A body of Theban exiles aſſembled in the Thriaſian plain, on the frontier of Attica, where twelve of the moſt enterpriſing voluntarily offered to enter the capital, and to co-operate with Phyllidas, ſecretary to the council, in the deſtruction of the magiſtrates. The diſtance between Thebes and Athens was about thirty-five miles. The conſpirators had thirteen miles to march through a hoſtile territory. They diſguiſed themſelves in the garb of peaſants, arrived at the city towards evening, and paſſed the gates without ſuſpicion. During that night, and the ſucceeding day, the houſe of Charon, a wealthy and reſpectable citizen, the friend of Phyllidas, and a determined enemy of the ariſtocracy, afforded them a ſecure refuge, till the fatal moment of action arrived. The important evening approached, when the artful ſecretary had prepared a ſumptuous entertainment in the treaſury. Here the inſidious and ill-fated Archias, with the Spartan magiſtrates, revelling in debauch, were ſoon overcome with wine and folly. At a given ſignal the conſpirators drew their daggers, and effected their purpoſe. Charon and Mello were the principal actors in this bloody ſcene, which was entirely directed by Phyllidas. But a more difficult taſk remained. Leontiades, with other abettors of the tyranny, ſtill lived, to avenge the murder of their aſſociates. The conſpirators, encouraged by their firſt ſucceſs, and conducted by Phyllidas, gained admiſſion into their houſes ſucceſſively, by means of the unſuſpected ſecretary. On the appearance of diſorder and tumult, Leontiades ſeized his ſword, and boldly prepared for his defence; but Pelopidas inſtantly aſſailed and killed the principal author of the Theban ſlavery. His aſſociates periſhed without reſiſtance; men whoſe names may be conſigned to juſt oblivion, ſince they were diſtinguiſhed by nothing memorable but their cruel and oppreſſive tyranny.

The meaſures of the conſpirators were equally vigorous and prudent. Before alarming the city, they proceeded to the different priſons, which were crowded with the unfortunate victims of arbitrary power. Every door was open to Phyllidas. The captives, tranſported with joy and gratitude, increaſed the ſtrength of their deliverers. They broke open the arſenals, and provided themſelves with arms. The ſtreets of Thebes now reſounded with alarm and terror. During a moment of awful ſilence, a herald proclaimed, with a clear and loud voice, the death of the tyrants, and ſummoned to arms the friends of liberty and the republic. Among others who obeyed the welcome invitation was Epaminondas, the ſon of Polymnis, a youth of the moſt illuſtrious merit; who united the wiſdom of the ſage, and the magnanimity of the hero, with the practice of every mild and gentle virtue; in birth, valour, and patriotiſm, not inferior to Pelopidas, with whom he had contracted an early friendſhip. Encompaſſed by an invincible band, Pelopidas and his aſſociates proceeded to the market-place; ſummoned a general aſſembly of the people; explained the neceſſity, the object, and the extent, of the conſpiracy; and, with the univerſal approbation of their fellow-citizens, reſtored the democratic form of government.

Exploits of valour and intrepidity may be diſcovered in the hiſtory of every nation. But the revolution of Thebes diſplayed not leſs wiſdom of deſign, than gallantry in execution. Amidſt the tumult of action, and ardour of victory, the conſpirators poſſeſſed ſufficient coolneſs and foreſight to reflect that the Cadmæa, or citadel, which was held by a Lacedæmonian garriſon of fifteen hundred men, would be reinforced, on the firſt intelligence, by the activity of Sparta. To anticipate this event, they diſpatched a meſſenger to Athens, to communicate the news of a revolution which could not fail to be highly agreeable to that ſtate, and to ſolicit the immediate aſſiſtance of the Athenians. This meſſage was attended with the moſt ſalutary effects. The diſcernment of the Athenians eagerly ſeized the favourable opportunity of weakening Sparta, which, if once neglected, might never return. Several thouſand men were ordered to march, who reached Thebes the day after Pelopidas had re-eſtabliſhed the democracy. The events of the ſiege are variouſly related. According to the moſt probable account, the garriſon made but a feeble reſiſtance, being intimidated by the impetuous alacrity and increaſing numbers of the aſſailants, who already amounted to fourteen thouſand men, and received continual acceſſions of ſtrength from the neighbouring cities of Bœotia. In a few days the Lacedæmonians deſired to capitulate, on condition of being allowed to depart in ſafety with their arms. Their propoſal was readily accepted; but they made no terms for thoſe unfortunate Thebans, whoſe attachment to the Spartan intereſt ſtrongly ſolicited their protection. The greater part of them periſhed by the cruel reſentment of their countrymen; and only a remnant remained, which was ſaved by the humane interpoſition of the Athenians.

The emancipation of Thebes gave a deep wound to the tyranny of Sparta; and occaſioned the Bœotian war, which commencing in the year before Chriſt 378, laſted with little interruption during ſeven years, and ended with the battle of Leuctra, which produced a total revolution in the affairs of Greece. In the heart of a ſevere winter, Cleombrotus, with a well-appointed army, commenced the war by entering Bœotia. His preſence confirmed the obedience of Theſpiæ, Platæa, and other inferior communities. He defeated ſome ſtraggling parties of the Thebans, repelled their incurſions, ravaged their territory, burned their villages, but attempted not to make any impreſſion on the ſtrength of their city. After a campaign of two months, he returned home, leaving a numerous garriſon in Theſpiæ, commanded by Sphodrias, a general of great enterpriſe, but little prudence.

Meanwhile the Athenians, alarmed by a nearer view of danger, diſavowed the aſſiſtance which they had given to Thebes; and baniſhed, or put to death, the adviſers of that meaſure, in order to renew their alliance with Sparta. The Thebans felt the full importance of this defection, and left nothing untried to prevent its fatal tendency; a deſign in which they ſucceeded by a very ſingular ſtratagem. The light and raſh character of Sphodrias was well known to the Theban chiefs, who employed ſecret emiſſaries to perſuade him, by arguments moſt flattering to his paſſions, to attack by ſurpriſe the harbour of Athens. The diſtance between Thebes and Theſpiæ, which was not more than twenty miles, furniſhed an eaſy opportunity for carrying on theſe ſecret practices; but the diſtance, which exceeded forty miles, between Thebes and Athens, rendered the enterpriſe of Sphodrias abortive. He marched from Theſpiæ with the flower of his army, early in the morning, expecting to reach the Piræus before the dawn of the ſucceeding day. But the report flew to Athens, and the citizens, with their uſual alacrity, ſeized their arms, and prepared for a vigorous defence. The mad deſign, and the ſtill greater madneſs of Sphodrias, in ravaging the country on his retreat, provoked the fury of the Athenians. They immediately ſeized the perſons of ſuch

ſuch Lacedæmonians as reſided in their city. They ſent an embaſſy to Sparta, complaining, in the moſt indignant terms, of the inſult of Sphodrias. The Spartans diſavowed his conduct. He was recalled and tried, but ſaved from death by the authority of Ageſilaus.

The next year, B. C. 376, Ageſilaus repeatedly invaded Bœotia, without performing any thing worthy of his former renown. His army amounted to eighteen thouſand foot, and fifteen hundred horſe. The enemy were aſſiſted by a conſiderable body of mercenaries, commanded by Chabrias the Athenian, who finally repelled the Spartan king from Thebes. He returned home to be cured of his wounds; where he ſuffered the mortifying reproaches of his adverſary Antalcidas, "for teaching the Thebans to conquer." But the generals who ſucceeded them had no better ſucceſs. Phœbidas, the original author of the war, who had been appointed governor of Theſpiæ, was defeated and ſlain, with the greateſt part of the garriſon of that place. Pelopidas, with his own hand, killed the Spartan commander in the action at Tanagra; and in the pitched battle of Tegyra, the Lacedæmonians, though ſuperior in number, were broken and put to flight.

While the war was thus carried on by land, the Athenians put to ſea, and gained the moſt diſtinguiſhed advantages on their favourite element. The Lacedæmonian fleet, of ſixty ſail, commanded by Pollis, was totally defeated near the iſle of Naxos, by the bravery of Chabrias, who performed alternately the duties of admiral and general. But the principal ſcene of action was the Ionian ſea, where Timotheus and Iphicrates every where prevailed over thoſe who oppoſed them. The fleet of Sparta was almoſt annihilated by the victors, who repeatedly ravaged the coaſts of Laconia, and laid under heavy contributions the iſlands of Corcyra, Zacinthus, Leucadia, and Cephalenia. Even the iſland of Chios, and the city of Byzantium, deſerted their connection with the declining fortune of Sparta, and once more accepted the alliance of the Athenians. Theſe hoſtile operations, which weakened, without ſubduing the ſpirit of, the vanquiſhed, were interrupted by the ſolicitations of the king of Perſia, who wiſhed to promote the domeſtic tranquillity of Greece, that he might enjoy the aſſiſtance of its arms in cruſhing a new rebellion in Egypt. His emiſſaries met with equal ſucceſs in Athens and Sparta, which were alike weary of the war, the former having little more to hope, and the latter having every thing to fear, from its continuance. Many of the inferior ſtates, being implicitly governed by the reſolves of theſe powerful republics, readily imitated their example. And ſo precarious and unſettled was the condition of them all, that above twenty thouſand men abandoned their homes and families, and followed the ſtandard of the Perſians. The merit of Iphicrates juſtly entitled him to the command of his countrymen, which was unanimouſly conferred on him. But the expedition produced nothing worthy of ſuch a general, who in a few months returned to Athens, diſguſted with the pride and timidity of the Perſian commanders. Meanwhile the Thebans, who had diſregarded the invitation of Artaxerxes, profited of the diverſion made by the Egyptian war, to reduce ſeveral cities of Bœotia. The walls of Theſpiæ were raſed to the ground; Platæa met with the ſame fate; and its inhabitants, after ſuffering the cruelleſt indignities, were driven to ſolicit the protection of the Athenian aſſembly, who kindly received them into the boſom of their republic, and expreſſed the utmoſt indignation againſt their inſolent oppreſſors.

This affecting tranſaction threatened to deprive the Thebans of an ally to whom they were in a great meaſure indebted for their proſperity. Their ſubſequent conduct tended ſtill farther to widen the breach. They marched troops into Phocis, with an intention to reduce that country. They heard with equal diſdain, the remonſtrances of their friends, and the threats of their enemies. Their lofty ſpirit totally alienated the Athenians, who ſeemed diſpoſed to conclude a laſting peace with Sparta, on the principles of the treaty of Antalcidas, that their reſpective garriſons ſhould be withdrawn from foreign parts, and the communities, ſmall as well as great, be permitted to enjoy the independent government of their own laws. The intereſt of the king of Perſia, who ſtill needed the aſſiſtance of Greece to carry on the Egyptian war, induced him to employ his good offices for promoting this ſpecious purpoſe; and a convention of all the ſtates was ſummoned to Sparta, whither the Thebans deigned indeed to ſend a repreſentative; but one whoſe firmneſs and magnanimity were well fitted to ſuſtain and elevate the aſpiring pretenſions of his republic. This repreſentative was Epaminondas, to whoſe abilities and eloquence the Thebans committed the defence of their moſt important intereſts in the general congreſs of the Grecian ſtates. The Athenians ſent Antocles and Calliſtratus. Ageſilaus himſelf appeared on the part of Sparta. Matters were eaſily adjuſted between thoſe leading republics, who felt equal reſentment at the fate of Theſpiæ and Platæa. They lamented their mutual jealouſy, and unfortunate ambition, which had occaſioned ſo many bloody and deſtructive wars; and commemorated the ſhort but glorious intervals of moderation and concord, which had tended ſo evidently to their own and the public felicity. Inſtructed by fatal experience, it was time for them to lay down their arms, and to allow that tranquillity to themſelves and to their neighbours, which was neceſſary to heal the wounds of their common country. The peace could not be uſeful or permanent, unleſs it were eſtabliſhed on the principles of equality and freedom, to which all the Grecian communities were alike entitled by the treaty of Antalcidas. It was propoſed, therefore, to renew that ſalutary contract, which was accepted by the unanimous conſent of Athens, of Sparta, and of their reſpective confederates.

Epaminondas then ſtood up, offering to ſign the treaty in the name of the Bœotians. "The Athenians," he took notice, "had ſigned for all the inhabitants of Attica; the Spartans had ſigned not only for the cities of Laconia, but for their numerous allies in all the provinces of the Peloponneſus. Thebes was entitled to the ſame prerogatives over her dependent cities, which had anciently acknowledged the power of her kings, and had recently ſubmitted to the arms of her citizens." Ageſilaus, inſtead of anſwering directly a demand which could neither be granted with honour, nor denied with juſtice, aſked in his turn, Whether it was the intention of the Thebans to admit, in terms of the treaty, the independence of Bœotia?—Epaminondas demanded, Whether it was the intention of Sparta to admit the independence of Laconia? "Shall the Bœotians," ſaid the king, with emotion, "be free?"—"Whenever," replied Epaminondas, with firmneſs, "you reſtore freedom to the Lacedæmonians, the Meſſenians, and the oppreſſed communities of Peloponneſus, whom, under the name of allies, you retain in an involuntary and rigorous ſervitude." Theſe juſt remonſtrances of Epaminondas made a deep impreſſion on the deputies. Ageſilaus, alarmed at its effect, anſwered him in a ſtrain very different from that deſpotic brevity which the Spartans uſually affected. His ſpeech was long and eloquent. The deputies were awed into ſubmiſſion, leſs perhaps by the force of his eloquence, than by the terror of the Spartan armies ready to take the field. But the words of Epaminondas ſunk deep into their hearts. They communicated, at their return, the powerful impreſſion to their conſtituents; and its influence was viſible in the field of Leuctra, and in the events which followed that memorable engagement.

In the interval of ſeveral months, between the congreſs at Sparta and the invaſion of Bœotia, Ageſilaus and his ſon Archidamus collected the domeſtic ſtrength

of their republic, and ſummoned the tardy aid of their confederates. Sickneſs prevented the Spartan king from taking the field in perſon; but his advice prevailed with the ephori and ſenate, to command his colleague Cleombrotus to march without delay againſt the Thebans, with aſſurances of being ſpeedily joined by a powerful reinforcement. The rendezvous was appointed in the plain of Leuctra, ſituate on the Bœotian frontier, almoſt at the equal diſtance of ten miles from the ſea and from Platæa. The Spartans and their confederates joined forces in this neighbourhood; and their army amounted to twenty-four thouſand foot, and ſixteen hundred horſe. The Theban infantry did not amount to more than half that number. Their cavalry, however, nearly equalled thoſe of the Spartans, and far excelled them in diſcipline and in valour. Epaminondas exhorted them to march, and repel the invaders, if they would prevent the defection of Bœotia, and avoid the dangers and diſgrace of a ſiege. They readily obeyed, and proceeded to the neighbouring mountains, on which having encamped, they obtained a commanding view of their enemy's forces in the plain. Before conducting them to battle, Epaminondas diſplayed his invincible courage and confidence of victory, by permitting all thoſe to retire, who either diſapproved his cauſe, or were averſe to ſhare his danger; a permiſſion which the Theſpians firſt thought proper to embrace. The unwarlike crowd of attendants, whoſe ſervices were uſeleſs in time of action, gradually ſeized the ſame opportunity to leave the camp. The ſwelling multitude appeared as a ſecond army to the Spartans, who ſent a powerful detachment to oppoſe them. The fear of being cut off by the enemy threw them back on the Thebans, whoſe hopes were enlivened by the unexpected return of ſuch a conſiderable reinforcement. Thus encouraged, they determined unanimouſly to ſtand by their heroic chief, and either to defend their country, or to periſh in the attempt; and the ardour of the troops equalling the ſkill of the general, the union of ſuch advantages rendered them invincible.

Cleombrotus had diſpoſed his forces in the form of a creſcent, according to a favourite practice of the Spartans. His cavalry were poſted in ſquadrons along the front of the right wing, where he commanded in perſon. The allies compoſed the left wing, conducted by Archidamus. The Theban general, perceiving this diſpoſition, and ſenſible that the iſſue of the battle would eventually depend on the domeſtic troops of Sparta, determined to charge vigorouſly with his left, in order to ſeize or deſtroy the perſon of Cleombrotus; thinking that ſhould this plan ſucceed, the Spartans muſt be diſcouraged and repelled; and that even the attempt muſt occaſion diſorder in their ranks, as the braveſt would haſten, from every quarter, to defend the perſon of their king. Having reſolved, therefore, to commit the fortune of the day to the bravery of the left diviſion of his forces, he ſtrengthened it with the choiceſt of his heavy-armed men, whom he drew up fifty deep. The cavalry were placed in the van, to oppoſe the Spartan horſe. Pelopidas, with the Sacred Band, flanked the whole on the left; and deeming no particular ſtation too dangerous for their proweſs, they were prepared to appear in every tumult of the field, whither they might be called by an opportunity of ſucceſs, or by the proſpect of diſtinguiſhed danger. The principal inconvenience to which the Thebans were expoſed, was that of being ſurrounded by the wide-extended arms of the Spartan creſcent. This danger the general foreſaw; and in order to prevent it, he ſpread out his right wing, of which the files had only ſix men in depth, and the ranks proceeding in an oblique line, diverged the farther from the enemy, in proportion as they extended in length.

The action began with the cavalry, which, on the Spartan ſide, conſiſted chiefly of ſuch horſes as were kept for pleaſure by the richer citizens in time of peace; and which, proving an unequal match for the diſcipline of the Thebans, were ſpeedily broken, and thrown back on the infantry. Their repulſe occaſioned conſiderable diſorder in the Lacedæmonian ranks, which was greatly heightened by the impetuous charge of the Sacred Band. Epaminondas availed himſelf of this momentary confuſion, to perform one of thoſe rapid evolutions which commonly decide the fate of battles. He formed his ſtrongeſt but leaſt numerous diviſion into a compact wedge, with a ſharp point, and with ſpreading flanks; expecting that the Lacedæmonians, as ſoon as they had recovered their ranks, would attack the weaker and more extended part of his right wing. The event anſwered his expectation. While the Lacedæmonians advanced upon his right wing, where they found little reſiſtance, he ruſhed forward with his left; and darting like the beak of a galley on the flank of the enemy, bore down every thing before him, until he arrived at the poſt occupied by Cleombrotus. The urgency of the moment recalled to their ancient tactics the degenerate ſons of Lycurgus. The braveſt warriors flew from every quarter to the aſſiſtance of their prince, covered him with their ſhields, and defended him with their ſwords and lances. Their impetuous valour reſiſted the intrepid progreſs of the Thebans, till the Spartan horſemen, who attended the perſon of Cleombrotus, were totally cut off, and the king himſelf, pierced with many wounds, fell on the breathleſs boſoms of his generous defenders. The fall of the chief gave new rage to the battle. Anger, reſentment, and deſpair, by turns agitated the Spartans. But they could not obtain any further advantage. Epaminondas was careful to fortify his ranks, and to maintain his order of battle; and the firmneſs and rapidity of his regular aſſault gained a complete and deciſive victory over the deſperate reſiſtance of the Spartan troops. The allies had hitherto remained inactive, unwilling raſhly to engage in a battle, the motives of which they had never heartily approved. The defeat of the Lacedæmonians, and the death of Cleombrotus, decided their wavering mind. They determined with one accord to decline the engagement; their retreat was effected with the loſs of about two thouſand men; and the Thebans remained complete maſters of the field.

When the intelligence was diffuſed over Greece, that the Thebans, with the loſs of only three hundred men, had raiſed an immortal trophy over the ſtrength and renown of Sparta, the importance of this event became every where conſpicuous. The deſire, and hope, of a revolution in public affairs, filled the Peloponneſus with agitation and tumult. Eleans, Arcadians, and Argives, every people who had been influenced or intimidated by Spartan power, openly aſpired at independence. But amidſt this general defection, the Athenians exhibited an illuſtrious example of political moderation. Immediately after the battle of Leuctra, a Theban herald, adorned with the emblems of peace and victory, had been diſpatched to Athens, in order to relate the particulars of the engagement, and to invite the Athenians to an offenſive alliance againſt a republic, which had ever proved the moſt dangerous as well as the moſt inveterate enemy of their country. But the aſſembly of Athens, governed by the generoſity of Timotheus and Iphicrates, determined only to humble their rivals, not to deſtroy them. In this view they prepared to derive every poſſible advantage from the diſtreſs of Sparta, as well as to curtail its power. Convinced that the inhabitants of Peloponneſus would no longer be inclined to follow her ſtandard, and ſhare her adverſity, they ſeized the opportunity of delivering them for ever from her yoke; and, leſt any other people might attain the rank which the Spartans once held, and raiſe their own importance on the ruins of public freedom, ambaſſadors were ſent ſucceſſively to the ſeveral cities, requiring their reſpective compliance with the treaty of Antalcidas. Againſt ſuch as rejected this overture, war was denounced

denounced in the name of Athens and her allies; which was declaring to all Greece, that the battle of Leuctra had put the balance of power into her hands, and that ſhe had determined to check the ambition of every republic whoſe views were too aſpiring.

Diſappointed of the aſſiſtance of Athens, the Thebans courted an alliance with Theſſaly, then under the government of Jaſon of Pheræ, a man whoſe abilities and diſcernment were united with indefatigable labour and invincible courage. His family was deſcended from the ancient kings of the heroic ages, and formed the wealthieſt houſe in Pheræ. Taking a decided part with the Thebans, he adjuſted with equity and preciſion the proportion of taxes, and the contingent of troops, to be raiſed by the ſeveral cities in his dominions. The new levies, added to his ſtanding army of mercenaries, amounted to eight thouſand horſe, twenty thouſand heavy-armed foot, and ſuch a body of targeteers as no other ſtate could match. But numbers formed the leaſt advantageous diſtinction of the army of Jaſon. Every day he exerciſed his troops in perſon; diſpenſed rewards and puniſhments; caſhiered the ſlothful and effeminate; while he honoured and careſſed the brave and diligent. By this judicious plan the ſoldiers of Jaſon became alike attached to their duty, and to the perſon of their general, whoſe ſtandard they were ready to follow to any part of the world.

He began his military career by ſubduing the Dryopes, the Dolopians, and the other warlike tribes, inhabiting the mountains of Oeta and Pindus, which form the ſouthern frontier of Theſſaly. Then turning northwards, he ſtruck terror into Macedonia, and compelled Amyntas to become his ally. Thus fortified on both ſides, he retaliated the inroads of the Phocians, who had formerly inſulted the weakneſs of his country; and by conquering the ſmall and uncultivated diſtrict of Epirus, which then formed a barbarous principality under Alcetas, an anceſtor of the renowned Pyrrhus, he extended the dominion of Theſſaly from the Ægean to the Ionian ſea, and encompaſſed, as with a belt, the utmoſt breadth of the Grecian republics. He next engaged in a war with the Phocians, of which, whatever might be the pretence, the real object was to obtain the ſuperintendence of the Delphic oracle, and the adminiſtration of the ſacred treaſure. To avoid marching through a hoſtile territory, he ordered his galleys to be equipped, as if he had intended to proceed by ſea to the coaſt of Bœotia. His naval preparations amuſed the attention of the Phocians, while Jaſon entered their country with a body of two thouſand light horſe, and advanced with ſuch rapidity, that he was every where the firſt meſſenger of his own arrival.

By this unuſual celerity, he joined, without encountering any obſtacle, the army of the Thebans, who were encamped in the neighbourhood of Leuctra, at no great diſtance from the enemy. Inſtead of an auxiliary, Jaſon thought it at firſt more ſuitable to his intereſt to act the part of a mediator. He exhorted the Thebans to reſt ſatisfied with the advantages which they had already obtained, without driving their adverſaries to deſpair; that the recent hiſtory of their own republic and of Sparta, ſhould teach them to remember the viciſſitudes of fortune. The Lacedæmonians, on the other hand, he reminded of the difference between a victorious and a vanquiſhed army. That the preſent criſis ſeemed totally adverſe to the re-eſtabliſhment of their greatneſs; that they ſhould yield to the fatality of circumſtances, and watch a more favourable opportunity to reſtore the tarniſhed luſtre of their arms. His arguments prevailed; hoſtilities were ſuſpended; the terms of a peace were propoſed and accepted: but it is remarkable, that the Spartans and their allies had ſo little confidence in this ſudden negociation, that they decamped the night following, and continued to march homeward, with the diligence of diſtruſt and fear, until they got entirely beyond reach of the Thebans. Jaſon had not, probably, more confidence in a treaty haſtily concluded between enemies, whoſe reſentments were irritated and inflamed by ſo many mutual injuries offered and retorted. Nothing could have been more contrary to his views than a ſincere and laſting peace between theſe powerful republics; but as this was not to be apprehended, he wiſhed to obtain the reputation of appeaſing the diſſenſions of Greece; a circumſtance of great importance to the accompliſhment of his own deſigns.

In his return home, he demoliſhed the walls of Heraclea, a town ſituate near the ſtraits of Thermopylæ; not fearing, ſays his hiſtorian, that any of the Greek ſtates ſhould invade his dominions from that ſide, but unwilling to leave a place of ſuch ſtrength on his frontier, which, if ſeized by a powerful neighbour, might obſtruct his paſſage into Greece. Thither he determined to return at the celebration of the Pythian games, at which he meant to claim the right of preſiding, as an honour due both to his piety and to his power. But, amidſt theſe lofty projects, Jaſon, while reviewing the Pheræan cavalry, was ſtabbed by ſeven youths, who approached him on pretence of demanding juſtice againſt each other. Two of the aſſaſſins were diſpatched by his guards. Five mounted fleet horſes, which had been prepared for their uſe, and eſcaped to the Grecian republics, in which they were honoured as the ſaviours of their country from the ambitious deſigns of a tyrant. The projects and the empire of Jaſon periſhed with himſelf, and Theſſaly relapſed into its former ſtate of diviſion and weakneſs.

But this event ſtopped not the progreſs of the war. In the year before Chriſt 369, the renowned Thebans took the field, having carefully pondered their own ſtrength, and collected into one body the flower and vigour of their numerous allies. They were accompanied by the warlike youths of the towns and villages of Bœotia, by the Acarnanians, Phocians, Locrians, and Eubœans, and by a promiſcuous crowd of fugitives, who were attracted to their camp by the allurement of plunder. They had no ſooner arrived on the frontier of Arcadia, than they were joined by the inhabitants of that country, as well as by the Elians and Argives. This united ſtrength exceeded any numbers, that either before or afterwards ever aſſembled in Greece under one ſtandard, amounting to fifty, ſome ſay to ſeventy, thouſand men. The Thebans, and the reſt of the Bœotians, were commanded by Epaminondas and Pelopidas, to whom the generous admiration of their colleagues had voluntarily reſigned their authority. Appriſed of the march of ſuch a formidable army, conducted by generals of ſuch unqueſtionable merit, Ageſilaus prepared to evacuate Arcadia, a meaſure which he effected, before his ſoldiers beheld the fires kindled in the hoſtile camp, and thus avoided the diſgrace of retiring before the enemy. The Thebans in the mean time ſummoned a council of war, wherein it was determined to march without farther delay into the Lacedæmonian territories, to lay waſte the country, and, if poſſible, to take poſſeſſion of the capital.

That this reſolution might be executed with the greater celerity, the army was thrown into four diviſions, deſtined, by ſeparate roads, to break into the devoted province, to join forces again at Sellaſia, and thence to march in one body to Sparta. The Bœotians, Elians, and Argives, penetrated, without oppoſition, by the particular routes which had been aſſigned them. But when the Arcadians, who formed the fourth diviſion of the army, attempted to traverſe the diſtrict of Sciritis, the brave Iſchilas, who guarded that important paſs, determined to repel them, or to periſh. The example of Leonidas at Thermopylæ kindled a generous enthuſiaſm in the breaſt of this gallant Spartan. The number of the Arcadian levies ſo far exceeded his own, that inevitable death was the reſult of his courage.

Yet

Yet he exhorted all thoſe to decline the danger, who were not ambitious to ſhare in it. He even *commanded* the youth to leave his camp before the engagement, deeming their lives too precious to be expoſed in ſo deſperate an enterpriſe. He, with the veteran ſoldiers who followed him, choſe the preſent opportunity to meet a glorious death in defence of their country. But their lives were ſold dearly. The action was long doubtful; the loſs of the Arcadians great; nor did the battle ceaſe till the laſt of the Spartans had periſhed.

The confederates having ſoon after aſſembled at Sellaſia, the place of rendezvous, marched forward to Sparta, burning and deſtroying all before them. During five hundred years Laconia had not experienced a ſimilar calamity. The guards who defended the city were thrown into conſternation. The women were terrified by the ſmoke and tumult raiſed by the invaders; a ſpectacle, concerning which it had been their uſual boaſt, that they alone of all the Grecian females, had never beheld the theatre of war. Alarmed by the danger which threatened them, and which they were ſenſible of their own inability to repel, the Spartans embraced the expedient of giving arms to their peaſants and ſlaves, whom they commonly treated with ſuch an exceſs of cruelty. Not leſs than ſix thouſand of theſe unhappy men were engaged, by threats or promiſes, to undertake the defence of the proud tyrants whom they deteſted. Their formidable numbers increaſed the general panic, which had ſeized the magiſtrates and citizens, and which did not finally ceaſe until the arrival of a powerful body of men from Corinth, Phlius, Epidaurus, and Pallenè; cities which, though they had ever oppoſed the *deſpotiſm*, were unwilling to permit the *deſtruction*, of Sparta.

This ſeaſonable reinforcement not only removed the conſternation of the Spartans, but elevated their minds from the depth of deſpondency to the hope of ſucceſs. The kings and magiſtrates could ſcarcely reſtrain their impetuoſity from ruſhing into the field; and this martial enthuſiaſm, guided by the conſummate prudence of Ageſilaus, enabled them to repel the firſt aſſaults of the enemy, and convince them that the deſtruction of the Spartan government was no ſuch eaſy taſk. The conduct of Ageſilaus, during this critical emergency, has been highly extolled by all writers, and never beyond its merit. By a well-contrived ambuſh in the temple of the Tyndaridæ, he defeated the deſigns of the aſſailants: by very uncommon preſence of mind, he quelled a dangerous inſurrection; and while, by force or ſtratagem, he overcame the united efforts of domeſtic and foreign enemies, he negociated a moſt important treaty of alliance with the Athenians, who, in a crouded aſſembly, determined almoſt unanimouſly to take the field. Iphicrates was named general; twelve thouſand men were ordered to repair to his ſtandard; the troops took a ſhort repaſt; and ſuch was their ardour to meet the enemy, that many of them marched forth without waiting the orders of their commander. Epaminondas, meanwhile, committed dreadful devaſtation in Laconia. His repulſe from the capital exaſperated his vengeance againſt the country. He deſolated the fertile banks of the Eurotas, abounding in all the conveniencies of life known to the auſtere manners of Sparta. He aſſaulted Helos and Gythium; and, traverſing the whole province, deſtroyed the villages and inhabitants by fire and ſword. Even theſe terrible ravages did not ſatisfy his reſentment; he determined that the invaſion of Laconia ſhould not be a temporary evil, which the labour of a few years might repair; and for this purpoſe employed an expedient, which, even after he might evacuate their country, muſt leave the Lacedæmonians expoſed to the rage of an implacable enemy.

We have had occaſion to relate the various fortunes of the Meſſenians. About three centuries before the period now under review, their city had been demoliſhed by the Spartans; their territory had been ſeized, and divided among that people; the ancient inhabitants had been reduced into ſervitude, and compelled to cultivate their paternal fields for the benefit of cruel maſters; or diſperſed in miſerable baniſhment over Greece, Italy, and Sicily. After two centuries of humiliation and calamity, the humanity, or perhaps the policy, of Athens, took compaſſion on this unfortunate race, and ſettled them in the territory of Naupactus, and the neighbouring iſland of Cephalenia. The Meſſenians diſplayed their gratitude by important ſervices during the Peloponneſian war; but their moſt vigorous exertions could not then retard the declining fortune of Athens. The event of that war rendered Sparta the arbiter of Greece; and the Meſſenians were the firſt objects of her memorable tyranny, being univerſally enſlaved, baniſhed, or put to death. It is probable that the ſcattered remains of this miſerable community would flock from every quarter to the ſtandard of Epaminondas, rejoicing in an opportunity to retaliate the unrelenting perſecution of a people who now ſuffered themſelves the ſame calamities which they had ſo often inflicted on others. But the general voice of hiſtory aſcribes to Epaminondas the merit of aſſembling the Meſſenians. It is certain that he rebuilt their city, and put them in poſſeſſion of their territory; an act of generous compaſſion which inflicted a moſt unexpected puniſhment on the Spartans, who beheld the aſhes of a nation, which they had twice endeavoured to extinguiſh, now revive and flouriſh, never to be again ſubjected to their controul.

Epaminondas had accompliſhed this extraordinary enterpriſe, when he received intelligence of the motions of the Athenian army commanded by Iphicrates. That illuſtrious general had allowed the ardour of his troops to evaporate, by purſuing a conduct which it is impoſſible, at this diſtance of time, to explain, but which the military hiſtorian condemns, as highly unworthy of his former renown. His ſoldiers loudly demanded to meet the enemy, or even to aſſault the walls of Argos, the ſtrongeſt and moſt populous city in Peloponneſus, and not inferior to Thebes in animoſity againſt their common foe. Iphicrates, however, embraced none of thoſe meaſures, but led his army towards Arcadia; expecting, perhaps, what actually happened, that the news of his arrival there would deliver Laconia from the hoſtile invader. It cannot however be imagined, that Epaminondas feared the iſſue of an engagement with the Athenians. But he was juſtly alarmed with the intereſt which that people had taken in the affairs of Sparta. The indignation and reſentment which they, the rivals and enemies of the injured, diſcovered on this occaſion, taught him what ſentiments his conduct muſt excite in more impartial ſtates, ſhould he perſiſt in his plan to deſtroy Sparta; or, as the orator Leptines expreſſed it, "pluck out an eye of Greece." Many concurring cauſes tended alſo to accelerate his departure. The Arcadians were called home to defend their houſes and families. The Elians and Argives were anxious to ſecure their booty by an expeditious retreat. Even the Thebans were weary of an expedition which had conſumed ſeveral winter months, a ſeaſon in which they were not accuſtomed to keep the field.

Early in the enſuing ſpring, the Lacedæmonians, with the allies who ſtill adhered to their cauſe, diſpatched an embaſſy to Athens, in order to ſtrengthen the bands of amity with that republic. In the conference held for that purpoſe, it appeared that the Spartans were either very deeply affected by the recent obligations conferred on them, or that they very earneſtly deſired the continuance of ſimilar favours. They acknowledged that the experience, the bravery, the naval victories and fortune, of Athens, juſtly entitled her to the ſovereignty of the Grecian ſeas; and when this conceſſion, which had been long and diſdainfully withheld,

could not ſatisfy the more haughty members of the aſſembly, they condeſcended to propoſe, that in all ſuch military expeditions as were undertaken by the joint forces of both republics, the command ſhould be equal and alternate; ſo that an army of Lacedæmonians, a thing hitherto unexampled, would be commanded during half the campaign by Athenian generals. Patrocles the Phliaſian, whoſe eloquence and addreſs had been diſtinguiſhed in the former negociation, was not leſs active in the preſent; and an alliance of the moſt intimate kind was concluded between the two republics. The Spartan negociations, ſo fortunate in Athens, were alſo ſucceſsful with Dionyſius tyrant of Sicily, and Artaxerxes king of Perſia. The former, himſelf a Dorian, naturally lamented the humiliation and diſtreſs of a people, who, during ſeven hundred years, had formed the principal ornament and defence of the Dorian race; while the latter purſued his uſual ſyſtem of aſſiſting the weaker party, in order to balance the contending powers, and to perpetuate the hoſtilities of Greece.

While the Lacedæmonians gained ſtrength by theſe important alliances, their enemies took the field. The Arcadians began the campaign by entering the territory of Pallenè, which ſtill remained faithful to Sparta. The country was laid waſte, the villages burned, the city taken by ſtorm, and the garriſon, conſiſting of three hundred men, partly Lacedæmonians, put to the ſword. Soon after this ſucceſs, the Arcadians were joined by the Elians and Argives. Epaminondas likewiſe marched ſouthward at the head of the Thebans, their foot amounting to ſeven thouſand, and their cavalry to five hundred. Before he reached the Iſthmus, the Lacedæmonians had been reinforced by a body of two thouſand Sicilian troops, agreeably to their treaty with Dionyſius; and the Athenians had taken the field under the command of Chabrias, the moſt popular of their generals. It was the object of the Spartan and Athenian commanders, to prevent the junction of Epaminondas with his ſouthern allies. For this purpoſe they ſtrongly guarded the Iſthmus; an expedient which had not been put in practice ſince the expedition of Xerxes. The Thebans, however, reſolutely broke through, took Sicyon, and aſſaulted Corinth. But Chabrias, who at this time held the alternate command, repulſed them with ſuch loſs, that Epaminondas judged it proper to retire homeward; on which account he was ſhamefully diſgraced by his countrymen.

In the beginning of the year before Chriſt 367, the Spartan army again took the field. They received a freſh ſupply of troops from Dionyſius, and both troops and money from Artaxerxes. But the Theban troops commenced the campaign before them, and were actively employed in Theſſaly and Macedon; ſo that every circumſtance conſpired to ſtimulate Ageſilaus and the Lacedæmonians. But the infirmities incident to old age made him decline the command, which was intruſted to his ſon Archidamus; his colleague Ageſipolis not poſſeſſing the requiſite abilities either for war or government. The rapid ſucceſs of Archidamus ſoon juſtified the prudent choice of the magiſtrates and people. He expelled the hoſtile garriſons from the cities of Laconia, ſtormed Caryæ, and put the rebellious inhabitants to the ſword. From thence he haſtened to Arcadia, laid waſte the ſouthern frontier of that province, and prepared to attack the populous city of Parrhaſia, when the united ſtrength of the Arcadians, commanded by Lycomedes, and reinforced by the Argives, approached to its relief. As ſoon as Archidamus beheld the enemy prepared to engage, he commanded the Spartans to form, and addreſſed them as follows: "Fellow-citizens and friends! if we are ſtill brave, we may look forward with confidence; we may yet retrieve our affairs, and deliver down our republic to poſterity as we received it from our anceſtors. Let us ſtrive, then, by one noble effort, to recover our hereditary renown; and let us ceaſe being the reproach of our friends, our parents, our families, and our country." Animated by the heroiſm of their leader, they were tranſported with an enthuſiaſm of valour, and impetuouſly ruſhed againſt their opponents, in full confidence of victory. The enemy were diſmayed at their mien and aſpect as they advanced to the attack. The few who waited their approach were totally deſtroyed; many thouſands periſhed in the purſuit; it is ſaid by hiſtorians, that the Spartans loſt not a man. Archidamus erected a trophy, and diſpatched a meſſenger to Sparta. The people were aſſembled, when he communicated his extraordinary intelligence. The aged Ageſilaus ſhed tears of joy. The ephori and ſenators ſympathiſed with the emotions of their king. The patriotic weakneſs was communicated from breaſt to breaſt; the contagion ſpread; the ſterneſt members of this numerous aſſembly diſſolved in ſoftneſs, and melted in ſenſibility.

The Spartans were prevented from reaping the full fruits of their victory, by a conſiderable reinforcement which the Arcadians ſoon afterwards received from Thebes. By the aſſiſtance of theſe troops, the Menalians and Parrhaſians, who, from their ſituation on the ſouthern frontier of Arcadia, were moſt expoſed to the incurſions of the enemy, found means to execute a deſign ſaid to have been ſuggeſted by Epaminondas. They abandoned twenty ſtraggling and defenceleſs villages; and, chooſing an advantageous ſituation in the centre of their territory, erected a fortreſs, which they ſurrounded with a ſtrong wall. The benefit of ſecurity attracted new inhabitants; the walls were extended; the place acquired the name of Megalopolis, the laſt city built by the Greeks while they preſerved the dignity of independent government.

Epaminondas, who had for ſome time ſerved as a volunteer in the Theban ranks, was, in the beginning of the year before Chriſt 366, again reſtored to the chief command, and intruſted with a powerful army, with which, for the third time, he invaded the Peloponneſus. The Elians and Arcadians, though hoſtile to each other, were alike diſpoſed for rebellion againſt Thebes; but inſtead of marching into their territories, a meaſure which might have engaged them to ſettle their private differences, and to unite againſt Thebes, Epaminondas endeavoured to quaſh their diſaffection, by the rapid conqueſt of Achaia, which, ſtretching along the Corinthian gulph, ſkirted the northern frontiers of Elis and Arcadia. From the nature of their government, the Achæans uſually enjoyed more tranquillity than their neighbours. Towards the eaſt, and the Iſthmus of Corinth, the cities of Sicyon and Phlius had long been regarded as ſeparate republics, unconnected with the general body of the Achæan nation. Ægium enjoyed the prerogative of conſtituting the uſual place of convention for the ſtates of Achaia; but Dymè, Tirtæa, and Pallenè, ſcarcely yielded to Ægium in populouſneſs and power, and ſeem, with ſeveral places of inferior note, to have formed ſo many ſeparate and independent communities, all alike ſubject to the ſame ſyſtem of Achæan laws. Immediately before the Theban invaſion, the ariſtocracy had acquired an undue weight in the conſtitution of Achaia, ſo that the principal nobles and magiſtrates were no ſooner informed of the approach of an enemy, than they flocked from all quarters of the province to meet Epaminondas, ſoliciting his favour and friendſhip, little anxious about the independence of their country, provided they might preſerve their perſonal privileges and private fortunes. The people, perceiving themſelves betrayed by thoſe who ought to have been their protectors, abandoned all thoughts of reſiſtance. Epaminondas accepted the ſubmiſſion of the magiſtrates, and received pledges of their engagement, that Achaia ſhould thenceforth adhere to the intereſt of Thebes, and follow the ſtandard of that republic.

This

This conqueſt, though effected without ſtriking a blow, was deſtructive and ſanguinary in its conſequences. Epaminondas, for reaſons not ſufficiently explained, returned with his army to Thebes; but before he arrived there, various complaints againſt his conduct had been made in the Theban aſſembly. The Arcadians and Argives complained that a people, who knew by their own recent experience the inconveniences of ariſtocracy, ſhould have confirmed that ſevere form of government in a dependent province. The democratic faction in Achaia ſecretly ſent emiſſaries to ſecond the complaint. The enemies of Epaminondas ſeized the favourable opportunity of accuſing and calumniating that illuſtrious commander, and the capricious multitude were perſuaded to condemn his proceedings, and to ſend commiſſioners into Achaia, who, with the aſſiſtance of the populace, as well as of a conſiderable body of mercenaries, diſſolved the ariſtocracy, baniſhed or put to death the nobles, and inſtituted a democratic form of government. The foreign troops had ſcarcely left that country, when the exiles, who were extremely numerous and powerful, returned with common conſent, and, after a bloody and deſperate ſtruggle, recovered their ancient influence in their reſpective cities. The leaders of the populace were now, in their turn, put to death or expelled; the ariſtocracy was re-eſtabliſhed; and the magiſtrates, knowing that it was dangerous to depend on the unſteady politics of Thebes, craved the protection of Sparta, which was readily granted them. The Achæans approved their gratitude by ravaging the northern, while the Lacedæmonians infeſted the ſouthern, frontier of Arcadia; and that unhappy province ſeverely felt and regretted the fatality of its ſituation between two implacable enemies.

Meanwhile, the war languiſhed on both ſides, till the hoſtile confederacies were on the point of being diſſolved. The Athenians and Arcadians, equally diſguſted with their reſpective allies, concluded a treaty of peace and mutual defence, by the intervention of Lycomedes the Mantinæan, who was ſlain in his return from Athens by a party of Arcadian exiles. This negociation gave general alarm; the Arcadians, who had entered into a treaty with Athens, were the allies of Thebes; and the united ſtrength of theſe three republics was at that time ſufficient to ſubdue and enſlave the reſt of Greece. The terror was increaſed when it appeared that the Athenians had little inclination to evacuate ſeveral places in the Corinthian territory which they had undertaken to defend againſt the Arcadians and Thebans. By ſeaſonable vigilance the Corinthians anticipated a deſign, too unjuſt to be publicly avowed; they cautiouſly diſſembled their fears; graciouſly thanked Chares, who had arrived with an Athenian fleet on pretence of offering them his ſervice, but took care not to admit him within their harbours; and by extreme kindneſs and condeſcenſion, accompanied with warm profeſſions of gratitude for the protection hitherto afforded them, they got rid of the foreign garriſons, without coming to an open rupture with the Athenians. But the narrow eſcape which they had made, and the dread of being expoſed in future to any ſimilar danger, made them extremely ſolicitous to promote a general peace on the terms propoſed by the Thebans, which were, that Sparta ſhould declare and admit the future independence of the fertile country of Meſſenia. Motives of the ſame kind influenced the cities of Achaia, and the little republic of Phlius, which, together with Corinth, were the only allies that remained faithful to Sparta. A ſimilarity of intereſts occaſioned a cloſe communication of views and meaſures among all thoſe communities; who agreed, by common conſent, to diſpatch an embaſſy to Sparta, requeſting that ſhe would accept theſe conditions of peace; or if ſhe thought it inconſiſtent to cede her pretenſions to Meſſenè, that ſhe would allow her faithful allies to enter into a ſeparate negociation with the Theban republic.

The reaſonableneſs of this requeſt muſt have been apparent to the Spartans, when they reflected on the uſeful ſervices of the allies, and conſidered how much they had already ſuffered in their cauſe. The Phliaſians, in particular, had, during five years, given ſuch illuſtrious proofs of their unſhaken adherence to Sparta, as ſtand unrivalled in the hiſtory of national fidelity. Situated in the midſt of enemies, they had continually, ſince the battle of Leuctra, ſuffered the invaſions and aſſaults of the Thebans, Arcadians, and Argives. Their territory was totally waſted; their city cloſely beſieged; their citadel more than once ſurpriſed and taken; their wealth, public and private, was exhauſted; and they ſubſiſted precariouſly on proviſions brought from Corinth, for the payment of which they had pledged their beaſts of burden and inſtruments of agriculture. Yet, under the preſſure of theſe multiplied calamities, they had preſerved their fidelity inviolate; they had diſdained to accept the peace which the Thebans offered them on condition of their forſaking Sparta; even, at laſt, they were determined to negociate with Thebes for neutrality alone; nor had they ſolicited permiſſion to embrace this meaſure, until Corinth, the only ſource of their ſubſiſtence, ſeemed ready to forſake them.

The ſtrength of ſuch arguments, urged by the eloquence of Patrocles the Phliaſian, might have ſoftened, if any thing could have ſoftened, the inflexible temper of the Spartan ſenate, and diſpoſed that aſſembly to prefer the intereſt of their allies, and their own immediate ſafety, to the doubtful proſpect of recovering Meſſenè. But the ſpeech of Archidamus, full of animation and contempt for the foes of Sparta, decided their perſeverance in the war. "The Phliaſians, the inhabitants of Corinth and Achaia, may, without exciting ſurpriſe, expreſs an anxiety for peace; ſafety, not glory, being their aim. But the Spartans have a character to ſuſtain, which it would be diſhonourable to relinquiſh. They expect not barely to exiſt, but to enjoy glory and renown, the true ſweeteners of exiſtence; and, if that be impoſſible, they muſt periſh! Yet is not their ſituation deſperate: a nation can never be reduced to any condition of diſtreſs, in which a warlike genius, and a well-regulated government, may not afford relief. But in military experience and abilities, we are ſtill unrivalled; and ſuch a ſyſtem of policy as we enjoy, no other people can boaſt. We enjoy, beſides, temperate and laborious habits, the contempt of pleaſure and wealth, an ardour for martial glory, and an ambition for honeſt fame. Theſe are powerful auxiliaries, when protected by the immortal gods, whoſe oracles anciently approved our juſt conqueſt of Meſſenè. Nor, though the Corinthians and Achæans forſake us, ſhall we be deſtitute of allies. The Athenians, ever jealous of Thebes, their moſt formidable neighbour, will again take arms in our cauſe. Dionyſius, the tyrant of Sicily, gives us hope of farther aſſiſtance; the king of Egypt, and many princes of Aſia, declared enemies of Artaxerxes, are all naturally our friends. We poſſeſs, beſides, though not the perſons and actual ſervice, the hearts and affections at leaſt, of whatever is moſt eminent in Greece. But had we nothing of this kind to boaſt, and were the one half of Greece not more diſpoſed to injure us, than the other to abet their injuſtice, I have ſtill one alternative to propoſe, harſh indeed and ſevere, but becoming thoſe ſentiments which have ever animated the Spartans. Proſperity, that conceals the infamy of cowardice, robs fortitude of half its glory. It is adverſity alone that can diſplay the full luſtre of a firm and manly character. I propoſe, therefore, that rather than cede a territory, which your anceſtors acquired by the blood and labour of twenty campaigns, you ſhould remove from Sparta your wives, children, and parents, who will be received

with

with kindneſs in Italy, Sicily, Cyrenè, and many parts of Aſia. Thoſe who are fit to bear arms muſt alſo leave the city, and carry nothing from thence that may not eaſily be tranſported. They muſt, then, fix on ſome poſt well fortified by nature, and which art may render ſecure againſt every hoſtile aſſault. This, henceforth, muſt be their city and country; and from this, as a centre, they muſt on all ſides infeſt the enemy, until either the Thebans remit their arrogance, or the laſt drop of the Spartan blood periſh."

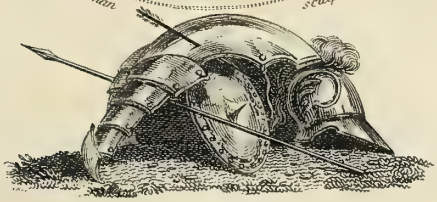
The ſpeech of Archidamus expreſſed the general ſenſe of his country. The allies were diſmiſſed with permiſſion to act as beſt ſuited their convenience, but with aſſurance that Sparta would never liſten to any terms of accommodation while deprived of Meſſenè. With this anſwer the ambaſſadors returned to their reſpective cities. Soon afterwards they were diſpatched to Thebes, where, having propoſed their demands, they were offered admiſſion into the Theban confederacy. They anſwered, that this was not peace, but only a change of the war; and at length, after various propoſitions and reaſoning, they obtained the much-deſired neutrality.

The Spartans, thus deſerted on every ſide, would probably have been the victims of their pride and obſtinacy, if circumſtances unforeſeen had not prevented the Thebans and Arcadians from carrying on the war with their uſual ſucceſs. Projects of glory and ambition had diſarmed the reſentment of Epaminondas. That active and enterpriſing leader, who thought that nothing was done while any thing was neglected, had ſet himſelf to render Thebes miſtreſs of the ſea. The attention and labour of the republic were directed to this new object; preparations were made at Aulis with ſilence and celerity; and when the deſign ſeemed ripe for execution, Epaminondas ſailed to Rhodes, Chios, and Byzantium, to concert meaſures with thoſe maritime ſtates, which had already begun to ſhake off the yoke of the Athenians. But the vigilance of the latter, who had ſent out a ſtrong fleet under Laches, a commander of reputation and ability, prevented the dangerous conſequences of this defection; and the Theban arms were, at the ſame time, ſummoned to a ſervice which more immediately concerned their intereſt and honour.

Alexander, the tyrant of Pheræ, in the year before Chriſt 364, having entered into an alliance with Athens, he was thus enabled to attack the principal cities of Theſſaly, and to lay waſte the whole territory. The oppreſſed Theſſalians had recourſe to Thebes, whoſe powerful protection they had ſo happily experienced on former occaſions, and whoſe ſtandard they had uniformly followed, with an alacrity which afforded a ſufficient pledge of their gratitude. The Thebans decreed to aſſiſt them with ten thouſand men, and the command was entruſted to Pelopidas, the perſonal enemy of Alexander, who inſtantly marched into Theſſaly; and, being joined by the allies near the town of Pharſalus, they encamped at the foot of the mountains of Cynoſcephalæ. The tyrant Alexander approached with an army of twenty thouſand men, boldly offering battle. Nor did Pelopidas decline the engagement, though his troops were, in number, inferior to the enemy. The action began with the cavalry, and was favourable to the Thebans; but the mercenaries of Alexander, having gained the advantage of the ground, preſſed with vigour the Theban and Theſſalian infantry. In this emergency, Pelopidas rode up, and, encouraging the retiring troops with his voice and action, gave them ſuch freſh ſpirits, that Alexander did not doubt their having received a conſiderable reinforcement. The mercenaries were preſſed in their turn, and thrown into diſorder. Pelopidas, darting his eye through their broken ranks, eſpied Alexander in the right wing, rallying his men, and preparing to advance with his uſual intrepidity. At this ſight the Theban, accompanied by a few horſemen, impetuouſly ruſhed forward, calling aloud to his adverſary, and challenging him to ſingle combat. Alexander, overcome with fear, retired behind his guards, who received, firſt with a ſhower of javelins, and then with their ſpears, the little band of Pelopidas; who, after a dreadful carnage, fell a victim to his own ungovernable fury. Meanwhile, his troops advancing to the relief of their general, the guards of the tyrant were repelled; the Thebans, with their allies, proved victorious in every part of the battle; the enemy were diſperſed in flight, and purſued with the loſs of three thouſand men. But the death of Pelopidas threw a gloom over the victory. He was lamented by the Thebans and Theſſalians with heartfelt ſorrow. Accompanied by an innumerable crowd of mourners, his body was carried in proceſſion to Thebes. The Theſſalians, in whoſe ſervice he had fallen, requeſted the honour of ſupplying the expences of his funeral, which was celebrated with every circumſtance of ſolemn magnificence. The Thebans appointed Malcitas and Diogeiton to the command in Theſſaly; and the tyrant Alexander was again defeated, and ſtripped of all his poſſeſſions except Pheræ; while the neighbouring cities entered into a cloſe alliance with Thebes.

While operations, deſtructive or fruitleſs, employed the activity of Thebes, her allies in Arcadia were occupied with a deſign extremely unpardonable. To pave the way for the total conqueſt of the Peloponneſus, in which they had already obtained an aſcendant, they began by wreſting ſeveral places from the Elians, the leaſt warlike, and moſt wealthy, of their neighbours. The Elians, worſted in every encounter, craved the aſſiſtance of Sparta, which, being reinforced by the Achæans, (notwithſtanding the neutrality ſo recently ſtipulated,) made ſeveral vigorous but unſucceſsful efforts for the defence of the Elian territory. The Arcadians ſtill puſhed their conqueſts in that country, gaining one town after another, until at length Olympia itſelf fell into their hands. As poſſeſſors of this ſacred city, and by virtue of a pretended right derived from the inhabitants of Piſa, an ancient but decayed place in the neighbourhood of Olympia, the Arcadians prepared to celebrate the hundred and fourth Olympiad, the era of which was at hand. At the approach of this auguſt ſolemnity, the concourſe, as uſual, was great from every part of Greece; hoſtilities were ſuſpended; and all parties united in common amuſements, and common ceremonies of religion.

The prayers and ſacrifices were performed, and the military games had begun, when the ſpectators were alarmed by the ſudden claſhing of armour, and the fight of a real battle. The Elians had marched forth with their whole forces, and ſurpriſed the Arcadians, who, with two thouſand Argives, and a body of Athenian cavalry amounting to four hundred, guarded the ſacred groves and temples of Olympia. The vigour of their unexpected aſſault ſucceſſively repelled theſe intruders, who fled in diſorder through the ſtreets, and were purſued by the Elians with an inſpired valour, "ſince," ſays Xenophon, "Heaven alone can do, in one day, what no other power can accompliſh but in great length of time; make cowards courageous." The Arcadians, however, recovering from their conſternation, began to rally. The aſſailants were reſiſted with obſtinacy; but did not retire, till having loſt Stratolas their commander, with other brave men, they retreated in good order, after giving a conſpicuous proof of their courage and intrepidity to thoſe who had long deſpiſed their unwarlike character. The Arcadians renewed the guard with double vigilance; fortified the avenues that led to the Stadium and Hippodrome; and having taken theſe neceſſary precautions againſt a ſecond ſurpriſe, proceeded with the remaining ceremonies of the feſtival, which, though brought to an undiſturbed concluſion, was never acknowledged in the records of the Elians. And after celebrating the Olympic games, the Arcadians, in full aſſembly,



EPAMINONDAS.

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aſſembly, reflecting on the ſacrilegious violence that had been offered by their troops to the ſacred ſhrine of Olympia, determined to reſtore that city, as well as the direction of the games, to thoſe who had, from time immemorial, enjoyed both, and to conclude a peace with the Elians, who ſolicited it with much earneſtneſs, as a meaſure highly conducive to the general intereſt of the Peloponneſus.

After theſe tranſactions, Epaminondas took the field with the Bœotians, Eubœans, and a ſtrong body of Theſſalians; and upon his arrival in the Peloponneſus, he expected to be joined by the Argives, the Meſſenians, and ſeveral communities of Arcadia, particularly the inhabitants of Tegea and Megalopolis. With theſe hopes, he proceeded ſouthward to Nemea, where he encamped for ſeveral days, with an intention to intercept the Athenians, whoſe neareſt route into Peloponneſus lay through the diſtrict of Nemea. But this ſcheme was defeated by the prudence of the Athenians, who, inſtead of marching through the Iſthmus, ſailed to the coaſt of Laconia, and proceeded from thence to join their confederates at Mantinæa. When appriſed of this deſign, Epaminondas moved his camp, and marched forward to Tegea, which being ſtrongly fortified, and enjoying a lofty and central ſituation, was judiciouſly choſen as the place of rendezvous for his Peloponneſian confederates. The ſtrength of the enemy at Mantinæa was continually increaſing. Ageſilaus had already conducted the Lacedæmonians to the frontier of Arcadia. If they likewiſe ſhould join, the combined forces would prove ſuperior to the army of Epaminondas, which amounted to thirty thouſand in number, and of which the cavalry alone exceeded three thouſand. Conſidering theſe circumſtances, he determined on an enterpriſe, which, if crowned with ſucceſs, would render the preſent hitherto fruitleſs expedition not unworthy of his former fame.

Having decamped with his whole army in the night, he performed a haſty march of thirty miles, in order to ſurpriſe Sparta; and had not the extraordinary ſwiftneſs of a Cretan deſerter appriſed Ageſilaus of the danger, that city would have been taken unprepared, and totally incapable of defence. The bulk of the Lacedæmonian army had proceeded too far on the road to Mantinæa, to anticipate the deſign of the enemy; but the aged king, with his ſon Archidamus, returned, with a ſmall but valiant band, to the defence of Sparta. The engagement which followed, as related by Xenophon, appears one of the moſt extraordinary that hiſtory records. Epaminondas had employed every precaution which his ſagacity could ſuggeſt; he did not approach Sparta by thoſe narrow roads, where a ſuperiority of numbers would afford him ſmall advantage; he did not draw up his forces in the plain, in which, while entering the town, they might have been annoyed with miſſile weapons; nor did he allow an opportunity of ſurpriſing him by ſtratagem or ambuſcade, in the management of which the Spartans were at all times ſo dexterous. Seizing an eminence which commanded the town, he determined to deſcend into it with every advantage on his own ſide, and without the ſeeming poſſibility of being expoſed to any inconvenience. But the iſſue of ſo well-concerted an enterpriſe, the hiſtorian heſitates whether to refer to a particular providence of the gods, or to aſcribe to the invincible courage of men actuated by deſpair. Archidamus, with ſcarcely an hundred men, oppoſed the progreſs of the enemy, cut down the firſt ranks, and advanced to aſſault the remainder. Then, ſays Xenophon, "thoſe Thebans who had ſo often conquered, who were far ſuperior in number, and who poſſeſſed the advantage of the ground, ſhamefully gave way. The Spartans purſued them with impetuoſity, but were ſoon repelled with loſs; for the divinity, whoſe aſſiſtance had produced this extraordinary victory, ſeems alſo to have preſcribed the limits beyond which it was not to extend."

Epaminondas, foiled in an attempt which promiſed ſuch a fair proſpect of ſucceſs, did not ſink under his diſappointment. As he had reaſon to believe that the whole forces at Mantinæa would be withdrawn from that place to the defence of Sparta, he immediately founded a retreat, returned to Tegea with the utmoſt expedition, and allowing his infantry time for reſt and refreſhment, ordered the horſe to advance forward to Mantinæa, (which was diſtant only twelve miles,) and to maintain their ground until his arrival with the reſt of the army. He expected to find the Mantinæans totally unprepared for ſuch a viſit; and as it was then autumn, he doubted not that moſt of the townſmen would be employed in the country, in reaping and bringing in the corn. His plan was wiſe, and well executed. The ſituation of the Mantinæans correſponded to his hopes. But it ſeemed as if fortune had delighted to baffle all his enterpriſes. Before the Theban forces arrived at Mantinæa, a numerous ſquadron of Athenian cavalry entered that place, commanded by Hegelochus, who then firſt learned the departure of the allies to protect the Lacedæmonian capital. He had ſcarcely received this intelligence, when the Thebans appeared, and, advancing with great rapidity, prepared to effect the purpoſe of their expedition. The Athenians had not time to refreſh themſelves; they were inferior in number; they knew the bravery of the Theban and Theſſalian cavalry, with whom they muſt contend; yet, regardleſs of every conſideration but the ſafety of their allies, they ruſhed into the field, ſtopped the progreſs of the aſſailants, and, after a fierce and bloody engagement, which diſplayed great courage on both ſides, obtained an acknowledged victory. The enemy craved the bodies of their dead; the victors erected a trophy of their uſeful valour, which had ſaved Mantinæa from falling a prey to the invaders.

The repeated misfortunes, which would have broken the ſpirit of an ordinary commander, now determined Epaminondas to bring on a general engagement. The confederates had re-aſſembled at Mantinæa, ſtrengthened by conſiderable reinforcements. Freſh ſuccours had likewiſe arrived to the Thebans. Never had ſuch numerous armies taken the field during the perpetual wars in which thoſe unhappy republics were engaged. Epaminondas, after ranging his men in battalions, led them on towards Mantinæa. The enemy, appriſed of his march, drew up their forces before the walls; the Lacedæmonians and Arcadians in the right wing, the Athenians in the left, the Achæans and Elians in the centre. Meanwhile Epaminondas, marching ſlowly along, extended his circuit as if he wiſhed to decline the engagement. This opinion, too lightly conceived, proved fatal to the enemy. They abandoned their arms and their ranks, diſperſed in their tents, and loſt not only that external arrangement, but that inward preparation, that martial ardour of mind, which ought to animate ſoldiers at the near proſpect of an engagement. Epaminondas ſeized the deciſive moment of attack. Facing to the right, he converted the column of march into an order of battle. His troops were thus diſpoſed inſtantaneouſly in the ſame order in which he meant to fight. At the head of his left wing, which conſiſted of the flower of the Bœotians, and which, as at the battle of Leuctra, he formed into a firm wedge with ſpreading flanks, he advanced againſt the Spartans and Mantinæans; and truſting the event of the battle to the rapid impulſe of this unexpected onſet, he commanded the centre and right wing, in which he placed leſs confidence, to proceed with a ſlow pace, that they might not come up and grapple with the oppoſing diviſions of the enemy, until the victory of his left wing had taught them to conquer. This judicious deſign was crowned with ſucceſs. The enemy, perceiving the dreadful ſhock to which they were expoſed, flew to their arms, and ſuddenly reſumed their ranks; but theſe operations were

performed with the trepidation of ſurpriſe and haſte, rather than with the ardour of hope and courage; and the whole army had the appearance of men prepared rather to ſuffer, than to inflict, any thing terrible or deciſive. The Spartans and Mantinæans, however, drawn up in firm order, ſternly waited the firſt onſet of the aſſailants. The battle was fierce and cruel; and after their ſpears were broken, both parties had recourſe to their ſwords. The wedge of Epaminondas at length forced the Spartan line, and this advantage encouraged his centre and right wing to attack and repel the correſponding diviſions of the enemy. The Theban and Theſſalian cavalry were equally ſucceſsful. In the intervals of their ranks Epaminondas had placed a body of light infantry, whoſe miſſile weapons greatly annoyed the enemy's horſe, who were drawn up two deep. He had likewiſe taken the precaution to occupy a riſing ground on his right with a conſiderable detachment, which might take the Athenians in flank and rear, ſhould they advance from their poſt. Theſe prudent diſpoſitions produced a victory, which Epaminondas did not live to improve. In the heat of the battle he received a mortal wound, and was carried to an eminence, which was afterwards called the Watch-tower, probably that he might the better obſerve the ſubſequent operations of the field. But with the departure of their leader was withdrawn the ſpirit which animated the Theban army. Having impetuouſly broke through the hoſtile ranks, they knew not how to profit by this advantage. The enemy rallied in different parts of the field, and prevailed in ſeveral partial encounters. All was confuſion and terror. The light infantry, which had been poſted amidſt the Theban and Theſſalian horſe, being left behind in the purſuit, were received and cut to pieces by the Athenian cavalry, commanded by Hegelochus. Elated with this ſucceſs, the Athenians turned their arms againſt the detachment placed on the heights, conſiſting chiefly of Eubœans, whom they routed and put to flight, after a terrible ſlaughter. With ſuch alternations of victory and defeat ended this memorable engagement. Both armies, as conquerors, erected a trophy; both craved their dead, as conquered; and this battle, which, being certainly the greateſt, was expected to prove the moſt deciſive, ever fought among the Greeks, produced no other conſequence than that general langnor and debility long remarkable in the ſubſequent operations of thoſe hoſtile republics.

When the tumult of the action ceaſed, the moſt diſtinguiſhed Thebans aſſembled round their dying general. His body had been pierced with a javelin; and the ſurgeons declared, that it was impoſſible for him to ſurvive the extraction of the weapon. He aſked whether his ſhield was ſafe; which being preſented to him, he viewed it with a languid ſmile of melancholy joy. He then demanded, whether the Thebans had obtained the victory. Being anſwered in the affirmative, (for the Lacedæmonians indeed had firſt ſent to demand the bodies of their ſlain,) he declared himſelf ready to quit life without regret, ſince he left his country triumphant. The ſpectators lamented, among other objects of ſorrow, that he ſhould die without children, who might inherit the glory of his name, and the fame of his virtues. "You miſtake," ſaid he, with a cheerful preſence of mind; "I leave two fair daughters, the battles of Leuctra and Mantinæa, who will tranſmit my renown to the lateſt ages." So ſaying, he ordered the weapon to be extracted, and immediately expired. The awful ſolemnity of his death correſponded with the dignified ſplendour of an active and uſeful life. He is uſually deſcribed as a perfect character; nor does the truth of hiſtory oblige us to detract any thing from this deſcription. He was buried in the field of battle, where his monument ſtill exiſted, after four centuries, in the time of Pauſanias, with an inſcription in elegiac verſe, enumerating his exploits. Adrian, then maſter of the Roman world, added a ſecond column, with a new inſcription, in honour of a character, whom that celebrated emperor had genius to admire, but wanted firmneſs to imitate.

Soon after the battle of Mantinæa, in the year before Chriſt 362, a general peace was propoſed under the mediation of Artaxerxes, who wanted Grecian auxiliaries to check the inſurrections in Egypt and Leſſer Aſia, which diſturbed the two laſt years of his reign. The only condition annexed to this treaty was, that each republic ſhould retain its reſpective poſſeſſions. The Spartans determined to reject every accommodation until they had recovered Meſſenia; and as Artaxerxes had uniformly oppoſed this demand, they tranſported forces into Egypt, to foment the defection of that province. At the head of a thouſand heavy-armed Lacedæmonians, and ten thouſand mercenaries, Ageſilaus ſupported one rebel after another, having ſucceſſively ſet on the throne Taches and Nectanebus. In this diſgraceful war he amaſſed conſiderable wealth, by means of which he probably expected to retrieve the affairs of his country. But returning home by Cyrenaica, in the year before Chriſt 361, he died on that coaſt, in the eighty-fourth year of his age, and forty-firſt of his reign. He was the greateſt, and the moſt unfortunate, of the Spartan kings. He had ſeen the higheſt grandeur of Sparta, and he beheld her fall. During the time that he governed the republic, his country ſuffered more calamities and diſgrace than in ſeven centuries preceding his reign. His ambition and his obſtinacy, doubtleſs, contributed to her diſaſters; yet ſo natural were the principles from which he acted, ſo probable his hopes of ſucceſs, and ſo firm and manly his ſtruggles for victory, that a contemporary writer, who could ſee through the cloud of fortune, ventured to beſtow on Ageſilaus a panegyric, which exalts him beyond the renown of his moſt illuſtrious predeceſſors.

With the battle of Mantinæa ended the bloody ſtruggle for dominion, which had long exhauſted Thebes and Sparta. No Theban aroſe to emulate the magnanimity of Epaminondas; nor did Archidamus, who ſucceeded to the Spartan throne, juſtify the high opinion conceived of his early wiſdom and valour. Weakened by their wounds, and worn down by exertions which exhauſted their ſtrength, thoſe republics ſunk into a ſtate of ſupineneſs, which encouraged the pretenſions of neighbours who had long waited for ſuch an event. While this unuſual deſpondency ſtrengthened the fœderal union, and tended to reſtore the primitive equality, of the Grecian ſtates, various circumſtances concurred to revive the aſpiring ambition of Athens. During the Bœotian war, the Athenians had acted as auxiliaries only; without making ſuch efforts as enfeebled their ſtrength, their arms had acquired freſh luſtre. Their powerful rivals were humbled; experience had taught them the danger of attempting to ſubdue, and the impoſſibility of keeping in ſubjection, the territories of their warlike neighbours: but the numerous iſlands of the Ægean and Ionian ſeas, the remote coaſts of Thrace and Aſia, invited the activity of their fleet, which they might now employ in foreign conqueſts, fearleſs of domeſtic envy. It appears, that ſoon after the death of Epaminondas, Eubœa again acknowledged the authority of Athens; an event facilitated by the deſtruction of the Theban partiſans belonging to that place, in the battle of Mantinæa. From the Thracian Boſphorus to Rhodes, ſeveral places along both ſhores ſubmitted to the arms of Timotheus, Chabrias, and Iphicrates; men, who having ſurvived Ageſilaus and Epaminondas, were far ſuperior in abilities to the contemporary generals of the other republics. The Cyclades and Corcyra courted the friendſhip of a people who were at once either to protect or deſtroy their navigation and commerce. Byzantium had become their ally, and there was reaſon to hope that Amphipolis would ſoon be rendered their ſubject. Such multiplied advantages revived the ancient grandeur of Athens, which

which once more commanded the ſea, with a fleet of near three hundred ſail, and employed the beſt half of her citizens and ſubjects in ſhips of war or of commerce. Yet idleneſs, and luxury, and diſſipation, ſeem to have been the only reſults which followed from this pre-eminence of the Athenian republic; and it required only a daring and profligate leader to involve them in freſh wars and extravagant ſpeculations. Such a perſonage preſented himſelf in Chares, whoſe ſoldier-like appearance and impetuous valour maſked his ambition, and rendered him the idol of the populace. Though an enterpriſing and ſucceſsful partiſan, he was unacquainted with the great duties of a general; and his defects appear the more ſtriking, when compared with the abilities of Iphicrates and Timotheus, his contemporaries, who prevailed as often by addreſs as by force, and whoſe conqueſts were ſecured to the republic by the moderation and humanity with which they had been obtained, and with which they continued to be governed.

Chares propoſed a new and moſt unjuſtifiable mode of adminiſtration: he exhorted his countrymen to ſupply the defects of their treaſury, and to acquire the materials of thoſe pleaſures which they regarded as eſſential to their happineſs, by plundering the wealth of their allies and colonies. This counſel was too faithfully obeyed; the vexations, anciently exerciſed againſt the tributary and dependent ſtates, were renewed and extended to a moſt alarming and oppreſſive degree. The weaker communities remonſtrated againſt this intolerable oppreſſion; while the iſlands of Chios, Coos, Rhodes, as well as the city of Byzantium, prepared openly to revolt, and engaged with each other to repel force by force, until they ſhould obtain peace and independence, or periſh with their liberty and property. Chares, who treated with contempt this formidable reſolution of the people, was ſent out with a powerful fleet and army to quaſh at once the hopes of the inſurgents; and thus, in the year before Chriſt 358, commenced the third Social War. He ſailed towards Chios, with an intention to ſeize the capital of that iſland, which was ſuppoſed to be the centre of the rebellion. The confederates, informed of his motions, had already drawn thither the greateſt part of their force. The city of Chios was beſieged by ſea and land. The iſlanders defended themſelves with vigour. Chares found it difficult to repulſe their ſallies. His fleet attempted to enter their harbour, but without ſucceſs; the ſhip of Chabrias alone penetrated thus far; and that able commander, whoſe valour and integrity merited a better fortune, though deſerted by the fleet, yet forſook not the ſhip intruſted to him by the republic. His companions threw away their ſhields, and ſaved themſelves by ſwimming to the Athenian ſquadron, which was within their reach. But Chabrias, fighting bravely, fell by the darts of the Chians, preferring an honourable death to a diſgraceful life.

Encouraged by theſe advantages, the inſurgents augmented their fleet, and ravaged the iſles of Lemnos and Samos. The Athenians, indignant that their power and authority ſhould have been thus foiled, fitted out, early in the next ſpring, a new armament under the command of Mneſtheus, the ſon of Iphicrates, and ſon-in-law of Timotheus, expecting that the new commander would more cordially co-operate with thoſe great men, who perhaps declined acting as principals in an expedition where Chares any longer poſſeſſed a ſhare of authority. That general had raiſed the ſiege of Chios, and now cruiſed in the Helleſpont; where, being joined by Mneſtheus, the united ſquadrons amounted to an hundred and twenty ſail. It was immediately determined to cauſe a diverſion of the enemy's forces from Samos and Lemnos, by laying ſiege to Byzantium. The deſign ſucceeded; the allies withdrew from theſe iſlands, collected their whole naval ſtrength, and prepared vigorouſly for defending the principal city in their confederacy. The hoſtile fleets approached each other, with a reſolution to join battle, when a ſudden and violent ſtorm aroſe, which rendered it impoſſible for the Athenians to bear up to the enemy, or even to keep the ſea, without being expoſed to the dangers of ſhipwreck. Chares alone confidently inſiſted on commencing the attack, while the other commanders, more cautious and experienced, perceived the diſadvantage, and declined the danger. His impetuoſity, thus over-ruled by the prudence of his colleagues, was converted into reſentment and fury; he called the ſoldiers and ſailors to witneſs their oppoſition, which he branded with every odious epithet of reproach; and, with the firſt opportunity, diſpatched meſſengers to Athens, to accuſe them of incapacity, cowardice, and neglect of duty. The accuſation was ſupported by venal orators in the pay of Chares.

Timotheus and Iphicrates were tried capitally. The former truſted to his innocence and eloquence; the latter to an expedient which had diſgracefully ſucceeded before. The targeteers, or light infantry, who had been long diſciplined and commanded by Iphicrates, ſurrounded, on the day of trial, the benches of the magiſtrates; and ſeaſonably diſplayed the points of their daggers. The magiſtrates, overawed by the inſtant danger which they had neither ſtrength to reſiſt nor virtue to elude, were compelled to an immediate deciſion; but, inſtead of the ſentence of death, they impoſed a fine on the delinquents, which no Athenian citizen in that age was in a condition to pay. This ſeverity drove into baniſhment thoſe two illuſtrious commanders. Timotheus ſailed to Chalcis in Eubœa, and afterwards to the iſle of Leſbos, both which places his valour and abilities had recovered for the republic, and which, being choſen as his reſidence in adverſity, ſufficiently evince the mildneſs of his government, and his moderation in proſperity. Iphicrates travelled into Thrace, where he lived and died in obſcurity. Thus did the ſocial war deſtroy or remove Iphicrates, Chabrias, and Timotheus, the beſt generals whom Greece could boaſt; and, the brave and honeſt Phocion excepted, the laſt venerable remains of Athenian ability and virtue.

By the removal of thoſe diſtinguiſhed commanders, Chares was left to conduct, uncontrouled, the war againſt the allies; and to diſplay the full extent of his weakneſs and incapacity. His inſatiable avarice rendered him intolerable to the friends of Athens; his voluptuouſneſs and negligence expoſed him to the contempt of the inſurgents. He indulged his officers and himſelf in a total neglect of diſcipline; the reduction of the rebels was the leaſt matter of his concern; he was attended by an effeminate crowd of dancers and harlots, whoſe extravagance exhauſted the ſcanty ſupplies raiſed by the Athenians for the ſervice of the war. In order to ſatisfy the clamorous demands of the ſoldiers, Chares, regardleſs of the treaties ſubſiſting between Athens and Perſia, let out himſelf and his forces to Artabazus, the wealthy ſatrap of Ionia, who had revolted from Artaxerxes Ochus, the moſt cruel tyrant that ever diſgraced the throne of Cyrus. The arms of the Greeks ſaved Artabazus from his implacable reſentment, and their ſervices were laviſhly rewarded by the gratitude of the ſatrap. But this ſingular tranſaction neither aſtoniſhed nor diſpleaſed the Athenians. They were now accuſtomed to allow their commanders in foreign parts to act without controul; and the creatures of Chares extolled his good management in paying the Grecian troops with Perſian money. But the diſgraceful triumph was of ſhort duration. Ochus ſent an embaſſy to remonſtrate with the Athenians on their unprovoked infraction of the peace; and threatened, that unleſs they immediately withdrew their forces from Aſia, he would aſſiſt the rebels with a fleet of three hundred ſail. This menace, in the year before Chriſt 356, obliged

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the Athenians to recal their armament from the eaſt, and to terminate the laſt ſocial war, without obtaining any of the purpoſes for which it had been undertaken. The confederates made good the claims which their ſufferings had urged; regained complete freedom and independence; and lived twenty years exempt from ſubſidies and contingents, till they ſubmitted, with the reſt of Greece, to the ſuperior fortune and intrigues of Philip, who paved the way to the irreſiſtible ſucceſs of the Macedonian arms.

From the TERMINATION of the THIRD SOCIAL WAR, to the ASSASSINATION of PHILIP KING of MACEDON.

The peopling of Macedonia, as far back as the year before Chriſt 814, is attributed to Caranus, an Argive prince of the race of Hercules, who, eluding the dangers which proved fatal to royalty in moſt communities of Greece, conducted a ſmall colony of his adventurous countrymen, and, having conquered the warlike natives, ſettled in Edeſſa, the capital of the province then named Emathia. According to ancient mythology, the gods took care of the infancy of Macedon, and ſent, as oracles had announced, a herd of goats to conduct Caranus to his new capital of Edeſſa, which thence changed its name to Ægæ, the city of goats; a fiction unworthy of record, did it not explain the reaſon why goats were adopted as the enſigns of Macedon, and why the figures of thoſe animals are ſtill to be ſeen on the coins of Philip and his ſucceſſors. Caranus, and the princes Cœnus and Thyrimas, who immediately followed him, had occaſion to exerciſe their prudence as well as their valour. Their feeble colony of Greeks might have fallen a prey to the ferocity of the aboriginal tribes, had they not endeavoured to gain, by good offices, the ancient inhabitants of Emathia, and the neighbouring diſtricts. By this judicious ſyſtem, the followers of Caranus gradually aſſociated with the warlike tribes in their neighbourhood, whom it would have been alike impoſſible to extirpate, or to enſlave; and this generous policy, being embraced by their deſcendants, may be regarded as the primary cauſe of Macedonian greatneſs.

Perdiccas, the firſt of that name, ſo far eclipſed the fame of his three predeceſſors, that he is accounted the founder of the monarchy by Herodotus and Thucydides. Five princes are ſaid to have intervened between him and Alexander I. who filled the Macedonian throne when Xerxes invaded Greece. Alexander acted an important part in the affairs of Greece and Perſia, without neglecting the intereſt of his own kingdom, which he extended to the river Neſſus on the eaſt, and to the Axius on the weſt. His ſon, Perdiccas II. inherited the abilities of his father; and was ſucceeded by his ſon Archelaus I. who diſplayed an enlightened policy, encouraged agriculture and the arts; and was the friend of men of merit and genius, in all the various walks of literature and ſcience. A reign of ſix years was too ſhort a period for accompliſhing the important improvements which Archelaus had in view. By his death, in the year before Chriſt 405, the proſperity of Macedon was interrupted for almoſt half a century, by a ſucceſſion of ten princes or uſurpers, whoſe hiſtory forms a perpetual ſeries of crimes and calamities. The ſceptre, however, finally remained in the family of Hercules; but almoſt every prince of the blood had an ambition to reign, whereby aſſaſſination and ſedition alternately ſucceeded each other. Bardyllis, an active and daring chief, who had riſen from the condition of a private robber to the command of the Illyrian tribes, entered Macedon at the head of a numerous army, diſpoſſeſſed Amyntas II. the father of the illuſtrious Philip, and placed Argæus on the throne, who conſented to become the tributary of his benefactor. The Thracians ſupported the title of another prince named Pauſanias; but the aſſiſtance of Theſſaly and Olynthus, in the year before Chriſt 383, enabled Amyntas to reſume the government; the Olynthians refuſing, however, to ſurrender ſeveral places of importance which Amyntas had entruſted to their protection, he complained to Sparta; and that republic, as we have ſeen above, declared war againſt Olynthus, and reinſtated the Macedonian king in full poſſeſſion of his dominions.

The ſhort reign of his ſon Alexander was diſturbed by an invaſion of the Illyrians, from whom he purchaſed a precarious peace. He left two brothers, Perdiccas and Philip; both of whom being minors, Pauſanias found means to uſurp the throne, in which he was ſupported not only by the Thracians, but by a conſiderable body of Greek mercenaries, as well as by a powerful party in Macedon. At length, Iphicrates the Athenian eſtabliſhed Perdiccas on the throne; but as he was ſtill in his minority, the kingdom was governed by his natural brother Ptolemy, who in his turn openly aſpired to the crown. This uſurper was dethroned by Pelopidas and the Thebans, who again reinſtated Perdiccas in his dominions; and, in order to ſecure the dependence of Macedon on Thebes, carried into that city as hoſtages thirty Macedonian youths, and with them Philip, the younger brother of the king. Perdiccas now, elated with the protection of the Thebans, forgot the gratitude he owed to Iphicrates and the Athenians; diſputed the right of that people to Amphipolis, which had been acknowledged by the general council of Greece; and his unſeaſonable oppoſition rendered fruitleſs their endeavours to recover that important eſtabliſhment. The Athenians found an avenger in Bardyllis, to whom Perdiccas had denied the tribute that had been paid by his predeceſſors Argæus and Alexander. Bardyllis therefore maintained his claim by force of arms. The Macedonians met him in the field, and were totally defeated; Perdiccas was taken priſoner, and ſoon after died of his wounds; leaving as his ſucceſſor Amyntas, an infant ſon. The Thracians now again ſupported the cauſe of Pauſanias, whom they prepared to ſend back into Macedon at the head of a numerous army; but Argæus, the ancient competitor of king Amyntas for the throne of Macedon, renewed his pretenſions to that dignity; and eaſily perſuaded the Athenians, by the hopes of recovering Amphipolis, to exert themſelves in his favour. Impelled by this object, the Athenians launched their fleet, and ſailed towards the coaſt of Macedon, with three thouſand heavy-armed men, commanded by Mantias.

Such were the evils which oppreſſed Macedon, when the young and heroic Philip appeared, in the year before Chriſt 360, aſſerting the rights of his infant nephew againſt two candidates for the throne, and four formidable armies. The Athenian fleet had already anchored before the harbour of Methonè; Argæus, with his numerous followers, had encamped in the province of Pieria; and their united forces prepared to march northward to Edeſſa, or Ægæ, the ancient capital of Macedonia, where they expected to be joined by a powerful party, whom fear or inclination would bring to the ſtandard of the baniſhed king. The Macedonians who adhered to the intereſt of Perdiccas, or rather of his infant ſon Amyntas, were rouſed and animated by the manly exhortations of Philip. His graceful perſon, inſinuating addreſs, and winning affability, at once gained the unlimited confidence of the Macedonians, who now unanimouſly agreed to ſet aſide the ſucceſſion of Amyntas; and Philip, who had hitherto poſſeſſed only the power of regent, was inveſted with the royal title and authority. After this elevation to the ſupreme dignity, Philip had no ſooner collected ſufficient ſtrength to take the field, than he directed his whole force againſt Argæus, and defeated him in a general engagement, in which Argæus himſelf fell, with the flower of his army. The young king, having given ſuch early proofs of his abilities in negociation and war, availed himſelf of

the affection of his ſubjects to eſtabliſh, during a ſeaſon of tranquillity, a new and invincible order of warriors. From the braveſt of the Macedonian youth, he choſe a ſelect body, which he diſtinguiſhed by the name of COMPANIONS, who, being entertained at the royal table, attended the king's perſon in war and in hunting. Their intimacy with the ſovereign, which was regarded as a proof of their merit, obliged them to ſuperior diligence in all the ſevere duties of a military life. The noble youth, animated with the hope of glory, vied with each other to gain admiſſion into this diſtinguiſhed order; and while, on one hand, they ſerved as hoſtages for the allegiance of their families, they formed, on the other, an uſeful ſeminary of future generals, who, after conquering for Philip and Alexander, at length conquered for themſelves, and divided the ſpoils of the ancient world.

The military reſources which the activity of Philip had provided, his ambition did not allow to remain long unemployed. The death of Agis, king of the Pæonians, drew him into the field, to revenge the injuries which thoſe barbarians had inflicted on Macedon. Deprived of the valour of Agis, the Pæonians loſt all hopes of defence. Philip over-ran their country, impoſed a tribute on their chiefs; and reduced Pæonia to an abſolute dependence on Macedon. His arms were next directed againſt Olynthus, and other cities of the Chalcidicè, which alſo ſoon acknowledged him for their ſovereign. But the importance of Olynthus and Chalcidicè could not divert the ſagacity of Philip from Amphipolis, which he regarded as a more neceſſary, though leſs ſplendid, conqueſt. The poſſeſſion of Amphipolis, which would connect Macedon with the ſea, and ſecure to that kingdom many commercial advantages, opened a road to the woods and mines of mount Pangæus, the former of which was ſo eſſential to the raiſing of a naval power, and the latter to the forming and keeping on-foot a ſufficient military force. Philip penetrated eaſtward thirty miles beyond Amphipolis, to the town of Crenidæ, ſituated at the foot of mount Pangæus, diſtant ten miles from the ſea. Here his attention was attracted by the gold-mines in that neighbourhood, formerly wrought by colonies from Thaſos and from Athens, but totally neglected ſince the ignorant Thracians had become maſters of Crenidæ. Philip expelled thoſe barbarians, and a Macedonian colony was planted at Crenidæ, which thenceforth aſſumed the name of Philippi.

Having effected the main purpoſe of his Thracian expedition, Philip immediately contracted an alliance with Arybbas king of Epirus, a principality which ſkirted the weſtern frontier of Theſſaly. In his excurſions from Thebes, he had early ſeen Olympias, the ſiſter of that prince, whoſe wit and ſpirit, joined to the lively graces of her perſon, had made a deep impreſſion on his heart. Their interview naturally revived his tender paſſions; and, as the kings of Epirus were lineally deſcended from Achilles, the match appeared every way ſuitable; Arybbas yielded his conſent, and the beautiful princeſs, in the year before Chriſt 357, was conducted into Macedon.

Meanwhile the tributary princes of Pæonia and Illyria prepared to rebel; the king of Thrace engaged in their deſigns, which were concerted with more caution than is uſual with barbarians; and this general conſpiracy of neighbouring ſtates might have repreſſed for a while the fortune of Macedon, if Philip had not been ſeaſonably informed of the danger by his emiſſaries in thoſe countries. Early in the enſuing ſpring he took the field with the flower of the Macedonian troops. Parmenio, the general in whom he had moſt confidence, cruſhed the rebellion in Illyria, while Philip was equally ſucceſsful in Pæonia and Thrace. He was informed of the victory of Parmenio, juſt as a ſecond meſſenger acquainted him that his horſes had gained the prize in the chariot-races at the Olympic games; a victory which he regarded as far more honourable, and which, as it proved him a legitimate ſon of Greece, he carefully commemorated by impreſſing a chariot on his coins. Almoſt at the ſame time, a third meſſenger arrived with the joyful tidings that Olympias had brought forth a prince at Pella; to whom, as born amidſt ſuch auſpicious circumſtances, the diviners announced the greateſt proſperity and glory. Such a rapid tide of good fortune did not overſet the prudence of Philip, if we may judge by the firſt authentic tranſaction which immediately followed thoſe events. This was the correſpondence with Ariſtotle the philoſopher, written with a brevity which marks the king and the man of genius. "Know that a ſon is born to us. We thank the gods, not ſo much for their gift, as for beſtowing it at a time when Ariſtotle lives. We aſſure ourſelves that you will form him a prince worthy of his father, and worthy of Macedon." Ariſtotle commenced this illuſtrious employment about thirteen years afterwards, when the expanding mind of Alexander might be ſuppoſed capable of receiving the benefit of his inſtructions.

Philip had reigned about five years, when it became the moſt arduous purpoſe of his ambition to obtain the ſovereignty of Greece. But inſtead of diſcovering theſe deſigns, he concealed his deep-laid policy with a careful aſſiduity. He was ſenſible, that by ſnatching too eagerly at the prize, he might deſtroy for ever his proſpect of obtaining it. While the Athenians were occupied by the deſtructive war with their confederates, he had, indeed, embraced the opportunity to gain poſſeſſion of ſeveral of their dependent ſettlements in Thrace and Macedon; colouring, however, theſe proceedings by the pretence of juſtice or neceſſity, and tempering even his hoſtilities by many liberal acts of kindneſs and generoſity. Succeſſive events alſo correſponded with his views. The Amphictyons, having recovered their authority, began to exerciſe an uncontrouled power over the petty ſtates of Greece. They pretended that many unwarrantable abuſes had been introduced, which it became them to remedy. The rights of religion, they ſaid, which it was their firſt duty to maintain, had been materially violated by the Phocians, who had ploughed lands conſecrated to Apollo, and conſequently withdrawn from agriculture. They therefore fulminated an angry decree againſt Phocis, commanding the ſacred lands to be laid waſte, and impoſing a heavy fine on that community.

The Phocians, thus ſingled out as the victims of oppreſſion, were deeply agitated by their danger. The commands of the Amphictyons were indeed peremptory; but that council had not on-foot any ſufficient force to render them effectual, ſhould the objects of their vengeance venture to oppoſe their authority. This meaſure, daring as it ſeemed, was ſtrongly recommended by Philomelus, whoſe eloquence and valour gave him a powerful aſcendant in Phocis. He poſſeſſed great hereditary wealth; contemned the national ſuperſtition; and being endowed with an ambitious ſpirit, he expected to riſe, amidſt the tumult of war, to an unrivalled preeminence in the republic. After repeated deliberations, in which he flattered the vanity and tempted the avarice of his countrymen, he brought the majority of the ſenate into his opinion. As the propereſt inſtrument to execute his own meaſures, Philomelus was named general: the Phocian youth flocked to his ſtandard; and his private fortune, as well as the public revenues, were conſumed in purchaſing the mercenary troops which abounded in every province of Greece. Thus reinforced, Philomelus, in the year before Chriſt 356, ventured on a meaſure not leſs ſingular than unexpected. The temple of Delphi, ſo long guarded by ſuperſtition, was not defended by any military force. Philomelus, having prepared the imagination of his followers for this bold enterpriſe, immediately conducted them towards Delphi, and entered the ſacred city in the ſtyle

of a conqueror. The Delphians, who expected no mercy from a man devoid of respect for religion, prepared themselves in silent horror for beholding the complicated guilt of sacrilege and murder. But Philomelus declared that he had come to Delphi with no hostile disposition against the inhabitants, with no sacrilegious designs against the temple. His principal motive was to emancipate the one and the other from the arbitrary controul of the Amphictyons, and to assert the ancient and unalienable prerogative of Phocis to be the patron and protector of the Delphian shrine. To the same purpose he scattered declarations through the different republics of Greece; his emissaries acquainted the Spartans that he had destroyed the brazen tablets containing the unjust decrees against Sparta and Phocis; they inflamed the resentment of the Athenians, naturally hostile to Thebes; and both those republics came to the resolution of supporting the measures of Philomelus.

The Thebans, on the other hand, who directed, and the Locrians, Thessalians, and other states, who obeyed, the decrees of the Amphictyons, determined to take the field in defence of their insulted religion. Their operations were conducted with that extreme slowness natural to confederacies. Philomelus acted with more vigour. He collected above ten thousand mercenaries, who sacrificed all scruples of religion to the hopes of dividing a rich spoil. He first proceeded to fortify the temple and city of Delphi, in which he placed a strong garrison; and, with the remainder of his forces, boldly marched forth to repel the incursions of the enemy. During two years, hostilities were carried on with various fortune against the Locrians and Thebans. Victory for the most part inclined to the Phocians; but there happened not any decisive action, nor was the war memorable on any other account but that of the excessive cruelty mutually inflicted and suffered. The Phocian prisoners were uniformly condemned to death, as wretches convicted of the most abominable sacrilege; and the resentment of their countrymen retaliated with equal severity on the unhappy captives whom the chance of war threw into their hands. As both armies expected reinforcements, they were unwilling to risk a general engagement. Entangled, however, among the woods and mountains of Phocis, the conveniency of forage attracted both towards the same point. The vanguards met unexpectedly near the town of Neone, and began to skirmish. A general and fierce action followed, in which the Phocians were repelled by superior numbers. Pathless woods, abrupt rocks and precipices, obstructed their retreat. In vain Philomelus strove with his voice and arm to rally the fugitives. He himself was carried along to the brink of a precipice, afflicted with wounds, and still more with anguish and despair. The enemy advanced upon him; it seemed impossible to escape their vengeance; the resolution of Philomelus was prompt and terrible; with a vigorous bound he sprang from the rock, thus eluding the torment of his own mind, and the resentment of his pursuers. While the Thebans and their allies admired this spectacle as a manifest indication of divine vengeance, Onomarchus, the lieutenant and brother of the Phocian general, collected and drew off the scattered remains of the vanquished army towards Delphi. The confederates determined to expel them from that sacred place, and to inflict on them a punishment similar to that to which the wrath of Apollo had driven the impious Philomelus.

Different causes had concurred to prevent Philip on the one hand, and Athens and Sparta on the other, from taking an early part in the Phocian war. The interested policy of Archidamus, who directed with absolute authority the councils of Sparta, was less anxious to support the arms of his distant confederates, than solicitous to recover the Lacedæmonian dominion in Peloponnesus. The opportunity seemed favourable for this purpose, the Thebans being deeply engaged in another contest, and the Athenians in strict alliance with Sparta. For several years the arms of Archidamus were employed against the Messenians, Arcadians, and Argives. But his design failed of success; the inferior cities of Peloponnesus, roused by the common danger, confederated for their mutual defence; and Athens, though actually the ally of Sparta, was unwilling to abandon to the tyranny of that republic her more ancient and faithful allies, the Arcadians and Messenians. Yet while the politics of the Peloponnesus formed a system apart, the sacred war shook the centre of Greece, and the affairs of Thrace began to occupy the mind of Philip and the Athenians. Cotys, who long reigned in Thrace, was dead; his sons, Kersobleptes, Berisades, and Amadocus, were all dissatisfied with the partition of his dominions. While their hostilities against each other exhibited a cruel picture of fraternal discord, the prizes for which they contended were successively carried off by Philip. The encroachments of that prince at length engaged Kersobleptes, the most powerful of the co-heirs, to cede the Thracian Chersonesus to the Athenians, who sent Chares with a numerous fleet to take possession of that peninsula. The town of Sestos alone made resistance. It was taken by storm, and treated with great severity by Chares; while Philip besieged and took the far more important city of Methonè in Pieria. In this siege he lost an eye, a loss which he is said to have borne with impatience, as the circumstances attending it were alike dishonourable to his judgment and humanity.

It appears extraordinary that the Thebans, after the defeat and death of Philomelus, should not have pursued their good fortune, without allowing the enemy time to recover strength. They probably imagined that the fatal exit of that daring chief would deter a successor; and that the Phocians would sue for peace, if not driven to despair. Such indeed was the resolution of the more respectable part of the Phocians. But the bold and needy, who composed the most numerous description of that people, were bent on continuing the war. An assembly was convened, when Onomarchus flattered their hopes, and encouraged them to persevere. His opinion prevailed; he was named general; and his conduct soon proved, that he equalled his brother in boldness and ambition, and surpassed him in activity and enterprise. With the Delphic treasure he coined such a quantity of money as perhaps had never before circulated in Greece. The Phocian army was augmented; their allies were more heartily encouraged; and even their enemies were not proof against the temptations of gold. By seasonable bribes, Onomarchus distracted the councils of Thebes, and kept their arms inactive. The neighbouring states were persuaded to observe a perfect neutrality; while the Thessalians, a people at all times noted for avarice and fraud, and of whose country the proverb said, "that it had never produced a bad horse or an honest man," openly embraced the cause of Phocis. These multiplied advantages were not suffered to languish in the hands of Onomarchus: at the head of a numerous army he poured down on Locris and Doris, ravaged the country, took Thronium by storm, laid several cities under contribution, pierced into Bœotia, and made himself master of Orchomenus. The Thebans assembled their forces to stem the torrent. Onomarchus first met with a repulse before the walls of Chæronæa, and ventured not to renew the engagement, having weakened his forces by leaving garrisons in the places which he had taken, as well as by sending a detachment of seven thousand men, under his brother Phayllus, into Thessaly.

In that country, the arms and intrigues of Philip counteracted the gold of Onomarchus: with his usual diligence he entered Thessaly, defeated Phayllus, besieged and took Pegasæ, and drove the enemy towards the

the frontier of Phocis. The fear of loſing his newly-acquired intereſt among the Theſſalians, made Onomarchus evacuate Bœotia, and advance againſt Philip. The Macedonians, though leſs numerous, did not decline the engagement. At the firſt charge the Phocians gave way, and retreated towards the neighbouring mountains. Philip ordered his men to purſue in their ranks. It was then that the Phocians really began the battle. Onomarchus foreſeeing that the Macedonians would follow in cloſe order, had poſted a detachment on the ſummit of the precipice, who were ready, on a given ſignal, to roll down fragments of rock, and ſtones of an enormous ſize, on the embattled phalanx. This was the only mode of attack for which the Macedonians were not prepared. The line of march, in which the moment before they proceeded with ſuch firmneſs and confidence, was converted into a dreadful ſcene of carnage and ruin. Before they recovered from their conſternation, the flying Phocians, who had decoyed them into this ambuſh, returned to the charge. Philip, however, rallied his men; and while Onomarchus heſitated to advance, he drew them off in good order, with a view to ſtrike with more impetuous vigour in the next rencounter. This was finally juſtified; although the Phocians firſt enjoyed a ſhort triumph. Philip having recruited his army, returned into Theſſaly; and a conſiderable portion of the Theſſalians received the king of Macedon as their deliverer. Onomarchus was thus obliged to withdraw his forces from Bœotia. At the head of twenty thouſand foot and five hundred horſe, he was met by the Macedonians, ſtill more numerous, on the coaſt of Magneſia. To remind his ſoldiers that they fought in the cauſe of Delphi and of Heaven, Philip crowned their heads with the laurel conſecrated to Apollo, and adorned his ſtandards with the attributes of that divinity. Their onſet was impetuous and fierce, and their valour, animated by enthuſiaſm, rendered them irreſiſtible, though the Phocians, conſcious of guilt, fought with the fury of deſpair. Three thouſand Theſſalian cavalry, who had ſignally contributed to the victory of Philip, rendered the purſuit bloody and deſtructive; while the Phocians, having thrown away their armour, fled towards the ſea, allured by the ſight of the Athenian fleet under Chares, which was returning from the Cherſoneſus. That commander ſeems not to have made any attempt to ſave them. Above ſix thouſand periſhed in the battle, or in the purſuit. The body of Onomarchus was found among the ſlain; Philip ordered it to be hung on a gibbet, as a mark of peculiar infamy; the reſt were thrown into the ſea, as unworthy, by their impious ſacrilege, of the rites of burial.

It might be expected that ſuch a deciſive blow ſhould have proved fatal to the Phocians. But Philip, who had conquered them in Theſſaly, durſt not purſue his advantages by invading Phocis. It was his intereſt to perpetuate diſſenſions in Greece. For that reaſon he fomented the diſcord that reigned among the ſtates of Peloponneſus; and though he had purſued the obnoxious Phocians, he was unwilling to terminate a war, which diverted the public attention from penetrating his own ambitious deſigns. He had long deluded the Olynthians by good offices and promiſes, but now began to throw off the maſk, and to ſhow that he meant to be their ruler. He actually applied to Kerſobleptes, whom he ſubtilly detached from the intereſt of Athens; and having raiſed him on the ruins of the neighbouring chieftains of Thrace, thereby obtained his confidence, and waited an occaſion to deſtroy him with ſecurity. The dominions of that prince opened the way to Byzantium, his deſigns againſt which were manifeſted by attacking the fortreſs of Heræum, which ſerved as an outwork and defence to that rich and populous city.

The Athenians had ſufficient penetration to diſcern the drift of Philip. They formed an alliance with the republic of Olynthus; they warned Kerſobleptes of his danger; they voted a numerous fleet to ſail to the defence of Byzantium, with which, though rendered independent of Athens by the ſocial war, they ſtill carried on a lucrative commerce. But theſe ſpirited exertions were not of long continuance. Philip's wound at Methonè, together with the continual labour and fatigue to which he had afterwards ſubmitted, threw him into a dangerous malady. The report of his ſickneſs was, before it reached Athens, magnified into his death. The Athenians rejoiced in ſo ſeaſonable a deliverance, and, laying aſide their naval preparations, bent their principal attention to the ſacred war. That unhappy conteſt was renewed by Phayllus, the laſt ſurviving brother of Philomelus and Onomarchus. As his cauſe became more deſperate, Phayllus availed himſelf to the utmoſt of the only reſource which was left him. Having converted into ready money the moſt precious dedications of Delphi, he doubled the pay of his mercenaries. This extraordinary encouragement brought new adventurers to his ſtandard, and ſoon rendered his army equal to that of either of his predeceſſors. The fugitive Theſſalians, aſſembled by their general Lycophron, entered into his pay. By means of the Delphic treaſure, he acquired, likewiſe, the aſſiſtance of a thouſand Lacedæmonians, two thouſand Achæans, five thouſand Athenian foot, with four hundred cavalry. Theſe powerful reinforcements, in the year before Chriſt 352, enabled the Phocians again to become moſt formidable to their enemies.

Philip, meanwhile, recovered from his indiſpoſition. The preparations of the Athenians had taught him that his deſigns could no longer be concealed. The occaſion required that he ſhould appear in favour of his allies, and in defence of the pious cauſe which he had formerly maintained with ſo much glory. While his enemies admired his piety and trembled at his valour; they would now view with religious awe his unexpected appearance at Thermopylæ, to aſſert the violated rights of the Delphian temple. Such were the hopes and motives on which Philip, at the head of a numerous army, directed his march towards thoſe celebrated ſtraits, which had been immortalized by the fame of Leonidas. But the event ſhewed, that on this occaſion he had made a falſe eſtimate of the valour and ſuperſtition of the Athenians. That people penetrated his deſigns, and determined to oppoſe them. With an alacrity and ardour, of which there was no recent example in their councils, they flew to arms, launched their fleet, ſailed to Thermopylæ, and firſt took poſſeſſion of the ſtraits. Never did Philip meet with a more ſenſible diſappointment, than in being anticipated by a people whom he had ſo often deceived. He retired with regret, leaving the Phocian war to be carried on by the Thebans and their allies. Meanwhile, the Athenians placed a guard at Thermopylæ; and, elated by the firſt inſtance of their ſucceſs againſt the Macedonian, called an aſſembly to deliberate on meaſures proper to reſtrain his ambition.

This aſſembly is rendered memorable by the firſt appearance of Demoſthenes againſt Philip, whoſe meaſures from this moment he ceaſed not to watch and to counteract. The Athenians were then involved in the ſacred war; their northern poſſeſſions were continually inſulted by Philip; yet in this ſituation of affairs, the partiſans of that prince, in order to divert the public attention from his too aſpiring deſigns, affected to extend their views to Aſia, and to be alarmed by the motions of Artaxerxes Ochus, who was preparing to reduce the rebels of Cyprus, Egypt, and Phœnicia. In every aſſembly of the people, the creatures of Philip, dwelt, with exaggerated terror, on the naval and military preparations of the great king, which they repreſented as deſtined to revenge the injuries committed by the Athenian troops, under Chares, on the coaſt of Aſia. In this popular argument joined Iſocrates the orator,

together with the ſtateſman and general Phocion, two men whoſe talents and virtues would have done honour to the moſt illuſtrious age of the republic. The unblemiſhed integrity of Iſocrates, the diſintereſted poverty of Phocion, afford ſufficient proof that neither of theſe great men were corrupted by Macedonian gold. But they both perceived that the indolence and unſteadineſs of the Athenians were incapable to contend with the unceaſing activity of Philip, and both exhorted their countrymen to cultivate the friendſhip of a prince, againſt whom they could not make war with any reaſonable proſpect of ſucceſs. Iſocrates inſiſted that a foreign war alone could heal the domeſtic diſſenſions which reigned in every quarter of Greece; and from a thorough knowledge of the inherent defects in the government of Thebes, Athens, and Sparta, he regarded Macedon as the ſtate, and Philip as the general, beſt entitled, and beſt qualified, to aſſume the command of a military expedition into Aſia, to deliver the Grecian colonies from the oppreſſion of barbarians. The ſentiments of Demoſthenes were equally different from thoſe of Iſocrates and Phocion on the one hand, and from thoſe of the hirelings of Philip on the other. In the ardour of patriotiſm he forgot the moderation of philoſophy; and while he ſternly maintained the prerogatives of his country, he would rather have ſeen Athens defeated at the head of her allies, than victorious under the ſtandard of the Macedonians, or any ſtandard but her own. With ſuch ſentiments, he was naturally a favourite of the people, and a warm partiſan of popular government; while Phocion preferred a moderate ariſtocracy; and Iſocrates was inclined to a well-regulated monarchy, as the beſt of all governments. Yet ſubſequent events juſtified the opinion of Demoſthenes. The Athenians were delivered from their ill-grounded fears of Artaxerxes Ochus, when they beheld the preparations of that monarch directed againſt his rebellious ſubjects. The encroachments of Philip became continually more formidable; and his recent attempts to ſeize the ſtraits of Thermopylæ, ſhewed the neceſſity of oppoſing him with vigilance and vigour.

The people of Athens were thus divided in ſentiment, and ſplit in party politics, when Philip in the year before Chriſt 349, began to play thoſe batteries which he had raiſed with ſuch ſkill and ſecrecy. The iſland of Eubœa, which he called the fetters of Greece, was the firſt object of his attack. After the Thebans had been conquered, the Athenians preſerved their intereſt in the iſland, where they maintained a ſmall body of troops. The different cities, however, enjoyed the independent government of their own laws; they appointed their own magiſtrates; they ſometimes made war againſt each other; and ſeparately aſſumed the prerogatives of free and ſovereign ſtates, while they all collectively acknowledged their dependence on Athens.

Such political arrangements made room for the intrigues of Philip. He fomented their civil diſcord; gained partiſans in each city; and at length, under colour of protecting his allies, landed an army in the iſland. The Athenian party exclaimed and threatened; but Plutarch, the leader of that party, was gained to the intereſts of Philip, and demanded auxiliaries from Athens only to betray them into the hands of their enemies. Demoſthenes, who alone penetrated this dark ſcheme, entreated and conjured his countrymen to put no confidence in Plutarch. The Athenians at length became more wiſe in the choice of a general. The conſummate prudence of Phocion, who, on his arrival in Eubœa, found things in a worſe ſtate than had been repreſented, riſked no chance of defeat, and loſt no opportunity of advantage. Having choſen a favourable poſt, ſurrounded on all ſides by broken ground, he deſpiſed the clamours of his men and the inſults of the enemy. The treacherous Plutarch was quickly defeated in a mock battle in which he fell back on the Athenian cavalry, who fled in diſorder to the camp of Phocion. The Eubœans and Macedonians purſued with a raſh and intemperate ardour; and, elated with victory, prepared to aſſail the camp, in which they were embarraſſed by the unequal ground, and by their own raſhneſs. Phocion then ſallying from his entrenchments with intrepid valour, increaſed the confuſion of the enemy, who were repelled with great ſlaughter towards the plain which they had at firſt occupied. The activity of Cleophanes, who commanded the Athenian cavalry, rendered the victory complete. The remains of the vanquiſhed took refuge in the fortreſs of Zeratra, in the northern corner of the iſland, which, being attacked, made a feeble reſiſtance. The garriſon ſurrendered; but Phocion reſtored all the Eubœans to liberty, and returned to Athens in triumph.

Philip's diſappointment in Eubœa ſerved only to ſtimulate his activity. The Olynthians, againſt whom he now turned his arms, were aſtoniſhed to obſerve that ſeveral of their citizens grew inſtantaneouſly rich and great, and diſplayed a degree of magnificence and grandeur hitherto unknown in their frugal republic. The unexpected invaſion of Philip revealed the myſtery; and diſcovered that a conſiderable party had grown wealthy by betraying the ſecrets of their country. In this emergency they truſted not to their domeſtic forces of ten thouſand foot and one thouſand horſe, but ſent an embaſſy to Athens, craving their aſſiſtance againſt ſo inſidious and formidable an enemy. Had the people of Athens heartily undertaken their cauſe, Philip would have been expoſed to every difficulty. But the Athenians were plunged into a ſlothful and fatal ſecurity. While they enjoyed their theatrical entertainments, and all the eaſe and luxury of a city life, they were little inclined to engage in any enterpriſe that might diſturb the tranquil courſe of their pleaſures. In this diſpoſition they were encouraged by many of their orators, who exhorted them to beware of involving themſelves in the danger of Olynthus, or of provoking the reſentment of a prince whoſe power they were unable to reſiſt. The orator Demades particularly diſtinguiſhed his zeal in the Macedonian intereſt; adviſing an abſolute and total rejection of the demands of the Olynthian ambaſſadors. But Demoſthenes aroſe, and with all the fire and enthuſiaſm of genuine rhetoric, expatiated on the extent of their ſupineneſs and folly.

"On many occaſions, O Athenians! have the gods declared their favour to this ſtate, but never more manifeſtly than in the preſent juncture. That enemies ſhould be raiſed to Philip, on the confines of his territory, can be aſcribed to nothing leſs than the bountiful interpoſition of Heaven. With every thing elſe on our ſide, let us not be wanting to ourſelves; let us not be reproached with the unſpeakable infamy of throwing away, not only thoſe cities and territories which we inherited from our anceſtors, but thoſe occaſions and alliances offered us by fortune and the gods. To inſiſt on the power and greatneſs of Philip, were to bewilder and miſlead you in open violation of your own ſenſes. He has become great through your ſupine neglect, and the perfidy of traitors whom it becomes you to puniſh. I am of opinion then, that, fearleſs of conſequences, you ought to aſſiſt Olynthus with the utmoſt celerity and vigour, and to diſpatch an embaſſy to the Theſſalians, to inflame their hoſtility. But take care, Athenians! that your ardour evaporate not into reſolutions and decrees. Be ready to pay your contributions; prepare to take the field; ſhow yourſelves in earneſt, and you will ſoon diſcover not only the hollow faith of the allies of Philip, but the internal weakneſs of Macedon itſelf."

The people of Athens, animated to their duty, on the one hand, by Demoſthenes, and ſeduced, on the other, by the hirelings of Philip, imprudently ſteered a middle courſe, which is often the moſt dangerous. Convinced that

that the preſervation of Olynthus was the beſt ſafeguard of Attica, yet unwilling to tear themſelves from their pleaſures, they determined to ſend Chares, with a fleet and two thouſand mercenaries, to the aſſiſtance of their allies. This commander, who was the idol of the diſſipated multitude, made a deſcent on the fertile coaſt of Pallenè, where, falling in with eight hundred men commanded by Audæus, called the friends of Philip, he obtained over thoſe contemptible cowards an eaſy and ludicrous victory, which ſerved only to amuſe the comic poets of the times. Having gained this paltry advantage, Chares was unwilling to try his fortune in any ſeverer conflict; but returned home, to celebrate his triumph over the vain and voluptuous Audæus. The thoughtleſs multitude, who judged of the expedition of Chares by the pomp with which he entertained them at his return, now talked of invading Macedon, and chaſtiſing the inſolence of Philip, when a ſecond embaſſy arrived from Olynthus. The inhabitants of this place had been ſhut up within their walls; they had loſt Stagyra, Miciberna, Toronè, cities of great ſtrength; yet on the firſt appearance of Philip, they were forward to receive his bribes, and open their gates; which ſhameful venality, in places ſo well provided for defence, made the king of Macedon obſerve to his generals, "that from thenceforth he ſhould conſider no fortreſs or gate impregnable, which would admit only a ſingle mule a-breaſt, laden with money." The Olynthians, in the mean time, turned their thoughts to negociation, that they might amuſe the invader till the arrival of the Athenian ſuccours. Philip penetrated their deſign, and dexterouſly turned their arts againſt themſelves; affecting to lend an ear to their propoſals, but meanwhile continuing his approaches, till, having got within forty ſtadia of their walls, he declared that of two things one was neceſſary, either *they* muſt leave Olynthus, or *he* Macedon. This explicit declaration convinced the Olynthians that their ruin was at hand. They endeavoured to retard the fatal moment by a vigorous ſally, in which their cavalry, commanded by Apollonides, particularly ſignaliſed their valour. But they were repulſed by ſuperior numbers, and obliged to take refuge in the city.

In this poſture of affairs the Olynthian ambaſſadors ſailed for Athens; and found, to their utter aſtoniſhment, the multitude ſtill enjoying the imaginary triumph of Chares. Demoſthenes, therefore, again undertook the cauſe of Olynthus. After endeavouring to repreſs the vain confidence of his countrymen in the ſuppoſed advantages of Chares, he deſcribed the real danger of their allies, which he perſuaded them to regard as their own. The criſis was now arrived; and if they neglected the preſent opportunity of fulfilling their engagements to Olynthus, they muſt ſoon expect to meet Philip in Attica. After inſiſting ſtill farther on the neceſſity of an immediate and imperious interpoſition, Demoſthenes ſaid, "I ſpeak thus, not with a view to give offence, but becauſe I think it the duty of a public ſpeaker to prefer your intereſt to your pleaſure. Such were the maxims of thoſe ancient and illuſtrious orators whom all unite to praiſe, but none venture to imitate; of the virtuous Ariſtides, of Nicias, of Pericles, and of him whoſe name I bear. But ſince miniſters have appeared who dare not addreſs the aſſembly, till they have firſt *conſulted* you about the *counſels* which they ought to give, who aſk, as it were, What ſhall I propoſe? What ſhall I adviſe? In what, Athenians! can I do you pleaſure? the ſweet draught of flattery has concealed a deadly poiſon; our ſtrength is enervated, our glory tarniſhed, the public name is diſgraced, while ſmooth-tongued magiſtrates and miniſters acquire credit and ſplendour; paſs from poverty and meanneſs to opulence and dignity; build private palaces, which inſult the edifices of the public; grow greater as their country becomes leſs, and gradually riſe on its ruins. What is the ſource of this general diſorder? It is, Athenians! that formerly the people did their duty, took the field in perſon, and thus kept magiſtrates and miniſters in awe."

The arguments of Demoſthenes prevailed; and in the year before Chriſt 348, an embaſſy under the conduct of Æſchines was ſent into Peloponneſus, to inflame the hoſtility of that country againſt Philip; and it was determined to aſſiſt the Olynthians with an army of Athenian citizens. But, before this reſolution could be carried into effect, Olynthus was no more. Its defence had long depended on the merit of one man. In the various ſkirmiſhes, as well as in the two general engagements which had happened ſince the commencement of the ſiege, Philip perceived that Apollonides, who commanded the Olynthian cavalry, diſplayed ſuch valour and abilities as might long retard the ſucceſs of his arms. His ſecret emiſſaries were ſet to work; perfidious clamours were ſown among the populace of Olynthus; Apollonides was publicly accuſed; and condemned to baniſhment on a ſuſpicion of treaſon. The command of the cavalry devolved on Laſthenes and Euthycrates, two wretches who had ſold their country to Philip. Having obtained ſome previous ſucceſſes, which had been concerted the better to maſk their deſigns, they advanced againſt a Macedonian poſt; carried it at the firſt onſet; purſued the flying garriſon; and betrayed their own troops into an ambuſh prepared by the enemy. Surrounded on all ſides, the Olynthians ſurrendered their arms; and this fatal diſaſter, encouraging the Macedonian partiſans within the walls, ſoon opened the gates of Olynthus. The conqueror entered in triumph, plundered and demoliſhed the city, and dragged the inhabitants into ſervitude. Amid the ſcenes of rejoicing and feſtivity which followed this conqueſt, Philip ſeems not to have forgotten that the next object of his policy was to detach the Athenians from the cauſe of Phocis and Kerſobleptes, who were both their allies. The bad conduct of Chares had left the ſea open to the Macedonians, who in the mean time fitted out a conſiderable naval force. Philip now attacked the Athenians on their favourite element. His fleet ravaged their tributary iſlands of Lemnos and Imbros; ſurpriſed and took a ſquadron of Athenian veſſels ſtationed on the coaſt of Eubœa; and, encouraged by theſe advantages, boldly ſailed to Attica, made a deſcent on the ſhore of Marathon, repelled the Athenian cavalry headed by Deotimus, ravaged the territory, and carried off the Salaminian galley. From thence they proceeded to the iſle of Salamis, and defeated a conſiderable detachment commanded by Charidemus. The illuſtrious trophies of Marathon and Salamis were effaced by the inſults of the Macedonians, whoſe fleet returned home in triumph, adorned with ſpoils, and elevated with military and naval glory.

Such was the ſtate of public affairs when Æſchines returned from his Peloponneſian embaſſy. He had aſſembled the great council of the Arcadians; revealed to them the dangerous views of Philip, which threatened the liberty of Greece; and, notwithſtanding the powerful oppoſition of Hieronymus, and other Macedonian partiſans, he had engaged that people to approve the zeal of Athens, and to reſolve on taking arms in the common cauſe. In relating the ſucceſs of his embaſſy, he inveighed with great ſeverity againſt thoſe mercenary traitors, who had ſold the intereſts of their country to a cruel tyrant. The Greeks had full warning of their danger. The miſerable fate of Olynthus ought ever to be before their eyes. At his return through Peloponneſus, he had beheld a ſight ſufficient to melt the moſt obdurate heart; thirty young Olynthians, of both ſexes, driven like a herd of cattle, as a preſent from Philip to ſome of the unworthy inſtruments of his ambition. The ſuſceptible and ever-varying temper of the multitude was deeply affected by theſe repreſentations of Æſchines; whilſt war and revenge echoed through the aſſembly. Ambaſſadors were diſ-

patched to confirm the hoſtile reſolutions of the Arcadians, and the Athenian youth were aſſembled in the temple of Agraulos to ſwear irreconcilable hatred againſt Philip and the Macedonians. But that conſummate politician thought nothing done while any thing was neglected; and, as he allowed not the ſlighteſt opportunity to paſs unimproved, ſo he often derived important benefits from inconſiderable cauſes.

A wealthy Athenian named Phrynon, had been robbed and confined by ſome Macedonian ſoldiers, who compelled him to purchaſe his liberty at a very conſiderable ranſom. As this violence had been committed during the fifteen days of truce that followed the Olympic games, Phrynon judiciouſly ſuppoſed that the king of Macedon, who had long been ambitious of obtaining a place in the Grecian confederacy, would not abet this act of injuſtice. He therefore requeſted his countrymen, who were about to negociate with Philip for an exchange of priſoners, to join him in commiſſion with Cteſiphon, who had already been named to that embaſſy. Having arrived in Macedon, the ambaſſadors were treated by Philip with the greateſt reſpect; their demands were moſt cordially granted; the king apologiſed to Phrynon for the ignorance or violence of his ſoldiers, which had led them to act ſo unwarrantably; and he lamented, both to Phrynon and Cteſiphon, the hoſtile nature of their miſſion, ſince he had nothing more ſincerely at heart than to cultivate the beſt underſtanding with their republic. At their return to Athens, the repreſentations of theſe ambaſſadors could not be without weight; nor could they fail of being extremely favourable to the king of Macedon. But another incident followed, which was improved with no leſs dexterity. At the ſack of Olynthus, Stratocles and Eucrates, two Athenians of diſtinction, had been ſeized and carried into Macedon; and had not been releaſed with the other priſoners. Their relations were anxious for their ſafety, and therefore applied to the Athenians, that a proper perſon might be ſent to treat for their ranſom. Ariſtodemus was employed in this commiſſion; but Philip, who well knew the hoſtile reſolutions in agitation againſt him at Athens, releaſed the priſoners without ranſom, and diſmiſſed them with the higheſt expreſſions of regard. Moved by gratitude, Stratocles and his friends appeared in the aſſembly, and exerted every nerve in praiſe of the king of Macedon. This artificial generoſity of Philip, blazoned forth in the public aſſembly, fixed the wavering irreſolution of the multitude, and the military preparations were ſuſpended. Even Demoſthenes and Æſchines yielded to the torrent; and imagining that a bad peace was better than a bad war, ſupported a decree of Philocrates for ſending a herald and ambaſſadors back to Philip, to fix the terms of accommodation with which he had ſo long amuſed them.

In the ſhort ſpace of one year, three embaſſies were ſent to Philip; the firſt to propoſe a peace, the ſecond to ratify it, the third to ſee the conditions of it obſerved; and, during that time Kerſobleptes, being ſtripped of his dominions, was reduced into captivity, and Philip having ſeized Thermopylæ, invaded Phocis, and deſtroyed the twenty-two cities of that province in leſs than twenty-two days. The Athenians, therefore, ſaw the neceſſity of immediately ratifying the peace with that prince, who had actually taken the field in Thrace, along the coaſt of which the Athenians ſtill poſſeſſed Serrium, Doriſcus, and ſeveral other tributary cities. Theſe cities were now attacked by Philip, and readily ſubmitted to his arms. Upon intelligence of the latter event, the Athenians diſpatched Euclides to inform the king of Macedon, that the places which he had taken belonged to Athens; to which he coldly replied, that he had not been ſo inſtructed by his ambaſſadors, nor was there any mention of thoſe cities in the treaty recently ſigned, but not yet ratified, between the two powers.

The diſtracted ſituation of Thebes now promiſed a ſpeedy iſſue to the Sacred War, which, for more than two years, had been feebly carried on between the Phocians on one ſide, and the Thebans and Locrians on the other, by ſuch petty incurſions and ravages, as indicated the inveterate rancour of combatants, who ſtill retained the deſire of inflicting devaſtation and death, after they had loſt the power. During the greater part of that time, the Athenians, amuſed by this negociation with Philip, afforded no aſſiſtance to their diſtreſſed allies. The treaſures of Delphi, immenſe as they were, at length began to fail. The Phocians, abandoned and exhauſted on all ſides, reflected with terror and remorſe on their paſt conduct; and, in order to make atonement for their ſacrilegious violations of the temple, inſtituted a judicial enquiry againſt Phaleucus their general, and his accomplices, in plundering the dedications to Apollo. Several were condemned to death; Phaleucus was depoſed; and the Phocians, having performed theſe ſubſtantial acts of juſtice, ſolicited with better hopes the aſſiſtance of Sparta and Athens. But the crafty Archidamus, who had long directed the Spartan councils, conſidered the diſtreſs of the Phocians as a favourable opportunity to urge the claim of his own republic to the ſuperintendence of the Delphic temple; and actually ſent ambaſſadors into Theſſaly, to confer with the king of Macedon on that ſubject. The Athenians paid more attention to the requeſt of their allies, who, as an inducement to excite their activity, offered to put them in poſſeſſion of the towns of Nicæa, Alpenus, and Thronium, which commanded the ſtraits of Thermopylæ. But this ſalutary plan, which might have retarded the fate of Greece, was defeated by Phaleucus, who commanding eight thouſand mercenaries, that acknowledged no authority but that of their general, eſtabliſhed his head-quarters at Nicæa, and deſpiſed the menaces both of Phocis and of Athens.

Mortifying as this diſappointment muſt have been, it was followed by a diſaſter in another quarter ſtill more terrible. The Phocians had fortified the city of Abæ, to defend their northern frontier againſt the depredations of the Locrians. The Thebans, reinforced by ſome auxiliaries of Macedon, marched againſt that place. The Phocians met them in the field; but were defeated with great ſlaughter, and purſued through the ſurrounding territory. A party of above five hundred took refuge in the temple of Abæan Apollo, where they remained for ſeveral days, ſleeping under the porticoes, on beds of dried herbs, ſtraw, and other combuſtible materials. An accidental fire, that began in the night, was communicated to the whole edifice, part of which was conſumed, while the unhappy Phocians were either ſtifled, or burnt to aſhes. The Thebans failed not to repreſent this calamity as a judgment of heaven, againſt the daring impiety of wretches, who had ventured to take refuge in the temple of a god whom their ſacrilege had long offended. They entreated Philip to aſſiſt them in deſtroying the remnant of that guilty race. This was the chief purpoſe of their embaſſy to that prince, whom the Athenians entreated to ſpare the nation, while the Lacedæmonians, regardleſs of the fate of Phocis, thought only of making good their ancient claim to the guardianſhip of the Delphic temple.

Philip treated the deputies of the three republics with apparent frankneſs and cordiality. He aſſured the Thebans, that his arms ſhould be employed to recover for them the towns of Orchomenus, Coronæa, and Tilphoſſeum, which had ſubmitted to the Phocians during their invaſion of Bœotia. The Phocians, he ſaid, had rendered themſelves the objects of divine diſpleaſure; and he was determined that both they and their allies

ſhould

ſhould ſuffer thoſe calamities which their crimes ſo juſtly deſerved. Thus far Philip was ſincere; for, in theſe particulars, the views of Thebes were exactly conformable to his own. But in his mind he agitated other matters, in which the intereſt of Thebes interfered with that of Macedon. To accompliſh thoſe purpoſes, without offending his allies, it was neceſſary to gain the ambaſſadors. Careſſes, flattery, and promiſes, were laviſhed in vain. Money was at length tendered with a profuſe liberality; but the Theban deputies remained uncorrupted, firmly maintaining their patriotiſm and their honour. Philon, the chief of the embaſſy, anſwered for his colleagues: "We are already perſuaded of your friendſhip for us, independent of your preſents. Reſerve your generoſity for our country, on which it will be more profitably beſtowed, ſince your favours conferred on Thebes, will ever excite the gratitude both of that republic and its miniſters."

Demoſthenes extols the dignity of this reply, as becoming rather the ambaſſadors of Athens. But theſe miniſters, though one object of their commiſſion was to ſave the Phocians, whom the Thebans wiſhed to deſtroy, diſcovered neither integrity nor ſpirit. All of them, except Demoſthenes, accepted the preſents of the king of Macedon, who found little difficulty in perſuading men, thus prepoſſeſſed in his favour, that he pitied the Phocians; that he reſpected Athens; that he deteſted the inſolence of Thebes; and that, ſhould he ever proceed to the ſtraits of Thermopylæ, his expedition would be more dangerous to that ſtate than to his enemies. At preſent, however, he obſerved, that he had private reaſons for managing the friendſhip of a people who ſet no bounds to their reſentment. From ſuch motives, he had hitherto declined ratifying the peace with Athens; but this meaſure he would no longer defer. He only entreated, that to ſave appearances with the Thebans, the name of the Phocians might be omitted in the treaty. This arduous work was at length brought to a concluſion; and for the more ſecrecy, tranſacted in a place which Demoſthenes calls a tavern, adjoining to the temple of Pollux, in the neighbourhood of Pheræ. The Athenian ambaſſadors took leave, affecting to be perſuaded of the good intentions of the king of Macedon. The ambaſſadors of Sparta alſo departed, but with far leſs ſatisfaction. They made ſuch a report to Archidamus, as convinced him that his republic had not any advantage to expect from the preponderance of the Macedonian intereſt, and the deſtruction of the Phocians; and that, ſhould the Spartans perſiſt in their claim to the ſuperintendence of the Delphic temple, they muſt aſſert it by force of arms. Archidamus therefore raiſed an army for this purpoſe, and marched towards the ſtraits. But the intrigues of Philip rendered his hoſtility as impotent as his negociations had been fruitleſs. From Theſſaly that prince had already ſent a letter to the Athenians, couched in the moſt artful terms. He expreſſed his profound reſpect for the ſtate, and his high eſteem for its ambaſſadors; declaring that he ſhould omit no opportunity of proving how earneſtly he deſired to promote the proſperity and glory of Athens. Of the conditions of the peace he was careful to make no mention; but after many declarations of his good-will, he entreated them "not to be offended at his detaining their ambaſſadors, of whoſe eloquence and abilities he wiſhed to avail himſelf in ſettling the affairs of Theſſaly."

Soon afterwards theſe ambaſſadors returned home; and having given an account of their negociation to the ſenate of Five Hundred, they next appeared before the popular aſſembly; when a motion was made, and agreed to, for thanking Philip for his equitable and friendly intentions, as well as for ratifying a perpetual peace and alliance between Athens and Macedon. In the ſame decree it was determined that the Phocians ſhould ſubmit to the Amphictyonic council, under pain of incurring the diſpleaſure of the republic. Theſe articles, together with the ſecret motives which produced them, were, by the emiſſaries of Philip, immediately communicated to the Phocian ambaſſadors then reſiding at Athens; who, tranſported with joy at the proſpect of averting the calamities which long threatened their country, loſt no time in tranſmitting the agreeable intelligence to their fellow-citizens. They concluded, with a high degree of probability, that, however Philip might deceive the Phocians, the miniſters of Athens could never be ſo bold as publicly to deceive the Athenians; and that, therefore, they could no longer entertain any doubt of the favourable diſpoſition of the king of Macedon. This belief was ſo firmly eſtabliſhed, that when Archidamus marched into Phocis at the head of an army in order to defend the temple againſt Philip, the Phocians rejected his aſſiſtance, obſerving, that they feared for Sparta much more than for themſelves; upon which the Lacedæmonians returned into Peloponneſus.

Philip was now prepared for ſtriking a deciſive blow. The Athenians were appeaſed; the Lacedæmonians had retired; the Phocians were off their guard; Theſſalians, Thebans, and Locrians, were devoted to his ſtandard. One obſtacle only remained, and that eaſy to be ſurmounted. Phaleucus, who commanded eight thouſand mercenaries, ſtill kept poſſeſſion of Nicæa. But a man who had betrayed the intereſt of his own republic, could not be very delicate in defending the cauſe of Greece. Philip entered into a negociation with him, in order to get poſſeſſion of Nicæa, without which it would have been impoſſible to paſs the ſtraits of Thermopylæ; and, while this tranſaction was going forward, he wrote letters to the Athenians, full of cordiality and affection. He by this means not only kept the Athenians from liſtening to the remonſtrances of Demoſthenes, but prevailed on them to depute that orator, together with Æſchines, and ſeveral others, whoſe advice and aſſiſtance he affected to want, in order to ſettle the arduous buſineſs in which he was engaged. Demoſthenes ſaw through the artifice, and abſolutely refuſed the commiſſion. Æſchines, on pretence of ſickneſs, ſtaid at home to counteract the meaſures of his rival. The other ambaſſadors departed, in compliance with the requeſt of Philip, and the orders of their republic, in hopes of ſeeing a treaty fulfilled, which, they had been taught to believe, would be attended with conſequences equally advantageous and honourable.

While the ambaſſadors travelled through Eubœa, in their way to join the king of Macedon, they firſt learned that Phaleucus had been perſuaded to evacuate Nicæa. He retired towards Peloponneſus, and embarked at Corinth, with a view to ſail to Italy, where he expected to form an eſtabliſhment. But the capricious temper of his followers compelled him to make a deſcent on the coaſt of Elis. After this they re-embarked, and ſailed to Crete, where their invaſion proved fatal to their general. Having returned to the Peloponneſus, they were defeated by the Elians and Arcadians. The greater part of thoſe who ſurvived the battle fell into the hands of the enemy, by whom they were ſhot with arrows, or precipitated from rocks. A feeble remnant eſcaped to their ſhips, but periſhed ſoon afterwards in an inſurrection which they had excited in the iſle of Sicily. Philip, meanwhile, having paſſed the ſtraits of Thermopylæ, was received by the Phocians as their deliverer. He had promiſed to plead their cauſe before the Amphictyonic council, to the deciſions of which that credulous people conſented to ſubmit, well knowing that a prince who entered Greece at the head of a numerous army, might eaſily controul the reſolutions of the Amphictyons, and fondly believing that prince to be their friend. The deputies of Athens had not yet arrived; thoſe of the ſouthern republics had not even been ſummoned. The Locrians, Thebans, and Theſſalians, alone compoſed the aſſembly that was

to

to decide the fate of Phocis; a country which they had perfecuted with unrelenting hoftility in a war of ten years. The fentence was fuch as might be expected from the refentment of fuch judges. It was decreed that the Phocians fhould be excluded from the general confederacy of Greece, and for ever deprived of the right to fend repreſentatives to the council of Amphictyons: that their arms and horſes fhould be fold for the benefit of Apollo; that they fhould be allowed to keep poſſeſſion of their lands, but compelled to pay annually from their produce the value of ſixty thouſand talents, till they had completely indemnified the temple; that their cities fhould be diſmantled, and reduced to diſtinct villages, containing no more than ſixty houſes each, at the diſtance of a furlong from each other; and that the Corinthians, who had recently given them aſſiſtance, fhould be deprived of the preſidency at the Pythian games; which prerogative, together with the ſuperintendence of the temple of Delphi, as well as the right of ſuffrage in the Amphictyonic council, loſt by the Phocians, ſhould thenceforth be transferred to, and enjoyed by, the king of Macedon.

This extraordinary decree, when communicated to the Phocians, filled them with ſuch terror and diſmay, as rendered them totally incapable of acting with vigour or with union. They were unable to take meaſures for repelling the invader; a few cities only, more daring than the reſt, endeavoured to defend their walls; but their feeble reſiſtance was ſoon overcome; all oppoſition ceaſed; and the Macedonians proceeded to execute the will of the Amphictyonic council with inflexible cruelty. The wretched Phocians beheld the deſtruction of their ancient monuments and trophies, their walls levelled with the ground, the fertile banks of the Cephiſſus covered with deſolation, and the venerable cities of Daulis, Penopeus, Lilæa, and Hyampolis, which had flouriſhed above nine centuries in ſplendour and proſperity, and which will ever flouriſh in the ſong of Homer, ſo totally demoliſhed as ſcarcely to leave a veſtige of their exiſtence. After this terrible havoc, the inhabitants were driven like herds of cattle to ſettlements allotted for them, and compelled to cultivate their paternal fields for the benefit of haughty and unrelenting maſters.

The unexpected news of theſe melancholy events reached Athens in five days. The people immediately aſſembled; a decree paſſed, at the motion of Calliſthenes, which marked equally their reſentment and diſmay. It was reſolved, "that the Athenians, who uſually reſided in the country, ſhould be ſummoned to the defence of the city; that thoſe, within the diſtance of twelve miles round, ſhould, along with their perſons, tranſport their moſt valuable effects into the city or the Piræus; that thoſe at a greater diſtance ſhould reſpectively convey themſelves and their property to the neareſt places of ſtrength in the Attic territory." The people with one voice called aloud for arms: levies were prepared for the relief of Phocis; and their admiral Proxenus, who had lately returned, was ordered again to direct his courſe towards that country. The king of Macedon, appriſed of theſe tranſactions, now wrote a letter to the Athenians in that ſtyle of ſuperiority which the ſucceſs of his arms entitled him to aſſume. After acquainting them with his treatment of the Phocians, he mentions his being informed of their preparations for ſupporting that impious people, and exhorts them to lay aſide their unwarrantable deſign; but adds, "If you perſiſt, know that we are prepared for repelling your hoſtilities with firmneſs and vigour." This mortifying letter was received at the ſame inſtant that the Athenian ambaſſadors returned from Eubœa, and brought ſuch accounts of the deſtruction of the Phocians, that it appeared impoſſible to afford them any relief. All that remained was to ſave from the vengeance of their enemies the miſerable wreck of that unfortunate community. The Athenians paſſed a decree for providing them with ſettlements in Attica, or in the colonial dependencies of the republic; a meaſure which, though it was founded on gratitude and humanity towards ancient and faithful allies, gave great offence to the Theſſalians and Thebans, who were deſirous to ſhare with Philip in the ſpoils of the ruined ſtate. Orchomenus, Coronæa, Hyampolis, with other cities of leſs note in Bœotia, were, in conſequence of the deſtruction of their Phocian allies, again ſubjected to the dominion of Thebes; which, on this occaſion, prepared to act with more than uſual cruelty. But Philip, with a ſudden turn of oppoſite policy, eſpouſed the cauſe of the Bœotians with a generous ardour, extremely diſagreeable to the Thebans. His humanity, whether real or pretended, was loudly extolled by his partiſans. It redounded, however, more to his own glory, than to the benefit of the Bœotians; who, being expelled from their own country by Theban tyranny, ſought refuge in the boſom of Athens.

Having thus terminated the ſacred war in a manner ſo favourable to his own ambition, Philip, in the year before Chriſt 346, convened the members of the Amphictyonic council, to the number of two hundred, and aſſiſted in the ſacrifices offered to Apollo. The name of the pious king of Macedon, who had been the principal inſtrument of their ſucceſs, reſounded in the Pœans ſung in honour of the god. The Amphictyons ratified all the tranſactions of Philip; erected his ſtatue in the temple of Delphi, and acknowledged, by a ſolemn decree, the kingdom of Macedon as the principal member of the Hellenic body. Philip at the ſame time appointed deputies to preſide at the Pythian games, the celebration of which was nearly approaching, and to which moſt of the Grecian ſtates had already ſent their repreſentatives. The Athenians, ſtung with indignation, abſtained from this feſtival. An embaſſy was therefore diſpatched to them in the name of the Amphictyons, requiring their concurrence with meaſures embraced by the general council of Greece; and remonſtrating againſt their diſpleaſure at the aggrandiſement of a prince, with whom they had ſo lately contracted an alliance. The deliberations of the Athenian aſſembly ſhewed the extent of their own folly, and evinced the conſummate policy of Philip. They acknowledged, with dejection and anguiſh, that they had neglected the many opportunities preſented them by the favour of heaven, for repreſſing the ambition of their rival; that the time of acting with vigour and effect was now no more; that the cauſe of Greece was an empty name, ſince the Greeks ſurrendered their franchiſes to the king of Macedon; and that it became their own republic to conſult rather its ſafety than its honour, and to maintain peace with a monarch againſt whom they were by no means prepared to wage war. Even Demoſthenes recommended this reſolution; leſt, ſays he, we ſhould offend thoſe now aſſembled, who call themſelves the Amphictyons, and thus excite a general war againſt ourſelves. This opinion was univerſally approved: Macedon was acknowledged a member of the Grecian confederacy; and Iſocrates, an Athenian of the higheſt reputation, addreſſed a diſcourſe to Philip, in which he exhorted him to diſdain inglorious victories over his countrymen and friends, to employ his authority to extinguiſh for ever the animoſities of Greece, and to direct the united efforts of that country, of which Macedon now formed the head, againſt the wealth and encroachments of Perſia, its ancient and inſidious enemy.

By his intrigues, Philip thus obtained more important advantages, than he could have gained by a long ſeries of victories; but the complete conqueſt of Greece was a point not ſo eaſily effected. The Lacedæmonians, ever ready for war, ſolicited the aſſiſtance of Athens. The latter ſtate had received a conſiderable acceſſion of ſtrength, as well as of honour and reſpect, from its hoſ-

pitable reception of the diſtreſſed exiles from Phocis and Bœotia. It derived new conſideration from a general congreſs of ambaſſadors from Sparta, Thebes, Macedon, Argos, Meſſenè, and Arcadia, who, after the recent ſtruggles for conqueſt and independence, condeſcended to aſſert their reſpective claims before the Athenian aſſembly. The Lacedæmonians repreſented the league, formed againſt themſelves, as alike dangerous to Athens and to Sparta; that the ambition of Philip would not reſt ſatisfied with a partial conqueſt; his imagination graſped the dominion of Greece; and now was the only time for the two leading republics, who had ever mutually aſſiſted each other in ſeaſons of imminent danger, to make a firm ſtand in defence of the public ſafety. The Thebans, joined with the miniſters of Philip, called loudly on the Athenians to adhere to their treaty of peace recently concluded with that prince; and laboured with the utmoſt aſſiduity to ſeparate the views and intereſts of Athens and Lacedæmon on this important emergency.

The Athenian orators, many of them creatures of Philip, alſo exhorted their countrymen not to break too haſtily with a prince with whom they had ſo recently concluded an alliance, nor imprudently renew a bloody and deſtructive war, out of which they had been lately extricated with ſo much difficulty. Demoſthenes, however, pronounced a diſcourſe, which the king of Macedon is ſaid to have read with a mixture of terror and admiration. "When you hear deſcribed, O men of Athens! the continual hoſtilities by which Philip violates the peace, I obſerve that you approve the equity and patriotiſm of thoſe who ſupport the rights of the republic: but while nothing is done, on account of which it is worth while to liſten to ſuch ſpeeches, our affairs are brought to ſuch a paſs, that the more clearly we convict Philip of perfidy towards you, and of hoſtile deſigns againſt Greece, the more difficult it is to propoſe any ſeaſonable advice. The cauſe of this difficulty is, that the encroachments of ambition muſt be repelled, not by words, but by deeds. If ſpeeches and reaſoning ſufficed, we ſhould long ere now have prevailed over our adverſary. But Philip excels in actions as much as we do in arguments; and both of us obtain the ſuperiority in what forms reſpectively the chief object of our ſtudy and concern; we in our aſſemblies, Philip in the field.

"Immediately after the peace, the king of Macedon became maſter of Phocis and Thermopylæ, and made ſuch an uſe of theſe acquiſitions as ſuited the intereſt of Thebes, not of Athens. Upon what principle did he act thus? Becauſe, governed in all his proceedings, not by the love of juſtice, but by an inſatiable luſt of power, he ſaw the impoſſibility of bending the Athenians to his ſelfiſh and tyrannical purpoſes. He knew that the loftineſs of their character would never ſtoop to private conſiderations, but prefer to any advantage that he might offer them, the dictates of juſtice and of honour; and that neither their penetration, nor their dignity, could ever deſcend to ſacrifice to a partial and temporary intereſt, the general ſafety of Greece; but that they would fight for each member of the confederacy with the ſame ardour as for their own walls. The Thebans he judged (and he judged aright) to be more aſſailable; he knew their meanneſs to be ſuch, that provided he heaped benefits on themſelves, they would aſſiſt him to enſlave their neighbours. Upon the ſame principle he now cultivates, in preference to yours, the friendſhip of the Meſſenians and Argives; a circumſtance, Athenians! which highly redounds to your honour, ſince Philip thus declares his perſuaſion, that you alone have wiſdom to underſtand, and virtue to oppoſe, his deſigns; that you foreſee the drift of all his negociations and wars, and are determined to be the incorruptible defenders of the common cauſe. Nor is it without good grounds that he entertains ſuch an honourable opinion of you, and the contrary of the Thebans and Argives. When the liberties of Greece were threatened by Perſia, as they now are by Macedon, the Thebans baſely followed the ſtandard of the invaders; the Argives did not oppoſe their arms; while the magnanimous patriots, from whom you are deſcended, ſpurned offers, highly advantageous, made them by Alexander of Macedon, the anceſtor of Philip, who acted as the ambaſſador of Perſia; and, preferring the public intereſt to their own, provoked the devaſtation of their territory, and the deſtruction of their capital, and performed, in defence of Greece, thoſe unrivalled exploits of heroiſm which can never be celebrated with due praiſe, nor obliterated from the annals of time. For ſuch reaſons, Philip chooſes for his allies, Thebes, Argos, and Meſſenè, rather than Athens and Sparta. The former ſtates poſſeſs not greater ſtrength, wealth, fleets, harbours, and armies; they have not more power, but leſs virtue. Nor can Philip plead the merits of their cauſe; ſince, if Chæronæa and Orchomenus are juſtly ſubject to Thebes, Argos and Meſſenè are juſtly ſubject to Lacedæmon; nor could it be equitable to enſlave the inferior cities of Bœotia, and at the ſame time to teach thoſe of Peloponneſus to rebel.

"But Philip was compelled to this conduct, as alleged in his defence.—'Surrounded by the Theſſalian cavalry and Theban infantry, he was obliged to aſſiſt allies whom he diſtruſted, and to concur with meaſures which he diſapproved. Hence the ſevere treatment of Phocis; hence the cruel ſervitude of Orchomenus and Chæronæa. The king of Macedon, being now at liberty to conſult the dictates of his own humanity and juſtice, is deſirous to re-eſtabliſh the republic of Phocis; and, in order to bridle the inſolence of Thebes, actually meditates the fortifying of Elatæa.'—This, indeed, he meditates, and will meditate long. But, does he not meditate the deſtruction of Lacedæmon? For this purpoſe he has remitted money, he has ſent his mercenaries, he is prepared, himſelf, to march at the head of a powerful army. His preſent tranſactions ſufficiently explain the motives of his paſt conduct. It is evident that he acts from ſyſtem, and that his principal batteries are erected againſt Athens itſelf. How can it be otherwiſe? He is ambitious to rule Greece; you alone are able to thwart his meaſures. He has long treated you unworthily; and he is conſcious of his injuſtice. He is actually contriving your deſtruction, and he is ſenſible that you ſee through his deſigns. For all theſe reaſons he knows that you deteſt him, and that ſhould he not anticipate your hoſtility, he muſt fall a victim to your juſt vengeance. Hence he is ever active and alert, watching a favourable moment of aſſault, and practiſing on the ſtupidity and ſelfiſhneſs of the Thebans and Peloponneſians; for if they were not ſtupid and blind, they might perceive the fatal aim of the Macedonian policy. I once ſpoke on this ſubject before the Meſſenians and Argives; my diſcourſe, which was uſeleſs to them, may, perhaps, not unſeaſonably be repeated to you. "Men of Argos and Meſſene! you remember the time when Philip careſſed the Olynthians, as he now does you: how highly, do you think, that infatuated people would have been offended, had any man talked againſt the benefactor, who had generouſly beſtowed on them Anthemus and Potidæa? Had any man warned them againſt the dangerous artifices of Philip, would they have liſtened to his advice? Yet, after enjoying for a moment the territories of their neighbours, they were for ever deſpoiled of their own. Inglorious was their fall; not conquered only, but betrayed and ſold by one another. Turn your eyes to the Theſſalians. When Philip expelled their tyrants, could the Theſſalians ever conjecture that the ſame prince would ſubject them to the creatures of Macedon, ſtill more tyrannical and oppreſſive? When he reſtored them to their ſeat and ſuffrage in the Amphictyonic council, could they have

been perſuaded that he would one day deprive them of the management of their own revenues? As to you, Meſſenians and Argives! you have beheld Philip ſmiling and deceiving; but beware! pray to Heaven, that you may never behold him inſulting, threatening, and deſtroying. Various are the contrivances which communities have diſcovered for their defence; walls, ramparts, battlements, all of which are raiſed by the labour of man, and ſupported by continual expence and toil. But there is one common bulwark, which only the prudent employ, though alike uſeful to all, eſpecially to free cities againſt tyrants. What is that? DISTRUST. Of this be mindful; to this adhere; preſerve this carefully, and no calamity can befal you."

Philip, meanwhile, unoppoſed and unobſerved, was ſailing with a powerful armament towards Cape Tenarus, the moſt ſouthern promontory of Laconia. Having landed there without oppoſition, he was joined by the Meſſenians, Arcadians, and Argives. The united army, after ravaging the moſt valuable part of the Lacedæmonian territories, beſieged and took Trinaſus, a maritime city of conſiderable importance. The terror occaſioned among the Spartans by theſe misfortunes, was heightened by extraordinary meteors in the air, whoſe unuſual redneſs ſeemed to preſage ſome dreadful calamity. The alarm was ſo general, that it has been thought worth while to record the ſaying of a Spartan youth, who remained unmoved amidſt the public conſternation. Being aſked, "Whether he was not afraid of Philip?" "Why, (replied the generous youth,) ſhould I fear him; he cannot hinder me from dying for my country." But this manly reſolution no longer animated the great body of the Spartan nation. Unable to meet the invader in the field, they ſent Agis, the ſon of king Archidamus, to propoſe terms of accommodation, or rather to ſubmit their whole fortune to the diſpoſal of the Macedonians. The young prince coming alone and unattended, Philip expreſſed his ſurpriſe. "What, have the Spartans ſent but one!" "Am I not ſent to one?" was the manly reply of Agis. This was the expiring voice of Spartan pride; for the king of Macedon, though unwilling to provoke the deſpair of a people, whoſe degenerate virtue might yet be animated by the inſtitutions of Lycurgus and the example of Leonidas, compelled them to reſign their pretended authority over Argos, Meſſene, and Arcadia; and ſettled the boundaries of thoſe republics entirely agreeable to the wiſhes of his confederates. The king of Macedon then marched through the country amidſt the acclamations of the people, who vied with each other in beſtowing crowns and ſtatues on a prince who had generouſly reſcued them from the yoke of Sparta. At Corinth he paſſed ſome days in the houſe of Demaratus, a man totally devoted to his ſervice; but the turbulent Corinthians, who, beſides their innate hatred of kings, had particular cauſes of animoſity againſt Philip, did not conceal their unwillingneſs to owe their freedom and their ſafety to the interpoſition of a foreign tyrant. Philip was ſtrongly urged by his courtiers to puniſh their temerity; but he knew how to digeſt an affront, when forgiveneſs was more uſeful than vengeance; and repreſſed the unſeaſonable indignation of his attendants by obſerving, with admirable patience, "Were I to act with *ſeverity*, what muſt I expect from men, who repay even *kindneſs* with inſult?"

Next year Philip was occupied by ſecuring and receiving into his protection the city and republic of Cardia, occupying the neck of land which joins the Thracian Cherſoneſus to the continent. The reſt of the peninſula had long been ſubject to the Athenians, whoſe authority the citizens of Cardia always ſet at defiance. The Athenians had lately ſtrengthened the Cherſoneſites by a new colony, which had continual diſputes with the Cardians about the extent of their boundaries. Matters had actually come to a criſis, and the Cardians were ready to be overwhelmed by the ſtrength and numbers of the enemy, when they were at once defended by the Macedonian arms. This hoſtile meaſure once more rouſed the Athenians from their lethargy; but inſtead of oppoſing Philip with arms, the only means by which he might be reſiſted with any hope of ſucceſs, they employed the impotent defence of ſpeeches, reſolutions, and embaſſies. The ſubtle artifices of the king of Macedon, though ſupported by the impetuous eloquence of Python, were overcome by Hegeſippus and Demoſthenes, who ſtill unveiled the injuſtice of Philip with ſuch force of evidence, that the Athenians finally reſolved upon ſending a conſiderable armament to the Cherſoneſus, to protect their ſubjects in that peninſula. Diopeithes, who commanded the expedition, was a determined enemy to the Macedonians, and a man of courage and enterpriſe. Having provided for the defence of the Athenian ſettlements, he made an incurſion into the neighbouring country; ſtormed the Macedonian ſettlements at Crobylè and Tiriſtaſis; and having carried off many priſoners, and a conſiderable booty, lodged them in the ſafe retreat of the Cherſoneſus. On this emergency, Amphilochus, a Macedonian of rank, was ſent to treat of the ranſom of priſoners; but Diopeithes caſt him in priſon, the more ſurely to widen the breach between Athens and Macedon; and, if poſſible, to render it irreparable. The king of Macedon, when informed of theſe hoſtilities, gave free ſcope to his complaints; and his emiſſaries had an eaſier game at Athens, as Diopeithes had not only violated the peace with Macedon, but, in order to maintain his troops, had levied conſiderable contributions from the Greek ſettlements in Aſia. The partiſans of Macedon inveighed againſt this commander as a robber and pirate, the common enemy of Greeks and barbarians; Philip demanded vengeance from the juſtice of Athens, if not, he would be his own avenger; the perſonal enemies of Diopeithes joined in the outcry, and inſiſted, that ſuch a daring offender ought immediately to be recalled, and puniſhed for his miſconduct.

On this occaſion Demoſthenes undertook to defend the accuſed general, whoſe meaſures he warmly approved; and motives of private friendſhip heightening the ardour of patriotiſm, render his diſcourſe on the affairs of the Cherſoneſus one of the moſt animated and intereſting of his productions. The impeachment of Diopeithes he aſcribes entirely to malice or perfidy, which had been too ſucceſsfully employed to withdraw the attention of the Athenians from the main object of their concern, the continual encroachments of Philip, to unjuſt complaints and calumnies againſt their fellow-citizens. On this ground he proceeds, "Be not deceived, Athenians! Philip has at heart the final contrivance of all your misfortunes and diſgrace. For who can be ſo fooliſh as to believe, that the villages of Thrace ſhould form an object worthy of his ambition; that, in order to acquire them, he ſhould ſubmit to toils and dangers; that, for the ſake of the rye and millet of Thrace, he ſhould conſent to ſpend ſo many months amidſt winter ſnows and tempeſts; while, at the ſame time, he diſregarded the riches and ſplendour of Athens, your harbours, arſenals, galleys, mines, and revenues? No, Athenians. It is to get poſſeſſion of Athens, that he makes war in Thrace and elſewhere. What then ought we to do? Tear ourſelves from our indolence; not only ſupport, but augment, the troops which are on foot; that, as Philip has an army ever ready to attack and conquer the Greeks, you alſo may be ready to ſuccour and to ſave them. Raſh and violent I neither am, Athenians, nor with ever to become. The courage of a miniſter is put to an eaſy trial, who is ever ready to ſacrifice your permanent intereſt to your preſent pleaſure. But he is truly courageous, who, for the ſake of your ſafety and glory, oppoſes your moſt favourite inclinations, rouſes you from your dream of pleaſure,

diſdains

diſdains to flatter you, and having the good of his country ever in view, aſſumes that poſt in the adminiſtration in which fortune often prevails over policy, knowing himſelf reſponſible for the iſſue. Such a miniſter am I, whoſe unpopular counſels tend to render, not myſelf, but my country, GREAT."

The arguments of Demoſthenes not only ſaved Diopeithes, but animated the Athenians with a degree of vigour which they had been long unaccuſtomed to exert. A fleet was fitted out under the command of Callias, who made a deſcent on the coaſt of Theſſaly, after plundering the harbours in the Pelaſgic gulph. A conſiderable body of forces was ſent into Acarnania to repel the incurſions of Philip, aſſiſted by his kinſman and ally, Alexander of Epirus. The inhabitants of the iſland of Peperathus, truſting to the protection of Athens, expelled the Macedonian garriſon from Halonneſus. Repeated embaſſies were diſpatched to the Peloponneſians and Eubœans, exhorting them to throw off the ignominious yoke of Macedon, and to unite with their Grecian brethren againſt the public enemy. Philip was not unattentive to theſe commotions; but, his deſigns againſt the valuable cities on the Propontis and Thracian Boſphorus being ripe for execution, he was unwilling to allow any ſecondary conſideration to divert him from that important enterpriſe.

In the year before Chriſt 342, his intrigues had gained a conſiderable party in Byzantium, at the head of which was the perfidious Python, whoſe vehement eloquence gave him great influence with the multitude. A conſpiracy was formed to ſurrender one of the gates of the city; the Macedonian army of thirty thouſand men hovered round; but the deſign was diſcovered, and Philip, to ſcreen his partiſans from public vengeance, withdrew his army, and inveſted the neighbouring city of Perinthus. In Eubœa, the recent prevalence of the Macedonian party had been marked by many acts of violence and oppreſſion. The cities of Chalcis, Oreum, and Eretria, prepared to rebel, having previouſly ſolicited aſſiſtance from Peloponneſus, Acarnania, Attica, and every province of Greece, which they had any reaſon to deem favourable to their views. From other ſtates they brought back promiſes and hopes; from Athens they obtained, chiefly by the influence of Demoſthenes, a conſiderable body of troops commanded by the brave and virtuous Phocion. The orator accompanied the expedition; and being allowed to addreſs the popular aſſemblies in moſt of the cities of Eubœa, he inflamed them with ſuch animoſity againſt Philip and his partiſans, that little remained to be done by the valour of the Athenian general. The Eubœans every where took arms in defence of their freedom, the Macedonian garriſons were expelled from the principal cities, and driven from one poſt to another, till they were compelled entirely to evacuate the iſland. This event occaſioned great joy at Athens; and the principal merit being aſcribed to Demoſthenes, he was crowned by the ſenate and people with a golden crown.

The loſs of Eubœa was ill-compenſated to Philip by the military operations againſt Perinthus, in which he found an enemy of courage and perſeverance. The town was ſituated on the ſloping ridge of an iſthmus, and ſtrongly fortified both by art and nature, the houſes and ſtreets riſing one above another like the ſeats of an amphitheatre, ſo that the higher edifices overlooked and defended the lower. Having ſcoured the neighbouring country with his cavalry, Philip exhauſted, in the ſiege of Perinthus, all the military ſkill known to the ancients. He raiſed towers forty cubits high, which enabled his men to fight on equal ground with the beſieged; his miners were buſy at the foundation; at length the battering rams advanced to the wall, in which a conſiderable breach was made, and the Perinthians were reduced to the laſt extremity, when they were unexpectedly ſaved, firſt by a large ſupply of arms and proviſions from Byzantium, next by a ſtrong reinforcement of men in Perſian pay, commanded by Apollodorus, a citizen of Athens. Philip, ever laudably ſparing of the lives of his men, determined to change the ſiege into a blockade. Perinthus was ſhut up by ſea and land: part of the Macedonian troops, who had become mutinous for want of pay, were indulged in plundering the rich territory of Byzantium, while the remainder were conducted to the ſiege of Selymbria, and ſoon after of Byzantium itſelf, the taking of which places, it was hoped, might compenſate their diſappointments at Perinthus.

During theſe military operations, the Athenian councils were animated with a degree of energy and enthuſiaſm which had not appeared in them during many years, and which produced the laſt tranſitory glimpſe of ſucceſs and ſplendour, before the glory of Athens was extinguiſhed for ever. It was decreed by the ſenate and people, in the year before Chriſt 340, to fit out a fleet of an hundred and twenty galleys; but unfortunately the command was given to Chares, whoſe character rendered him as contemptible to the enemies, as he was deteſted by the allies, of the republic. The Byzantines even excluded him from their harbour; and he was defeated by Amyntas, the Macedonian admiral, off the oppoſite ſhore of Chalcedon. This diſaſter, which was occaſioned by the incapacity or treachery of their commander, made the Athenians caſt their eyes on Phocion, who, though ever ready to ſerve his country, was only called for in times of danger and calamity. Before Phocion reached the Propontis, Philip, fluſhed with his late naval ſucceſs, made an attempt to ſtorm Byzantium. Confident in the ſtrength of their walls, and the abundance of their magazines, the inhabitants of Byzantium, without riſking a ſally, allowed Philip to carry on his works. During this inaction of the townſmen, Philip determined to attempt the walls by ſurpriſe. For executing this deſign, he choſe the gloom of a tempeſtuous night; a determined band of Macedonians paſſed the ditch; the ſcaling-ladders were fixed; when the centinels of Byzantium were alarmed by the barking of maſtiffs, kept in the towers, to ſecure them in the night. The alarm ſpread with rapidity among the guards, who ruſhing tumultuouſly from their reſpective ſtations, were on the point of blindly aſſaulting each other, when a bright meteor enabled them to diſtinguiſh their friends from their foes. Having formed in ſome order, they advanced againſt the Macedonians, who had already gained the rampart; but from which they were repulſed, with dreadful ſlaughter, by ſuperior numbers. Yet the defeat of this bold enterpriſe did not diſcourage Philip from carrying on his operations; and his perſeverance muſt have prevailed over the obſtinacy of the beſieged, had not the Athenian fleet, under Phocion, arrived in the Thracian Boſphorus. The Byzantines received him with open arms; and, under his ſuperior proweſs, the troops of Philip were foiled in every rencounter. The king of Macedon, who had as much flexibility in varying his meaſures, as firmneſs in adhering to his purpoſes, was unwilling any farther to preſs his bad fortune: he judged it neceſſary to raiſe the ſiege of Byzantium, to withdraw his forces from Selymbria and Perinthus, and to leave the Athenians in full poſſeſſion of the northern ſhore of the Propontis.

Phocion, to whoſe conduct the ſafety of ſo many important cities was principally owing, ſailed from Byzantium amidſt the grateful acclamations of innumerable ſpectators. In his voyage to the Cherſoneſus, he captured a fleet of victuallers and tranſports, carrying arms and proviſions for the enemy. When he arrived in that peninſula, he repreſſed the inſolence of the Cardians, who, reinforced by a Macedonian garriſon, had undertaken an expedition againſt the city of Seſtos. He recovered ſeveral places on the coaſt of Thrace, which had

had ſubmitted to the dominion of the Macedonians; and, in concert with the inhabitants, took ſuch meaſures as ſeemed moſt proper to protect the Athenian allies in thoſe parts, from future danger. Theſe meritorious ſervices of Phocion were felt and acknowledged by the communities whom he had protected and relieved. The deliverance of the Cherſoneſus, of Perinthus, and of Byzantium, was teſtified by crowns, ſtatues, inſcriptions, and altars; and are ſtill recorded in an oration of Demoſthenes, which has deſervedly ſurvived thoſe periſhing monuments of gold and marble.

Diſappointed in his deſigns upon Byzantium, Philip turned his arms againſt Atheas, king or chief of Scythia Minor, now called Little Tartary, who had recently inſulted the Macedonian ambaſſadors that had been ſent to treat of an amicable alliance with him. Philip reaped ſuch fruits from this expedition, as might be expected by a victory over a people who had no king but their general, no god but their ſword, and no cities but the ground on which they occaſionally encamped with their herds and families. The ſpoil conſiſted in arms, chariots, twenty thouſand robuſt captives, and a greater number of mares, deſtined to repleniſh the ſtuds of Macedonia. But while Philip marched at the head of his army, thus encumbered with baggage and ſpoil, a very unexpected event threatened to terminate at once his glory and his life. Allured by the hopes of ſharing the warlike plunder of the Scythians, the barbarous Triballi, a people who had been often conquered, but never ſubdued, vigorouſly aſſaulted the Macedonians, entangled amidſt the intricate windings of the mountains of Mœſia. The confuſion and the danger was ſuch as demanded the utmoſt exertions of the king of Macedon, who ſummoned all the fortitude and firmneſs of his mind. With his voice and example he conducted his faithful guards to the heat of the battle, and fought with unexampled bravery, till the ſame weapon which pierced his horſe, laid him ſenſeleſs on the ground. The young Alexander, who fought near his ſide, derived peculiar glory from ſaving the life of his father, whom he covered with his ſhield, and defended by his ſword, until his attendants conveyed him to a place of ſafety; the ſon immediately ſucceeded to the command, and the barbarians were routed and put to flight. Philip's wound was attended with an incurable lameneſs, which he bore with much impatience. His magnanimous ſon endeavoured to remove his anxiety, by aſking, how he could be chagrined at an accident, which continually reminded him of his valour.

The Macedonian army now haſtened through Thrace, where Philip was met by deputies from the Amphictyonic council, appointing him general of their forces, and requeſting him to march into Greece, to repreſs the warlike preparations of the Athenians, who had equipped a fleet far ſuperior to the naval ſtrength of Macedon. The troops and partiſans of that kingdom were driven from their ambuſhes in Megara, and in the neighbouring territories, where they had long watched an opportunity of deſtroying the power of Athens. Demoſthenes, and Hyperides, an orator ſecond only to Demoſthenes, were diſpatched into the Peloponneſus and other parts of Greece, to perſuade the ſeveral republics to ſecond the generous ardour of the Athenians, whoſe recent ſucceſs under Phocion added great weight to the arguments and eloquence of thoſe illuſtrious ſtateſmen.

To counteract theſe menacing preparations, Philip employed ſeveral ſecret engines, which were calculated to work very deſtructively upon the Athenians. There was a man at Athens named Antiphon, who inſinuated himſelf into the popular aſſembly without the legal qualification. This defect paſſed long unobſerved, but was at length detected by Demoſthenes, when he was driven into exile, and became an active incendiary in the pay of the king of Macedon. It was agreed between Philip and Antiphon, that the latter ſhould return to Athens in diſguiſe, inſinuate himſelf into the Piræus, and lie there in concealment, until he found an opportunity to ſet fire to the Athenian docks, and thus deſtroy at once the ſheet-anchor of the republic. But the vigilance of Demoſthenes diſcovered this deſperate deſign, when on the point of execution. He immediately flew to the Piræus, dragged Antiphon from his concealment, diveſted him of his diſguiſe, and produced him at the bar of the aſſembly. Torture, which the inſtitution of domeſtic ſlavery had rendered familiar in Greece, extorted from him a reluctant confeſſion; and his enormous guilt was puniſhed with as enormous ſeverity. Had the deteſtable enterpriſe of Antiphon ſucceeded, Philip would have obtained his purpoſe of ruining Athens by a ſtroke of the meaneſt perfidy. It was on this occaſion that Demoſthenes exclaimed, "Philip is diſtinguiſhed above all his predeceſſors for collecting together the fouleſt enemies of Grecian freedom. His meaſures required the co-operation of traitors, and traitors he found more corrupt and more dexterous than ever appeared in any former age; and, what is moſt worthy of remark, the principal inſtruments of his ambition flouriſhed in the very boſom of that ſtate, whoſe public councils moſt openly oppoſed his greatneſs."

The ſeaſon for convening at Delphi the vernal aſſembly of the Amphictyons, now approached; and the Athenians particularly diſtinguiſhed their pious munificence, by ſending, among other dedications, ſeveral golden ſhields, with the following inſcription: "Taken from the Medes and Thebans when they fought againſt Greece." This offering, highly offenſive to the Theban deputies, was prematurely ſuſpended in the temple; the Thebans murmured, the Amphictyons liſtened to their complaints, and it was aſſerted in the council, that the Athenians deſerved puniſhment for preſenting their gift to the god, before it had been conſecrated with the other offerings. Pretending high indignation at theſe murmurs, Æſchines ruſhed into the aſſembly, and began a ſpirited defence of his countrymen; when he was rudely interrupted by a Locrian of Amphiſſa, a city only eight miles diſtant from Delphi, which growing populous and powerful on the ruins of Criſſa and Cirrha, had ventured to cultivate the Cirrhean plain, which, near three centuries before, had been deſolated by the Amphictyons, ſolemnly conſecrated to Apollo, and devoted to perpetual ſterility. The artful Locrian, affecting a religious zeal not leſs ardent than the patriotiſm of Æſchines, clamorouſly interrupted that orator, calling aloud in the aſſembly, that it ill became the dignity of the Amphictyons to hear with patience the juſtification, much leſs the praiſes, of Athens, a city impious and profane, which, in defiance of human and divine laws, had ſo recently abetted the execrable ſacrilege of the Phocians.

Æſchines, in reply, not only juſtified the innocence, but diſplayed the illuſtrious merit of the Athenians; and then addreſſing the Amphictyons with a look peculiarly earneſt and expreſſive, "Say, ye Grecians! ſhall men who never knew the exalted pleaſures of virtue and renown, be ſuffered to tear from us the ineſtimable rewards of glory ſo juſtly earned? Shall men, themſelves polluted by ſacrilege, and already devoted to deſtruction by the moſt awful imprecations, preſume to call the Athenians profane and impious? Look down, ye reverend guardians of religion! look down on that plain, (pointing to the Cirrhean plain, which might be ſeen from the temple,) behold theſe lands anciently devoted to the god, now appropriated and cultivated for the private emolument of the Amphiſſeans; behold the numerous buildings which they have erected there, and that accurſed port of Cirrha, juſtly demoliſhed by our anceſtors, now rebuilt and fortified." Æſchines here read the oracle of Apollo, which condemned that harbour and thoſe lands to perpetual deſolation. Then proceeding with increaſed vehemence, he ſaid, "Ye Grecians! I ſwear, that I myſelf, my children, my country, will diſcharge our duty

to heaven; and, with all the powers and faculties of mind and body, avenge the abominable violation of the conſecrated territory. Do you, Amphictyons! determine as wiſdom ſhall direct. Your offerings are prepared, your victims are brought to the altar; you are ready to offer ſolemn prayers for bleſſings on yourſelves, and on the republics which you repreſent. But conſider with what voice, with what heart, with what confidence, you can breathe out your petitions, while you ſuffer the profanation of the Amphiſſeans to paſs unrevenged. Hear the words of the imprecation, not only againſt thoſe who cultivate the conſecrated ground, but againſt thoſe who neglect to puniſh them: "May they never preſent an acceptable offering to Apollo, Diana, Latona, or Minerva the provident; but may all their ſacrifices and religious rites be for ever rejected and abhorred!"

The warmth of Æſchines occaſioned the utmoſt confuſion in the aſſembly, and thus laid the foundation of the third ſacred war, in the year before Chriſt 339. It was determined, after violent contentions, that the Amphictyons ſhould next day repair to the Cirrhean plain, in order to burn, cut down, and deſtroy, the houſes and plantations which had ſo long adorned or defiled that devoted territory. The ravagers met with little oppoſition in performing this pious devaſtation; but as they returned towards the temple, they were overtaken by a numerous party of Amphiſſeans, who threw them into diſorder, took ſeveral priſoners, and purſued the reſt to Delphi. The ſignal of war was now raiſed; the inſulted Amphictyons, in whoſe perſons the ſanctity of religion had been violated, complained to their reſpective republics, while the recent audacity of the Amphiſſeans aggravated their ancient crimes and enormities. But the council loudly declaimed againſt the lukewarm indifference of the Grecian ſtates, in a war which ſo deeply concerned the national religion. It became the Amphictyons, therefore, as the miniſters of Apollo, and the guardians of his temple, to ſeek out and employ ſome more powerful inſtrument of the divine vengeance. Philip of Macedon had formerly given proof of his pious zeal in the Phocian war. That prince was now named as a general the beſt qualified to defend the cauſe of Apollo and the ſacred ſhrine, and a deputation of the Amphictyons was ſent to Philip in Thrace. He received their meſſage with great cordiality, and declared his veneration for the commands of the council, which he ſhould be ever ready to obey. The vigilant prince ſoon provided a ſufficient number of tranſports to convey his army into Greece, notwithſtanding the Athenians had taken a decided part againſt him, and that their admirals Chares and Proxenus were prepared to intercept his paſſage with a ſuperior naval force. To baffle this oppoſition, Philip, as uſual, employed a ſtratagem. A light brigantine was diſpatched to Macedon with letters of ſuch import as gave reaſon to believe that he purpoſed immediately returning into Thrace. Beſides writing to Antipater, his principal confidant, he took care to maſk his artifice, by ſending letters to his queen Olympias. The brigantine deſignedly fell into the hands of the Athenians. The diſpatches were ſeized and read; but the letter for the queen was politely forwarded to its deſtination. The Athenian admirals quitted their ſtation, and Philip arrived, without oppoſition, on the coaſt of Locris, from whence he proceeded to Delphi.

Though the Macedonians were more than ſeemed neceſſary for the reduction of Amphiſſa, the king diſpatched circular letters through moſt parts of Greece, requiring from the Thebans, Peloponneſians, and other ſtates, the aſſiſtance of their combined arms to maintain the cauſe of the Amphictyons and Apollo. The Thebans, intimidated by a powerful army in their neighbourhood, ſent a ſmall body of infantry to join the ſtandard of Philip. The Lacedæmonians, long diſguſted with the meaſures of Greece, were firm in preſerving a ſullen neutrality; while the Athenians, awakened by the activity of Demoſthenes to a ſenſe of their danger, oppoſed Philip with ten thouſand mercenaries, deſpiſing the threats of the oracle againſt thoſe who took part with Amphiſſa. The king of Macedon, however, without waiting for any farther reinforcement than that which he had received from the Thebans, beſieged, took, and garriſoned, that unfortunate city; and having routed and put to flight the Athenian mercenaries, ſoon ſpread the terror of his arms around the neighbouring territory. The Athenians, now dreading that they muſt ſoon have their own walls to defend againſt the victorious invader, ſent an embaſſy to Megara, Eubœa, Leucas, Corinth, Corcyra, and Achaia, each of which favourably received the ambaſſadors, and entered into a league againſt Macedon. Thebes fluctuated in uncertainty, hating the Athenians as rivals, and dreading Philip as a tyrant. The ſituation of the Theban territory, through which Philip muſt march before he could invade Attica, rendered the deciſion of that people peculiarly important. To gain or to retain their friendſhip, the intrigues of Philip, and the eloquence of Athens had been employed with unwearied aſſiduity. The Thebans temporiſed, deliberated, reſolved, and changed their reſolutions. The partiſans of Athens were moſt numerous, thoſe of Macedon moſt active, while the great body of the Theban people heard the clamours and arguments of both parties with that ſtupid indifference, and took their meaſures with that lethargic ſlowneſs which diſgraced their character. To fix their wavering irreſolution, Philip at length determined to ſeize on Elatæa, a city conveniently ſituate for receiving reinforcements from Theſſaly and Macedon, commanding the paſſage into Bœotia, diſtant only two days march from Attica, and which, being garriſoned by a powerful army, might continually alarm the ſafety of Thebes and Athens. Philip drew the greater part of his troops thither, repaired and ſtrengthened the walls, and having thus ſecured himſelf from ſurpriſe, watched a favourable opportunity of inflicting puniſhment on the Athenians, who had given him ſufficient ground to repreſent them as the enemies of the Amphictyonic council, by whoſe authority the king of Macedon affected to be guided in all his operations.

On the firſt tidings that Philip had taken poſſeſſion of Elatæa, the people of Athens were all conſternation and alarm, until Demoſthenes exhorted them to ſhake off the unmanly terror which had ſurpriſed them; and, inſtead of fearing for themſelves, to fear only for their neighbours, whoſe territories were more immediately threatened, and who muſt ſuſtain the firſt ſhock of the invaſion. "Let your forces," continued he, "immediately march to Eleuſis, in order to ſhow the Thebans, and all Greece, that as thoſe who have ſold their country are ſupported by the Macedonian forces at Elatæa, ſo you are ready to defend with your hereditary courage and fortune thoſe who fight for liberty. Let ambaſſadors be ſent to Thebes, to remind that republic of the good offices conferred by your anceſtors; to aſſure the Thebans, that you do not conſider them as aliens; that the people of Athens have forgot all former hoſtilities with the citizens of Greece, and will never forſake the cauſe of their common country, which is in a peculiar manner the cauſe of Thebes." Theſe propoſals being received with general approbation, Demoſthenes was immediately diſpatched to Thebes; the Thebans received with gratitude the proffered aſſiſtance of Athens; and the Athenian army having ſoon after taken the field, were admitted within the Theban walls, and treated with all the diſtinctions of ancient hoſpitality.

Meanwhile Philip having advanced towards the Bœotian frontier, his detached parties were foiled in two ſkirmiſhes with the confederates. Regardleſs of theſe loſſes, he proceeded with his main body, thirty-two thouſand ſtrong, to the plain of Chæroneæa, which was

conſidered by Philip as well adapted to the operations of the Macedonian phalanx. The generals of the confederate Greeks advanced towards the ſame ſpot, accompanied by the Thebans, and the ſcanty reinforcements raiſed by the iſlands and ſtates of Peloponneſus, which had joined their alliance. Their army amounted to thirty thouſand men, animated by the nobleſt cauſe for which men can fight, but commanded by the Athenians Lyſicles and Chares, the firſt but little, and the ſecond unfavourably, known; and by Theagenes the Theban, a perſon ſtrongly ſuſpected of treachery.

When the day approached for ſapping the tottering foundations of the republics of Greece, which Philip had been gradually undermining for twenty-two years, both armies formed in battle array before the riſing of the ſun. The right wing of the Macedonians was headed by Philip, who judged proper to oppoſe in perſon the impetuous fury of the Athenians. His ſon Alexander, only nineteen years of age, but ſurrounded by experienced officers, commanded the left wing, which faced the Sacred Band of the Theban army. The auxiliaries were poſted in the centre. In the beginning of the action, the Athenians charged with their uſual impetuoſity, and repelled the oppoſing diviſions of the enemy; but the youthful ardour of Alexander obliged the Thebans to retire, and the young prince completed their diſorder, by purſuing the ſcattered multitude with his Theſſalian cavalry. Meantime the Athenian generals, too much elated by their firſt advantage, loſt the opportunity to improve it; for having repelled the centre and right wing of the Macedonians, except the phalanx of choſen men, under the immediate command of the king, they, inſtead of attempting to break this formidable body by attacking it in flank, preſſed forward againſt the fugitives, the vain Lyſicles exclaiming in triumph, "Purſue, my brave countrymen! let us drive the cowards to Macedon." Philip obſerved this raſh folly with contempt, and ſaying to thoſe around him, "Our enemies knew not how to conquer," commanded his phalanx, by a rapid evolution, to gain an adjacent eminence, from which they poured down, firm and collected, on the advancing Athenians, whoſe confidence of ſucceſs had rendered them inſenſible of their danger. But the irreſiſtible ſhock of the Macedonian ſpear converted their fury into deſpair. Above a thouſand fell, two thouſand were taken priſoners; the reſt eſcaped by a precipitate flight. Of the Thebans more were killed than taken. Few of the confederates periſhed, as they had little ſhare in the action, and as Philip, perceiving his victory to be complete, gave orders to ſpare the vanquiſhed, with a clemency unuſual in that age, and not leſs honourable to his underſtanding than his heart; ſince his humanity thus ſubdued the minds, and gained the affections, of his enemies.

According to the Grecian cuſtom, the battle was followed by an entertainment, at which the king, preſiding in perſon, received the congratulations of his friends, and the ſupplications of the Athenian deputies, who craved the bodies of their ſlain. Their requeſt, which ſerved as an acknowledgment of their defeat, was readily granted; but, before they availed themſelves of the permiſſion to carry off their dead, Philip, who with his natural intemperance had protracted the entertainment till morning, iſſued forth with his licentious companions to viſit the field of battle; their heads crowned with feſtive garlands, their minds intoxicated with wine and victory. Having proceeded to that quarter of the field where the Athenians had fought and fallen, the king abandoned himſelf to all the levity and littleneſs of petulant joy. Inſtead of being impreſſed with a deep ſenſe of his recent danger, and with gratitude to heaven for his eſcape, Philip only compared the boaſtful pretenſions with the mean performances of his Athenian enemies; and, ſtruck by this contraſt, rehearſed, with inſolent mockery, the pompous declaration of war lately drawn up by the ardent patriotiſm of Demoſthenes. It was on this occaſion that Demades at once rebuked the folly and flattered the ambition of Philip, by aſking him, Why he aſſumed the character of Therſites, when fortune aſſigned him the part of Agamemnon? Philip felt the rebuke, and his ambition immediately gave place to moderation. He reſtored, without ranſom, the Athenian priſoners; who, at departing, having demanded their baggage, were alſo gratified in this particular; the king pleaſantly obſerving, that the Athenians ſeemed to think he had not conquered them in earneſt. Soon afterwards he diſpatched his ſon Alexander, and Antipater the moſt truſted of his miniſters, to offer them peace on ſuch favourable terms as they had little reaſon to expect. They were required to ſend deputies to the iſthmus of Corinth, where, to adjuſt their reſpective contingents of troops for a Perſian expedition, Philip purpoſed aſſembling, early in the ſpring, a general convention of all the Grecian ſtates; they were ordered to ſurrender the iſle of Samos, which formed the principal ſtation of their fleet, and the main bulwark and defence of all their maritime poſſeſſions; but they were allowed to enjoy, unmoleſted, the Attic territory, with their hereditary form of government, and flattered by the acquiſition of Oropus, for which they had ſo long contended with the Thebans. It was not merely in being deprived of this city, that the Thebans experienced the indignation of the conqueror. From the tranſactions between Macedon and Thebes, in the early part of his reign, Philip thought himſelf entitled to treat that people, not as open and generous enemies, whoſe ſtruggle for freedom deſerved his clemency, but as faithleſs and inſidious rebels, who merited all the ſeverity of his juſtice.

The arguments of the wiſeſt portion of the Athenian aſſembly for accepting the peace proffered by Philip, were ſtrengthened and confirmed by the return of Demades, with the priſoners taken at Chæronæa. Ambaſſadors were diſpatched to the king of Macedon, to accept and ratify the treaty of peace, upon the terms which he had condeſcended to offer; and the only marks of deference ſhewn to the patriotic party, who ſtill clamoured for war, were, that Demochares, who oſtentatiouſly affected a rude boldneſs of ſpeech againſt Philip, was named among the ambaſſadors; and that Demoſthenes, the irreconcileable enemy of that prince, was appointed to pronounce the funeral oration in honour of the ſlain. This diſtinguiſhed office conferred on Demoſthenes, ſhewed that, notwithſtanding the unfortunate iſſue of his counſels, the Athenians ſtill approved his principles and his patriotiſm; but the complexion of the times no longer admitted thoſe daring flights of elevated fancy to which he had been accuſtomed to ſoar. One tranſient flaſh of light breaks forth towards the end of his diſcourſe, when, commemorating the glory of the ſlain, he ſays, that the removal of thoſe zealous patriots from their country was like taking the ſun from the world; a figure bold, yet juſt; ſince, after the battle of Chæronæa, there remained no further hopes of reſiſting the conqueror—the dignity of freedom was for ever loſt, and the gloom of night and tyranny thickened over Greece.

Philip, thus become ſole arbiter of the country, adminiſtered the religion, decided the differences, and commanded the valour, of ſoldiers and freemen. Perſonal merit entitled him to hold the ſceptre, which, being derived from the gods, could not long be ſwayed by unworthy hands. The ſuperiority of his abilities, the vigilant and impartial juſtice of his adminiſtration, formed the main pillars of his prerogative; ſince, according to the principles and feelings of the Macedonians, he who infringed the rights of his ſubjects, ceaſed from that moment to be a king. He affected to preſerve inviolate the ancient forms of the republican conſtitution, and determined to govern the Greeks by the ſame

policy

J. Chapman sculp.

PHILIP, KING OF MACEDON.

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policy with which he had ſubdued them. While Macedonian garriſons kept poſſeſſion of Thermopylæ and the other ſtrong holds of Greece, the active partiſans of Philip controuled the reſolutions and directed the meaſures of each particular republic. The ſuperintendence of the ſacred games, as well as of the Delphic temple, rendered him the only viſible head of the national religion: in conſequence of the double right of preſiding and voting in the Amphictyonic council, he appeared in the character of the ſupreme civil magiſtrate of Greece; and his illuſtrious victory at Chæronæa over the only communities that dared to oppoſe his greatneſs, pointed him out as the general beſt entitled to conduct the military force of Greece and Macedon in the projected invaſion of Perſia; an authority which, as he might have aſſumed without blame, he received with greater applauſe from the impartial ſuffrages of the people.

This condeſcenſion appeared highly flattering to the Greeks aſſembled at Corinth, where Philip, the year following the battle of Chæronæa, held a general convention of the Amphictyonic ſtates. In this aſſembly, Dius of Epheſus repreſented, with affecting energy, the vexations and oppreſſion which the Greek colonies of Aſia daily experienced from the rapacious cruelty of the Perſian ſatraps. The voice of the aſſembly approved his complaint, while they recollected, with indignation, the continual outrages of a people who had anciently invaded their country, inſulted their religion, burned their temples, and nouriſhed thoſe cruel animoſities which had long filled every part of Greece with ſedition and blood. Philip had private wrongs to urge againſt the Perſians; yet he inſiſted chiefly on their public injuries, and notorious enmity to the whole Grecian name, the honour of which could only be redeemed by a ſucceſsful expedition into Aſia. This expedition was determined with univerſal conſent; and the troops which they reſpectively raiſed, amounted to two hundred and twenty thouſand foot, and fifteen thouſand horſe, excluſive of the Macedonians; a prodigious force, of which the domeſtic diſſenſions of the Greeks had hitherto, perhaps, prevented them from forming an adequate notion. On no former occaſion had the ſeveral republics appeared ſo thoroughly united in one common cauſe; never had they ſhewn themſelves ſo ſenſible of their combined ſtrength; never had they teſtified ſuch general alacrity to take the field, or ſuch unlimited confidence in the abilities of their commander.

Philip, having diſpatched Parmenio with a body of troops to protect the Aſiatic colonies, was prevented from immediately following that commander, by an inſurrection of the Illyrian tribes. This unſeaſonable diverſion from the greateſt enterpriſe of his reign, was rendered more formidable by the domeſtic diſcord which ſhook the palace of Philip. A ſpirit leſs intolerant than that of Olympias, mother of Alexander, might have been juſtly provoked by the continual infidelities of her huſband, who, whether at home or abroad, in peace or in war, never ceaſed to augment the number of his wives or concubines. The generous mind of Alexander muſt naturally have eſpouſed the cauſe of his mother, although his own intereſt had not been deeply concerned in preventing Philip from continually giving him ſo many new rivals to the throne. The young prince defended the rights of Olympias and his own, with the impetuoſity natural to his character; at the nuptials of Philip with Caſſandra, an open rupture broke out between the imperious father and his haughty ſon; and the latter, concluding all thoſe to be his own friends who were enemies to the former, ſought refuge among the rebellious Illyrians, who were already in arms againſt their ſovereign. The dexterity of Philip extricated him from theſe difficulties. Having conquered the Illyrians, he ſoftened Alexander by aſſuring him that his illuſtrious merit, which was alike admired in Greece and Macedon, had not eſcaped the anxious vigilance of a parent, who, by giving him many rivals to the throne, had only afforded him an opportunity of ſurpaſſing them all in glory. Soothed by this condeſcenſion, Olympias and her ſon again appeared at court with the diſtinction due to their rank; and to announce and confirm this happy reconcilement with his family, Philip married his daughter Cleopatra to the king of Epirus, maternal uncle of Alexander; and celebrated the nuptials by a magnificent feſtival which laſted ſeveral days, during which the Greeks and Macedonians vied with each other in ſhewing their reſpect towards their common general and maſter.

Amidſt the tumultuous amuſements of this feſtivity, Philip appeared in public with unguarded confidence in the fidelity and attachment of his ſubjects: but proceeding one day from the palace to the theatre, he was ſtabbed to the heart by Pauſanias, a Macedonian. Whether the aſſaſſin was ſtimulated by private reſentment, or prompted by the ill-appeaſed rage of Olympias, or inſtigated to commit this atrocity by the Perſian ſatraps, is equally uncertain; but the laſt was aſſerted by Alexander, who alleged the aſſaſſination of his father among his reaſons for invading the Perſian empire.

Thus, in the year before Chriſt 336, fell Philip of Macedon, in the forty-ſeventh year of his age, and twenty-fourth of his reign; the firſt prince whoſe life and actions hiſtory hath deſcribed with ſuch regular accuracy and circumſtantial fulneſs, as render his adminiſtration a matter of inſtruction to ſucceeding ages. With a reach of foreſight and ſagacity peculiar to himſelf, he united all the prominent features of the Grecian character, valour, eloquence, addreſs, flexibility to vary his conduct without changing his purpoſe, the moſt extraordinary powers of application and perſeverance, of cool combination and ardent execution. Intercepted in the middle of his career by the hand of an aſſaſſin, he was prevented from undertaking the juſteſt and nobleſt deſign of his reign; a deſign which he had long meditated, and in which his near proſpect of ſucceſs promiſed to reward the labours and dangers of his toilſome life. Had not his days been ſhortened by a premature death, there is reaſon to believe that he might have ſubdued the Perſian empire; an enterpriſe more dazzling, though leſs difficult, than the exploits which he had already atchieved. Had that event taken place, Philip muſt have reached unbounded greatneſs; and, in the opinion of poſterity, would perhaps have ſurpaſſed the glory of all kings and conquerors, who either preceded or followed him. Yet, even on this ſuppoſition, there is not any man of probity, who, if he allows himſelf time for ſerious reflection, would purchaſe the imagined grandeur and proſperity of the king of Macedon, at the price of his artifices and crimes; and to a philoſopher, who conſidered either the means by which he had obtained his triumphs, or the probable conſequences of his dominion over Greece and Aſia, the buſy ambition of this mighty conqueror would appear but a deceitful ſcene of ſplendid miſery.

From the ACCESSION of ALEXANDER the GREAT, to the SUBJUGATION of GREECE by the ROMANS.

Though no regular ſucceſſion had been ſettled to the throne of Macedon, Alexander had not much to apprehend from the rivalſhip of his brothers, ſince Ptolemy, born of Arſinoë, and afterwards king of Egypt, was reputed to be the ſon of Lagus, to whom Philip had married Arſinoë, while ſhe was with child by himſelf; and Aridæus, the ſon of Philina, who, for ſix years after the death of Alexander, held a pageant royalty in the eaſt, by the terror of his brother's name, and through the diſcordant ambition of his lieutenants, poſſeſſed not vigour of mind to diſpute the ſucceſſion. Yet Alexander's title was conteſted by Amyntas, ſon of Perdiccas, the elder brother of Philip, in whoſe name the laſt-

mentioned prince originally adminiſtered the government, till the tender age of Amyntas being rejected by the Macedonians, Philip ſo little feared the revival of his claim, that he had given him his daughter Cyna in marriage. This new advantage ſtrengthened the pretenſions of Amyntas, which, it was probable, would be warmly ſupported by Attalus, the perſonal enemy of Olympias and her ſon, of whom the former had recently put to death his kinſwoman Cleopatra, with ſhocking circumſtances of cruelty. But Alexander privately took meaſures for cruſhing thoſe dangerous enemies; and, being acknowledged king of Macedon, he haſtened into Greece, to carry forward the projected expedition againſt Perſia.

Having entruſted to Antipater, one of the moſt reſpected of his father's counſellors, the affairs of Greece and Macedon, and committed to that general an army of above twenty thouſand men, to maintain domeſtic tranquillity in thoſe countries, he departed early in the ſpring of the year 334 before Chriſt, at the head of above five thouſand horſe, and ſomewhat more than thirty thouſand infantry. The armament landed without oppoſition on the Aſiatic coaſt; the Perſians, though long ago appriſed of the intended invaſion, having totally neglected the defence of their weſtern frontier. The cauſes of this negligence reſulted, in ſome degree perhaps, from the character of the prince, but ſtill more from that of the nation. The provinces had ceaſed to maintain any regular communication with the capital, or with each other. The ſtanding military force proved inſufficient to keep in awe the diſtant ſatraps or viceroys. The ties of a common religion or language, or the ſenſe of a public intereſt, had never united into one ſyſtem this diſcordant maſs of nations, which was ready to crumble into pieces at the touch of an invader. When to theſe unfavourable circumſtances we join the reflection, that under the younger Cyrus, twelve thouſand Greeks baffled the arms, and almoſt divided the empire, of Perſia, we ſhall not find much reaſon to admire the magnanimity of Alexander in undertaking his eaſtern expedition; unleſs we are at the ſame time appriſed, that Darius was deemed a brave and generous prince, beloved by his Perſian ſubjects, and aſſiſted by the valour of fifty thouſand Greek mercenaries.

While Alexander purſued his march along the coaſt, Arſites, Spithridates, Memnon, and other governors of the maritime provinces, aſſembled in the town of Zeleia, diſtant ſixty miles from the Helleſpont. Memnon the Rhodian was the ableſt general in the ſervice of Darius. He repreſented the danger of reſiſting the Macedonian infantry, who were ſuperior in number, and encouraged by the preſence of their king. That the invaders, fiery and impetuous, were now animated by hope, but would loſe courage on the firſt diſappointment. Deſtitute of magazines and reſources, their ſafety depended on ſudden victory. It was the intereſt of the Perſians, on the other hand, to protract the war, and above all to avoid a general engagement. They ought to trample down the corn with their numerous cavalry, deſtroy all other fruits of the ground, and deſolate the whole country, without ſparing the towns and villages. Some rejected this advice, as unbecoming the dignity of Perſia; Arſites, governor of Leſſer Phrygia, declared with indignation, that he would never permit the property of his ſubjects to be ravaged with impunity. Theſe ſentiments the more eaſily prevailed, becauſe many ſuſpected the motives of Memnon. It was determined, therefore, by this council of princes, to aſſemble their reſpective forces with all poſſible expedition, and to encamp on the eaſtern bank of the Granicus, a river which falls into the Propontis.

The ſcouts of Alexander having brought him intelligence of the enemy's deſign, he inſtantly determined to give them battle. The advanced guard, conſiſting of horſemen armed with pikes, and five hundred light infantry, commanded by Hegelochus, were detached to examine the fords of the Granicus, and to obſerve the diſpoſition of the enemy. They returned to acquaint Alexander, that the Perſians were advantageouſly poſted on the oppoſite bank, their horſe amounting to twenty thouſand, and their foreign mercenaries, drawn up on the ſlope of a riſing ground, behind the cavalry, ſcarcely leſs numerous. Notwithſtanding this intelligence, the young prince determined to paſs the river. Having advanced within ſight of the hoſtile ranks, his horſe ſpread to the right and left, the maſſy column of infantry opened, and the whole formed along the bank in order of battle. The phalanx, divided into eight ſections, compoſed the main body, which occupied the centre; the Macedonian cavalry formed the right wing; the Grecian, the left. While Alexander made theſe diſpoſitions, the cautious Parmenio approached, and remonſtrated againſt paſſing the Granicus in the face of a ſuperior enemy. The river, he obſerved, was deep and full of eddies; its banks abrupt and craggy; "it would be impoſſible, therefore, to march the Macedonians in front, and if they advanced in columns, their flanks muſt be expoſed naked and defenceleſs." Theſe prudential conſiderations prevailed not with Alexander, who declared that the Macedonians muſt act with equal promptitude and vigour, and perform ſomething worthy of the terror which they bore. Saying this, he mounted his horſe, aſſumed the command of the right wing, and committed the left to Parmenio.

Animated by the hope of ſoon cloſing with the enemy, he diſdained to employ military engines. He coolly and judiciouſly diſtributed his orders; a ſolemn ſilence enſued; the hoſtile armies beheld each other with reſentment or terror. This ſolemn pauſe was ſoon broken by the Macedonian trumpet, which, on a ſignal from Alexander, reſounded from every part of the line. His brother Ptolemy, as had been previouſly directed, rode forth at the head of a ſquadron of cuiraſſiers, followed by two bodies of light dragoons, and a battalion of infantry commanded by Amyntas. While theſe troops boldly entered the Granicus, Alexander advanced with the choſen cavalry on the right wing, followed by the archers and Agrians. In paſſing the river, both Alexander and Ptolemy led their troops obliquely down the current, to prevent, as much as poſſible, the Perſians from attacking them in flank, as they ſucceſſively reached the ſhore. The Perſian cavalry behaved with courage; the firſt ſquadron of the Macedonians were driven back into the ſtream. But Alexander, who animated the companions with his voice and arm, maintained his ground on the bank, and thought he had gained the battle, when he obtained an opportunity of fighting. In the equeſtrian engagement which followed, the Macedonians owed much to their ſkilful evolutions and diſcipline; ſtill more to their ſtrength and courage; and not a little to the excellence of their weapons, which far ſurpaſſed the brittle javelins of the enemy.

Meanwhile Parmenio croſſed the Granicus, at the head of the left wing, with equal ſucceſs, but unequal glory, becauſe Alexander had already proved, by his example, that the difficulty might be overcome, which would have otherwiſe appeared inſurmountable. The attention of the enemy was ſo deeply engaged by the ſucceſſive attacks of the cavalry, that they ſeem not to have made much oppoſition to the paſſage of the phalanx. But before this powerful body of infantry had croſſed the river, the Macedonian horſe had already reaped the faireſt honours of the field. Alexander animated them by his preſence, and, after performing all the duties of a great general, diſplayed ſuch perſonal acts of proweſs as will be more readily admired than believed by the modern reader. But in the cloſe combats of antiquity, the forces, when once thoroughly engaged, might be ſafely abandoned to the direction of their own reſentment and courage, while the commanders

diſplayed

diſplayed the peculiar accompliſhments to which they had been trained from their youth, in the more conſpicuous parts of the field. Alexander was eaſily diſtinguiſhed by the glittering of his armour, and the alacrity of his attendants. The braveſt of the Perſian nobles impatiently waited his approach. He darted into the midſt of them, and fought till he broke his ſpear. Having demanded a new weapon from Aretes, his maſter of horſe, Aretes ſhewed him his own ſpear, which was likewiſe broken. Demaratus the Corinthian ſupplied the king with a weapon. Thus armed, he rode up, and aſſaulted Mithridates, ſon-in-law of Darius, who exulted before the hoſtile ranks. While Alexander beat him to the ground, he was himſelf ſtruck by Rœſaces with a hatchet. His helmet ſaved his life. He pierced the breaſt of Rœſaces; but a new danger threatened him from the ſcimitar of Spithridates. The inſtrument of death already deſcended on his head, when Clitus cut off the arm of Spithridates, which fell with the graſped weapon.

The heroiſm of Alexander animated the valour of the Companions, and the enemy firſt fled where the king commanded in perſon. In the left wing, the Grecian cavalry muſt have behaved with diſtinguiſhed merit, ſince the Perſians had begun on every ſide to give way before the Macedonian infantry had completely paſſed the river. The ſtern aſpect of the phalanx, ſhining in ſteel and briſtling with ſpears, confirmed the victory. Above a thouſand Perſian horſe were ſlain in the purſuit. The foot, conſiſting chiefly of Greek mercenaries, ſtill continued in their firſt poſition, petrified by aſtoniſhment. While the phalanx attacked them in front, the victorious cavalry aſſailed their flanks. Surrounded on all ſides, they fell an eaſy prey; two thouſand ſurrendered priſoners, the reſt periſhed. The battle alſo proved fatal to moſt of the Perſian commanders. Arſites, the chief adviſer of the engagement, died in deſpair by his own hand. The generals Niphates and Petenes, Omares leader of the mercenaries, Spithridates ſatrap of Lydia, Mithrobuzanes governor of Cappadocia, Mithridates ſon-in-law of Darius, and Arbupales ſon of Artaxerxes, were numbered among the ſlain. Such illuſtrious names might lead us to ſuſpect, that the Perſians were ſtill more numerous than Arrian repreſents them; and it is ſcarcely to be believed, that in ſuch an engagement Alexander ſhould have loſt only eighty-five horſemen, and thirty light infantry. Of the former, twenty-five belonged to the royal band of Companions. By command of Alexander, their ſtatues were erected by Lyſippus, in the Macedonian city of Dium.

This important victory enabled Alexander to diſplay both his humanity and his prudence. He declared the parents and children of the deceaſed thenceforth exempted from every ſpecies of tribute. He carefully viſited the wounded, and heard with patience and commendation their boaſted exploits. The Perſian commanders were interred; and the Greeks, both officers and ſoldiers. The Grecian captives were condemned to work in the Thracian mines, as a puniſhment for bearing arms againſt the cauſe of their country. But even this ſeverity Alexander ſoftened by a very ſeaſonable compliment to the Athenians, whoſe city he preferred to be the repoſitory of his trophies and renown. Immediately after the battle, he ſent three hundred ſuits of Perſian armour, as dedications to Minerva in the citadel. This magnificent preſent was inſcribed with the following words: "Gained by Alexander, ſon of Philip, and the Greeks, from the barbarians of Aſia." The battle of the Granicus alſo opened to Alexander the conqueſt of Ionia, Caria, Phrygia; in a word, all the Aſiatic provinces weſt of the river Halys, which had anciently formed the powerful monarchy of the Lydians. Many of the walled towns ſurrendered at his approach. Sardis, the ſplendid capital of Crœſus, opened its gates, and once more obtained the privilege of being governed by its ancient laws, after enduring, above two centuries, the arbitrary yoke of Perſia. The Grecian cities on the coaſt were delivered from the burden of tribute, and the oppreſſion of garriſons; and, under the auſpices of a prince who reſpected their ancient glory in arts and in arms, reſumed the enjoyment of their hereditary freedom.

Miletus and Halicarnaſſus now alone retarded the progreſs of the conqueror. The latter place, commanded by Memnon the Rhodian, made a memorable defence. Alexander had ſcarcely ſat down before it, when the garriſon, conſiſting of Greeks and Perſians, ſallied forth, and maintained a deſperate conflict. Having repelled them with much difficulty, he undertook the laborious work of filling up a foſs thirty cubits broad, and fifteen deep, which the beſieged, with incredible diligence, had ſunk round their walls. This being effected, he advanced wooden towers, on which the Macedonians erected their battering engines, and prepared to aſſault the enemy on equal ground. But a nocturnal ſally impeded theſe preparations; a ſecond engagement was fought with ſtill greater fury than the firſt; three hundred Macedonians were wounded, while darkneſs prevented their uſual precaution in guarding their bodies. At length various breaches were made in the walls; and from the numbers who had periſhed, or been wounded, in repeated conflicts, Memnon and his colleagues perceived that much longer reſiſtance was impoſſible. In this emergency they diſplayed the ſame deciſive boldneſs which had appeared in every part of their defence. Having ſummoned the braveſt of their adherents, they, in the night-time, ſet fire to a wooden tower, which they had erected for defence againſt the ſhocks of the enemy's engines, and for protection to their arſenal and magazines, and eſcaped to two neighbouring caſtles of great ſtrength. About midnight, Alexander perceived the raging flames, and early the next day he reconnoitred the caſtles, and perceiving that they could not be taken without much loſs of time, he reluctantly demoliſhed Halicarnaſſus, in the year before Chriſt 334, that it might never thenceforth ſerve as a retreat to his enemies.

Before leaving Caria, Alexander committed the adminiſtration to Ada, the hereditary governeſs of that province. Ada was the ſiſter of Hidricus, on whoſe deceaſe ſhe was entitled to reign, both by the Carian laws and thoſe of Upper Aſia, where female ſucceſſion had been eſtabliſhed ever ſince the age of Semiramis. But the great king, with the uſual caprice of a deſpot, had rejected the claim of Ada, and ſeated a pretender on her tributary throne. The injured princeſs, however, ſtill maintained poſſeſſion of the fortified city Alinda. When Alexander appeared in Caria, Ada haſtened to meet him, and voluntarily ſurrendered to him her city. As the king always repaid favours with intereſt, he committed to her the government of the whole province, and left a body of three thouſand foot and two hundred horſe, to ſupport her authority. His meaſures in other reſpects were equally deciſive and prudent. The Perſian fleet, ſupplied by Egypt, Phœnicia, and the maritime provinces of Lower Aſia, four times out-numbered his own; yet, ſmall as it was, he determined to diſcharge it, declaring to his lieutenants, that by conquering the land, he ſhould render himſelf maſter of the ſea, ſince every harbour that ſurrendered to him muſt diminiſh the naval reſources of the enemy. Agreeably to this judicious plan, he purſued his journey through the ſouthern provinces of the Aſiatic peninſula, while Parmenio traverſed the central countries of Lydia and Phrygia. At the ſame time Cleander was diſpatched into Greece to raiſe new levies; and ſuch ſoldiers as had married ſhortly before the expedition, were ſent home to winter with their wives; a meaſure which extremely endeared Alexander to the army, and enſured the utmoſt alacrity of his European ſubjects in furniſhing ſupplies towards the enſuing campaign.

After the deciſive battle of the Granicus, he experienced little reſiſtance from the numerous forts and garriſons in Lower Aſia. The tributary princes and ſatraps readily ſubmitted to a milder and more magnanimous maſter; and the Grecian colonies on the coaſt eagerly eſpouſed the intereſt of a prince who, on all occaſions, avowed his partiality for their favourite inſtitutions. In every province or city which he conquered, he reſtored to the Aſiatics their hereditary laws; to the Greeks, their ancient democracy. Into whatever country he marched, he encouraged uſeful induſtry, and alleviated public burdens. His taſte and his piety alike prompted him to repair the ſacred and venerable remains of antiquity. He conſidered the barbarians, not as ſlaves, but as ſubjects; the Greeks, not as ſubjects, but allies; and both perceived in his government ſuch moderation and equity, as they had never experienced either from the deſpotiſm of Perſia, or from the domineering ambition of Athens and Sparta.

Having received the ſubmiſſion of Xanthus, Patara, Phaſelis, and above thirty other towns or ſea-ports in Lycia, Alexander, probably for the ſake of greater expedition, divided the corps under his immediate command. A conſiderable detachment traverſed the Lycian and Pamphylian mountains, while the king in perſon purſued the more dangerous track, leading along the ſea-coaſt from Phaſelis to Perga. Here Alexander was met by ambaſſadors from Aſpendus, the principal city and ſea-port of Pamphylia. The Aſpendians offered to ſurrender their city, but entreated that they might not be burdened with a garriſon. Alexander granted their requeſt, on condition of their raiſing fifty talents to pay his ſoldiers, and delivering to him the horſes which they reared as a tribute for Darius. The ambaſſadors accepted theſe terms; but their countrymen diſcovered no inclination to fulfil them. Alexander was informed of their treachery while he lay before Syllius, another ſtrong-hold of Pamphylia. He immediately marched towards Aſpendus, which was ſituate on a ſteep rock, waſhed by the Eurymedon. Several ſtreets, however, were built on the plain, ſurrounded only by a ſlight wall. At the approach of the Greeks, the inhabitants of the lower town aſcended the mountain. Alexander entered the place, and encamped within the walls. The Aſpendians, alarmed by the apprehenſion of a ſiege, intreated him to accept the former conditions. He commanded them to deliver the horſes, as agreed on; to pay, inſtead of fifty, an hundred talents; and to ſurrender their principal citizens, as ſecurities that they would thenceforth obey the governor ſet over them, and pay an annual tribute to Macedon.

After chaſtiſing the treachery of Aſpendus, Alexander determined to march into Phrygia, to join forces with Parmenio. New levies from Greece and Macedon were likewiſe ordered to aſſemble in that province; from which it was intended, early in the ſpring, to proceed eaſtward, and atchieve ſtill more important conqueſts. To reach the ſouthern frontier of Phrygia, Alexander was under a neceſſity of traverſing the inhoſpitable mountains of the warlike Piſidians. Amidſt thoſe rocks and faſtneſſes the Macedonians loſt ſeveral brave men; but the fury of the Piſidians was unable to check the progreſs of Alexander. The city of Gordium in Phrygia was appointed for the general rendezvous. This place is diſtant about ſeventy-five miles from the Euxine, and was famous, in remote antiquity, as the principal reſidence of the Phrygian kings, and the chief ſeat of their opulence and grandeur. Alexander had not long arrived in that place, when a deſire ſeized him of aſcending to the ancient palace of Gordius, to inſpect the famous knot on his chariot, which was believed to involve the fate of Aſia. See the article GORDIUS, p. 691 of this volume. Whether Alexander untied or cut the knot, is left uncertain by hiſtorians; but all agree that his army followed him with complete conviction that he had fulfilled the oracle.

The rapid progreſs of Alexander, and his continual exertions during that ſeaſon of the year when armies are little accuſtomed to keep the field, tends to heighten our ſurpriſe at the inactivity of Darius, who had long ſignaliſed his valour againſt the fierceſt nations of Aſia. But Darius, inſtead of oppoſing the invader in the field, hoped to deſtroy him by the arm of an aſſaſſin. Many traitors were ſuborned for this purpoſe, but none with greater proſpect of ſucceſs than Alexander, the ſon of Æropus. Yet this man had owed his life to the clemency of the ſon of Philip, when his brothers Heromenes and Arrabæus were condemned as acceſſary to the murder of that prince. He was numbered among the companions of Alexander, and had recently been entruſted with the command of the Theſſalian cavalry. The promiſe of ten thouſand talents, and of the kingdom of Macedon, obliterated his gratitude, and ſeduced his allegiance. But his treaſon eſcaped not the vigilance of Parmenio, who communicated the intelligence to his maſter, while encamped in the neighbourhood of Phaſelis. By the ſame faithful miniſter, the unworthy ſon of Æropus was ſeized, and committed to ſafe cuſtody.

Darius had now recourſe to arms; and his troops were aſſembled in the plains of Babylon. They conſiſted of an hundred thouſand Perſians, of whom thirty thouſand were cavalry. The Medes ſupplied almoſt half that number, and the Armenians almoſt as many as the Medes. The Barcani, the Hyrcanians, the inhabitants of the Caſpian ſhores, and nations more obſcure or more remote, ſent their due proportion of cavalry and infantry for this immenſe army, which, including thirty thouſand Greek mercenaries in the Perſian ſervice, is ſaid to have amounted to ſix hundred thouſand men. The magnificence of the Perſians had not diminiſhed ſince the days of Xerxes; neither had their military knowledge increaſed. Their muſter was taken by the ſame contrivance employed by that monarch. Ten thouſand men were ſeparated from the reſt, formed into a compact body, and ſurrounded by a paliſade. The whole army, paſſing ſucceſſively into this incloſure, were rather meaſured, than numbered, by their generals. Nothing could exceed the ſplendour that ſurrounded Darius; the trappings of his horſes, the rich materials and nice adjuſtment of his chariot, the profuſion of jewels which covered his royal mantle, veſt, and tiara. The dreſs, and even the armour, of his guards, were adorned with gold, ſilver, and precious ſtones. He was attended by his family, his treaſures, and his concubines, all eſcorted by numerous bands of horſe and foot.

While this army ſlowly advanced towards Lower Aſia, Alexander left Gordium, and marched to Ancyra, a city of Galatia. In that place he received an embaſſy from the Paphlagonians, who ſurrendered to him the ſovereignty of their province, but intreated that his army might not enter their borders. He granted their requeſt, and commanded them to obey Calas, ſatrap of Phrygia. Alexander then marched through Cappadocia; and Sabictas being appointed to the adminiſtration of that extenſive province, the army encamped at the diſtance of ſix miles from the Cilician frontier, at a place which, ſince the memorable expedition performed by Xenophon, retained the name of Cyrus's Camp. As Alexander advanced, the barbarians haſtily fled; and the puſillanimous Arſames, to whom the whole province was entruſted by Darius, prepared to plunder, and then abandon, his own capital of Tarſus. But he had only time to ſave his perſon. The rapidity of Alexander prevented the deſtruction of that city, where the inhabitants received him as their deliverer. Here Alexander was detained by a malady occaſioned by imprudently

prudently bathing, when heated, in the cold waters of the Cydnus, which flows through the city. Philip the Acarnanian was the only perſon who deſpaired not of his life. While this ſkilful phyſician adminiſtered a draught to his royal patient, a letter came from Parmenio, warning Alexander to beware of Philip, who had been bribed by Darius to poiſon him. Alexander took the potion, and gave Philip the letter; ſo that the phyſician read, while the king drank; a tranſaction which proved either his contempt of death, or his unſhaken confidence in his friends; but which, by the admiration of his contemporaries and poſterity, has been conſtrued into a proof of both. The ſickneſs of Alexander, however, interrupted not the operations of the army. Parmenio was diſpatched to ſeize the only paſs on mount Amanus, which divides Cilicia from Aſſyria. The king ſoon followed, having in one day's march reached Anchialos, an ancient city of vaſt extent, and ſurrounded with walls of prodigious thickneſs. The greateſt curioſity of Anchialos was the tomb of Sardanapalus, diſtinguiſhed by the ſtatue of that effeminate tyrant, in the attitude of clapping his hands; with the following inſcription: "Sardanapalus, ſon of Anacyndaraxas, built Anchialos and Tarſus in one day. As to you, ſtranger! eat, drink, and ſport, for other human things are not worth *this*;" alluding to the clap of his hands.

Having arrived at Mallos, an Argive colony at the eaſtern extremity of Cilicia, Alexander learned that Darius lay with his army in the extenſive plain of Sochos, diſtant only two days march from the Cilician frontier. The hoſtile armies were ſeparated by the mountains which divide Cilicia and Syria. Alexander haſtened to paſs the ſtraits called the Syrian Gates, proceeding ſouthwards along the bay of Iſſus, and encamped before the city Mariandrus. His delay in Cilicia, which had been occaſioned by ſickneſs, and by other unforeſeen events, was aſcribed to very different motives by Darius and his flatterers. That perfidious race, the eternal bane of kings, eaſily perſuaded the Perſian monarch that Alexander dreaded his approach. The haughty Darius was elated at the imagined fears of his adverſary; with impatience he longed to come to action; and not ſuſpecting that Alexander would traverſe the Syrian Gates, he haſtily determined to paſs the ſtraits of Amanus, in a different direction, in queſt of Alexander. This fatal meaſure was carried into inſtant execution, notwithſtanding the repreſentations of Amyntas the Macedonian, and of all Darius's Grecian adherents, who unanimouſly exhorted him to wait the enemy in his preſent advantageous poſition. In the language of antiquity, an irreſiſtible fate, which had determined that the Greeks ſhould conquer the Perſians, as the Perſians had the Medes, and the Medes the Aſſyrians, impelled Darius to his ruin. Having paſſed the defiles of Amanus, he directed his march ſouthward to the bay of Iſſus, and took the city of that name, which contained, under a feeble guard, the ſick and wounded Macedonians, who had not been able to follow the army in its expeditious march acroſs the mountains. The Perſians put theſe unhappy men to death with ſhocking circumſtances of cruelty, little thinking that Alexander was in their rear, preparing to avenge their fate.

That ſagacious prince, who could ſcarcely believe the folly of Darius, ſent a ſwift-ſailing veſſel to reconnoitre his motions. This veſſel ſpeedily returned to Alexander, with the agreeable news that his enemies were now in his hands. Having ſummoned an aſſembly, the king forgot none of thoſe topics of encouragement which the occaſion ſo naturally ſuggeſted, ſince the meaneſt Macedonian ſoldier could diſcern the injudicious movements of the Perſians, who had quitted a ſpacious plain, to entangle themſelves among intricate mountains, where their numerous cavalry, in which they chiefly excelled, could perform no eſſential ſervice. In preparing his troops for this important conteſt, Alexander commanded them firſt to refreſh their bodies; and immediately diſpatched ſome horſe and archers to clear the road to Iſſus. In the evening he followed with his whole army, and about midnight took poſſeſſion of the Syrian ſtraits. The ſoldiers were then allowed a ſhort repoſe, ſufficient guards being poſted on the ſurrounding eminences. At dawn of day the army was in motion, marching by its flank while the paſſage continued narrow; and new columns being ſucceſſively brought up, as the mountains gradually opened. Before reaching the river Pinarus, on the oppoſite bank of which the enemy were encamped, the Macedonians had formed in order of battle; Alexander leading the right wing, the left being committed to Parmenio. They continued to advance, till their right was flanked by a mountain, and their left by the ſea, from which Parmenio was ordered not to recede. Darius, being appriſed of the enemy's approach, detached a body of fifty thouſand cavalry and light infantry acroſs the Pinarus, that the remainder might have room to form without confuſion. His Greek mercenaries, amounting to thirty thouſand, he poſted directly oppoſite to the Macedonian phalanx; and theſe were flanked on both ſides by double that number of barbarians, alſo heavy armed. The nature of the ground admitted not more troops to be ranged in front; but as the mountain on Alexander's left ſloped inwards, Darius placed on that ſinuoſity twenty thouſand men, who could ſee the enemy's rear, though it appears not that they could approach or annoy it. Behind the firſt line the reſt of the barbarians were ranged, according to their various nations, in cloſe but unſerviceable ranks; Darius being every-where encumbered by the vaſtneſs of an army which he had not ſkill to direct.

When Darius perceived the Macedonians advancing, he commanded his men to maintain their poſt on the Pinarus, the bank of which was in ſome places high and ſteep; where the acceſs ſeemed eaſier, he gave orders to raiſe a rampart; precautions which ſhewed the enemy, that even before the battle began, the mind of the Perſian king was already conquered. Alexander, meanwhile, rode along the ranks, exhorting, by name, not only the commanders of the ſeveral brigades, but the tribunes and inferior officers, and even ſuch captains of the auxiliaries as were diſtinguiſhed by rank, or ennobled by merit. Perceiving it neceſſary to moderate the martial ardour that prevailed, he commanded his forces to advance with a regular and ſlow ſtep, leſt the phalanx ſhould fluctuate through too eager a contention. Their motion quickened when they proceeded within reach of the enemy's darts. Alexander, with thoſe around him, then ſprung into the river. Their impetuoſity aſtoniſhed the barbarians, who ſcarcely waited the firſt ſhock. But the Greek mercenaries perceiving that by the rapidity and ſucceſs of Alexander's aſſault, the Macedonians were bent towards the right wing, which was ſeparated from the centre, they ſeized the deciſive moment of ruſhing into the interval, where the phalanx was disjointed. A fierce engagement enſued; the Greeks eager to regain the honour of their name, the Macedonians ambitious to maintain the unſullied glory of the phalanx. This deſperate action proved fatal to Ptolemy the ſon of Seleucus, and other officers of diſtinction, to the number of an hundred and twenty. Meanwhile the Macedonian right wing, having repelled the enemy with great ſlaughter, wheeled to the left, and, animated by recent victory, finally prevailed againſt the Greek mercenaries. A body of Perſian horſe ſtill maintained the battle againſt the Theſſalian cavalry, and did not quit the field, till informed that Darius had betaken himſelf to flight.

The overthrow of the Perſians was now manifeſt on all ſides. Their cavalry and infantry ſuffered equally in the rout; for their horſemen were heavy-armed, and encumbered

encumbered by the narrowneſs of the roads, and their own terror. Ptolemy, the ſon of Lagus, ſays, that the purſuers filled up the ditches with dead bodies. The number of the ſlain was computed at an hundred and ten thouſand, among whom were many ſatraps and nobles. The great king himſelf diſcovered little magnanimity in defending the important objects at ſtake. His left wing was no ſooner repelled by Alexander, than he drove away in his chariot, accompanied by his courtiers. When the road grew rough and mountainous, he continued his flight on horſeback, leaving his ſhield, his mantle, and his bow, which were found by the Macedonians. Alexander, who had received a dangerous wound on the thigh, judged it improper to purſue him, till the Greek mercenaries were diſperſed, and hence the approach of night facilitated his eſcape. This memorable battle took place in the year before Chriſt 333.

The Perſian camp afforded abundant proof of Aſiatic luxury and opulence. It contained however in money but three thouſand talents; the magnificent treaſures, which accompanied the great king, being depoſited, previous to the battle, in the neighbouring city of Damaſcus. This ineſtimable booty was afterwards ſeized by order of Alexander, who found in the camp a booty more precious, the wife and daughters of Darius, his mother Syſigambis, and his infant ſon. In an age when priſoners of war were ſynonymous with ſlaves, Alexander behaved to his royal captives with the tenderneſs of a parent, blended with the reſpect of a ſon. In his chaſte attention to Statira, the faireſt beauty of the eaſt, his conduct forms a remarkable contraſt with that of Achilles, whom he equalled in valour, but far ſurpaſſed in humanity. Theſe illuſtrious princeſſes bore their own misfortunes with patience, but burſt into dreadful lamentations, when informed by an eunuch that he had ſeen the mantle of Darius in the hands of a Macedonian ſoldier. Alexander ſent to aſſure them that Darius yet lived; and next day viſited them in perſon, accompanied by Hepheſtion, the moſt affectionate of his friends. Syſigambis approached to proſtrate herſelf before the conqueror; but not knowing the king, as their dreſs was alike, ſhe turned to Hepheſtion. Hepheſtion ſuddenly ſtepping back, Syſigambis ſaw her miſtake, and was covered with confuſion. "You miſtook not, madam, (ſaid the king,) Hepheſtion is likewiſe Alexander."

The virtues of Alexander long continued to expand with his proſperity; but he was never more inimitably great, than after the battle of Iſſus. The city of Soli, in Cilicia, though inhabited by a Grecian colony, had diſcovered uncommon zeal in the cauſe of Darius. To puniſh this unnatural apoſtacy, Alexander demanded a heavy contribution from Soli; but, after the victory, he remitted this fine. Impelled by the ſame generous ſpirit, he releaſed the Athenian captives taken at the battle of the Granicus; a favour which he had ſternly refuſed at the opening of the campaign. In Damaſcus, ſeveral Grecian ambaſſadors were found among the captives. Alexander ordered them to be brought into his preſence. Theſſaliſcus and Dionyſodorus, the Thebans, he inſtantly declared free, obſerving, that the misfortunes of their country juſtly entitled them to apply to Darius, and to every prince from whom they might hope for relief. Iphicrates, the Athenian, he treated with the reſpect which appeared due both to his country and to his father. Euthycles, the Spartan, alone, he detained in cuſtody, becauſe Sparta ſullenly rejected the friendſhip of Macedon. But as his forgiveneſs ſtill increaſed with his power, he afterwards liberated Euthycles, with a princely condeſcenſion.

Darius, in his flight, was gradually joined by about four thouſand men, chiefly Greeks. Under this eſcort he departed haſtily from Sochos, purſued his march eaſtward, and croſſed the Euphrates at Thapſachus, eager to interpoſe that rapid ſtream between himſelf and the conqueror. Alexander's inclination to ſeize the perſon of his adverſary could not divert him from the judicious plan of war to which he immoveably adhered. In a council of his generals, he declared his opinion, that it would be highly imprudent to attempt the conqueſt of Babylon, until he had thoroughly ſubdued the maritime provinces; becauſe, ſhould he be carried with an unſeaſonable celerity into Upper Aſia, while the enemy commanded the ſea, the war might be removed to Europe, where the Lacedæmonians were open enemies, and the Athenians doubtful friends. Having therefore appointed governors of Cilicia and Cœlo-Syria, he directed his march ſouthward along the Phœnician coaſt. Aradus, Marathus, and Sidon, readily opened their gates. The Tyrians ſent a ſubmiſſive embaſſy of their moſt illuſtrious citizens, among whom was the ſon of Azelmicus, their king, who had himſelf embarked with Autophradates in the Perſian fleet. They humbly informed Alexander, that the community from which they came, was prepared to obey his commands. Having complimented the city and the ambaſſadors, he deſired them to acquaint their countrymen, that he intended ſhortly to enter Tyre, and to perform ſacrifice there to Hercules. Upon this intelligence, the Tyrians diſcovered equal firmneſs and reſolution. A ſecond embaſſy aſſured Alexander of their unalterable reſpect, but at the ſame time communicated to him their determination, that neither the Perſians nor the Macedonians ſhould ever enter their walls. This magnanimity appears remarkable in a nation of merchants, long unaccuſtomed to war. But the reſources of their wealth and commerce ſeemed to have elevated the courage, inſtead of ſoftening the character, of the Tyrians. Their city, which, in the language of the eaſt, was ſtyled the eldeſt daughter of Sidon, had long reigned queen of the ſea. It was ſeparated from the continent by a frith half a mile broad; its walls exceeded an hundred feet in height, and extended eighteen miles in circumference. The convenience of its ſituation, the capaciouſneſs of its harbour, and the ingenuity of its inhabitants, rendered it the commercial capital of the world.

Notwithſtanding the ſtrength of the city, Alexander determined on the ſiege of Tyre. The firſt operation which he directed, was to run a mole from the continent to the walls of that city, where the ſea was about three fathoms deep. The neceſſity of this meaſure aroſe from the imperfection of the battering engines of antiquity, which had little power, except at ſmall diſtances. On the ſide of the continent, the work was carried on with great alacrity; while the combined fleets effectually co-operated by ſea. The iſſue of theſe operations, in the year before Chriſt 332, decided the fate of Tyre. Amidſt repeated aſſaults, the beſiegers diſplayed the ardour of enthuſiaſm, the beſieged the fury of deſpair. From wooden towers, erected equal in height to the walls, the Greeks and Macedonians fought hand to hand with the enemy. By throwing ſpontoons acroſs, the braveſt ſometimes paſſed over, even to the battlements. In other parts, the Tyrians ſucceſsfully employed hooks and grappling-irons to remove the aſſailants. On thoſe who attempted ſcaling-ladders, they poured veſſels of burning ſand, which penetrated to the bone. The vigour of the attack was oppoſed by as vigorous a reſiſtance. The ſhock of the battering engines was deadened by green hides and coverlets of wool, and whenever an opening was effected, the braveſt combatants advanced to defend the breach. But time and fatigue, which exhauſted the vigour of the enemy, only confirmed the perſeverance of Alexander. While the engines aſſailed the walls, the fleet, divided into two ſquadrons, attacked the oppoſite harbours. A wide breach being effected, Alexander commanded the hulks, which carried the engines, to retire, and others, bearing the ſcaling-ladders, to advance, that his ſoldiers might enter the town over the ruins.

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The targeteers, headed by Admetus, firſt mounted the breach. This gallant commander was ſlain by a ſpear; but Alexander, who was preſent wherever danger called, immediately followed with the royal band of *Companions*. After their walls were taken, the townſmen ſtill rallied, and prepared for defence. The length of the ſiege, and ſtill more the cruelty of the Tyrians, who, having taken ſome Grecian veſſels from Sidon, butchered their crews on the top of their wall, and threw their bodies into the ſea, in ſight of the whole Macedonian army, provoked the indignation of Alexander, and exaſperated the fury of the ſoldiers. Eight thouſand Tyrians were ſlain; thirty thouſand were reduced to ſervitude. The principal magiſtrates, together with ſome Carthaginians who had come to worſhip the gods of their mother-country, took refuge in the temple of Tyrian Hercules. They were ſaved by the clemency of Alexander, who had loſt four hundred men in this memorable ſiege of ſeven months.

The conqueſt of Phœnicia was followed by the ſubmiſſion of the neighbouring province of Judæa. But in the road leading to Egypt, the progreſs of the conqueror was interrupted by the ſtrong city of Gaza, ſituate on a high hill, near the confines of the Arabian deſert. This place was held for Darius by the loyalty of Batis, an eunuch, who had prepared to reſiſt Alexander by hiring Arabian troops, and by providing copious magazines. The Macedonian engineers declared their opinion that Gaza was impregnable. But Alexander, unwilling to incur the diſgrace and danger of leaving a ſtrong fortreſs in his rear, commanded a rampart to be raiſed on the ſouth ſide of the wall, which ſeemed leaſt ſecure againſt an attack. His engines were ſcarcely erected, when the garriſon made a furious ſally, and ſet them on-fire. It required the preſence of the king to ſave the rampart, and to prevent the total defeat of the Macedonians. A wall of incredible height and breadth was run entirely round the city; the Macedonians raiſed their batteries; the miners were buſy at the foundation; breaches were effected; and, after repeated aſſaults, the city was taken by ſtorm. When their wall was undermined, and their gates in poſſeſſion of the enemy, the inhabitants ſtill fought deſperately, and, without loſing ground, periſhed to a man. Their wives and children were enſlaved; and Gaza, being repeopled from the neighbouring territory, ſerved as a place of arms to reſtrain the incurſions of the Arabs.

The obſtinate reſiſtance of Gaza, was balanced by the ready ſubmiſſion of Egypt. In ſeven days march, Alexander reached the maritime city of Peluſium, to which he had previouſly ſent the fleet, with an injunction carefully to examine the neighbouring coaſts, lakes, and rivers. His deciſive victory at Iſſus, the ſhameful flight of Darius, the recent ſubjugation of Syria and Phœnicia, together with the defenceleſs ſtate of Egypt, opened a ready paſſage to the wealthy capital of Memphis. There Alexander was received as ſovereign, and immediately afterwards acknowledged by the whole nation. Having placed ſufficient garriſons both in Memphis and Peluſium, he embarked his forces, and ſailed down the Nile to Canopus. Here he found abundant occupation for his policy, in a country where there was no opportunity for exerciſing his valour. The inſpection of the Mediterranean coaſt, of the Red Sea, of the Lake Marœotis, and of the various branches of the Nile, ſuggeſted the deſign of founding a city, which ſhould derive, from nature only, more permanent advantages than the favour of the greateſt princes can beſtow. Prompted by this idea, he not only fixed the ſituation, but traced the plan, of his intended capital, deſcribed the circuit of its walls, and aſſigned the ground for its ſquares, market-places, and temples. Such was the ſagacity of his choice, that within the ſpace of twenty years, Alexandria roſe to diſtinguiſhed eminence among the cities of the eaſt, and continued, through all ſubſequent ages of antiquity, the ſeat of correſpondence and commerce among the civilized nations of the earth. Having thus effected his purpoſe, he returned to Memphis, in order finally to ſettle the affairs of Egypt. The inhabitants of that country were reinſtated in the enjoyment of their ancient religion and laws. Two Egyptians were appointed to adminiſter the civil government; but the principal garriſons Alexander prudently entruſted to the command of his moſt confidential friends.

The Macedonians had now extended their arms over Anatolia, Carmania, Syria, and Egypt; countries which anciently formed the ſeat of arts and empire; but which, at preſent, compoſe the ſtrength and centre of the Turkiſh power. But Darius ſtill found reſources in his eaſtern provinces, Schirvan, Gilan, Koroſan, and the wide extent of territory between the Caſpian and the Jaxartes. Not only the ſubjects of the empire, but the independent tribes in thoſe remote regions, which in ancient and modern times have ever been the abode of courage and barbarity, rejoiced in an opportunity to ſignaliſe their reſtleſs valour. At the firſt ſummons they poured down into the fertile plains of Aſſyria, and increaſed the army of Darius far beyond any proportion of force which he had hitherto collected. Meanwhile Alexander, having received conſiderable reinforcements from Greece, Macedon, and Thrace, purſued his journey eaſtward from Phœnicia, paſſed the Euphrates at Thapſacus, boldly ſtemmed the rapid ſtream of the Tigris, and haſtened to meet the enemy in Aſſyria. Darius had pitched his camp on the level banks of the Bumadus, near Gaugamela; but the famous battle, which finally decided the empire of the eaſt, derived its name from Arbela, a town in the ſame province, ſixty miles diſtant from the former; but better known, and of eaſier pronunciation.

Alexander was informed by deſerters, of the ſtrength and numbers of the Perſian army. Some made it amount to a million of foot, forty thouſand horſe, two hundred armed chariots, and fifteen elephants from the eaſtern banks of the Indus. Others exaggerated with more method and probability, reducing the infantry to ſix hundred thouſand, and raiſing the cavalry to an hundred and forty-five thouſand. But all agreed that the preſent army was more numerous, and compoſed of more warlike nations, than that which had fought at Iſſus. Alexander received this information without teſtifying the ſmalleſt ſurpriſe. Having commanded a halt, he encamped four days, to give his troops reſt and refreſhment. His camp being fortified by a good intrenchment, he left in it the ſick and infirm, together with all the baggage; and, on the evening of the fourth day, he prepared to march againſt the enemy with the effective part of his army, which was ſaid to conſiſt of forty thouſand infantry, and ſeven thouſand horſe. Having aſcended a riſing ground, Alexander firſt beheld the barbarians, drawn up in battle array, and perhaps more ſkilfully marſhalled than he had reaſon to apprehend. Their advantageous appearance determined him to change his firſt reſolution. He ſummoned a council of war, and different meaſures being propoſed, he acceded to the opinion of Parmenio, who adviſed that the foot ſhould remain ſtationary, while a detachment of horſe explored the field of battle, and carefully examined the diſpoſition of the enemy. Alexander, whoſe conduct was equalled by his courage, and both ſurpaſſed by his activity, performed thoſe important duties in perſon, at the head of his royal cohort. Having returned with unexampled celerity, he again aſſembled his captains, and encouraged them by a ſhort ſpeech. Their ardour correſponded with his own; and the ſoldiers, confident of victory, were commanded to take reſt and refreſhment.

Meanwhile Darius, perceiving the enemy's approach, kept his men prepared for battle. Notwithſtanding the great length of the plain, he was obliged to contract

his front, and form in two lines, each of which was extremely deep. According to the Perſian cuſtom, the king occupied the centre of the firſt line, ſurrounded by the princes of the blood, and the great officers of his court, and defended by his horſe and foot guards, amounting to fifteen thouſand choſen men. Theſe ſplendid troops were flanked, on either ſide, by the Greek mercenaries, and other warlike battalions, carefully ſelected from the whole army. The right wing conſiſted of the Medes, Parthians, Hyrcanians, and Sacæ; the left was chiefly occupied by the Bactrians, Perſians, and Carduſians. The various nations compoſing this immenſe hoſt were differently armed, with ſwords, ſpears, clubs, and hatchets; while the horſe and foot of each diviſion were promiſcuouſly blended, rather from the reſult of accident than the ſagacity of deſign. The armed chariots fronted the firſt line, whoſe centre was farther defended by the elephants. Choſen ſquadrons of Scythian, Bactrian, and Cappadocian, cavalry advanced before either wing, prepared to bring on the action, or, after it began, to attack the enemy in flank and rear.

At day-break, Alexander diſpoſed his troops in a manner ſuggeſted by the ſuperior numbers and order of the enemy. His main body conſiſted of two heavy-armed phalanxes, each amounting to above ſixteen thouſand men. Of theſe, the greater part formed into one line; behind which, he placed the heavy-armed men, reinforced by his targeteers, with orders, that when the out-ſpreading wings of the enemy prepared to attack the flanks and rear of his firſt line, the ſecond ſhould immediately wheel to receive them. The cavalry and light infantry were ſo diſpoſed on the wings, that while one part reſiſted the ſhock of the Perſians in front, another, by only facing to the right or left, might take them in flank. Skilful archers and darters were poſted at proper intervals, as affording the beſt defence againſt the armed chariots. Alexander, with equal judgment, led the whole in an oblique direction towards the enemy's left; a manœuvre which enabled the Macedonians to avoid contending at once with ſuperior numbers. When his advanced battalions, notwithſtanding their nearneſs to the enemy, ſtill ſtretched towards the right, Darius alſo extended his left, till, fearing that by continuing this movement his men ſhould be drawn gradually off the plain, he commanded the Scythian ſquadrons to advance, and prevent the further extenſion of the Macedonian line. Alexander immediately detached a body of horſe to oppoſe them. An equeſtrian combat enſued, in which both parties were reinforced, and the barbarians finally repelled. The armed chariots then iſſued forth with impetuous violence; but their appearance only was formidable; for the precautions taken by Alexander rendered their aſſault harmleſs. Darius next moved his main body, but with ſo little order, that the horſe, mixed with the infantry, advanced, and left a vacuity in the line, which his generals wanted time or vigilance to ſupply. Alexander ſeized the favourable moment, and penetrated into the void with a wedge of ſquadrons. He was followed by the neareſt ſections of the phalanx, who ruſhed forward with loud ſhouts, as if they had already purſued the enemy. In this part of the field, the victory was not long doubtful; after a feeble reſiſtance, the barbarians gave way; and the Perſian king was foremoſt in the flight. The battle, however, was far from being decided. The more remote diviſions of the phalanx, upon receiving intelligence that the left wing, commanded by Parmenio, was in danger, had not immediately followed Alexander. A vacant ſpace was thus left in the Macedonian line, through which ſome ſquadrons of Perſian and Indian horſe penetrated with celerity, and advanced to the hoſtile camp. It was then that Alexander derived ſignal advantages from his judicious order of battle. The heavy-armed troops and targeteers, which he had ſkilfully poſted behind the phalanx, ſpeedily faced about, advanced with a rapid ſtep, and attacked the barbarian cavalry, already entangled among the baggage. The enemy, thus ſurpriſed, were ſoon deſtroyed, or put to flight. Meanwhile, the danger of his left wing recalled Alexander from the purſuit of Darius. In advancing againſt the enemy's right, he was met by the Parthian, Indian, and Perſian, horſe, who maintained a ſharp conflict. Sixty of the *Companions* fell; Hephæſtion, Cœnus, and Menidas, were wounded. Having at length diſſipated this cloud of cavalry, Alexander prepared to attack the foot in that wing. But the buſineſs was already effected, chiefly by the Theſſalian horſe; and nothing remained but to purſue the fugitives, and to render the victory as deciſive as poſſible.

According to the leaſt extravagant accounts, with the loſs of five hundred men Alexander deſtroyed forty thouſand of the barbarians, who never thenceforth aſſembled in ſufficient numbers to diſpute his dominion in the eaſt. The invaluable provinces of Babylonia, Suſiana, and Perſis, with their reſpective capitals of Babylon, Suſa, and Perſepolis, formed the prize of his ſkill and valour. Alexander had not yet attained the ſummit of his fortune, though he had reached the height of his renown. The burning of the royal palace of Perſepolis, to retaliate the ravages of Xerxes in Greece, afforded the firſt indication of his being overcome by too much proſperity. To ſpeak the moſt favourably of this tranſaction, an undiſtinguiſhing reſentment made him forget that he deſtroyed his own palace, not that of his adverſary.

Darius, after his defeat, eſcaped by a precipitate flight acroſs the Armenian mountains into Media. Being gradually joined by the ſcattered remnant of his army, amounting to ſeveral thouſand barbarians, and fifteen hundred Greek mercenaries, he purpoſed to have eſtabliſhed his court in Media, ſhould Alexander remain at Suſa or Babylon; but in caſe he were ſtill purſued by the conqueror, his reſolution was to proceed eaſtward, through Parthia and Hyrcania, into the valuable province of Bactria, laying waſte the intermediate country, that he might thus interpoſe a deſert between himſelf and the Macedonians. With this deſign he diſpatched to the Caſpian Gates the waggons conveying his women, and ſuch inſtruments of convenience or luxury as ſtill ſoftened his misfortunes; while he remained in perſon at Ecbatana with his army. Alexander, when appriſed of theſe meaſures, haſtened into Media. In his way he ſubdued the Paritacæ; and having reached within three days' march of the Median capital, was met by Biſthanes, the ſon of Ochus, Darius's predeceſſor. This prince informed him, that Darius had fled from thence five days before, attended by three thouſand horſemen and ſix thouſand foot. Animated by this intelligence, Alexander proceeded to Ecbatana, in which place he left his treaſures, and poſted a ſtrong garriſon. A detachment under Parmenio was ſent into Hyrcania; Cœnus, who had been left ſick at Suſa, was commanded to march with all convenient ſpeed into Parthia; while the king, with a choſen army, advanced in purſuit of Darius. Having paſſed the Caſpian Straits, he learned that Darius, being ſeized and bound, was carried priſoner in his chariot; that Beſſus, governor of Bactria, in whoſe province this treaſon had been committed, had aſſumed the imperial honours; and that all the barbarians (Artabazus only and his ſons excepted) already acknowledged the uſurper. Alexander further learned, that ſhould he purſue Beſſus and his aſſociates, it was their intention to make peace with him by delivering up Darius; but ſhould he ceaſe from the purſuit, that they had determined to collect forces, and to divide the eaſtern provinces of the empire.

After this information, Alexander marched all night, and next day till noon, without overtaking the enemy.

He therefore diſmounted five hundred of his cavalry; placed the braveſt of his foot, completely armed, on horſeback; and, commanding Attalus and Nicanor to purſue the great road which Beſſus had followed, he advanced in perſon with his choſen band by a nearer way. From the cloſe of the evening till day-break he had rode near fifty miles, when he firſt diſcovered the enemy flying in diſorder, and unarmed. Probably to facilitate their own eſcape, the ſatraps Satibarzanes and Barzaentes ſtabbed Darius, and then rode away with Beſſus, accompanied by ſix hundred horſe. Notwithſtanding the celerity of Alexander, the unhappy Darius expired, in the year before Chriſt 330, before the conqueror beheld him. Darius was the laſt king of the houſe of Hyſtaſpes, and the tenth in ſucceſſion to the monarchy of Cyrus. In this arduous criſis, Alexander diſplayed tender ſympathy with affliction, and juſt hatred of treaſon. He gave orders, that the body of Darius ſhould be removed with every mark of reſpect to Perſia, and ſolemnly interred in the royal mauſoleum. The children of the deceaſed prince were treated with thoſe diſtinctions which belonged to their birth; and Barcinè, his eldeſt daughter, was finally eſpouſed by Alexander. The pardon of the Greek mercenaries, who were admitted into the Macedonian ſervice, and the honourable reception of Artabazus and his ſons, well became the character of a prince, who could diſcern and reward the merit of his enemies. Alexander then purſued the murderers of Darius through the inhoſpitable territories of the Arii and Zarangæi. Having received the ſubmiſſion of Aornos and Bactria, he paſſed the rapid Oxus, and learned, on the eaſtern banks of this river, that Beſſus, who had betrayed his maſter, had been betrayed in his turn by Spitamenes. The former was ſurpriſed by the Macedonians, and treated with a barbarity better merited by his own crimes, than becoming the character of Alexander.

Spitamenes ſucceeded to his ambition and danger. In purſuit of this daring rebel, the reſentment of Alexander hurried him through the vaſt provinces of Aria, Bactria, Sogdiana, and other conſiderable diviſions of the ſouthern region of Tartary. The more northern and independent tribes of that immenſe country, whoſe paſtoral life formed an admirable preparation for war, ventured to take arms againſt a conqueror who hovered on the frontier of their plains, and whoſe camp tempted them with the proſpect of a rich plunder. This was called the Bactrian and Scythian war, which commenced in the year before Chriſt 329. The policy of Spitamenes inflamed their courage, and animated their hopes. Theſe rude nations, and this obſcure leader, proved the moſt dangerous enemies with whom Alexander had to contend. Sometimes they faced him in the field, and after obſtinately reſiſting, retreated ſkilfully. Though never vanquiſhed, Alexander obtained many dear-bought victories. The Scythians, on ſeveral occaſions, ſurpriſed his advanced parties, and interrupted his convoys. The abruptneſs of their attack was only equalled by the celerity of their retreat; their numbers, their courage, and their ſtratagems, all rendered them formidable. But the enlightened intrepidity, and inimitable diſcipline, of the Greeks and Macedonians, finally prevailed over barbarian craft and deſultory fury. Not content with repelling theſe ſavage foes, Alexander croſſed the Jaxartes, and defeated the Scythians on the northern bank of that river. This victory was ſufficient for his renown; and the urgency of his affairs ſoon recalled him from that inhoſpitable country. The provinces between the Caſpian and Jaxartes twice rebelled, and were twice reduced to ſubmiſſion. The barbarians fighting ſingly were ſucceſſively ſubdued; their braveſt troops were gradually intermixed in the Macedonian ranks; and Alexander, thus continually reinforced by new numbers, was enabled to overawe thoſe extenſive countries, by dividing his army into five formidable brigades, commanded by Hephæſtion, Ptolemy, Perdiccas, Cænus, and himſelf. Near Gabæ, a fortreſs of Sogdiana, Cænus attacked and defeated Spitamenes. The Sogdians and Bactrians deſerted their unfortunate general, and ſurrendered their arms to the conqueror. The Maſſagetæ and other Scythians, having plundered the camp of their allies, fled with Spitamenes to the deſert; but being appriſed that the Macedonians prepared to purſue them, they ſlew this active and daring chief, whoſe courage deſerved a better fate; and in hopes of making their own peace, ſent his head to the conqueror.

After the death of Spitamenes, in the year before Chriſt 327, the enemy feebly reſiſted Alexander in the open country; but in the provinces of Sogdiana and Parætacene, two fortreſſes long deemed impregnable, ſtill bade defiance to the invader. Into the former, Oxyartes the Bactrian had placed his wife and children. The rock was ſteep, rugged, and inacceſſible, and provided with corn for a long ſiege. The deep ſnow, by which it was ſurrounded, increaſed the difficulty of aſſaulting it, and ſupplied the garriſon with water. Alexander, upon ſummoning the Bactrians to ſurrender, was aſked in deriſion, Whether he had furniſhed himſelf with winged ſoldiers? This inſolence piqued his pride; and he determined to make himſelf maſter of the fortreſs, with whatever difficulties and dangers his undertaking might be attended. He propoſed a reward of twelve talents to the man who ſhould firſt mount the top of the rock on which it was ſituated. The ſecond and third were to be proportionably rewarded, and even the laſt of ten was to be gratified with the ſum of three hundred darics. The hopes of this recompence ſtimulated the moſt daring and ingenious. Three hundred volunteers ſoon offered, who were furniſhed with ropes made of the ſtrongeſt flax, and with iron pins uſed in pitching tents. They were likewiſe provided with ſmall pieces of linen, which, being joined together, might ſerve as a ſignal. Thus equipped, they proceeded at the cloſe of evening towards the moſt abrupt ſide of the rock, and therefore the moſt likely to be unguarded. By driving the iron pins into congealed ſnow, and then faſtening to them the ropes, they gradually hoiſted themſelves up the mountain. By this ſimple contrivance, thoſe daring adventurers gained the ſummit of the rock, which overlooked the fortreſs; and waving their ſignal in the morning, were diſcovered by Alexander. At this joyous ſight, he ſummoned the beſieged to ſurrender to his winged ſoldiers. The barbarians beheld and trembled; terror multiplied the number of their enemies; and Alexander was invited to take poſſeſſion of the fortreſs. This ſtrong and hitherto unconquerable caſtle contained Roxana, daughter of Oxyartes, who was deemed, next to the ſpouſe of Darius, the greateſt beauty in the eaſt. Alexander was captivated by her form and her accompliſhments; but even in the fervour of youth, and the intoxication of proſperity, his generous mind diſdained the cruel rights of a conqueror, as juſtified by the maxims and example of his age and country. With a moderation and ſelf-command, worthy the ſcholar of Ariſtotle, he declined the embraces of his captive, till his condeſcending affection raiſed her to the throne, chooſing rather to offend the prejudices of the Macedonians, than to tranſgreſs the laws of humanity.

In Bactria, Alexander learned that the Parætacæ were in arms, and that many of his moſt dangerous enemies had ſhut themſelves up in the fortreſs of Chorienes. Upon this intelligence, he haſtened to the Parætacene. The height of the rock, which was every-where ſteep and craggy, he found to be near three miles, and its circumference above ſeven. It was ſurrounded by a broad and deep ditch, at ſuch diſtance from the baſe as placed the garriſon beyond the reach of miſſile weapons. Alexander gave orders that the fir-trees, of extraordinary

traordinary height, which ſurrounded the mountain, ſhould be cut down, and formed into ladders, by means of which his men, deſcending the ditch, drove huge piles into the bottom. Theſe, being placed at proper diſtances, were covered with hurdles of ozier conſolidated with earth. In this occupation his whole army were employed by turns, night and day. The barbarians at firſt derided this ſeemingly uſeleſs labour; but the ſpeedy progreſs of the work, and dauntleſs intrepidity of the Macedonians, ſoon wrought upon Chorienes, from whom the fortreſs took its name; and by his timely yet dignified ſubmiſſion, he not only obtained pardon, but gained the friendſhip of Alexander, who again entruſted him with the command of his fortreſs, and the government of his province.

By ſuch memorable atchievements, in the year before Chriſt 327, Alexander had completely ſubdued the nations between the Caſpian ſea, the river Jaxartes, and the lofty chain of mountains, which ſupply the ſources of the Indus and the Ganges. In the conduct of this remote and dangerous war, the great abilities of the general were conſpicuouſly diſtinguiſhed. His example taught the troops to deſpiſe hunger, fatigue, cold, and danger; neither rugged mountains, nor deep and rapid rivers, nor wounds, nor ſickneſs, could interrupt his progreſs, or abate his activity: his courage expoſed him to difficulties, from which he was extricated by new efforts of intrepidity, which in any other commander would have paſſed for temerity. Amidſt the hardſhips of a military life, obſtinate ſieges, bloody battles, and dear-bought victories, he ſtill reſpected the rights of mankind, and practiſed the mild virtues of humanity. The conquered nations enjoyed their ancient laws and privileges; the rigours of deſpotiſm were ſoftened; arts and induſtry encouraged; and the proudeſt Macedonian governors compelled, by the authority and example of Alexander, to obſerve the rules of juſtice towards their meaneſt ſubjects. Thus aroſe good out of the evils of war. To bridle the fierce inhabitants of the Scythian plains, he founded cities and eſtabliſhed colonies on the banks of the Jaxartes and the Oxus; and thoſe deſtructive campaigns, uſually aſcribed to his reſtleſs activity and blind ambition, appeared to the diſcernment of this extraordinary man, not only eſſential to the ſecurity of the conqueſts which he had already made, but neceſſary preparations for more remote and ſplendid expeditions which he ſtill meditated, and which he performed with ſingular boldneſs and unexampled ſucceſs.

During the three firſt years that the invincible heroiſm of Alexander triumphed in the Eaſt, the vigilance of Antipater repreſſed rebellion and ſedition in Greece. The attention of that general being diverted, by a revolt in Thrace, from the affairs of the ſouthern provinces, the Lacedæmonians, inſtigated by the warlike ambition of their king Agis, ventured to exert that hoſtility againſt Macedon which they had long felt and encouraged. Reinforced by ſome communities of the Peloponneſus, the allied army amounted to twenty-two thouſand men. But Antipater, having checked the inſurrection in Thrace, haſtened into the Grecian peninſula with a ſuperior force, and defeated the confederates in a battle, which proved fatal to king Agis and three thouſand Peloponneſian troops. The vanquiſhed were allowed to ſend ambaſſadors to implore the clemency of Alexander. From that generous prince the rebellious republics received promiſe of pardon, on condition that they puniſhed with due ſeverity the authors of ſo unprovoked and ill-judged a revolt. From this period, till the death of Alexander, Greece enjoyed, above eight years, an unuſual degree of tranquillity and happineſs. Many improvements were made in the ſciences; and the Greeks, the Athenians particularly, ſtill rivalled the taſte and genius, though not the ſpirit and virtue, of their anceſtors. Yet even in this degenerate ſtate, when their patriotiſm and valour were extinct, and thoſe vanquiſhed republicans had neither liberties to love, nor country to defend, their martial honours were revived and brightened by an aſſociation with the renown of their conqueror. Under Alexander, their exploits, though directed to very different purpoſes, equalled, perhaps excelled, the boaſted trophies of Marathon and Platæa. By a ſingularity peculiar to their fortune, the æra of their political diſgrace coincides with the moſt ſplendid period of their military glory. Alexander was himſelf a Greek; his kingdom had been founded by a Grecian colony; and, to revenge the wrongs of his nation, he was now accompliſhing the moſt extraordinary enterpriſes recorded in the hiſtory of the world.

Without allowing his troops to become enervated by indulgence or diſſipation, the conqueror immediately prepared for his Indian expedition; in which enterpriſe he embarked early in the ſpring; Amyntas being appointed governor of Bactria, and entruſted with an army ſufficient to overawe the ſurrounding provinces. With the remainder of his forces Alexander haſtened ſouthwards, and in ten days traverſed the Paropamiſus, a link of that immenſe chain of mountains reaching from the coaſt of Cilicia to the ſea of China. The ſouthern belt, diſtinguiſhed in different portions of its length by the various names of Taurus, Paropamiſus, Imaus, and Edmodus, the Greeks confounded with the northern chain, of which Scythian Caucaſus is a part, and whoſe remote branches extend from the ſhores of the Euxine to the eaſtern extremity of Tartary. The intermediate ſpace, eſpecially towards the central country of Bukaria, is far more elevated than any other portion of the eaſtern continent; and the towering heights of Paropamiſus had hitherto defended the majeſty of India againſt the ravagers of the earth. But theſe defences were of no avail againſt the proweſs and perſeverance of Alexander. He conducted his army by the route of Candahar, well known to the caravans of Agra and Iſpahan. Having reached the banks of the Cophenes, he divided his forces; the greater part he retained under his own command; the remainder were detached, under Hephæſtion and Perdiccas, to clear the road to the Indus, and to make all neceſſary preparations for croſſing that river. After many ſevere conflicts, he ſubdued the Aſpii, Thryræi, Araſaci, and Aſſaceni; ſcoured the banks of the Choas and Cophenes; expelled the barbarians from their faſtneſſes; and drove them towards the northern mountains, which ſupply the ſources of the Oxus and the Indus.

The Macedonians now proceeded through the country between the Cophenes and the Indus. In this fertile diſtrict, the army, as it advanced towards Mount Meros and the celebrated Nyſa, was met by a deputation from the citizens of that place, which was ſaid to have been founded in the heroic age, by a Grecian colony eſtabliſhed by Bacchus at the eaſtern extremity of his conqueſts. Theſe wandering *Greeks*, might we indulge for a moment the ſuppoſition that the inhabitants of Nyſa were really entitled to that name, appear in this Indian ſoil to have degenerated from the courage, while they preſerved the policy, the eloquence, and the artifices, of their European brethren. Being immediately conducted to Alexander, who had juſt ſat down in his tent, covered with ſweat and duſt, and ſtill armed with his caſque and lance, they teſtified great horror at his aſpect, and threw themſelves proſtrate on the ground. The king having raiſed them from their humble poſture, and addreſſed them with his uſual condeſcenſion, they recovered ſufficient boldneſs to entreat him to ſpare their country for the ſake of Bacchus their founder. In proof of this allegation, they inſiſted on the name of Nyſa, derived from the nurſe of Bacchus, and on the abundance, not only of vines and laurel, but of ivy, which grew in *their* territory, and in no other part of India.

ſia. Alexander, willing to admit a pretenſion, which might atteſt to ſucceeding ages that he had carried his conqueſts ſtill farther than Bacchus, readily granted their requeſt. Having underſtood that Nyſa was governed by an ariſtocracy, he demanded, as hoſtages, an hundred of their principal citizens, and three hundred of their cavalry. This demand excited the ſmile of Acuphis, who headed the embaſſy. Alexander deſired him to explain his ſmile. He replied, "O king! you are welcome to three hundred of our horſemen, and more, ſhould you think proper. But can you believe it poſſible that any city ſhould long continue ſafe, after loſing an hundred of its moſt virtuous citizens? Inſtead of one hundred of the beſt, ſhould you be contented with two hundred of the worſt men in Nyſa, be aſſured that, at your return, you will find this country in as flouriſhing a condition as when you left it." Pleaſed with this remark, Alexander remitted his demand of the magiſtrates; he was accompanied by the cavalry, and by the ſon and nephew of Acuphis, who were ambitious to learn the art of war under ſuch an accompliſhed general. Theſe tranſactions, added to a march of ſixteen days from the Oxus to the Indus, allowed time for Hephæſtion and Perdiccas to make the preparations neceſſary for paſſing the latter river. On the eaſtern bank, Alexander received the ſubmiſſion of the neighbouring princes. Of theſe, Taxiles, who was the moſt conſiderable, brought, beſides other valuable preſents, the aſſiſtance of ſeven thouſand Indian horſe, and ſurrendered his capital, Taxila, the moſt wealthy and populous city between the Indus and Hydaſpes. But the king, who never allowed himſelf to be outdone in generoſity, reſtored and augmented the dominions of Taxiles.

The army croſſed the Indus about the time of the ſummer ſolſtice, at which ſeaſon the Indian rivers are ſwelled by heavy rains, as well as by the melted ſnow, which deſcends in torrents from the heights above. Truſting to this circumſtance, Porus, a powerful warlike prince, had encamped on the Shantrou, or Hydaſpes, with thirty thouſand foot, four thouſand horſe, three hundred armed chariots, and two hundred elephants. At a ſmall diſtance from the main body, his ſon commanded a detachment, conſiſting of the ſame kind of forces, well accoutred, and excellently diſciplined. Alexander perceived the difficulty of paſſing the Hydaſpes in the face of this formidable hoſt; a difficulty which muſt be greatly increaſed by the elephants, whoſe noiſe, and ſmell, and aſpect, were alike terrible to cavalry. He therefore collected proviſions on the oppoſite bank, and gave out that he purpoſed to delay paſſing the river till a more favourable ſeaſon. This artifice deluded not the cunning Indians; and Porus kept his poſt. The king next had recourſe to a different ſtratagem. Having poſted his cavalry in ſeparate detachments along the river, he commanded them to raiſe in the night loud ſhouts of war, and to fill the bank with agitation and tumult, as if they had determined at all hazards to effect their paſſage. The noiſe rouſed the enemy, and Porus conducted his elephants wherever the danger threatened. This ſcene was repeated ſeveral ſucceſſive nights; during which the barbarians were fatigued and haraſſed by the perpetual alarms. Porus now thought that nothing was intended by this vain noiſe, but merely to diſturb his repoſe; he therefore deſiſted from following the motions of the Macedonian cavalry, and remained quiet in his encampment, having ſtationed proper guards on the bank.

The falſe ſecurity of Porus enabled Alexander to effect his purpoſe. At the diſtance of about eighteen miles from his camp, and at the principal winding of the Hydaſpes, there ſtood a lofty rock, thickly covered with trees; and near it an iſland, likewiſe over-run with wood, and uninhabited. Such objects were favourable for concealment; they immediately ſuggeſted to Alexander the deſign of paſſing the river with a ſtrong detachment, which he reſolved to command in perſon, as he ſeldom left to others what he could himſelf perform; and, amidſt the variety of operations, always claimed the taſk of importance or danger. The Macedonian phalanx, the new levies from Paropamiſus, together with the Indian auxiliaries, and one diviſion of the cavalry, remained under the command of Craterus. They had orders to amuſe the enemy by making fires in the night, and by preparing openly during day-time to croſs the Hydaſpes. While theſe operations were carrying on by Craterus, Alexander, having collected hides and boats, marched up the country with a choice body of light infantry, the archers and Agrians, the Bactrian, Scythian, and Parthian, cavalry, together with a due proportion of heavy-armed troops. Having receded from the bank to a diſtance ſufficiently remote for eluding the obſervation of Porus, he advanced towards the rock and iſland; and in this ſecure poſt prepared to embark, after taking ſuch precautions againſt the viciſſitudes of war and fortune, as could be ſuggeſted only by the moſt profound military genius. The orders given to Craterus were preciſe: ſhould the Indians perceive, and endeavour to interrupt, the paſſage to the rock and iſland, he was in that caſe to haſten over with his cavalry; otherwiſe not to ſtir from his poſt, until he obſerved Porus advancing againſt Alexander, or flying from the field. At an equal diſtance between the bank, where Alexander meant to paſs, and the camp where Craterus lay, Attalus and Meleager were poſted with a powerful body of mercenaries, chiefly conſiſting of Indian mountaineers, who had been defeated by the Macedonians, and taken into the pay of the conqueror. To provide for any unforeſeen accident, ſentinels were placed along the bank, at convenient diſtances, to obſerve and repeat ſignals. Fortune favoured theſe judicious diſpoſitions. A violent tempeſt concealed from the enemy's out-guards the tumult of preparation; the claſh of armour and the voice of command being overpowered by the complicated craſh of rain and thunder. When the ſtorm ſomewhat abated, the horſe and infantry, in ſuch proportions as both the boats and hides could convey, paſſed over unperceived into the iſland. Alexander led the line, accompanied in his veſſel of thirty oars by Seleucus, Ptolemy, Perdiccas, and Lyſimachus; names deſtined to fill the ancient world, when their renown was no longer repreſſed by the irreſiſtible diffuſion of their maſter's glory.

The king firſt reached the oppoſite bank, in ſight of the enemy's out-guards, who haſtened to convey the unwelcome intelligence to Porus. The Macedonians meanwhile formed in order of battle; but before meeting their enemies, they had to ſtruggle with an unforeſeen difficulty. The coaſt on which they landed was the ſhore of another iſland, diſjoined from the continent by a river commonly fordable, but actually ſo much ſwelled by the rains of the preceding night, that the water reached the breaſts of the men, and the necks of the horſes. Having paſſed this dangerous ſtream with his cavalry and targeteers, Alexander advanced with all poſſible expedition, conſidering, that ſhould Porus offer battle, theſe forces would reſiſt till joined by the heavy infantry; but ſhould the Indians be ſtruck with panic at his unexpected paſſage of the Hydaſpes, the light-armed troops would thus arrive in time to attack and purſue them with advantage. Upon the firſt alarm, Porus detached his ſon to oppoſe the landing of the enemy, with two thouſand horſe and one hundred and twenty armed chariots. Theſe forces, arriving too late, were ſpeedily broken and put to flight by the equeſtrian archers; their leader and four hundred horſemen were ſlain; moſt of the chariots were taken; the ſlime of the river, which rendered them unſerviceable in the action, likewiſe interrupted their flight.

The news of this diſcomfiture deeply afflicted Porus; but

but his immediate danger allowed not time for reflection. Craterus viſibly prepared to paſs the river, and to attack him in front; his flanks were threatened with the ſhock of the Macedonian horſe, elated by recent victory. In this emergency the Indian king appears to have acted with equal prudence and firmneſs. Unable to oppoſe this complicated aſſault, he left part of the elephants under a ſmall guard, to frighten, rather than reſiſt, Craterus's cavalry; while, at the head of his whole army, he marched in perſon to meet the more formidable diviſion of the enemy, commanded by Alexander himſelf. His horſe amounted to four, and his foot to thirty, thouſand; but the part of his ſtrength in which he ſeemed moſt to confide, conſiſted of three hundred armed chariots, and two hundred elephants. With theſe forces, Porus advanced and halted in a plain ſufficiently dry and firm for his chariots to wheel. He then arranged his elephants at intervals of an hundred feet; in theſe intervals he placed his infantry, a little behind the line. By this order of battle, he expected to intimidate the enemy, ſince their horſe, he thought, would be deterred from advancing at ſight of the elephants; and their infantry, he imagined, would not venture to attack the Indians in front, while they muſt be themſelves expoſed to be attacked in flank, and trampled under foot by thoſe terrible animals. At either extremity of the line, the elephants bore huge wooden towers, filled with armed men. The cavalry formed the wings, covered in front with the armed chariots.

Alexander by this time appeared at the head of the royal cohort and equeſtrian archers. Perceiving that the enemy had already prepared for battle, he commanded a halt, until the heavy-armed troops ſhould join. This being effected, he allowed them time to reſt and recover ſtrength, carefully encircling them with the cavalry; and meanwhile examined, with his uſual diligence, the diſpoſition of the enemy. Upon obſerving their order of battle, he determined not to attack them in front, in order to avoid encountering the difficulties which Porus had artfully thrown in his way; and at once reſolved on an expedient, which, with ſuch troops as thoſe whom he commanded, could ſcarcely fail to prove deciſive. By intricate and ſkilful manœuvres, altogether unintelligible to the Indians, he moved imperceptibly towards their left wing with the flower of his cavalry. The remainder, conducted by Cænus, ſtretched towards the right, having orders to wheel at a given diſtance, that they might attack the Indians in the rear, ſhould they wait to receive the ſhock of Alexander's ſquadrons. A thouſand equeſtrian archers directed their rapid courſe towards the ſame wing; while the Macedonian foot remained firm in their poſts, waiting the event of this complicated aſſault, which appears to have been conducted with the moſt preciſe obſervance of time and diſtance.

The Indian horſe, haraſſed by the equeſtrian archers, and expoſed to the danger of being ſurrounded, were obliged to form into two diviſions, of which one prepared to reſiſt Alexander, and the other faced about to meet Cænus. But this evolution ſo much diſordered their ranks, that they were totally unable to ſtand the ſhock of the Macedonian cavalry, which ſurpaſſed them as much in ſtrength as it excelled them in diſcipline. The fugitives took refuge in the intervals that had been left between the elephants. Theſe fierce animals were then conducted againſt the enemy's horſe; which movement was no ſooner obſerved by the infantry, than they ſeaſonably advanced, and galled the aſſailants with darts and arrows. Wherever the elephants turned, the Macedonians opened their ranks, finding it dangerous to reſiſt them with a cloſe and deep phalanx. Meanwhile, the Indian cavalry rallied, and were repelled with greater loſs than before. They again ſought the ſame friendly retreat; but their flight was now intercepted, and themſelves almoſt entirely ſurrounded, by the Macedonian horſe; at the ſame time that the elephants, having moſtly loſt their riders, became furious through their wounds, and proved more formidable to friends than foes, becauſe the Macedonians, having the advantage of an open ground, could every where give way to their fury. Thus the battle was decided before the diviſion under Craterus had paſſed the river. But the arrival of theſe freſh troops rendered the purſuit peculiarly deſtructive. The unfortunate Porus loſt both his ſons, moſt of his captains, twenty thouſand foot, and three thouſand horſe. The elephants, ſpent with fatigue and loſs of blood, were ſlain or taken; even the armed chariots were hacked in pieces, having proved leſs formidable in reality than appearance, ſince little more than three hundred men periſhed on the ſide of Alexander.

The Indian king, having perſonally behaved with great gallantry in the action, was the laſt to leave the field. His flight being retarded by his wounds, he was overtaken by Taxiles, whom Alexander entruſted with the care of ſeizing him alive. But Porus, perceiving the approach of a man who was his ancient and inveterate enemy, turned his elephant, and prepared to renew the combat. Alexander then diſpatched to him Meroe, an Indian of diſtinction, who, he underſtood, had formerly lived with Porus in habits of friendſhip. By the entreaties of Meroe, the high-minded prince, ſpent with thirſt and fatigue, was admoniſhed to ſurrender; and being ſeaſonably refreſhed, was conducted to the preſence of the conqueror. Alexander admired his ſtature, and the majeſty of his perſon, being more than ſeven feet high; but he admired ſtill more his courage and magnanimity. Having aſked in what he could moſt oblige him? Porus anſwered, "By acting like a king." "That," ſaid Alexander with a ſmile, "I ſhould do for my own ſake; but what can I do for yours?" Porus replied, "All my wiſhes are contained in that one requeſt." None ever admired the virtues of an exalted mind more than Alexander. Struck with the firmneſs of Porus, he declared him reinſtated on his throne; acknowledged him for his ally and his friend; and having ſoon afterwards received the ſubmiſſion of the Glauſæ, who poſſeſſed thirty-ſeven cities on his eaſtern frontier, he added this populous province to the dominions of his new confederate. Immediately after the battle, he interred the ſlain, performed the accuſtomed ſacrifices, and exhibited gymnaſtic and equeſtrian games on the banks of the Hydaſpes. Before leaving that river, he founded the cities of Nicæa and Bucephalia; the former was ſo called to commemorate the victory gained near the place where it ſtood; the latter, ſituate on the oppoſite bank, was named in honour of his horſe Bucephalus, who died there, worn out by age and ſervice. A large diviſion of the army remained under the command of Craterus, to build and fortify theſe new cities.

In promoting the ſucceſs of Alexander, the fame of his generoſity conſpired with the power of his arms. Without encountering any memorable reſiſtance, he reduced the dominions of another prince named Porus, and the valuable country between the Aceſines and the Hydraotes. In effecting this conqueſt, the obſtacles of nature were the principal enemies he had to encounter. The river Aceſines, fifteen furlongs broad, is deep and rapid; many parts of its channel are filled with ſharp rocks, which, oppoſing the rapidity of the ſtream, occaſion boiling eddies and whirlpools, equally formidable and dangerous. Of the Macedonians, who attempted to paſs in boats, many drove againſt the rocks, and periſhed; but ſuch as employed hides, reached the oppoſite ſhore in ſafety. The Hydraotes is of the ſame breadth with the Aceſines, but flows with a gentle current. On its eaſtern bank, Alexander learned that the Cathaei, Malli, and other Indian tribes, prepared to reſiſt his progreſs. They had encamped near the city Sangala,

Sangala, two days march from the Hydraotes; and, inſtead of a breaſt-work, had fortified themſelves with a triple row of carriages. Alexander advanced with his cavalry; the Indians ſtirred not from their poſt, but, mounting their carriages, poured forth a ſhower of miſſile weapons. Alexander perceiving the cavalry unfit for ſuch an attack, immediately diſmounted, and conducted a battalion of foot againſt the enemy. The lines were attacked, where weakeſt; ſome paſſages were opened; the Macedonians ruſhed in; and the Indians, being ſucceſſively driven from their triple barrier, fled in precipitation to Sangala. Alexander inveſted the greateſt part of the town with a rampart and a ditch, and prepared to advance his engines to batter the walls, when he was informed by ſome deſerters, that the enemy reſolved, that very night, to force their way out with their whole ſtrength. Upon this intelligence he poſted Ptolemy, the ſon of Lagus, with three thouſand targeteers, one troop of archers, and all the Agrians, upon the ſpot where he conjectured that the beſieged would attempt to force their paſſage. At the firſt ſound of the trumpet, the other commanders were to advance to the aſſiſtance of Ptolemy. Alexander declared his intention to ſhare the common danger. By this judicious diſpoſition the enemy were ſucceſsfully repelled, after leaving five hundred men dead on the ſpot. Meanwhile king Porus arrived in the camp with five thouſand Indians, and a conſiderable number of elephants. Encouraged by this reinforcement, the Macedonians prepared to terminate the ſiege. The engines were got ready; the ſcaling ladders were fixed; ſeveral breaches were made; and the town was taken by a moſt ſanguinary aſſault. Seventeen thouſand Indians are ſaid to have periſhed in the ſack of Sangala; above ſeventy thouſand were taken priſoners; and Sangala was razed to the ground. Above an hundred Macedonians fell in the aſſault; twelve hundred were wounded.

The perſevering intrepidity of Alexander thus rendered him maſter of the valuable country, now called the Panjab, or Lahore, watered by the five great ſtreams whoſe confluence forms the Indus. The banks of the Hyphaſis, the moſt eaſtern of theſe rivers, which he actually intended to croſs, allured by the flattering deſcription of the adjoining territory, were adorned by twelve Macedonian altars, equal in height, and exceeding in bulk, the greateſt towers in that country. Theſe monuments, erected midway between Delhi and Lahore, marked the extremity of Alexander's empire; an empire thus limited, not by the difficulties of the country, or the oppoſition of enemies, but by the immoveable and unanimous reſolution of his European troops. Invincible by his enemies, Alexander ſubmitted to his friends, at whoſe deſire he ſet bounds to his trophies in the Eaſt. But his reſtleſs curioſity prepared new toils and dangers for the army and himſelf. Having returned to the cities of Nicæa and Bucephalia, he divided his forces, for the ſake of exploring more carefully the unknown regions of India. Two diviſions, reſpectively commanded by Craterus and Hephæſtion, (for Cænus was now dead,) had orders to march ſouthward along the oppoſite banks of the Hydaſpes; his brother Philip Aridæus, to whom he had committed the government of the provinces adjacent to Bactria, was recalled with the troops under his command; and the whole Macedonian conqueſts in India, including ſeven nations and above two thouſand cities, were ſubjected to the dominion of Porus. Meanwhile the Ionians, Cyprians, Phœnicians, and other maritime nations who followed the ſtandard of Alexander, built or collected above two thouſand veſſels, for ſailing down the Hydaſpes till its junction with the Indus, and thence along that majeſtic ſtream to the Indian ocean. On-board this fleet the king embarked in perſon with the third diviſion of his forces. His navigation employed ſeveral months, being frequently retarded by hoſtilities with the natives, particularly the warlike tribe of the Malli. Theſe barbarians were driven from the open country; their cities were ſucceſſively beſieged and taken; but, at the ſtorm of their capital, a ſcene was tranſacted, which betrayed temerity even in Alexander.

When their ſtreets were filled with the enemy, the Malli took refuge in the citadel. This fortreſs was defended by a thick wall, which being thrown around the declivity of a mountain, was extremely lofty without, but towards the inner circumference of an inconſiderable height. Alexander, provoked by the obſtinacy of the Indians, commanded the ſcaling-ladders to be applied with all poſſible expedition. But this ſervice being performed more tardily than uſual, the king, in his anger, ſnatched a ladder from one who carried it, and having faſtened it to the wall, mounted with rapidity in defiance of the enemy's weapons. The Macedonians, alarmed by the danger of their general, followed in ſuch numbers, that the ladder broke as Alexander reached the ſummit; the ſame accident happened to other ladders which were haſtily applied, and injudiciouſly crowded. For ſome moments, the king thus remained alone on the wall, conſpicuous by the brightneſs of his arms, and expoſed to thick vollies of hoſtile darts from the adjacent towers. His reſolution was more than daring. At one bound he ſprang into the place, and poſting himſelf at the wall, ſlew the chief of the Malli, and three others, who ventured to aſſault him. Meanwhile Abreas, Leonnatus, and Peuceſtas, the only Macedonians who had reached the top of the wall, imitated the example of Alexander. Abreas was wounded and fell; his companions, regardleſs of their own ſafety, defended the king, whoſe breaſt had been pierced with an arrow. They were ſoon covered with wounds, and Alexander ſeemed ready to expire. By this time, the Macedonians had burſt through the gates of the fortreſs. Their firſt concern was to carry off the king; the ſecond to revenge his death, for they believed the wound to be mortal. Some report, that the weapon was extracted by Critodemus of Cos; others, that no ſurgeon being near, Perdiccas, of the life-guards, opened the wound with his ſword, by his maſter's command. The great effuſion of blood threatened his immediate diſſolution; while the affectionate admiration in which he was held by the troops, appeared in their gloomy ſadneſs during his danger, and their immoderate joy at his recovery.

Alexander having accompliſhed his voyage to the Indian Ocean, determined to proceed towards Perſepolis, through the barren ſolitudes of Gedroſia. This arduous deſign was not inſpired by an idle ambition to ſurpaſs the exploits of Cyrus and Semiramis, whoſe armies were ſaid to have periſhed in thoſe deſerts, but was prompted by nobler views, while the firſt European fleet which navigated the Indian ſea, explored the Perſian gulph, and examined the mouths of the Euphrates and the Tigris. This important voyage was performed by Nearchus, whoſe enterpriſing genius was worthy of the maſter whom he ſerved. In diſcovering the ſea and the land, the fleet and army of Alexander mutually aſſiſted each other. By the example of the king, both were taught to deſpiſe toil and danger. On foot, and encumbered with his armour, he traverſed the tempeſtuous ſands of the Perſian coaſt, ſharing the hunger, thirſt, and fatigue, of the meaneſt ſoldier; nor was it till after a march of two months, diſtinguiſhed by unexampled hardſhips, that the army emerged into the cultivated province of Carmania. Here Alexander was met by a diviſion of his forces, which he had ſent under the command of Craterus through the territories of the Arii and Drangæ. Staſanor and Phrataphernes, governors of thoſe warlike nations, and of the more northern provinces of Parthia and Hyrcania, brought a ſeaſonable ſupply of camels and other beaſts of burthen, to relieve the exigencies of an army enfeebled by diſeaſe and exhauſted by fatigue. The waſte of men occaſioned by this deſtructive expedition, was repaired by the arrival of numerous battalions from Media, which rendered

the ſtandard of Alexander ſufficiently reſpectable. Cleander and Sitalus, the commanders of thoſe forces, were accuſed by the Medes of deſpoiling their temples, ranſacking their tombs, and committing other deteſtable deeds of avarice and cruelty. Their own ſoldiers confirmed the accuſation; and their crimes were puniſhed with death. This prompt juſtice gave immediate ſatisfaction, and ſerved as a ſalutary example in future; for, of all the rules of government practiſed by this illuſtrious conqueror, none had a ſtronger tendency to confirm his authority, and conſolidate his empire, than his vigilance to reſtrain the rapacity of his lieutenants, and to defend his ſubjects from oppreſſion.

Encouraged by the long abſence of Alexander, and the perils to which his adventurous character continually expoſed his life, Harpalus, Orſines, and Abulites, governors of Babylon, Perſepolis, and Suſa, began to deſpiſe his orders, and to act as independent princes, rather than accountable miniſters. In ſuch emergencies, Alexander knew by experience the advantage of celerity. He therefore divided his army. The greater part of the heavy-armed troops were entruſted to Hephæſtion, with orders to proceed along the ſea-coaſt, and to attend the motions of the fleet commanded by Nearchus. With the remainder, the king haſtened to Paſargadæ. Orſines was convicted of many enormous crimes, which were puniſhed with adequate ſeverity. Baryaxes, a Mede, who had aſſumed the royal tiara, ſuffered death; and his adherents ſhared his fate. The return of Alexander from the eaſt proved fatal to Abulites, and his ſon Oxathres, who had cruelly oppreſſed the wealthy province of Suſiana, and particularly the inhabitants of the capital. Harpalus, whoſe conduct at Babylon had proved equally flagitious, eſcaped with his treaſures to Athens; but by a decree of the people he was expelled from Attica, and this traitor to the moſt generous of princes ſeems himſelf to have been ſoon afterwards treacherouſly ſlain. The brave Peuceſtas, who had ſaved Alexander's life at the aſſault of the Mallian fortreſs, was promoted to the government of Perſia; and in this important command, he ſhewed that the virtues of ſound policy are not incompatible with the moſt adventurous valour.

In the central provinces of his new empire, which from time immemorial had been the ſeat of Aſiatic pomp and luxury, Alexander ſpent the laſt, and not the leaſt glorious, year of his reign. In the figurative language of antiquity, the world was ſilent in his preſence; and his only remaining care was to improve and conſolidate his conqueſts. For theſe important purpoſes, he carefully examined the courſe of the Eulæus, the Tigris, and the Euphrates; and the indefatigable induſtry of his troops was judiciouſly employed in removing the weirs, or dams, by which the timid ignorance of the Aſſyrian and Perſian kings had obſtructed the navigation of thoſe great rivers. But Alexander, having no reaſon to dread fleets of war, was anxious to invite thoſe of commerce. The harbours were repaired; arſenals were conſtructed; a baſon was formed at Babylon ſufficient to contain a thouſand gallies. By theſe and ſimilar improvements, he expected to facilitate internal intercourſe among his central provinces, while, by opening new channels of communication, he hoped to unite the productive countries of Egypt and the Eaſt with the moſt remote regions of the earth. But objects leſs remote demanded his more immediate attention. In the winter ſeaſon, the waters of the Euphrates, which produce the extraordinary fertility of Aſſyria, are confined within their lofty channel. But in the ſpring and ſummer, and eſpecially towards the ſummer ſolſtice, they overflow their banks, and, inſtead of watering, would totally deluge the adjacent territory, unleſs the ſuperfluous moiſture were diſcharged into the great canal of Pallacopas. This artificial river, formed, it is ſaid, by Nebuchadnezzar, commences an hundred miles below Babylon. It is not fed by ſprings, nor repleniſhed from mountain ſnows, but branching from the great trunk of the Euphrates, moderates its too impetuous ſtream by diverting it into the ſea, through lakes and marſhes, by various, and for the moſt part inviſible, outlets. But this uſeful contrivance finally defeated its own purpoſe. The Pallacopas gradually ſunk into its ſoft and oozy bed, and the Euphrates, which even originally was much higher than this canal, continued to flow into the new channel, even after the ſeaſon when its waters ceaſe to riſe by the melting of the Armenian ſnows. This diminution of the river rendered it inſufficient to water the fields of Aſſyria; an inconvenience ſeverely felt in a country almoſt unacquainted with rain. The governors of Babylon attempted unſucceſsfully to remedy the evil, whoſe magnitude juſtly excited the attention of Alexander. From war, the mother of neceſſity, he had learned to improve the benefits of peace. While preparations were making for more diſtant expeditions, he ſailed down the Euphrates; carefully examined the nature of the ſoil; and having diſcovered, at the diſtance of about four miles from the inoſculation of the Euphrates and Pallacopas, a hard and rocky bottom, he commanded a canal to be cut there, which ſerved to moderate the inundations at one ſeaſon, without too much draining the waters at another. Having performed this eſſential ſervice to Aſſyria, he followed the courſe of the Pallacopas, and ſurveyed the lakes and marſhes, which guard the Arabian frontiers. In the neighbourhood of his new canal, he obſerved a convenient ſituation for a city, which, being built and fortified, was peopled with thoſe ſuperannuated Greeks who ſeemed no longer capable of military ſervice, and with ſuch others of their countrymen as thought proper to ſettle in this fertile, though remote, country.

In returning from his expedition towards the banks of the Euphrates, Alexander was met by ambaſſadors from Carthage, Spain, and Italy, as well as from many inland countries of Aſia and Africa, extending from Mount Imaus to the ſouthern extremity of Æthiopia. It was then, ſays his hiſtorian, that he appeared maſter of the world, both to his followers and to himſelf; and, as if the known parts of it had been inſufficient to ſatisfy his ambition, he gave orders to cut timber in the Hyrcanian foreſt, with a deſign to build ſhips, and explore the undiſcovered ſhores of the Caſpian and Arabian ſeas. But neither theſe lofty deſigns, nor the glory of war, nor the pomp of royalty, which, of all princes, Alexander enjoyed in the greateſt ſplendour, could appeaſe his grief for the loſs of Hephæſtion, whoſe death is ſaid, by Arrian, to have haſtened his own. It certainly tinged his character with a deep melancholy, which rendered him ſuſceptible of ſuch impreſſions as the firmneſs of his mind would otherwiſe have reſiſted and repelled. His melancholy, however, appears to have been diverted by the voyage down the Euphrates, and by directing the improvements in the canal of Pallacopas. On returning to Babylon, he gave audience to ſome Grecian ambaſſadors; and having reviewed his troops and gallies, prepared to execute the enterpriſes which he had ſo long meditated. But his deſigns and his life were rapidly drawing to a cloſe. Whether to conquer his melancholy, or to triumph in the vivacities of the table, he indulged without moderation in that banqueting and feſtivity to which, after the fatigues of war, he had often ſhewn himſelf too much addicted; and a fever, occaſioned, or at leaſt increaſed, by an exceſſive abuſe of wine, the vice of his nation and of his family, put a period to his life on the 28th of May, in the thirty-third year of his age, the thirteenth of his reign, and in the year before Chriſt 324.—For various anecdotes of his life, &c. ſee the article ALEXANDER, vol. i. p. 269.

Such was the reign of Alexander, whoſe character, being

being unexampled and inimitable, can only be explained by relating his actions. He was of a low ſtature, and ſomewhat deformed; but the activity and elevation of his mind animated and ennobled his frame. By a life of continual labour, and by an early and habitual practice of the gymnaſtic exerciſes, he had hardened his body againſt the impreſſions of cold and heat, hunger and thirſt, and prepared his conſtitution for bearing ſuch exertions of ſtrength and activity, as have appeared incredible to the undiſciplined ſoftneſs of modern times. In generoſity and in proweſs, he rivalled the greateſt heroes of antiquity; and in the race of glory, having finally outſtripped all competitors, became ambitious to ſurpaſs himſelf. His ſuperior ſkill in war gave uninterrupted ſucceſs to his arms; and his natural humanity, enlightened by the philoſophy of Greece, taught him to improve his conqueſts to the beſt intereſts of mankind. In his extenſive dominions, he built, or founded, not leſs than ſeventy cities, the ſituation of which being choſen with conſummate wiſdom, tended to facilitate communication, to promote commerce, and to diffuſe civility, through the greateſt nations of the earth. It may be ſuſpected, indeed, that he miſtook the extent of human power, when in the courſe of one reign, he undertook to change the face of the world; and that he miſcalculated the ſtubbornneſs of ignorance, and the force of habit, when he attempted to enlighten barbariſm, to ſoften ſervitude, and to tranſplant the improvements of Greece into an African and Aſiatic ſoil. Yet let not the deſigns of Alexander be too haſtily accuſed of extravagance. Whoever ſeriouſly conſiders what he actually performed before his thirty-third year, will be cautious of determining what he might have accompliſhed, had he reached the ordinary term of human life. His reſources were peculiar to himſelf; and ſuch views, as well as actions, became him, as would have become none beſides. In the language of a philoſophical hiſtorian, "he ſeems to have been given to the world by a peculiar diſpenſation of Providence, being a man like to none other of the human kind." Arrian, p. 168.

From the part which his father Philip and himſelf acted in the affairs of Greece, his hiſtory has been tranſmitted through the impure channels of exaggerated flattery, or malignant envy. The innumerable fictions which diſgrace the works of his biographers, are contradicted by the moſt authentic accounts of his reign, and inconſiſtent with thoſe public tranſactions, which concurring authorities confirm. Hence the various and inconſiſtent ſketches which have been given of the life of this extraordinary man, whoſe genius might have renovated and improved the ſtate of the ancient world. But the ſpirit of improvement is tranſient, and demands perpetual efforts; the ſources of degeneracy are permanent and innumerable. It ſeems at firſt ſight to be regretted, that by neglecting to provide for the ſucceſſion to his throne, he left the field open for thoſe bloody wars among his chiefs, which long deſolated the earth. Yet the difficulties with which he was himſelf obliged to ſtruggle, might teach him the impoſſibility of ſecuring the empire for the infancy of his ſon Hercules, or the weakneſs of his brother Philip Aridæus. The principles of royal ſucceſſion were never aſcertained in Macedon; and the camp of a conqueror could not be expected to prove a ſchool of moderation or juſtice. The firſt meaſure adopted by his generals was, to ſet aſide the hereditary claim of Hercules, born of the daughter of Darius, and to appoint Aridæus, together with the fruit of Roxana's pregnancy, if ſhe brought forth a ſon, to be joint heirs of the monarchy; Roxana eventually brought forth a ſon, named after his father, Alexander; and who, with Philip Aridæus, were for a time ſtiled, "the two kings." Perdiccas, in virtue of poſſeſſing the ſignet of his deceaſed maſter, aſſumed the regency: the troops and provinces were divided among the other chiefs, who, having been formerly the equals, diſdained to remain the inferiors, of Perdiccas. Each general truſted in his ſword for an independent eſtabliſhment; new troops were raiſed and diſciplined; leagues formed and broken; and the children and relations of Alexander, who became ſucceſſively priſoners in different hands, all periſhed miſerably, without a chance of ſucceeding to the dignity and honours of their illuſtrious houſe. A council was indeed held, in which it was reſolved that the following arrangements ſhould take place, in the name of the two kings. Antipater had the government of the European provinces, as general of the army in that continent; Craterus was veſted with the title of protector in that part; and Perdiccas had the command of the houſehold troops, in the room of Hephæſtion. Ptolemy, the ſon of Lagus, had Egypt, Lybia, and that part of Arabia which borders upon Egypt. To Lyſimachus was appointed Thrace and the Cherſoneſe; Eumenes had Paphlagonia and Cappadocia; Antigonus had Phrygia the greater, Lycia, and Pamphylia; and Seleucus was appointed commander of the royal cavalry.

The news of Alexander's death, having reached Athens, excited a conſiderable tumult in that city, and occaſioned univerſal demonſtrations of joy. The people, who had reluctantly, but ſilently, endured the Macedonian yoke, immediately prepared for war; and a deputation was ſent to all the ſtates of Greece, inviting them to join in a confederacy againſt Macedonia. Demoſthenes, who amidſt his misfortunes always retained an ardent zeal for the intereſt and glory of his country, was at that time in exile at Megara. He, however, joined himſelf with the Athenian ambaſſadors, and, ſeconding their remonſtrances by the irreſiſtible force of his eloquence, engaged Argos, Corinth, and the other cities of Peloponneſus, to accede to the league, for reſtoring the liberty of Greece. The Athenians, ſtruck with admiration at ſo generous and diſintereſted a conduct, paſſed a decree, that Demoſthenes ſhould be recalled from baniſhment: a galley was therefore diſpatched for him at Ægina, and when he entered the Piræus, the magiſtrates and principal perſons of the city went to meet this illuſtrious exile, and received him with the greateſt demonſtrations of joy and affection.

Leoſthenes the Athenian general, having raiſed a powerful army of confederated Greeks, marched againſt Antipater. That general being appriſed of the commotions in Greece, diſpatched a courier to Craterus in Cilicia, to march to his aſſiſtance. Antipater had no ſooner joined the reinforcement under the command of Craterus than a general engagement took place near the city of Cranon, in Theſſaly, in which the confederated Greeks ſuffered a moſt ſignal defeat; inſomuch that after the battle, a deputation was ſent to Antipater, ſupplicating a general peace. That commander, however, replied, that he would only treat ſeparately with the ſeveral ſtates and cities of the confederacy. This anſwer being received, the negociation was ſuſpended; and the Greeks, diſbanding their troops, returned home. In a ſhort time, however, every ſtate was under the neceſſity of acceding to whatever terms Antipater thought fit to propoſe. Athens was the only city that was excepted from the peace. Phocion was ſent at the head of an embaſſy to conciliate the favour of Antipater, and to negociate with that general a treaty of amity. The terms, however, on which this favour was granted, were equally ſubverſive of Athenian honour and power: it was demanded that Demoſthenes and Hyperides ſhould be delivered up; and that Athens ſhould receive a Macedonian garriſon, and defray the expences of the war. To this humiliating condition was Athens reduced, which had formerly been the glory of the world! Upwards of twelve thouſand Athenians were diſfranchiſed; many of them, finding their ſituation inſupportable, went into Thrace, and ſettled there. Demoſthenes fled

to Celauria, a ſmall iſland oppoſite to Troezene. Antipater, informed that the orator had eluded his vengeance by flight, diſpatched Archias to ſeize him. But Demoſthenes, anticipating the deſigns of the tyrant, ſwallowed poiſon, and died at the foot of the altar, where he had taken ſanctuary.—See the article DEMOSTHENES, vol. v. p. 715.

Perdiccas, who had formerly married Nicea the daughter of Antipater, was now deſirous of eſpouſing Cleopatra, ſiſter of the late king. So near an alliance with the family of Alexander would, he expected, ſecure to him the throne. Antigonus penetrated the deſign of Perdiccas, and foreſaw that the ſucceſs of the regent would be his own deſtruction; he therefore paſſed over into Greece, and diſcloſed to Antipater the plan which Perdiccas had formed for obtaining the ſovereignty. Ptolemy alſo was engaged in their intereſt; and preparations were made for fruſtrating the projects of the regent. Ptolemy alſo remonſtrated with Perdiccas on the inequality of the arrangements which had been made in the empire, and was the firſt of the united chiefs who prepared to act the part of an independent ſovereign. Perdiccas deliberated whether he ſhould march into Egypt againſt Ptolemy, or firſt direct his courſe towards Macedonia againſt Antipater and Craterus. The preparations, however, which Ptolemy had made, ſeemed too alarming to admit of delay; it was therefore reſolved, that Perdiccas ſhould march againſt him, while Eumenes, with a numerous body of forces, guarded the Aſiatic provinces againſt Antipater and Craterus. After undergoing conſiderable fatigue, the regent paſſed the Egyptian frontier. Hoſtilities immediately commenced, and vigorous efforts were made by the royal troops againſt Ptolemy, but in vain. His forces were uniformly victorious; and the ſoldiers of Perdiccas, dejected by their ill ſucceſs, mutinied, and ſlew him in his tent.

During theſe tranſactions the other parties were not inactive: Antipater entered Cilicia with an intention of aſſiſting Ptolemy in Egypt; and Craterus was detached with the remainder of the forces againſt Eumenes, who was then in Cappadocia. The reputation of Craterus was ſo great among the Macedonians, that it was expected when he appeared in the field, all the national troops of the hoſtile army would immediately revolt, and arrange themſelves under his banner. Eumenes was aware of this danger, and in order to guard againſt it, kept his army ignorant of the enemy againſt whom they had to contend, and poſted the foreign troops oppoſite the Macedonian ſoldiers. By that cautious management the forces under the command of Eumenes never knew againſt whom they fought, until they beheld Craterus breathleſs on the field of battle. By his death, Philla, the daughter of Antipater, whom he had married, was left a widow. From a two-fold cauſe, therefore, Antipater muſt have been afflicted by the loſs of Craterus. He was not, however, doomed to mourn long; a palliative was ſoon brought him, which was the intelligence of the death of Perdiccas. In conſequence of that event, Antipater was ſolicited to join the army in Syria, in order to make new arrangements for the government of the empire. He therefore haſtened thither, and upon his arrival was unanimouſly elected protector of the two kings.

As ſoon as he was inveſted with this authority, he made a new partition of the provinces, in which all thoſe were excluded who had eſpouſed the intereſts of Perdiccas and Eumenes. Seleucus, who had great authority from the command of the cavalry, obtained the government of Babylon, and afterwards became the moſt powerful of all Alexander's ſucceſſors. Antipater having adjuſted matters in Aſia, ſent Antigonus with an army againſt Eumenes. His ſon Caſſander was alſo appointed to the command of a conſiderable body of troops, with ſecret injunctions to guard with a jealous eye the proceedings of Antigonus. Antipater then returned to Macedon; and Antigonus prepared to act with vigour againſt Eumenes. An engagement took place in the year before Chriſt 320, in which Eumenes, by the treachery of one of his ſoldiers, was completely defeated. This diſcomfiture, however, occaſioned one of the moſt extraordinary actions of his life: he returned unperceived to the field of battle, burned the bodies of his ſlain companions, and raiſed over their aſhes a mound of earth; then diſmiſſing the ſick and wounded of his army, he retired with ſix hundred men to the caſtle of Nora, a place of great ſtrength on the frontiers of Cappadocia, in which he ſuſtained a ſiege of twelve months, againſt the whole ſtrength of Antigonus's army, and at length forced it to retire.

Antipater did not long ſurvive his return from the Aſiatic expedition. Finding his end approaching he aſſembled the friends of his country, and gave them inſtructions relative to the courſe of conduct, which it was equally their duty and their intereſt to purſue. It was neceſſary to appoint a governor over Macedon, and a regent of the empire. He knew the importance of thoſe ſtations, and was ſenſible that his own glory and reputation, the intereſt of the ſtate, and the preſervation of the Macedonian empire, required a perſon to be nominated whoſe age and experience would command authority and reſpect. Under theſe impreſſions he bequeathed to Polyperchon, the eldeſt of all Alexander's captains at that time in Europe, the two high offices of protector and governor of Macedon. Thus did he ſacrifice the intereſt of his own family to that of the empire, and died full of years and glory.

Caſſander, who was at that time in Aſia, apprehending in what a perilous ſituation his father Antipater's death had left himſelf and the friends of the late adminiſtration in Macedon, was reſolved to attempt ſomething for their ſtability. He revolved in his mind the high character of Polyperchon; and his ambition prompted him to attempt the recovery of that oſtenſible command, of which he had been deprived by the will of his father. Under the pretence, therefore, of taking the diverſion of hunting, he engaged ſeveral of his friends to accompany him into the country, where he freely diſcloſed his mind. He expatiated on the dangers that threatened them from the junction of intereſts between Polyperchon and Olympias, who was the implacable enemy of Antipater's friends, and whom the protector had recalled from her retirement in Epirus, and had appointed her to ſuperintend the rearing of Alexander, the ſon of Roxana. His remonſtrances produced the deſired effect; and many avowed themſelves his partiſans, in whoſe confidence he reſolved to act independently and openly. But while Caſſander was thus employed in forming projects for ſubverting the government, Polyperchon was equally buſied in ſecuring his dominions in Greece. He had held a council of ſtate, in which it was determined that all the governors whom Antipater had appointed in the Grecian communities ſhould be diſplaced, and that democracy ſhould be every-where re-eſtabliſhed. The main object of this edict was to break the power of the late governors; but they were unwilling to ſubmit to a decree which evidently tended to their prejudice; they therefore inſtantly joined Caſſander. Athens being of more conſequence to the Macedonian government than any other Grecian ſtate, the eyes of all men were turned on Nicanor, governor of that city. Had Nicanor immediately complied with the injunctions of the edict, moſt of the other cities and ſtates in Greece would have followed his example: but he expreſſed a diffidence at firſt, and after ſome further procraſtination, ſeized and fortified himſelf in the Piræus.

The Athenians, provoked at the conduct of Nicanor, determined to rid themſelves of thoſe that ſeemed to oppoſe the views of the edict, and the renewal of their democratical form of government. For that purpoſe they

they turned their fury upon the patriotic Phocion, and ſome of the moſt diſtinguiſhed citizens of Athens. Theſe withdrew from the rage of the people, and threw themſelves on the mercy of Alexander the ſon of Polyperchon, who was entering Attica with a powerful army; and by this time alſo the protector himſelf was at hand, with Philip Aridæus, and another large body of forces. Alexander, having heard Phocion and the other fugitives relate their account of the matter, was convinced of their innocence, and in conſequence ſent letters of recommendation with them to his father; but ſcarcely were they arrived at the camp of the regent, when deputies came from Athens, accuſing them of high treaſon. Polyperchon was at a loſs for ſome time how he ſhould act: at length he gave orders that Dinarchus, a Corinthian, ſhould be put to death; while Phocion and his companions were bound and ſent back to Athens, with this meſſage, "That though he was convinced they had been traitors to their country, yet he left them to the judgment of the Athenians as a free people." Phocion, Nicocles, Aheudippus, Agamon, and Pythocles, were ſentenced to ſuffer death; and Demetrius Phalereus, Callimedon, Charicles, and others, were condemned in their abſence. Many perſons placed garlands on their heads, and demonſtrated all the ſatisfaction that could have been felt had the moſt powerful enemy of the public ſuffered a defeat. An intimate friend took the opportunity of aſking Phocion, as they were bearing him to execution, if he had any commands to his ſon. "Only," replied he very coolly, "that he forget the ill treatment which his father received from the Athenians." In a very ſhort time, however, the Athenians paſſed from one extreme to the other. They recollected the manifold ſervices Phocion had performed to the ſtate; and therefore decreed the victim of their rage a ſtatue of braſs; and paſſed an act that his accuſers ſhould be put to death. Agonides, who was the principal perſon in promoting the plot againſt him, was ſeized and executed; but Epicurus and Demophilus fled. Phocion's ſon, however, purſued and ſlew them.

While theſe things were tranſacting, Caſſander, in the year before Chriſt 318, ſeeing no hopes of ſucceſs to his undertaking in Europe, judged it neceſſary to try ſome other quarter. Antigonus, he was ſenſible, would be ready to oppoſe any perſon that ſhould poſſeſs the high office of protector of the kings; and to him, therefore, he determined to apply for aſſiſtance. Antigonus received Caſſander with the greateſt kindneſs. He hated Polyperchon; and to execute vengeance on him he ſaw would be the ſhorteſt road to the conqueſt of Aſia, which was the great object of his ambition. The forces which Caſſander obtained of Antigonus were not numerous, but to a man of his enterpriſing genius, any number of troops proved of conſiderable importance, and were capable of achieving great exploits. With theſe reinforcements he ſailed for Athens, and entering the Piræus with his ſmall fleet, was welcomed to Greece by Nicanor. Polyperchon, being informed of the arrival of Caſſander, inſtantly reſolved to bring him to action. For that purpoſe, he aſſembled a large army, and marched into Attica. But the numerous forces which he had collected, ſoon cauſing a ſcarcity of proviſions in that country, induced the protector to alter the meaſures he had firſt propoſed. Leaving troops, therefore, under the command of his ſon Alexander in Attica, who had orders to obſerve the motions of the enemy, and to keep them in check, he marched with the reſt of the army into Peloponneſus, where he knew his opponent had many friends. By this time Clytus, with the Macedonian fleet, had ſet ſail to meet that of Caſſander, which was under the conduct of Nicanor. A battle was fought, in which this latter commander was defeated, and obliged to betake himſelf to flight. The fleet of Nicanor, however, being refitted, and reinforced by light-armed troops ſent over in barks by Antigonus, he ſoon found himſelf in a condition to face the enemy again. Having, therefore, put to ſea, he came up with the ſquadron of Clytus, whilſt at anchor at Byzantium, and obtained a complete victory. After the engagement, Clytus himſelf was killed by an inſurrection of the ſoldiers of Lyſimachus.

In the mean time Polyperchon had entered Peloponneſus, where he determined that his commands ſhould be obeyed, and in caſe of refuſal, threatened to inflict the moſt ſevere puniſhment. This was carried into execution in moſt of the Grecian communities; and diſcord, ſlaughter, and confuſion, every-where prevailed. Thoſe who had borne any office under the adminiſtration of Antipater were put to death, or driven into baniſhment. Theſe tyrannical acts excited the juſt odium of the diſcerning part of the people, who began in conſequence to deſert his cauſe, while Caſſander was gathering freſh ſtrength in Attica. After Nicanor had defeated Clytus, he again reſumed the government of the Pyræus. Caſſander, ſenſible of the ſervices which Nicanor had rendered to his cauſe, ſhewed him the greateſt attention and reſpect. They were upon the moſt friendly terms, when ſome perſon acquainted Caſſander that the governor had a deſign to make himſelf ſovereign of Attica. It happened alſo that Nicanor had reluctantly complied with admitting Caſſander's troops into ſome of his forts; a circumſtance which, being united with that report, awakened further ſuſpicion. In order, therefore, to have Nicanor deſtroyed, Caſſander poſted ſome of his men in an empty houſe, and requeſted the governor to meet him there, under pretence of conſulting about matters of importance. Nicanor appeared, and when he entered, was attacked and murdered by the aſſaſſins. This ſanguinary meaſure rouſed the indignation of Nicanor's friends; but when they conſidered that Caſſander was already in poſſeſſion of the ſtrongeſt part of Athens, and that Polyperchon would not be able to grant them much aſſiſtance, they judged it proper to ſtifle their reſentment, and to ſubmit quietly to their fate. The engaging manners of Caſſander contributed not a little to reconcile the Athenians to his government; but his condeſcenſion favoured more of the crafty than of the generous prince.

Among the firſt acts of his power he appointed Demetrius Phalereus to be governor of Athens; he was a perſon of quality, a deſcendant of Conon, and poſſeſſed of extenſive property; but neither his birth nor his fortune was equal to his virtues. The moderation and mildneſs which he diſplayed towards the governed, procured him the eſteem and affection of the people. They were ſoon induced to repoſe the greateſt confidence in his wiſdom and integrity, and that confidence he did not betray. The power which he might eaſily have converted into tyranny, he employed in promoting the wealth and grandeur of the Athenians. He increaſed their public revenues; adorned the city with many ſtately and magnificent ſtructures, and reſtored ſuch as were likely to fall through the injuries of time. In every other reſpect he exhibited ſuch indiſputable marks of affection and regard for the people over whom he preſided, that they beſtowed on him very conſiderable honours.

The diſgrace which Polyperchon had in the mean time ſuſtained, made the protector ſenſible that he had no chance of aſſuming the ſovereignty of Greece. He was conſequently obliged to content himſelf with Macedon. Attica was now beyond the reach of his power; he therefore recalled Olympias from Epirus, to ſanction by her preſence the new adminiſtration of Macedon. Previouſly to her quitting Epirus, ſhe had written to Eumenes, then leading an army againſt Antigonus in Aſia, deſiring his advice, whether ſhe ſhould remain in her preſent ſituation, or return into Macedonia. Eumenes, who always had her intereſt at heart, informed her that

he conſidered it as moſt prudent to remain in Epirus until the war ſhould be terminated. He adviſed her not to be precipitate in her reſolutions, but that, in caſe ſhe did return to Macedon, ſhe ſhould forget the injuries which had been formerly done her, and endeavour to conciliate the affections and eſteem of the people. She diſregarded, however, this friendly admonition of Eumenes. When her preſence was announced at Pella, the Macedonian capital, great conſternation and diſmay ſeized the minds of the people. The friends of Antipater, however, by whoſe influence ſhe had been baniſhed Macedon, had ſtill greater reaſon to fear the conſequences of her return; but above all Philip Aridæus and his queen. Aridæus was the ſon of Philip by a concubine, and on that account he had from his infancy been ſubjected to the hatred and averſion of Olympias. It was not, therefore, to be ſuppoſed that either Philip, or Eurydice his wife, could look upon her with complacence. They, in fact, were ſenſible that they had every thing to fear from her power; and Eurydice, who had more diſcernment than her weak huſband, rightly conceived that Olympias would never be at reſt until ſhe had deprived Aridæus of the regal title and of his life. Under this impreſſion ſhe began to levy an army, and requeſted all who reſpected the brother of Alexander, their late royal maſter, or his queen, or who revered the virtues and memory of Antipater, to unite in the defence of the rights and liberties of their country. She then wrote to Caſſander, beſeeching him to haſten to her aſſiſtance, and required Polyperchon to meddle no more in the adminiſtration, but to deliver up all to Caſſander, to whom the king had deemed it expedient to delegate the regency of the empire.

Theſe haſty proceedings of Eurydice gave her enemies ſufficient pretext for levying an armed force to oppoſe her meaſures. Olympias, who had carefully obſerved her actions, perceived that it was neceſſary ſhe ſhould be on her guard againſt the deſigns of the queen. Her brother Æacidas had ſent a body of Epirots to eſcort her from his kingdom. Theſe ſhe added to ſome Macedonian troops, whom her intereſt and power induced to follow her fortunes; and ſtraightway marched her forces to join the army of Polyperchon, which was returning from his diſgraceful expedition into Peloponneſus. Having formed a junction, the whole united army moved to attack the troops of Eurydice, who, animated by the cruel treatment her family had received, boldly led forth her forces to oppoſe the enemy. It was not the intention of Eurydice to hazard a battle before the arrival of Caſſander; but her precipitation in raiſing forces had rouſed her adverſaries; and their motions being thus quickened, it was impoſſible to defer fighting until Caſſander could arrive with his army. The two contending parties therefore drew up their forces in order of battle; but the appearance of Olympias at the head of her troops, immediately terminated the diſpute. When the two armies approached each other, the ſoldiers that ſhould have fought for Eurydice, ſtruck with the awful mien of Olympias, who appeared to poſſeſs all the dignity and majeſty of the relict of Philip, and the mother of Alexander the Great, inſtantly deſerted their ſtandard, and ranged themſelves under the banners of the enemy. By this defection of the troops, Philip and Eurydice fell into the hands of Olympias, and ſhe cauſed them to be put to death.

Caſſander having received intelligence of this fatal event, haſtened into Macedonia. When he arrived at the ſtraits of Thermopylæ, he found the Theſſalians in arms ready to oppoſe his paſſage; but expedition being his main object, he collected all the ſhips he could procure in the neighbourhood, embarked his troops, and reached Macedon before Polyperchon and Olympias even ſuſpected his approach. Caſſander formed his army into two diviſions, one of which was under the command of Callas, while he himſelf took the lead of the other. Callas had orders to engage the troops of Polyperchon, which were now ſeparated from thoſe of Olympias; while Caſſander purſued the army of that vindictive woman. To ſupport her meaſures, ſhe went to all the principal cities, in company with her daughter Roxana, her grandſon Alexander, her niece Deidamia, Theſſalonica the ſiſter of Alexander, and many other perſons of high birth and intereſt. With this numerous retinue, ſhe was at length under the neceſſity of retiring to Pydna, a ſea-port and well-fortified town. Caſſander immediately inveſted the city by land, while his fleet blocked up the entrance of the harbour. The beſieged ſoon began to be in want of proviſions; but, encouraged by the preſence of many perſons of diſtinction, they obſtinately defended the place. Olympias alſo expected that her brother Æacidas would ſend ſuccours from Epirus to her aſſiſtance; which proved to be the caſe. Caſſander, therefore, knowing that the army of that prince was in motion, detached part of his troops to block up the paſſages into Epirus. This was done ſo completely, that the army of Æacidas was reduced to great difficulties, and not only deſpaired of the ſucceſs of the expedition, but of their own ſafety. Under theſe circumſtances the troops mutinied, and, depoſing Æacidas, ſubmitted to Caſſander. The only perſon on whom Olympias now relied, was Polyperchon; but the detachment under Callas employed his attention ſo much, that he was unable to afford her any aſſiſtance.

The condition of the beſieged was now become deplorable. The royal family fed on the fleſh of horſes, the ſoldiers on their dead companions, and the elephants on ſaw-duſt. Numbers were induced, by the miſeries which prevailed in the city, to deſert to Caſſander, who received with lenity all that had not been concerned in the late murders. Olympias again turned her thoughts towards Polyperchon. She wrote to him in the moſt preſſing terms to ſend a bark of fifty oars, to convey her away by night. Caſſander, however, having ſeized the meſſenger, diſappointed the deſign. Olympias, not finding the veſſel at the time ſhe expected, gave up all hopes, and ſurrendered herſelf and her army to Caſſander. This event determined the fate of Macedon. Pella, the capital, ſoon after ſubmitted to the conqueror; and Ariſtonus, who commanded a body of troops at Amphipolis, alſo yielded up that city. When Olympias ſubmitted, ſhe ſtipulated for her life: but the kindred of thoſe whoſe deaths ſhe had occaſioned, inſiſted that ſhe ſhould ſuffer. She was therefore accuſed before the aſſembly of the Macedonians, and without being heard in her defence, condemned to die. Caſſander adviſed her to make her eſcape to Athens, and offered her a ſhip of that purpoſe; but the relations for thoſe who had fallen ſacrifices to her cruelty, ſeized her, and cut her throat. Immediately after the death of Olympias, Roxana and her ſon Alexander were ſent to Amphipolis, where they were made priſoners; and orders were given that they ſhould be treated only as private perſons. Hercules the ſon of Alexander by Barcine, the only remaining branch of the royal family, was murdered by Polyperchon, at the inſtigation of Caſſander, about two years after; and thus the ſhort ſpace of eight years had ſcarcely elapſed ſince the death of Alexander, when not a ſingle branch of his houſe remained to enjoy a portion of that empire, which Philip and his ſon had acquired, at the expence of ſo much labour, blood, and treaſure.

While Caſſander employed his efforts to eſtabliſh himſelf on the throne of Macedon, and ſecure the ſovereignty of all Greece, Antigonus was concerting meaſures to rid himſelf of Eumenes, in Aſia. After being defeated by that general in moſt of the engagements that had taken place, Antigonus, in the year before Chriſt 315, determined to make one deſperate and deciſive effort. He reſolved to attack Eumenes in his winter quarters, when his troops were diſperſed all over

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the country. The battle was fought near the ſea; and Eumenes, having the ſuperiority in infantry, again routed the phalanx of Antigonus; but the enemy's horſe had the advantage through the treachery of Pauceſtes, commander of the cavalry, who had ſecretly gone over to Antigonus. In this ſituation of the army, Teutamus, who commanded the troops called the *argyraſpidæ*, or ſilver-ſhields, and who had long inclined to Antigonus, took the opportunity of delivering up Eumenes, who was ſeized, and his hands bound behind him. He was thus ſhamefully conducted to the camp of Antigonus, who kept him a few days in confinement, and then commanded him to be executed.

The late ſucceſs of Antigonus opened a wide field for ambition, and he formed the deſign of making himſelf maſter of all Aſia. Many of the commanders, who lately oppoſed him, after the proſperous event of this battle, haſtened to make their ſubmiſſion, and to proffer their aid and ſupport in his undertaking. He readily accepted their acknowledgments of his ſuperiority, but determined to leſſen their number. He ſacrificed ſeveral of the inferior governors to his ambition; and, had not Seleucus ſtill ſtood in the way, it is probable that his reſentment and ſuſpicions would have been allayed. Seleucus had performed many ſignal ſervices to Antigonus, who, nevertheleſs, demanded an account of the revenues of his province, which diſcovered that he conſidered him as a dependent. Seleucus, aſtoniſhed at this requeſt, replied that he did not conſider he was any more obliged to give an account, than Antigonus had to demand it; ſince the province of Babylon had been conferred on him by the Macedonians, as the reward of his ſervices. Antigonus perſiſted in his right to have ſatisfaction, and began to threaten. Seleucus, therefore, conſidering the great power of his enemy, and the little proſpect there was that he ſhould be able to reſiſt him, got together a body of fifty horſe, and, quitting Babylon in the night, fled into Egypt.

That they might be more ſecure in their poſſeſſions, Ptolemy, Lyſimachus, Caſſander, and Seleucus, now entered into a confederacy, whereby they were bound to maintain the rights of each other. Antigonus being informed of this meaſure, determined to proceed immediately to hoſtilities, and to obtain, if poſſible, the provinces of Syria and Phœnicia, which were at that time in the poſſeſſion of Ptolemy. Accordingly he marched an army with the greateſt expedition; and before the enemy were aware of his approach, moſt of thoſe provinces ſubmitted to him. Finding that he could not carry on a ſucceſsful war againſt ſo many powerful princes, unleſs he could procure a fleet to co-operate with his land-forces, he ordered vaſt quantities of timber to be cut upon mount Libanus, and in other parts of his dominions; and before the end of the year he was ready to put to ſea with five hundred ſail. His firſt expedition was directed againſt Tyre, which, after a ſiege of four months, opened its gates to him. But when Antigonus was informed, that while he was thus employed in Phœnicia, Caſſander had led his forces towards the coaſt of Aſia Minor, and had made himſelf maſter of ſeveral provinces, he marched to oppoſe him. In a ſhort time, he encamped in the neighbourhood of Caſſander; but that commander, ſenſible of the inferiority of his troops in point of numbers, wiſely declined an engagement.

During the time of the expedition of Antigonus into Aſia Minor, Ptolemy Lagus entered Syria with a numerous army; but he had advanced no farther than Gaza, when Demetrius, who had been left to command the troops in thoſe parts during the abſence of his father, offered him battle. Ptolemy did not decline the engagement, but attacked and defeated the army of the enemy. Demetrius, finding it impoſſible to reſiſt the victorious forces, abandoned Phœnicia, Paleſtine, and Syria, to the conqueror. Ptolemy, flushed with his ſucceſs, diſpatched Cilles, one of his generals, with a very conſiderable army, to expel Demetrius from Upper Syria, where he, with the remains of his forces, had retired. Demetrius, having received intelligence that Cilles was marching againſt him, determined to fall upon him unawares; and he executed his deſign with ſuch celerity, that he totally defeated the enemy, and took ſeven thouſand priſoners, in the number of whom was Cilles himſelf. When Antigonus, who was in Phrygia, received the news of this victory, he joined his troops to thoſe of his ſon, and, obliging Ptolemy to retire into Egypt, the provinces of Syria, Phœnicia, and Judea, again became ſubject to their former maſter. The defeat of Demetrius, however, at Gaza, enabled Ptolemy to aſſiſt Seleucus in his claims on Babylon. Accordingly Seleucus was furniſhed with a ſmall body of troops, with which he marched to attempt the recovery of his kingdom. The army he commanded did not amount to more than thirteen hundred men, and he had to conduct them through that extenſive territory which lies between Phœnicia and Babylon, many diſtricts of which were in the intereſt of Antigonus; but he accompliſhed his purpoſe, and was reſtored to a command to which his abilities and virtues juſtly entitled him. The attachment of his people, together with the vigour of his own mind, ſecured to him the province of Babylon, and ſome neighbouring ſtates.

Antigonus and Demetrius were now become the enemies of the whole Macedonian government. In Europe the diſmemberment of the empire was dreaded; and in Aſia and Africa, they expected a ſovereign that would be equally arbitrary and deſpotic. All became alarmed, and were ready to liſten to any propoſals which might ſeem calculated to afford them relief. A general confederacy was, therefore, formed againſt Antigonus and Demetrius; but the activity and reſources of theſe generals appeared inexhauſtible. In Greece the Ætolians and Epirots, excited and ſupported by them, had taken the field againſt Caſſander. Ptolemy had carried his arms into Aſia Minor, and ſent his fleets to reduce the Ægean iſlands that leagued with Antigonus; to both theſe objects Antigonus was obliged to attend; whilſt, on the other hand, Lyſimachus and Caſſander attacked the provinces on the banks of the Helleſpont and Boſphorus. There alſo it was neceſſary for Antigonus and Demetrius to ſend forces: in ſhort, they were beſet with foes on every hand, but they, nevertheleſs, maintained their cauſe with aſtoniſhing vigour and ſucceſs.

While Athens was enjoying a ſtate of tranquillity under the adminiſtration of the deputy of Caſſander, Demetrius, in the year before Chriſt 306, appeared off the Piræus, with a fleet of two hundred and fifty ſhips. The Athenians were therefore obliged to ſubmit to this powerful armament, and Demetrius Phalereus, the governor, was expelled Athens. From Athens, Demetrius ſailed to Rhodes, and formed the ſiege of that iſland. Caſſander, in the mean while, endeavoured to regain poſſeſſion of the Piræus; but Demetrius returning, compelled him to raiſe the ſiege of Athens, and in a very little time ſtripped him of all his conqueſts. The reſult of this triumph was the ſubmiſſion of the greater part of Greece to the arms of Demetrius, and he was appointed commander in chief of all the Grecian forces. All the cities from the ſtraits of Thermopylæ to the iſthmus of Corinth yielded to his prevailing power; and alſo many cities in Peloponneſus. Caſſander, now fearing leſt Demetrius would purſue him into Macedon, ſent deputies to Antigonus in Syria, to conclude a treaty of peace; but Antigonus required the unconditional ſubmiſſion of Caſſander, and the renunciation of all claim, on his part, to the throne of Macedon. The confederacy was therefore renewed againſt Antigonus and Demetrius, and was compoſed of the Macedonians, the Thracians, and the Egyptians, with

ſeveral inferior ſtates. Lyſimachus had the command of the Thracians and a detachment of Macedonians; and Seleucus headed the Egyptians. Lyſimachus haſtened into Aſia and Phrygia. He offered terms of accommodation to Antigonus; but that prince was too confident of ſucceſs to liſten to his propoſals.

As ſoon as the ſeaſon permitted, Demetrius tranſported his forces out of Greece into Aſia, to join the troops of his father; and, in the year before Chriſt 301, the two grand armies faced each other, and were ready for an engagement in Phrygia. The forces of Antigonus amounted to ſeventy thouſand foot, ten thouſand horſe, and ſeventy-five elephants: thoſe of the confederates to ſixty-four thouſand foot, ten thouſand five hundred horſe, four hundred elephants, and a hundred and twenty chariots of war. Both armies were anxious about the event of a battle, by which the fate of kingdoms was to be decided. Antigonus, who had never before been ſeen to ſhrink from danger, betrayed evident marks of fear on this occaſion. Coming out of his tent on the morning of the battle, he ſtumbled and fell, which he ſuperſtitiouſly conſidered as a proof that his army would be defeated. This memorable and eventful engagement was fought near to Ipſus, a ſmall town in the province of Phrygia. Both armies fought with diſtinguiſhed bravery; and victory was long and ably conteſted. At length, however, Antigonus loſt his life; the Syrians were completely defeated; and Demetrius, with much difficulty, effected his eſcape at the head of nine thouſand men. In conſequence of this victory, the whole empire of Alexander was now deſtined to found the following kingdoms: Egypt, Lybia, Arabia, and Paleſtine, were aſſigned to the ſovereignty of Ptolemy Lagus or Soter; Macedonia and Greece to Caſſander; Bithynia and Thrace to Lyſimachus; and the remaining territories in Aſia, as far as the river Indus, which were called the kingdom of Syria, were given to Seleucus.

Caſſander entered upon his exalted ſtation amidſt all the inquietudes of ſovereign power, being encompaſſed by crafty and inſidious enemies. He died, however, in the peaceable poſſeſſion of the throne of Macedon, to which the greateſt part of Greece was annexed, in the year before Chriſt 298. After his death, his two ſons, Antipater and Alexander, laid claim to the kingdom. Alexander invited Pyrrhus king of Epirus, and Demetrius the ſon of Antigonus, to his aſſiſtance. Demetrius treacherouſly aſſaſſinated the young prince at an entertainment; and then juſtifying the death of Alexander in a formal harangue, he perſuaded the Macedonians to elect him king. Inſtead of repairing the devaſtations that the kingdom had ſuffered from conſtant wars, Demetrius, in the year 294 before Chriſt, engaged in new military enterprizes againſt Greece, Ætolia, Epirus, and Thrace. He abandoned himſelf, at the ſame time, to luxury, vanity, and extreme haughtineſs. This incited Pyrrhus, king of Epirus, to invade the Macedonian territories with a numerous and powerful army; Lyſimachus alſo poured his troops into the ſame country on the ſide of Thrace; and Ptolemy attacked with a fleet all his dominions in Greece. Demetrius, therefore, was obliged to abandon his kingdom; and, though he made ſeveral attempts to regain poſſeſſion of it, he was unſucceſsful. Pyrrhus aſſumed the ſovereignty of Macedon; but was in his turn expelled by Lyſimachus, who had acted with him in the revolution of that country. In the year before Chriſt 285, diſſenſions aroſe in the family of Lyſimachus, and the injured faction requeſted the aſſiſtance of Seleucus. This prince, though ſeventy-ſeven years of age, willingly heard the inſinuations of the enemies of Lyſimachus, hoping to annex the kingdom of Macedon and the ſtates of Greece to the dominions he then poſſeſſed. He therefore met Lyſimachus on the borders of Phrygia, in the Field of Cyrus. Lyſimachus was in the ſeventy-fourth year of his age. They were the only ſurviving generals of Alexander, and both fought with their uſual bravery. The army of Lyſimachus was defeated, and himſelf ſlain. Animated by a warm deſire of taking poſſeſſion of Macedon, Seleucus now paſſed the Helleſpont, and advanced with an army as far as Lyſimachia in Thrace. In the neighbourhood of that city, however, he was baſely murdered by Ptolemy Ceraunus, whom he had generouſly relieved, and for whoſe ſake he had commenced the war.

Ptolemy, having perſormed this execrable deed, put on the crown, and boldly declared himſelf king of Macedon, in the year before Chriſt 280. Not long after, a body of three hundred thouſand Gauls, leaving their country in queſt of new ſettlements, followed the courſe of the Danube for a conſiderable way, and then divided into three parties, one of which made an irruption into the Macedonian kingdom. An obſtinate and bloody engagement enſued, in which Ptolemy was taken priſoner and his head cut off, which was carried through the ranks on the top of a lance. Soſthenes, with the remains of the Macedonian troops, attacked and defeated the Gauls; but a freſh ſwarm of theſe barbarians, under the command of Brennus, attacked and cut Soſthenes and his army to pieces.

After the death of Soſthenes, and the evacuation of the kingdom of Macedon by the Gauls, Antigonus Gonatus, the ſon of Demetrius, aſſumed the ſovereignty, in the year before Chriſt 278. Before, however, he could reſtore the kingdom to its ancient ſtrength and luſtre, he was obliged to contend with Pyrrhus king of Epirus, who, indignant at the conduct of Antigonus, who had refuſed to grant ſome ſuccours which he requeſted, invaded the frontiers of Macedonia, and was joined by ſome of the ſoldiers of Antigonus, who deſerted the ſtandard of their monarch. An engagement enſued, in which the forces of Antigonus were defeated, and moſt of them cut off, and he himſelf was under the neceſſity of quitting Macedon. Returning again, however, after the departure of Pyrrhus, who left his ſon Ptolemy to govern his newly-acquired dominions, he ſuffered a ſecond defeat, and eſcaped with only ſeventeen attendants.

While theſe contentions took place in Macedon, Cleonymus, pretending to the throne of Sparta after the death of Eudamidas, endeavoured to exclude Arcus from the kingdom. The people, however, inclining to favour the latter, Cleonymus applied for redreſs to Pyrrhus, who marched an army into the Lacedæmonian territory. Pyrrhus had with him twenty thouſand foot, two thouſand horſe, and twenty-four elephants. Arcus was at this time in the iſland of Crete, with the flower of the Lacedæmonian army. After an obſtinate aſſault upon the city, which was as obſtinately reſiſted, and which was carried on for three days ſucceſſively, Pyrrhus was compelled to retire towards his own dominions. Antigonus and Arcus, who had arrived at Sparta to ſuccour the place, haraſſed his retreat. Pyrrhus ordered his ſon Ptolemy to aſſiſt the attacked troops; but the young prince, expoſing himſelf too much, was ſlain. The king of Epirus directed his courſe to Argos; but Arcus followed him to that city with a thouſand infantry, and while the Argives engaged the army of Pyrrhus in front, the Spartans attacked them in the rear. By theſe means, the Epirots ſuffered very conſiderably, and Pyrrhus was ſtruck dead with a ſtone. With regard to the character of Pyrrhus, we may obſerve, that Hannibal thought him the greateſt general the world had ever beheld, and that Scipio was only the ſecond. After the death of Pyrrhus, Antigonus reſumed the ſovereignty of Macedon; and now meditated nothing leſs than the reduction of all Greece. He marched an army to Athens; and, notwithſtanding that city was powerfully ſupported by troops from Sparta and Egypt, he compelled it to receive a Macedonian

donian garriſon. But in the midſt of his ſucceſs, he was recalled to the defence of his kingdom againſt Alexander, the young king of Epirus, who had entered Macedon, and committed great depredations: but ambition ſtill led him to purſue new conqueſts. After employing much time in the attempt, he at length made himſelf maſter of the city of Corinth, which was again ſurpriſed and taken from him. He died at the age of eighty years, thirty-four of which he had been king of Macedon. Demetrius ſucceeded his father Antigonus in the year before Chriſt 243. The principal tranſactions of his reign were intended to maintain an intereſt in the Grecian ſtates, not by poſſeſſing the dominion himſelf, but by ſupporting the ſeveral tyrants who had uſurped it. He reigned only ſix years, and was ſucceeded by his kinſman Antigonus.

About this time the republic of Achaia, which had lain for a long time dormant, began to make a very conſpicuous figure, and ſeemed to aim at nothing leſs than the ſovereignty of all Greece. This ſtate was of high antiquity, and conſiſted of twelve towns, which had formed a noted confederacy, called the *Achæan League*.—See the article ACHÆANS, vol. i. p. 66. The republic of Ætolia was, at that time, ſecond in power to Achaia, and formed on the ſame plan. In conſequence of the influx of wealth and diſſipation, Lacedæmon had by this time exchanged poverty and hardy diſcipline for opulence and voluptuous manners. Agis, the Spartan king, endeavoured to reſtore the ancient ſimplicity, to enforce the ſumptuary laws, to cancel all debts, and to make a new diviſion of lands. The people in general reliſhed the propoſals; but the few in whoſe hands the wealth of Sparta centered, oppoſed them; and Agis was at length puniſhed with death, on pretence of attempting a revolution in the government. Such was the ſituation of affairs when Cleomenes mounted the Spartan throne; a prince who poſſeſſed an ardent paſſion for glory, united with great temperance and ſimplicity of manners. In the beginning of his reign he was under the neceſſity of exerting himſelf to ſupport the tottering power of the ſtate. Domeſtic diſtreſs had cauſed an almoſt univerſal deſpondency throughout Laconia, when Cleomenes, actuated no leſs by his natural diſpoſition, than by the repreſentations of the Ætolians, proceeded, in the year before Chriſt 242, to an open rupture with the Achæan ſtates.

The Spartan king attacked and took Tegea, Mantinæa, and Orchomenes, cities in Arcadia. He then marched his army againſt a caſtle in the diſtrict of Megalopolis, which commanded the entrance of Laconia. Immediately after theſe acts of hoſtility, the ſtates of Achaia declared war againſt Sparta. Cleomenes took the field with his troops, which were not numerous, but inſpired with the greateſt ardour for military enterprizes. The Achæans marched againſt him with twenty thouſand infantry and a thouſand horſe, under the command of Ariſtomachus. Cleomenes, with not more than five thouſand troops, offered battle to the enemy. Aratus, being intimidated by the bravery of this proceeding, would not permit the general to hazard an engagement. In conſequence therefore of the retreat of the Achæans, Aratus ſuffered the reproaches of his own troops and the raillery of the enemy; and the Eleans, who had never been the ſteady friends of Achaia, openly declared againſt that republic. Cleomenes afterwards defeated the Achæans in a ſecond encounter; but Aratus, taking advantage even of his defeat, turned his arms immediately againſt Mantinæa, and, before the enemy were aware of his deſigns, made himſelf maſter of that city, which he garriſoned with a body of troops.

Cleomenes would now gladly have come to terms with Aratus; but that politician was immoveable in his deſigns of deſtroying the Spartan authority. As he found, however, that the Achæans could not effect this of themſelves, he entertained the project of calling in the aſſiſtance of Antigonus, king of Macedon, to accompliſh his intentions; a meaſure held in almoſt univerſal odium by the Greeks. Aratus, however, contrived to ſurmount this difficulty; and Antigonus with great pleaſure, in the year before Chriſt 227, embraced the opportunity of interfering in the affairs of Greece. A treaty was agreed on by Aratus and Antigonus, from the conditions of which it was evident that the liberties of Achaia were no more, and that Antigonus was to be the real ſovereign of that country. This tranſaction rouſed the indignation of the whole Peloponneſians, who looked to Cleomenes as the only protector of their liberties. In the mean time Antigonus began his march at the head of twenty thouſand foot and fourteen hundred horſe, and arriving at the iſthmus, encamped over againſt Cleomenes, who had fortified with a ditch and rampart the whole ſpace between Corinth and the Onian hills. Antigonus, not thinking it adviſable to force a paſſage, prepared to decamp and tranſport his troops by ſea to Sicyon. At this critical moment, the Argives having revolted from the Spartans, and joined the enemy, Cleomenes was apprehenſive that the Achæans would attack him in the rear, while the Macedonians aſſaulted his front, and therefore retired with precipitation, firſt to Argos, and then to Mantinæa.

The Achæans now recovered their ſuperiority in Peloponneſus; and Corinth, Tegæa, Mantinæa, Horæa, and Telphaſſa, with many other places, immediately ſubmitted to the combined arms of Macedon and Achaia. Antigonus having ſent his troops into Macedonia during the winter, Cleomenes attacked and took the city of Megalopolis, which was plundered by the ſoldiers, and every thing of value in it demoliſhed. He alſo laid waſte the Argian territories. Antigonus was at that time in Argos with a few mercenary ſoldiers; but though the enemy inſulted him and abuſed the confederates, he could not be prevailed on to engage Cleomenes. In the beginning of the ſummer, however, he advanced into Laconia with an army of twenty-eight thouſand foot, and twelve hundred horſe. Cleomenes had previouſly fortified all the paſſes and avenues into that country with ramparts, and ſent detachments of troops to defend them. He alſo marched himſelf with a body of twenty thouſand foot, and encamped at a paſs called Sellaſia, formed by two hills, the Eva and Olympus. Cleomenes having thrown up an entrenchment at the foot of theſe mountains, poſted the auxiliaries on the eminence of Eva, under the command of his brother Euclidas, while he himſelf, with the reſt of the army, took poſſeſſion of Olympus. Between thoſe two hills ran the river Oenus, along the banks of which the road to Sparta extended.

When Antigonus arrived and viewed the ſituation of the ground, with the mode of defence adopted by the enemy, he was ſenſible that no part could be attacked with any probability of ſucceſs. He therefore encamped at a ſmall diſtance, on the banks of the Gorgulus, which covered part of his army. Cleomenes, reduced to the greateſt diſtreſs for want of proviſions, was under the neceſſity of throwing open his entrenchments, and of engaging the enemy without further delay. The victory remained for a long time doubtful: but at length Cleomenes, receiving intelligence that the forces under his brother were defeated upon the hill, and that his cavalry began to give way on the plain, ſounded a retreat. The overthrow then became general; great numbers of the Lacedæmonians were cut in pieces, and thoſe who found means to eſcape fled from the field of battle in the greateſt confuſion. Cleomenes, with a few horſe, retreated to Sparta, and from thence fled to Egypt, where, not being able to brook the indignities offered him by the miniſters of Ptolemy Philopater, he

poiſoned himſelf. In Cleomenes ended the Herculean race of Spartan kings, if we except the ſhort reign of Agaſipolis.

While Antigonus was abſent in Greece, the Illyrians invaded Macedon with a powerful army. Being, therefore, recalled to the defence of his kingdom, he advanced with his troops againſt the Illyrians, whom he attacked and defeated. Straining his voice, during the engagement, with unuſual vehemence, he burſt a blood veſſel, which occaſioned his death, in the year before Chriſt 221.

Antigonus the ſecond was ſucceeded by Philip the ſon of Demetrius, the laſt of the Macedonian kings of that name. At the time of his acceſſion to the throne, this prince was only in the ſeventeenth year of his age: he was intelligent, affable, munificent, and attentive to the duties of his ſtation. The jealouſy which the Ætolians had for a long time entertained of the Achæan ſtates, was now increaſed by the importance they had aſſumed from their alliance with Macedon. Immediately, therefore, after Antigonus was dead, they ravaged the Achæan coaſt, and committed great depredations on all the neighbouring countries. Aratus attacked them with a very inferior force, and the Ætolians gained a complete victory. The Achæans were, therefore, under the neceſſity of again applying to Macedon, to requeſt the aſſiſtance of the new monarch. Philip promiſed that he would aid them with the whole ſtrength of his kingdom; and accordingly ſoon after ſet out for Greece. He had the vanity, however, to conſider himſelf entitled to the ſovereignty over all Greece; and to accompliſh this end, he determined to effect a junction with the celebrated Hannibal, who at this time waged war againſt the Romans. He ſent commiſſioners to treat with Hannibal, and with the Carthaginian deputies in the camp; when it was agreed that the kingdom of Macedon, and the republic of Carthage, ſhould conſider the Romans as common enemies; that after uniting their arms, and reducing the power of the Roman people, they ſhould purſue their conqueſts in Greece, for the purpoſe of extending the dominions of Macedon.

In vain did Aratus diſſuade Philip from this project. He entered the Ionian gulf with a large fleet, took Oricum, on the coaſt of Epire, and laid ſiege to Apollonia. Here, however, he was ſurpriſed and defeated by the Romans, and retreated homewards acroſs the mountains. The Romans, humbled by the victorious arms of Hannibal, were not in a condition, at that time, to proſecute a war with Macedon; but they determined to raiſe up enemies againſt Philip in Greece. Accordingly overtures were made to the Ætolians, who, confiding in the declarations of the Roman ambaſſador, not only concluded a treaty themſelves, but engaged Sparta and Elis, together with the Illyrians, in the cauſe of Rome. In the year before Chriſt 211, this new war commenced; and the Romans having taken Zacynthus, Æniadæ, and Naſus, reſtored them to the Ætolians. Machanidas the tyrant of Sparta invaded the territories of the Achæans, who ſent a deputation to Philip, to requeſt his aſſiſtance. Philip loſt no time in marching into Greece to defend the poſſeſſions of his allies; and the Ætolians, under Pyrrhus, who was appointed commander that year, in conjunction with king Attalus, advanced to meet him as far as Lamia. A battle enſued, in which the Ætolians and their allies were diſcomfited; and another engagement ſoon after followed, in which Philip gained a deciſive victory. The Macedonian king next marched againſt Elis, which had received an Ætolian garriſon. After plundering the territory, he was attacked by the confederate army, among whom were four thouſand Romans commanded by the proconſul Sulpitius. The battle was long and obſtinate. Here Philopœmen, who led the Achæan horſe, ſtruck dead with his lance the commander of the Ætolian cavalry. Philip, ſeeing his troops give way, ruſhed headlong among the enemies, and was with the greateſt difficulty ſaved by the Macedonians.

Early in the ſpring, Sulpitius and Attalus, quitting their winter quarters, ſailed to Eubœa, and obtained poſſeſſion of Orcum in that iſland. Attalus alſo laid ſiege to the city of Opus in Achaia, which he took; but Philip coming with his army, he retired precipitately towards his ſhips. In the mean time Machanidas, tyrant of Lacedæmon, advanced with a powerful army into Achaia. He could not, however, have choſen a more improper time for his expedition; for Philopœmen was that year created general of the Achæan ſtates. No ſooner was he raiſed to this important office, than he began to re-eſtabliſh military diſcipline among the troops. Having aſſembled his army at Mantinæa, he gave battle to Machanidas. An obſtinate conflict enſued. Machanidas at firſt had the advantage; but purſuing the flying troops too far, Philopœmen attacked him in the rear. He alſo ſtruck Machanidas with a ſpear, and killed him: the death of the tyrant put an end to the battle, in which the Lacedæmonians loſt four thouſand men.

Not long after the death of Machanidas, Sparta groaned beneath the yoke of a ſtill more cruel tyrant called Nabis, who, in addition to the other vices common to tyranny, was actuated by a violent ſpirit of avarice. He baniſhed moſt of the wealthy citizens from Sparta, that he might ſeize their riches; and many he cauſed to be aſſaſſinated. He had received Argos from Philip, in pledge for the money which he had lent that monarch. He there practiſed the moſt ſhocking cruelties. He had invented a machine in the form of a ſtatue reſembling his wife, the breaſt, arms, and hands, of which were full of pegs of iron, covered with magnificent garments. If any one refuſed to give him money, he was introduced to the embraces of this machine, which, by means of certain ſprings, caught faſt hold of him; and the victim, to deliver himſelf from this exquiſite torture, readily granted whatever Nabis deſired.

The Ætolians, thinking themſelves deſerted by the Romans, concluded a peace with Philip. Soon after, Publius Sempronius the proconſul arrived with ten thouſand foot, a thouſand horſe, and thirty-five galleys, to the aſſiſtance of the Ætolians. He was eaſily prevailed on by that people, to agree to an accommodation between the Romans and the king of Macedon. Accordingly a treaty of amity was entered into, in the year before Chriſt 203; and Philip cauſed the king of Bithynia, the Achæans, the Bœotians, the Theſſalians, Acarnanians, and Epirots, to be included in the treaty. The Romans on their ſide named king Attalus, Pleuratus a petty prince of Illyricum, Nabis tyrant of Sparta, the Eleans, Meſſenians, and Athenians. Philip having thus ſettled his affairs at home, and finding that the fortune of the Carthaginians was declining, endeavoured to extend his dominions in the eaſt. He therefore attacked the Rhodians, Athenians, and king Attalus, contrary to the expreſs terms of the treaty. Whereupon, at the requeſt of the Athenians, war was declared againſt him by the Romans, and Sulpitius the conſul appointed to carry it on. The Romans diſpatched a fleet for the relief of Athens, then beſieged by the Macedonians. Diſappointed, therefore, in his purpoſes, Philip laid waſte the whole territory. The command of the Roman army devolving on Titus Quintius Flaminius, that general had the addreſs to detach the Achæans from the Macedonian intereſt. An engagement ſoon after took place near the mountains of Cynocephalæ in Theſſaly, in which Philip was defeated with the loſs of thirteen thouſand men; while the Romans loſt not more than ſeven hundred. The Macedonian king was now obliged to ſue for peace, on

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ſuch conditions as Rome and her allies were pleaſed to impoſe.

Flaminius having expelled Nabis the tyrant of Sparta from Argos, left Greece to enjoy the liberty and happineſs he had reſtored, and returned to Rome with all the Roman garriſons, in the year before Chriſt 197. The Ætolians were the only Grecian people diſſatisfied with the peace; on account of ſome cities which had been withheld from them. They therefore inſinuated to Nabis the contemptible condition to which he was reduced by the Romans; and that Achaia poſſeſſed all Peloponneſus, while he was permitted to retain Sparta only. Nabis was well inclined to undertake any thing they propoſed againſt the Romans, and therefore immediately laid ſiege to Gitium. Philopœmen, however, cut off his army ſoon after near Sparta, and beſieged the tyrant in that city. Nabis was ſoon after killed by a body of Ætolians, who ſurpriſed Sparta; and that ſtate joined the Achæan league. In the mean while the Ætolians perſuaded Antiochus, king of Syria, to paſs over into Greece, with an intent to expel the Romans from that country. Accordingly he entered Greece with a ſmall force; but being diſappointed of the ſuccours he expected from the Grecian ſtates, was defeated at the Straits of Thermopylæ, by Manlius Acilius Glabrio, the Roman conſul. A deputation was ſoon after ſent from the Ætolians to ſolicit a peace from the Roman people. The conditions of the treaty were extremely hard. They were heavily fined, compelled to give up ſeveral of their cities and territories to the Romans, and to deliver to the conſul forty hoſtages, to be choſen by him, none under twelve, nor above forty years of age.

The Roman ſenate began now to take umbrage at the power and reputation of the Achæan league. Though confederated with Achaia, each of the Peloponneſian cities retained its peculiar privileges, and a ſpecies of independent ſovereignty. After peace had been concluded with Ætolia, and Cephallenia reduced, M. Fulvius Nobilior reſided in that iſland to decide, as he ſaid, any diſputes which ſhould ariſe in Greece, but in fact to improve and foment every diſſenſion for the aggrandiſement of the Roman republic. The general aſſembly of the Achæans had been always held at Ægium; but Philopœmen, who was now at the head of that ſtate, thought fit to divide the honour and advantages of the congreſs among the ſeveral cities of the league, and had appointed Argos for the next diet. But the inhabitants of Ægium oppoſed this regulation, and appealed to the deciſion of the Roman conſul in Cephallenia.

Beſides this, Fulvius had another pretext for paſſing over into Greece. During the tyranny which exiſted in Sparta, many of the Lacedæmonians had been driven into exile, and inhabited the maritime cities of Laconia, protected by Achæan garriſons. Theſe men had cut off the inhabitants of Lacedæmon from all intercourſe with the ſea-coaſt. This reſtraint the Spartans could not brook, and therefore attacked in the night a ſmall city called Las; but were repulſed. Philopœmen repreſented to the aſſembly this attempt as an inſult offered to all Achaia; and a decree was enacted, that the Lacedæmonians ſhould deliver up the authors of that outrage, on pain of being conſidered as enemies. The Lacedæmonians not only refuſed to obey the decree, but put the Achæans to death who were ſent to inform them of it, and then diſpatched ambaſſadors to Fulvius, requeſting him to come and take poſſeſſion of their city. Philopœmen, however, advanced with an army into Laconia, and laid waſte the territories. By the emiſſaries of the Romans too, the Meſſenians had been prevailed on to take up arms againſt the Achæans; and Philopœmen, haſtening to ſuppreſs the inſurgents, fell into their hands, and was put to death. The Romans, by this means, being invited to act as umpires, ſoon found means to deſtroy the ſtrength of Achaia, by ſeducing its confederate ſtates.

During theſe tranſactions in Greece, the Romans were endeavouring to quarrel with Philip king of Macedon, that they might ſeize his poſſeſſions, and deprive him of his power. For that purpoſe they encouraged the cantons or communities, which Philip had lately annexed to his dominions, to aſſert their independence; and commiſſioners being ſent from Rome to ſettle that matter, the king was ordered to content himſelf with Macedon in its ancient ſtate; and by a formal decree was required to withdraw his garriſons from Ænus and Maronea, maritime towns of Thrace. With theſe mortifying conditions Philip was obliged to comply, having no alternative left. Soon after this event, he fell into a deep melancholy, which put an end to his exiſtence.

Upon the death of Philip, Perſeus his ſon aſſumed the government, in the year before Chriſt 179. The firſt meaſures of his adminiſtration were remarkably mild, and he affected a ſtrict regard to juſtice. He aſſumed an air of benignity and gentleneſs. He ſat daily to hear cauſes, and his deciſions were generally made with prudence and diſcernment. The ſame diſpoſition which he diſplayed towards his own ſubjects, he exhibited in his conduct towards moſt of the Grecian ſtates; and at length profeſſed himſelf to be the patron of Greek liberty againſt the pride and dominion of Rome. The Romans, informed of theſe proceedings, diſpatched ambaſſadors to Macedon to queſtion Perſeus as to the authenticity of theſe reports. The king, however, only anſwered with pride and inſolence; and a war commenced. A Roman army was immediately ſent into Greece, under the command of Paulus Æmilius, who drove Perſeus from his intrenchments on the banks of the river Enipeus, and he retired precipitately to Pydna. Here both armies came to a general engagement, and the Macedonians being broken and routed with a great ſlaughter, Perſeus ſurrendered himſelf and his eldeſt ſon Philip into the hands of the Romans. Perſeus was afterwards led in triumph through the ſtreets of Rome, and then caſt into a dungeon, where he famiſhed to death. Philip died before his father; but Perſeus left a ſon named Alexander, who afterwards became ſecretary to the Roman ſenate.

Not long after the annihilation of the Macedonian kings, diſturbances broke out in Achaia, and war was declared againſt Sparta. The Romans ſent commiſſioners to terminate this diſpute. The Achæans, however, were extremely exaſperated againſt the Romans; and the Corinthians particularly diſtinguiſhed themſelves in their oppoſition to the interference of that imperious people. The Bœotians and Chalcidians joined the confederacy. Metellus marched the Roman army againſt them, and obtained a complete victory. He alſo fell in with one thouſand Arcadians, all of whom he put to the ſword. He then marched to Thebes; but moſt of the inhabitants had quitted that city. In the mean time Mummius, the conſul, arrived from Rome with new levies, which increaſed the army to twenty-three thouſand foot, and three thouſand five hundred horſe. With theſe forces he advanced towards Corinth againſt the enemy, who had ſhut themſelves up in that city with fourteen thouſand foot and ſix thouſand horſe, under the command of Diæus. An engagement took place under the walls of Corinth, and the Greeks were defeated; the greater part fled into the town, but in the night withdrew from that place; and Diæus himſelf took refuge in Megalopolis, whither he had before ſent his family. He killed his wife to prevent her from falling into the hands of the enemy, and then took poiſon, of which he died. On the third day after the action, the victorious general entered Corinth; and, with the exception only of the ſtatues and pictures intended for his triumph, gave the town, abounding with all the ornaments of a wealthy metro-

polis, to be plundered by his ſoldiers, in the year before Chriſt 146. The walls were then razed; and the city reduced to aſhes. Thus periſhed Corinth in the ſame year with Carthage.

Ten commiſſioners were now ſent from Rome, to regulate, in conjunction with the conſul, the affairs of Greece in general, and of Achaia in particular; they aboliſhed the popular government in all the cities, and eſtabliſhed magiſtrates, who were to govern each ſtate according to their reſpective laws, under the ſuperintendency of a Roman prætor. Thus the Achæan league was diſſolved, and all Greece reduced to a Roman province, called "the province of Achaia," becauſe at the taking of Corinth, the Achæans were the moſt powerful people of Greece. The whole nation paid an annual tribute to Rome, which the prætor, who was ſent thither every year, had the care of collecting.

Athens continued in the ſame ſtate as the reſt of the Grecian communities, until the Mithridatic war, before Chriſt 88, when that city openly declared againſt the Romans. Mithridates diſpatched into Greece an army of one hundred and twenty thouſand men, under the command of Archelaus; who ſoon made himſelf maſter of Athens, and compelled Lacedæmon, Achaia, and Bœotia, to join him alſo. He took up his abode in Athens. Sylla, being appointed to conduct the war againſt Mithridates, entered Greece with five legions; and all the cities, except Athens, immediately opened their gates to him. He firſt attempted to force his way into the Piræus by ſcaling the walls; but, being repulſed, he had recourſe to the ordinary means of attack. He erected towers; and, raiſing them to the ſame height as the battlements, got upon the ſame level as the beſieged, and plied them with miſſile weapons. Battering engines aſſailed the walls, or with galleries he undermined them; but the defence of the place was equally obſtinate and vigorous; and he was obliged, after many fruitleſs attempts, to turn the ſiege into a blockade, and to wait the effects of famine. Accordingly Athens was at length brought to the laſt extremity; but Ariſtion, the tyrant of the place, expecting no quarter for himſelf from the Romans, would not conſent to capitulate. Sylla, therefore, knowing the weak ſtate of the beſieged, ſtormed and forced the walls with great ſlaughter. Ariſtion ſought refuge in the citadel, but was taken and ſlain. Macedonia and Greece were ſoon afterwards finally reduced under the power of Rome, as were alſo the Grecian provinces in Aſia Minor; and thus, from the year before Chriſt 87, all the republics of Greece were obliged tamely to ſubmit to the arbitrary controul of the Romans, until the eaſtern empire was annihilated by Mahomet II. in the fifteenth century; ever ſince which period that highly diſtinguiſhed and enlightened people have groaned under the oppreſſive tyranny of the Turkiſh government. See the articles ROME, and TURKEY.

CUSTOMS, MANNERS, AND EXALTED CHARACTER, OF THE ANCIENT GREEKS.

Though, in the latter years of Alexander, literature, philoſophy, and the fine arts, diſplayed their brighteſt charms; yet had the ſources from which their beauty flowed, gradually and imperceptibly began to fail: ſo true it is, that in every country where the human genius has attained its higheſt degree of perfection, a principle of degeneracy naturally carries things in a retrograde or contrary direction. The era of the greateſt renown of Greece, is ſtated to have been between the years 479 and 431 before Chriſt. Not only magnanimous and invincible in arms, it was then the peculiar glory of the Greeks, particularly of the Athenians, that during their career of naval and military victories, they cultivated, with a generous enthuſiaſm, the arts which adorn peace as well as war, and improved thoſe decorations of poliſhed life into ſuch perfection as few nations afterwards attempted to imitate, and none aſpired to ſurpaſs. During the adminiſtration of a ſingle man, more works of elegance and ſplendour, more magnificent temples, theatres, and porticoes, were erected within the walls of Athens alone, than could be raiſed during many centuries in Rome, though miſtreſs of the world, by the wealth and labour of tributary provinces. In the ſame period of time, ſculpture attained a ſublimity, from which that noble art could never afterwards but deſcend and degenerate; and a republic hitherto inferior in works of invention and genius to ſeveral of her neighbours, and even of her own colonies, produced, in the ſingle lifetime of Pericles, thoſe ineſtimable models of poetry, eloquence, and philoſophy, which, in every ſucceeding age, the enlightened portion of mankind hath invariably regarded as the beſt ſtandards, not merely of compoſition and ſtyle, but of taſte and reaſon. The progreſs which was thus made in the manners, character, and policy, of the Athenians, was the conſequence of an uncommon exertion of their government, combined with other circumſtances inſeparably connected with their domeſtic and external proſperity. In the courſe of a few years, the ſucceſs of Ariſtides, Cimon, and Pericles, had tripled the revenues, and increaſed, in far greater proportion, the dominions of the republic. The Athenian gallies commanded the eaſtern coaſts of the Mediterranean; their merchantmen had engroſſed the traffic of the adjacent countries; the magazines of Athens abounded with excellent timber, metal, ebony, ivory, and all the materials of the uſeful as well as of the elegant arts; they imported the luxuries of Italy, Sicily, Cyprus, Lydia, Pontus, and Peloponneſus; experience had improved their ſkill in working the ſilver mines of Mount Laurium; they had opened the valuable marble veins in mount Pentelicus; the honey of Hymettus was more eſteemed, in proportion as it became better known to their neighbours; the culture of their olives (oil being long their ſtaple commodity, and the only production of Attica which Solon allowed them to export) muſt have improved with the general improvement of the country in arts and agriculture, eſpecially under the active adminiſtration of Pericles, who liberally let looſe the public treaſure, to encourage every ſpecies of elegant improvement and uſeful induſtry. He alſo found it neceſſary to comply with the extreme paſſion for pleaſure, which then began to enervate his countrymen. The people of Athens, ſucceſsful in every enterpriſe againſt their foreign as well as domeſtic enemies, ſeemed entitled to reap the fruits of their dangers and victories. For the ſpace of twelve years preceding the war of Peloponneſus, their city afforded a perpetual ſcene of triumph and feſtivity. Their dramatic entertainments, to which they were paſſionately addicted, were no longer performed in ſlight unadorned edifices, but in ſtone or marble theatres, erected at great expence, and embelliſhed with the moſt precious productions of nature and of art. The treaſury was opened, not only to ſupply the decorations of this favourite amuſement, but to enable the poorer citizens to enjoy it without incurring any private expence; and thus, at the coſt of the ſtate, to feaſt and delight their ears and fancy with the combined charms of muſic and poetry. The pleaſure of the eye was peculiarly conſulted and gratified in the architecture of the theatres and other ornamental buildings; for, as Themiſtocles had ſtrengthened, ſo Pericles adorned, his native city; and unleſs we had the concurring teſtimony of antiquity, as well as the immortal remains of the Parthenon, or temple of Minerva, which ſtill excite the admiration of travellers, (ſee the article ARCHITECTURE, vol. ii. p. 74,) it would be difficult to believe that in the ſpace of a few years, there could have been created thoſe ineſtimable wonders of art, thoſe innumerable temples, theatres, ſtatues, altars, baths, gymnaſia, and porticoes, which, in the language of ancient panegyric, rendered Athens the eye and light of Greece.

Pericles was indeed highly blamed for thus richly decking one favourite city; but it would have been fortunate for the Athenians if their wealth had not been employed

employed in more periſhing, as well as more criminal, luxury. The pomp of religious ſolemnities, which were twice as numerous and as coſtly in Athens as in any other city of Greece; the extravagance of public entertainments and banquets, which on ſuch occaſions always followed the ſacrifices; the increaſe of private luxury, which naturally accompanied this profuſion, alike contributed to exhauſt the reſources, without augmenting the glory, of the republic. Dramatic entertainments formed an eſſential part of the ſolemn feſtival conſecrated to Minerva, who had given her peculiar protection to the city of Athens. Jupiter enjoyed his appropriated honours; but more commonly, as is atteſted by Athenian medals, the worſhip of the father of the gods was aſſociated with that of his warlike daughter; and with the myſteries of Ceres, who taught the Athenians the valuable knowledge of agriculture, which they were ſuppoſed to have diffuſed over the ancient world. It would be endleſs to mention the inſtitutions in honour of the crowd of inferior divinities, which rendered the feſtivals at Athens twice more numerous than in any other Grecian city. Nor did the frequency abate the extenſive ſplendour which accompanied them. The ſhops and courts of juſtice were ſhut; the mechanic quitted his tools, the huſbandman ceaſed from his labours, the mourner intermitted his ſorrow. The whole city was diſſolved in feaſting and joy; the intervals of which were filled up by pompous ſhows and proceſſions, by concerts of muſic, by exhibitions of painting; and at ſeveral feſtivals, particularly the Panathenæan, by hearing and judging the nobleſt productions of eloquence and poetry.

It ſeems indeed extraordinary, that the revenues of Athens, notwithſtanding their improvement by Pericles, ſhould have ſufficed for this multitude of expences. But we muſt conſider that the general ſimplicity of manners in private life, formed a ſtriking contraſt with the extravagance of public feſtivals and amuſements. The houſes and tables of the moſt wealthy Athenians were little diſtinguiſhed above thoſe of their pooreſt neighbours. Pericles himſelf, though never ſuſpected of avarice, lived with the exacteſt œconomy; and the ſuperabundance of private wealth, which would have created envy and danger to the owner, if he had employed it for his particular convenience and pleaſure, procured him public honour and eſteem, when expended for the gratification of the multitude; and, in general, diſtinguiſhed obſequies at his death.

To perform the funeral rites was conſidered ſo ſacred, that they who neglected to diſcharge this office, were thought accurſed. They believed that their ſouls could not be admitted into the Elyſian ſhades, till their bodies were depoſited in the earth; and if theſe rites were altogether omitted, that they would be excluded for an hundred years. (*Homer. Odyſſ.* λ. *v.* 66, 72.) Hence, of all the curſes, that was the greateſt, that a perſon might die without the honours of burial: and of all deaths, that by ſhipwreck was deemed the moſt terrible; ſee p. 892. Thus, if they were in danger of being caſt away, it was uſual to faſten the moſt valuable ſtores round their middle, with a direction to thoſe who might find the body, if it ſhould be caſt upon ſhore, to give them human burial, and offering their ſtores as a compenſation for the trouble. In any caſe, it was conſidered not only an act of the greateſt inhumanity to neglect to perform theſe offices, but a crime ſufficient to provoke the vengeance of the infernal gods. He who thus offended was deemed profane and polluted, till he had ſubmitted to the accuſtomed purifications, and appeaſed the incenſed gods. It was not required, in all caſes, that the ſolemnities ſhould be ſtrictly performed; for if a traveller was in unuſual haſte, it was ſufficient to caſt three handfuls of ſoft earth upon the carcaſe, one of which was to be thrown upon the head. If the body of any perſon had been interred in haſte, and it was afterwards found by any of his friends, it was honoured with a ſecond funeral. (*Virg. Æn.* 3. *v.* 62 *and* 67.) It was thought to be a great misfortune, if their bodies had not been prepared for burial by their relations, and interred in the ſepultures of their family. The aſhes of thoſe who died in a foreign country were uſually brought home, and interred in the ſepulchre of their anceſtors. This pious care of the bodies of their dead was extended alſo to ſlaves; and was eſteemed ſo neceſſary, that the candidates for the magiſtracy at Athens were examined, as to the due celebration of the funerals, and proper care of the monuments, of their relations. It was alſo a grievous crime to be gay and cheerful before the uſual time of mourning expired. The perſons of the prieſts who officiated at funerals were highly reſpected, and their goods were regarded with religious veneration. (*Plutarch. Græc. Quæſt.* 21.)

There were ſome crimes, however, which were ſo heinous, as to prevent the perſons guilty of them from all rites of burial. Public or private enemies were deemed unworthy of partaking of this privilege. (*Homer Il. v.*) Thoſe who were conſpirators or traitors to their country, were excluded from the rites of burial; thoſe who refuſed to act in defence of their country in times of extremity; tyrants, who were pronounced enemies to their country; perſons guilty of ſuicide; and perſons guilty of ſacrilege, were threatened with this puniſhment. Perſons, killed by lightning, were buried apart by themſelves, being thought hateful to the gods; or left in the place where they died. Some ſay, they had no interment, but were ſuffered to rot where they fell, which was hedged in to prevent others from contracting pollution from it; as were all places which had been ſtruck with thunder. Thoſe who waſted their patrimony were denied the right of being buried in the ſepulchre of their fathers. The bodies of thoſe who died in debt belonged to their creditors, and were refuſed burial, till ſatisfaction was made. Some criminals who ſuffered capital puniſhment were deprived of burial; thoſe who died upon the croſs or were impaled, were allowed frequently to be devoured by birds or beaſts of prey. If the carcaſe was ſpared by the beaſts, it commonly remained upon the croſs till it was putrified. In ſome places it was uſual to inter the bodies of infants who had no teeth, without conſuming them to aſhes. If thoſe who had incurred public hatred had obtained the rites of burial, it was uſual to leap upon their tombs, and to caſt ſtones at them, in token of their abhorrence. They frequently dragged ſacrilegious perſons from their graves, after they had been decently interred. Traitors, who had been buried, were again taken from their tombs; and the bones of tyrants were ſeldom ſuffered to reſt in the grave. (*Plutarch. Dione. Euripid. Med.* 1378.)

Yet, amidſt all theſe attentions to perſons deceaſed, and amid this refinement in taſte and ſplendour, the character and condition of the Grecian women preſent the moſt ſtriking contraſt of any to be met with in hiſtory. If we knew not the conſideration in which the fair ſex were anciently held in Greece, and the advantages which they enjoyed at Sparta, after the laws of Lycurgus had revived the inſtitutions of the heroic ages, we ſhould be apt to ſuſpect that the ungenerous treatment of the feebler ſex, which afterwards ſo univerſally prevailed, had been derived from the Egyptian and Aſiatic colonies, which early ſettled in that part of Europe. Excluded from ſocial intercourſe, which nature had fitted them to adorn, the Grecian women were rigorouſly confined to the moſt retired apartments of the family, and employed in the meaneſt offices of domeſtic drudgery. It was thought indecent for them to venture abroad, unleſs to attend a proceſſion, to accompany a funeral, or to aſſiſt at certain other religious ſolemnities. Even on theſe occaſions, their behaviour was attentively watched, and often malignantly interrupted. The moſt innocent freedom was conſtrued into a breach of decorum; and their reputation, once ſullied by the ſlighteſt imprudence, could never afterwards be retrieved.

trieved. If ſuch unreaſonable ſeverities had proceeded from that abſurd jealouſy which ſometimes accompanies a violent love, and of which a certain degree is nearly connected with the delicacy of paſſion between the ſexes, the condition of the Grecian women, though little leſs miſerable, would have been far leſs contemptible. But the Greeks were utter ſtrangers to that refinement of ſentiment, which, in the ages of chivalry, elevated the character of the ſofter ſex almoſt to the rank of divinities. See the article CHIVALRY, vol. iv. p. 506. Married or unmarried, the Grecian females were kept in equal reſtraint; no pains were taken to render them, at any one period of their lives, agreeable members of ſociety; and their education was either entirely neglected, or confined to ſuch humble objects, as, inſtead of elevating and enlarging the mind, tended only to narrow and to debaſe it. Though neither qualified for holding an honourable rank in ſociety, nor permitted to enjoy the company even of their neareſt relations, they were thought capable of acting as ſtewards for their huſbands, and thus relieving men from a multiplicity of little cares, which ſeemed unworthy of their attention, and unſuitable to their dignity. The whole burden of ſuch mercenary cares being impoſed on the women, their firſt inſtructions and treatment were adapted to that lowly rank, beyond which they could never afterwards aſpire. Nothing was allowed to divert their minds from thoſe ſervile occupations in which it was intended that their whole lives ſhould be ſpent; no liberal idea was preſented to their imagination, that might raiſe them above the ignoble arts in which they were ever deſtined to labour; the ſmalleſt familiarity with ſtrangers was deemed a dangerous offence; and any intimacy or connection beyond the walls of their own family, a heinous crime; ſince it might engage them to embezzle the furniture and effects committed to their care and cuſtody. Even the laws of Athens confirmed this miſerable degradation of women, holding the ſecurity of the huſband's property a matter of greater importance than defending the wife's perſon from outrage, and protecting her character from infamy. By ſuch illiberal inſtitutions were the moſt amiable part of the human ſpecies inſulted, among a people in other reſpects the moſt enlightened of all antiquity. They were totally debarred from thoſe refined arts and elegant entertainments, to which their agreeable qualities might have added a new charm. Inſtead of directing the taſte, and enlivening the pleaſures of ſociety, their value was eſtimated, like that of the ignobleſt objects, merely by profit or utility. Their chief virtue was reſerve, and their point of honour œconomy.

This extreme depreſſion of the women levelled the natural inequalities of their temper and diſpoſition; the prude, the coquette, with the various intermediate ſhades of female character, diſappeared; and all the modeſt and virtuous part of the ſex (if virtue and modeſty can ever be the effects of reſtraint) were reduced to humble imitation and inſipid uniformity. But, in the time of Pericles, there was introduced at Athens a bolder claſs of females, who diveſted themſelves of natural modeſty, diſdained the artificial virtues, and avenged the violated privileges of their ſex. Aſia, the mother of voluptuouſneſs, produced this ſeductive brood, whoſe meretricious arts and occupations met with no reſtraint from the laxity of Ionian morals, and were even promoted and encouraged by the corruptions of Pagan ſuperſtition. In moſt of the Greek colonies of Aſia, temples were erected to the *earthly* Venus; where courtezans were not merely tolerated, but honoured as prieſteſſes of that condeſcending divinity. The wealthy and commercial city of Corinth firſt imported this innovation from the Eaſt; and ſuch is the extravagance of the human mind, that after the repulſe of Xerxes, the magiſtrates of that republic aſcribed the ſafety of their country to the powerful interceſſion of the votaries of Venus, whoſe portraits they cauſed to be painted at the public expence, as the Athenians had done thoſe of the heroic companions who gained the battle of Marathon. The fame of all thoſe accompliſhed but frail beauties, though highly celebrated by the poets and hiſtorians of the times, was eclipſed by the ſplendour of Aſpaſia of Miletus, who ſettled at Athens under the adminiſtration of Pericles, and is ſaid to have embarked in the fleet with which that fortunate commander ſubdued the wealthy iſland of Samos. The perſonal character of Aſpaſia gave temporary luſtre to a profeſſion, which, though exalted by the caſual caprices of ſuperſtition, muſt naturally have fallen into contempt, ſince later writers among the Greeks acknowledge, that though ſhe carried on a very diſhonourable commerce in female virtue, yet her wit and eloquence, ſtill more than her beauty, gained her extraordinary conſideration among all ranks in the republic. The ſuſceptible minds of the Athenians were delighted with what their abſurd inſtitutions rendered a novelty, the beholding the native graces of the ſex, embelliſhed by education. Aſpaſia is ſaid to have acquired a powerful aſcendant over Pericles himſelf; ſhe certainly acquired his protection and friendſhip; which is leſs extraordinary than that her converſation and company ſhould have pleaſed the diſcernment of the ſage Socrates. She is accuſed of having excited, from motives of perſonal reſentment, the war of Peloponneſus; yet, calamitous as that long and obſtinate conflict proved to Greece, and particularly to Athens, it may be ſuſpected that Aſpaſia occaſioned ſtill more incurable evils to both. Her example, and ſtill more her inſtructions, formed a ſchool of proſtitution at Athens, by which her dangerous profeſſion was reduced to a ſyſtem. The companions of Aſpaſia ſerved as models for painting and ſtatuary, and as themes for poetry and panegyric. Nor were they merely the objects, but the authors, of many literary works, in which they eſtabliſhed rules for the behaviour of their lovers, particularly at table; and explained, according to Athenæus, the art of gaining the heart, and captivating the affections. The dreſs, behaviour, and artifices, of this claſs of women, became continually more ſeductive and dangerous; and the metropolis of Greece thenceforth remained the chief ſchool of vice and pleaſure, as well as of literature and philoſophy. It has indeed been lamented that the fine arts, and particularly painting, ſhould have been thus proſtituted to the honour of harlots, and the purpoſes of voluptuouſneſs. Licentious pictures too are mentioned by ancient writers as a general ſource of corruption, and conſidered as the firſt ambuſh that beſet the ſafety of youth and innocence. Yet this unhappy effect of the arts was only the vapour that attends the ſun; ſince painting, architecture, and above all, ſtatuary, attained their meridian ſplendour in the age of Pericles; and ſhed peculiar glory on this period of Grecian hiſtory, not only by the powers of genius which they diſplayed, but by the noble and elegant purpoſes to which they were directed.

Of the doubtful and delicate problem, "Whence aroſe theſe pre-eminent attainments of the Greeks?" M. Herder, in his *Philoſophy of Man*, has offered the following ſolution: He regards as preliminary cauſes the acceſſible nature of their country, which occaſioned frequent migrations into it, and which gave riſe to conſtant intercourſe with ſtrangers: the cultivated ſtate of Aſia Minor, whence, at ſucceſſive periods, Greece was peopled: the numerous diſtinct tribes into which the ſeveral iſlands, and the marked features of the main land, occaſioned this people to be divided: the ſcope for emulation, imitation, and improvement, which a ſociety ſo diverſified afforded, a fine ſtructure of frame, the developement of the powers of which was aſſiſted by ſingular felicity of climate; and a paſſionate love of ſenſible beauty in arts and manners, in ſcience, and in political inſtitutions. In their exquiſite organs, faſhioned under a mild ſky, in their enthuſiaſtic attachment to muſic,

muſic, and in the well-directed efforts of various tribes to the ſame object, he attributes the cauſes of the ſuperiority of their beautiful and copious language.—See the article LANGUAGE. The topics of popular faith, the tales of tradition, and the expoſitions of natural appearances delivered by their ſages, blended together and worked up by lively imaginations, he conſiders as the ground-work of their elegant mythology; while their native vivacity diſpoſed them ſo ardently to love muſic, the dance, pantomime, and the drama.

Their arts, he thinks, originated in their religion and their political inſtitutions; the former requiring ſtatues and temples, and the latter demanding monuments and public edifices. Their quarries yielded the Parian marble, and their traffic furniſhed them with ivory and braſs: they imbibed a taſte for luxury from their kindred of Ionia and Magna Græcia; while their mediocrity of means weaned them from oriental magnificence, and diſpoſed them to ſtudy the charms of ſimplicity. In their climate, the light and elegant ſtyle of architecture was alſo the convenient one.—The colliſion of individuals ſo oppoſite in manners and habits, as the refined Athenian and the rude Arcadian, the luxurious Ionian and the ſequeſtered Epirot, the auſtere Spartan and the effeminate Sybarite, could not fail, he conceives, to call forth the active powers of the mind, and to fertilize the invention.

The religion of Greece conſecrated hoſpitality, protection to fugitives, and the inviolability of holy places; it repreſented an awful vengeance as hanging over the head of the murderer, it upheld the ſanctity of oaths, and it conſidered the domeſtic hearth as an altar, and the receſs of the dead as a temple. The oracle of Delphi reproved tyrants, aided the labours of virtuous ſages, favoured beneficial inſtitutions, gave authority to moral principles, hallowed the duties of the citizen, and gave efficacy to that ſingular tribunal of Greece, the council of the Amphictyons.—Manly games rendered youth healthy, robuſt, handſome, and active, while they kindled in them a love of their country, a public ſpirit, and even the deſire of poſthumous fame; and they gave riſe to a diſintereſted and heroic friendſhip, which nothing but death could diſſolve. Like the untutored children of nature, only the gentleſt bands united the different tribes of this people: there were no others than a religion, a language, oracles, games, a council of Amphictyons, a deſcent, the inheritance of ancient fame, and the reputation of early exploits, which belonged to them in common. Their popular governments, though certainly not the beſt for all purpoſes, yet incredibly advanced the human mind, and produced a maſs of population more enlightened than any on which the ſun has ever ſince ſhone. Thus, amid the tranquillity of enterpriſing and rival ſtates, the ſons of Greece rendered conſpicuous their ſuperior ability, by the ſucceſsful proſecution of the rigid ſciences. The period of their independence laſted long enough to allow the human mind to reach the higheſt pitch of excellence, to which culture, under circumſtances the moſt favourable and operating on ſubjects the beſt calculated, is capable of raiſing it.—That this aſſertion is founded in truth, ſeems to be confirmed by our increaſing admiration of the yet remaining though mutilated works of the Greeks, whoſe pre-eminence in the fine arts has hitherto ſtood unrivalled and undiſputed; and it is a fact, however humiliating to modern efforts, that the greater the artiſt of our own times, the more enthuſiaſtic are his encomiums on the taſte and ſuperior ability of the ancient Greeks.

With reſpect to the efficiency of the ſeveral forms of government among the Grecian ſtates, many contrary opinions have at different times prevailed. The two principal conſtitutions, and from which moſt of the ſubordinate ſtates of Greece copied or legiſlated for themſelves, were the ariſtocracy of Sparta, and the democracy of Athens. That of Sparta, though nominally a republic, was in reality a mixed government, conſiſting of two hereditary kings, a ſenate of members elected for life, and five principal magiſtrates called ephori; as already ſtated in our account of the legiſlation of Lycurgus. One of the leſſons forcibly impreſſed by this government was, "*that innovation was a great evil*;" and ſuch was the effect of this principle, and of the judicious balance of the ſtate, that for upwards of four hundred years not a ſingle ſedition is ſaid to have diſturbed its internal tranquillity.

The democratical form of government given to Athens by Solon, has generally been deemed much inferior to that given to Sparta by Lycurgus; yet the fact has been conteſted by different writers. M. Lauliette, in his *Eſſai ſur les Grecques*, publiſhed in 1805, not only attributes the ſuperior talents and genius of the Athenians to their democratical form of government, but alſo their progreſs in the arts, and their invincible courage in arms. "A democratical government, (he obſerves,) is propitious to talents of all kinds; it exalts all the paſſions; it forces men to ſhew themſelves, with all their virtues and their faults, greedy of power, and capable of ſacrificing every thing to independence. Wherever man is found in a ſtate of perfect liberty, he is in the vicinity of the extremes of virtue, and of the extremes of corruption. He then diſplays no mediocrity either of good or evil. In this ſtate, ſo favourable to the developement of his faculties, he fears no reſtraint, he forms the boldeſt projects, and there is no point, however elevated, which he does not wiſh to attain."

In oppoſition to the doctrine of this French hiſtorian, our countryman Dr. Biſſet aſſerts, that the excellent laws which Solon formed for the Athenian democracy, were not the conſtitution which he thought the beſt, but which he thought them moſt diſpoſed to bear. He then proceeds to ſhew, by the fate of Solon's conſtitution, that, where power is not divided and checked, the government muſt ſoon be overturned; and that in democracies the people are not more exempt from the danger of being duped and enſlaved by their own creatures, than abſolute monarchs are of being miſled by their favourites. The ingratitude of the Athenians towards Miltiades, Ariſtides, Themiſtocles, Cymon, and Pericles, and their ſhameful treatment of many of their moſt virtuous citizens, he traces up *to the nature of their government as their genuine ſource*; he aſcribes them to the genius of their conſtitution, and not to any depravity of character in the people themſelves. Nor will he allow that the valour or gallant reſiſtance of the Athenians, to the torrent poured on Greece by Perſia, was the reſult of the natural energy of democratic government: and he illuſtrates his aſſertion by ſhewing that other ſtates, by no means democratic in their conſtitutions, have often diſplayed not leſs energy and not leſs bravery than the Greeks in many of their wars.

"Where men have great intereſts at ſtake, (ſays Dr. Biſſet,) whatever be their form of government, they fight ſtrenuouſly. The government of Scotland was certainly far from democratical, when Sir William Wallace, with his ſmall band, long ſucceſsfully oppoſed the invaders of his country. Theſe were not Aſiatics, relaxed by climate, and enfeebled by luxury, but from a country which has always produced ſoldiers, to whom the world never ſaw ſuperiors: they were Engliſhmen. They were headed not by an oſtentatious eaſtern deſpot, but by one of the braveſt and wiſeſt of Engliſh kings. The efforts of England againſt the Spaniſh Armada, containing infinitely better troops than the Perſian fleet, were not leſs wiſe nor leſs vigorous than thoſe of the Athenians. A general ſpirit prevailed of fitting out ſhips, and going to combat the enemy. Our admirals availed themſelves no leſs of ſuperior ſeamanſhip, and ſuperior knowledge of the ſeas adjoining our coaſts, than did Themiſtocles. In Holland, when

the Dutch government was not democratical, the efforts of William III. and his countrymen, againſt the invading power of Louis XIV. were equally energetic with thoſe of the Athenians; and againſt troops to which the Perſians were as much inferior as their commanders, Mardonius and Xerxes, were to Turenne and Condé. Soldiers have generally fought beſt when attached to their ſuperiors. The German retainer, we are told by Tacitus, exerted himſelf with the moſt uncommon vigour, when fighting under the eye of his chief. Never did the Scotch highlanders, eminent as they have been at all times for their proweſs, fight with more energy, than under the chiefs of their reſpective clans. In fact, European ſoldiers generally fight bravely, whatever be their cauſe. Never did the Athenians exert themſelves more forcibly than the Macedonians when fighting under their king. Never did the efforts of any democracy exceed thoſe of the Spaniards under the prince of Parma, of the Turks under Solyman, of the Ruſſians under Romanzow, of the Auſtrians under prince Eugene, of the Pruſſians under Frederic the Great, and of the Britiſh under all commanders. Thus we ſee the opinion that democracy produces greater military exertions than any other government, is totally unfounded. In reality, the exertions of the Athenians, ſo far from ariſing from their democracy, was owing to a temporary departure from its ſpirit. By the Athenian conſtitution there were ten generals. Conſiſtently with their loved equality, each of theſe commanded in turn. At the battle of Marathon, the command was conferred on Miltiades alone; and here the democracy of inſtitution, in the time of danger, gave way to the ariſtocracy of nature. Ariſtides and Themiſtocles, during the ſecond Perſian war, were really princes: eſpecially the laſt. The Athenians acted according to the will of Themiſtocles, not Themiſtocles according to the will of the Athenians. Themiſtocles led the people from Athens to the ſhips; forced them to remain in the ſtraits of Salamis, and fight; drove Xerxes from Greece; fortified the Pyræus; increaſed the population, riches, and power, of Athens; and finally raiſed his country to the firſt ſtation in Greece. Had the Athenians, inſtead of ranging themſelves round the ſtandard of a leader, following his counſel, and obeying his orders, thought and acted for themſelves; had they in all theſe emergencies continued democratical; they would have become a province of Perſia. Acting for a time as ſubjects to a wiſe prince, they were eminently ſucceſsful; but on returning to their uſual democracy, they ungratefully doomed their benefactor to ruin. Not only wars of rapine and bloodſhed, continues this author, but ambition, injuſtice, and cruelty, are inherent in the very nature of a conſtitution purely democratical." But Dr. Biſſet muſt allow that wars of ambition, conqueſt, and injuſtice, have been begun by governments that were *not* purely democratical, nor purely monarchical; that even mixed governments have ſometimes without provocation, or the ſhadow of right, invaded the territories of other ſtates, depoſed ſovereigns, ſyſtematically purſued plans of aggrandizement, and ſometimes diſgraced wars that were in themſelves juſt, by the moſt ſhocking cruelties: of the former we have the ſtrongeſt evidence in the extent of the Britiſh empire in India; of the latter, in the maſſacre of Glencoe, and the bloody progreſs of the Engliſh army in Scotland after the battle of Culloden; and of both, in the wars of rapine and plunder ſo ſucceſsfully carried on by Bonaparte.

To the democratical form of government is attributed the levity, fickleneſs, and injuſtice, of the Athenians towards Alcibiades, in trying and condemning him unheard. Unfortunately, our own hiſtory, notwithſtanding the mixture of our government, records but too many inſtances of fickleneſs, and of the injuſtice of condemning perſons to death without a hearing. The attainders by act of parliament of queen Ann Boleyne, of Cromwell earl of Eſſex, and of various others, without ſo much as the formality of an appearance at the bar, will ever atteſt the melancholy truth that barefaced injuſtice is not alone confined to democratic ſtates. A perfect democracy, however, is too often diſtinguiſhed by a total diſregard of juſtice in judicial proceedings. "Every day, (ſays Dr. Biſſet,) afforded ſome inſtance of unjuſt ſentence, and unmerited acquittals, in the general aſſembly of Athens. Thoſe real patriots, who dared to ſpeak plain and bold truths, were impriſoned or put to death, while the demagogues, who flattered their vices and folly, though really bribed by their enemies, were held in the higheſt honour. Even private cauſes, in which the populace at large might not be ſuppoſed to be ſo much intereſted, were decided according to the whim of the people, or the popularity of the advocate who undertook the cauſe; and thus eventually was brought on the diſgrace and ruin of the ſtate."

A ſhocking inſtance of the blind fury of a democratical government, is recorded in the annals of Carthage. It was the intention of Alexander, had he lived, to have entirely deſtroyed the commerce of a nation ſo intimately connected with the Tyrians; and the magnitude of the deſign was worthy of the ſon of Philip. A thouſand galleys, on the return of the Macedonian monarch, would have ſailed from Alexandria throughout the Mediterranean; nor would the ſubjugation of Carthage have been deemed complete, until the whole of the adjacent coaſts, both of Africa and Spain, had acknowledged Alexander as their ſovereign. A broad and regular road for the convenience of commerce, was to have extended along the conquered line of coaſt, to Ceuta and Tangier; whilſt the eſtabliſhment of arſenals, havens, and dock-yards, at proper intervals, would have diſplayed the naval ſupremacy of Macedonia. Theſe deſigns of Alexander were in part ſuſpected by the Carthaginians, who accordingly employed the addreſs of Hamilcar to avert the impending ſtorm: but the report of their ambaſſador ſerved only to confirm their apprehenſions. On his arrival in Egypt, Hamilcar beheld with aſtoniſhment the riſing metropolis of eaſtern commerce: the alarm was quickly conveyed to Carthage; and the trembling meſſenger, who bore this unwelcome intelligence, was ſacrificed to the puſillanimous agitation of an ungovernable and ferocious democracy.

The regulations, as well as progreſs, made by the Greeks in military and naval tactics, and in the co-operation of their fleets and armies for the purpoſes of attack and defence, are the firſt on record which eminently diſtinguiſh any of the nations of antiquity. Mr. Clarke, in his Progreſs of Maritime Diſcovery, recently publiſhed, has ſhewn that in a Grecian fleet, the principal officers varied but little from the modern liſt; though naval and military duties were too much blended with each other. The *commander of the troops* appears to have preceded the *admiral*; of which rank, the Greeks had uſually from one to three officers in a ſquadron: yet ſuch was the prejudice, or jealouſy, of the times, that when an admiral had once diſcharged the important duties of that illuſtrious ſtation, he was ever afterwards deemed by the Spartans incapable of occupying the ſame rank. His title as commander of a fleet was *dux præfectuſque claſſis*. To the admiral ſucceeded the captain (*navarchus*), and then followed a poſt of great honour and reſponſibility, the pilot (*gubernator*), to whom the charge of the veſſel and the diſcipline of its crew were aſſigned. Under the pilot was appointed a ſort of mate called *proreus*, from his ſtation at the prow; he had the keeping of ſtores for the ſhip's rigging, and was allowed to diſtribute places to the rowers. Commanders of galleys, in addition to the above title of *navarchus*, or captain, were ſtyled *trierarchs*; and, when two were on-board, each commanded for ſix months.

This

This appellation of trierarchs was alſo given to thoſe cities, that in time of war were appointed to fit out galleys. The modern boatſwain is diſcovered in thoſe duties which the *keleuſtes* of the Greeks performed; he paſſed the word of command throughout the veſſel, and alſo aſſiſted in diſtributing the ſhip's allowance of proviſions. The appointments of purſer and ſecretary were always united, as they ſometimes are at preſent; and the ſprightly notes of the drum and fife, by which the labour of the capſtan-bar is at preſent ſo much abated, was a delightful taſk aſſigned to the Grecian *trieraules*, who ſtood before the maſt, and cheered his weary ſhipmates with the exhilarating muſic of the Canaanites:

Againſt the maſt the tuneful Orpheus ſtands,
Plays to the weary'd rowers, and commands
The thought of toil away! *Statius*, v. 343.

Whilſt on-board, the hardſhips which the Grecians endured, muſt have been conſiderable, from the ſmallneſs of their veſſel, and the badneſs of its accommodations. The rowers had only a wooden bench to repoſe on, and even the ſituation of their officers differed but little from the reſt of the crew; ſince it was objected againſt Alcibiades, as a mark of great effeminacy, that he was the firſt Grecian who had ordered his bed to be ſlung, in order to break the motion of the veſſel. The crew was divided into rowers (*remiges*), mariners (*nautæ*), and the ſoldiers, or marines, who were ſtyled *claſſiarii*. The rowers were again ſubdivided into the lower rank called *thalamitæ*, the middle *zugitæ*, and the uppermoſt *thranitæ*. Thucydides adds that the latter were paid the beſt, becauſe they worked a heavier oar. A ſhip's complement rarely exceeded two hundred; the uſual pay of their ſeamen was three oboli a day; and if we add the fourth, that was given by Cyrus at Lyſander's requeſt, it would amount on the whole to nearly ſixpence halfpenny. This however was ſometimes raiſed to a drachma, or about ninepence, though ſome authors make it leſs; as when the Athenians fitted out a fleet againſt Sicily.

In military ordinations, the Grecian armies chiefly were formed of free denizens. At the age of eighteen, the Athenians were appointed to guard the city, with its forts; at twenty they were ſent to foreign wars; and the Spartans, at thirty. At threeſcore, they were allowed to retire. At Athens, no one, above forty years of age, unleſs in a time of danger, was obliged to ſerve in war. The keepers of the revenue, and thoſe who danced at the feſtival of Bacchus, were exempted; ſlaves were alſo excluded from ſerving; and all who ſerved were regiſtered. The early Grecians were appointed by lots; the ſoldiers always maintained themſelves; none, but thoſe exempted by law, were allowed to abſent themſelves from ſervice, upon pain of loſing the rights of citizens, and of excluſion from the public temples. If they made their eſcape, they were branded with marks in their hands called σιγματα, to diſtinguiſh them from ſlaves who were marked on their foreheads. The Carians were the firſt who ſerved for pay; hence the terms καρικοι, and καριμοιροι, are uſed proverbially for cowards. *Heſychius.*

The Grecian armies were compoſed of different ſorts of ſoldiers. Their main body conſiſted of foot-men; the reſt were carried on chariots, horſes, or elephants. The foot-ſoldiers were at firſt of three ſorts; 1. Οπλιται, who bore heavy armour, and engaged with broad ſhields and long ſpears. 2. Ψιλοι, light-armed men, who fought with arrows and darts, or ſtones and ſlings; they were inferior to the heavy-armed ſoldiers. When they had ſhot their arrows, they retreated behind the ſhield of the heavy-armed ſoldiers. 3. Πελταϛαι, were armed with ſhields and ſpears, but of leſs ſize than thoſe of the οπλιται. The horſemen were not at firſt numerous, being thoſe only who could maintain themſelves; and who afterwards provided ſubſtitutes to ſerve for them. Their manœuvres in the field of battle were regulated with ſcientific preciſion; and their modes of forming for attack and defence were founded upon the moſt perfect principles of human ſagacity.

Thus in arms, as well as in arts, the Greeks excelled all their contemporaries; and it afforded matter of aſtoniſhment to the Romans, on their firſt appearance in Greece, to find a people ſo far before them in all the attainments of political and civilized life. With them the brilliant epoch of the polite arts, was alſo that of the belles-lettres. The poets and the orators of Greece co-operated with her painters, ſculptors, and ſtatuaries, in bringing to perfection the higheſt attainments and productions of human excellence; while her philoſophers and legiſlators regulated the commonwealth; and her heroes bled in its defence. During this period of Grecian glory, all that was great in man, all that contributed to exalt his powers, and to kindle every ſpark of talent, was cheriſhed by the moſt happy combination of events,—by a combination which very rarely occurs in the hiſtory of the world. Yet ſuper-eminent as was once the meridian glory of the Grecian people, their declination was proportionally rapid. Deſtitute of immediate and important objects to rouſe their activity, the example of their anceſtors ſoon ceaſed to animate and inſpire them. The rewards and incentives to merit being withdrawn, men no longer aſpired at excellence. The ſpirit of patriotiſm vaniſhed; the fire of genius was extinguiſhed; exertion periſhed with hope; and Greece, from the age of Alexander, is deſtitute of any tranſactions highly memorable either in arts or in arms.

PRESENT STATE OF MODERN GREECE.

This country, which has conferred ſo much honour on humanity, is now ſcarcely viſible among nations; and the luminary, which once enlightened her, ſeems to have ſet for ever. Rome has been more fortunate; ſhe has riſen from her ruins, and has obtained a ſecond exiſtence almoſt as brilliant as the firſt. She does not indeed preſent in modern times the majeſtic and ſtriking ſpectacle of a free and conquering people, nor a ſenate formidable to her citizens and to the world: but the genius of her ſovereigns long procured for her a domination not leſs extenſive than that which ſhe formerly enjoyed. The pomp of the Vatican, and the temple of the apoſtle of Chriſtianity, have in ſome degree eclipſed the majeſty of the Pantheon and the palace of the Cæſars. Italy has ſeen *chefs-d'œuvre* ariſe on the remains of thoſe of antiquity, and her harmonious lyres have revived the aſhes of Horace and of Virgil: but Greece has never recovered the happy privilege of enlightening and charming her people; and barbarians now trample over and diſgrace that claſſic ground. The ſectaries of Iſlamiſm, incapable of the efforts of creative genius, have almoſt effaced the very traces of the glory of Athens; brutiſh and miſerable ſlaves, without thought, and in ſtupid ignorance, walk over the auguſt theatres on which Sophocles and Euripides diſputed the tragic palm—on which Æſchines and Demoſthenes ſhared the triumphs of eloquence, and Plato and Ariſtotle aſſumed the glory of enlightening mankind.

The iſles have endured the ſame fate in which the continent has been involved; the ſame yoke is impoſed on Rhodes, ſo celebrated both for her maſter-pieces of art and for the induſtry of her inhabitants; on the iſland of Crete, in which poetry has placed the cradle of Jupiter; and, in ſhort, on the whole Archipelago, in which the illuſions of fable conſpired with the charms of nature to create a region of enchantment. What happy revolution, what exertion of European policy, will reſtore this country to its priſtine glory; and there rekindle, after the lapſe of twenty centuries, the torch of the arts? Modern Greece having been thus unfortunately ſubjected to the Turkiſh yoke ever ſince the fifteenth

fifteenth century, is now generally diſtinguiſhed by the appellation of Turkey in Europe, of which it forms the moſt ſouthern part. Romelia contains Thrace, Pæonia, Macedonia, and all the northern part of ancient Greece; while the Morea compriſes the whole of the ancient Peloponneſus. On the weſt of Romelia is ſituated Albania, which includes the kingdom of Epirus, Chaonia, and part of Illyricum. Crete, which ſo long proſpered under the laws of Minos, is now Candia. The whole of theſe territories, with the iſlands of the Archipelago, are alike under the dominion of the grand ſeignior; for particulars of all which, ſee under their reſpective names in this Encyclopædia. Magna Græcia, which became part of the kingdom of Naples, is the modern Campania; in which were the celebrated cities of Herculaneum and Pompeii; both of which were overwhelmed with lava in an eruption of Mount Veſuvius, in the year of Chriſt 79; and after the lapſe of ſixteen hundred years, they were again diſcovered, at the beginning of the eighteenth century.—See thoſe articles.

Of the preſent degraded and humiliating condition of the modern Greeks, we have but too many affecting inſtances, as ſet forth in the recent details of judicious and reſpectable travellers. M. Sonnini, who traverſed Egypt and Greece by order of Louis XVI. furniſhes us with the following intereſting remarks: "If, ſays he, from the compariſon of the phyſical ſtate of the two countries, we paſs to that of the men who inhabit them, we ſhall find no reſemblance but in the deſpotiſm by which they were both enſlaved. The Copt, or native of Egypt, whoſe character partakes of the dryneſs and rudeneſs of the climate, is ſhort and heavy; his head is big, but empty; his face is broad and flat; his complexion is ſallow and dark; and his countenance is mean. His diſpoſition is gloomy and melancholy; his treachery is the more dangerous, as it is, in a manner, more concentered: having no taſte for the arts, no flight of curioſity leads him to inſtruction; ſedentary, becauſe he has no vivacity in his mind, he ſeeks not to be acquainted with what ſurrounds him; lazy and ſlovenly, clowniſh and ignorant, unfeeling and ſuperſtitious, he has no longer any remembrance, nor even any trace remaining, of the greatneſs of his anceſtors. See the article EGYPT.

"What a difference between this nation, entirely degenerated, and that which ſtill inhabits the fallen countries of Greece! Under a pure ſky, in a wholeſome, temperate, atmoſphere, impregnated with the ſweeteſt emanations, on a ſoil which nature decks with flowers, and clothes with the verdure of eternal ſpring, or which may be enriched with crops of every ſort, or with delicious fruits, we muſt expect, among the men, to meet only with amenity of manners and ſweetneſs of diſpoſition. I am ſpeaking of the men whoſe generations there ſucceed each other without interruption; for the ignorant and untractable uſurper may, by his ſtupid ferocity, pollute the moſt happy climate, the moſt ſmiling country; and ages are required for their influence to temper, in a perceptible manner, the rudeneſs of his inclinations. The man of theſe charming parts of Greece is of a handſome ſtature; he carries his head high, his body erect; he is dignified in his carriage, eaſy in his manners, and nimble in his gait; his eyes are full of vivacity; his countenance is open; and his addreſs agreeable and prepoſſeſſing; he is neat and elegant in his clothing; he has a taſte for dreſs, as for every thing that is beautiful; active, induſtrious, and even enterpriſing, he is capable of executing great things; he ſpeaks with eaſe, he expreſſes himſelf with warmth; he is acquainted with the language of the paſſions, and he likewiſe aſtoniſhes by his natural eloquence; he loves the arts, without daring to cultivate them, under the brazen yoke which hangs heavy on his neck; ſkilful and cunning in trade, he does not always conduct himſelf in it with that frankneſs which conſtitutes its principal baſis; and if we ſtill find in modern Greece many of the fine qualities which do honour to the hiſtory of ancient Greece, it cannot be denied that ſuperſtition, the child of ignorance and ſlavery, greatly tarniſhes their luſtre; and we alſo diſcover in their diſpoſition that fickleneſs, that pliability, that want of ſincerity, in ſhort, that artful turn of mind which borders on treachery, and of which even the Greeks of antiquity have been accuſed. Every one is acquainted with that famous line which paints ſo well the character of the Greeks: *Timeo Danaos, et dona ferentes.*

"But this obliquity of character fortunately does not extend, or at leaſt is very much weakened, among the women of the ſame countries. The Greek ladies are, in general, diſtinguiſhed by an elegant ſhape, and a majeſtic carriage. Their features, traced by the hand of beauty, reflect the warm affections of ſenſibility; the ſerenity of their countenance is that of dignity, without having its coldneſs or gravity; they are amiable without pretenſion, decent without ſourneſs, charming without affectation. If, to ſuch brilliant qualities, we add elevation of ideas, warmth of expreſſion, thoſe flights of ſimple and ingenuous eloquence which attract and faſcinate, a truly devoted attachment to perſons beloved, exactneſs and fidelity in their duties, we ſhall have ſome notion of theſe privileged beings, with whom nature, in her munificence, has embelliſhed the earth, and who are ſtill the natives of Greece.—It is however to be lamented, that this amiable and intereſting people ſhould continue under the heavy yoke of the ſtern and proud Muſſulman; their ſlavery, like that of the deſcendants of the ancient Egyptians, is abſolute, and of too long ſtanding."

The iſlands of the Ægean Sea are the next objects of M. Sonnini's reſearch; thoſe numerous groups of lands and rocks, promiſcuouſly ſcattered throughout that ſea as an eternal monument of its depredations on the continent, which were divided by the ancients into Cyclades and Sporades: denominations now no more remembered, as they at preſent are known only under the general deſignation of the Iſlands of the Archipelago; for the ancient names of which ſee the article GEOGRAPHY, p. 378, of this volume; and for the modern names, ſee the article ARCHIPELAGO, vol. ii. p. 63.—As moſt of theſe iſlands, which are remarkable for the beauty and the fertility of their ſoil, celebrated by the writers of antiquity, and famed for having given birth to great men, are ſtill important points of eſtabliſhment, communication, or commerce, they become of the greater intereſt to the inquiſitive reader.—Stampali, he tells us, is one of the moſt fertile of the iſlands, and the inhabitants participate in the mildneſs of the climate and the ſoil; being free from that harſh and rough character ſo viſible in their neighbours, the iſlanders of Calamo and Lero, which are hard and rugged countries. In theſe regions, however, ſo favoured by nature, and ſo diſgraced by the form of government to which their unhappy lot has doomed them, the gifts of ſuperior fertility ſerve only as a ſcourge, and a rocky barrenneſs would be a deſirable boon: ſince the natural and legitimate ſource of riches becomes that of frequent extortions. The more ſmiling and beautiful is the country, the more it invites the attention and the viſits of their cruel exactors, who take from the inhabitants all encouragement to induſtry, and entirely ſuppreſs agriculture; while theſe ſenſeleſs deſpots, who ruin themſelves by ruining their territory, avoid the ruder climates, becauſe they are afraid of men who live on mountains, the uſual aſylum of poverty, courage, and independence. But the iſland of Delos, formerly ſo opulent, (ſays M. Sonnini,) and where were celebrated with ſo much pomp religious ceremonies, in preſence of an immenſe concourſe who repaired thither from all points of the eaſt, is now no longer any thing but a deſert, aban-

doned to filthy animals, and covered with ruins and rubbiſh. Pirates and robbers are almoſt the only men who land there; they go thither to ſhare the fruit of their plunder, or concert new ſchemes of rapine, ſeated on fragments of altars where incenſe and perfumes burnt in honour of the god of day. The ruins of Delos, the impoſing remains of the moſt beautiful edifices of which ancient Greece was proud, are now no longer what they were at the periods when modern travellers viſited and deſcribed them. They themſelves have their ruins, and they owe their freſh degradation to the profane barbariſm of people who come thither to take materials for building their houſes, or to wretched Turkiſh ſculptors, who carry off every year precious pieces, in order to make of them thoſe little pillars ſurmounted by a turban, which the Mahometans erect over the graves of the dead.

In the Travels of M. Stephanopoli through Greece in 1798, it is ſtated, "that if a Greek appears in a rich habit, the loweſt Turk will enviouſly take out his knife, and cut it in pieces. Throughout Romelia, a Greek male child is no ſooner born, than the firſt Turk who hears of it ſends his handkerchief to the father, and from that moment the child is his ſlave; if the father refuſes the handkerchief, the Turk ſoon finds out a method of ruining both father and child. A Turk, however low, conſiders every Greek whom he meets as being at his command, and orders him as he pleaſes. A Greek iſlander was lately meaſuring out corn from his boat; a Turk on the pier ordered him to fetch fire to light his pipe; the Greek ſtopped to fill his ſack, which wanted very little of being full; and the Turk, becauſe he did not obey him inſtantly, ſhot him dead.

"Stravachi, a Greek, while a ſort of intendant to the beys of Wallachia and Tranſylvania, accumulated a large fortune. Repeated vexations, which his wealth had brought on him, induced him to preſent himſelf before the grand ſeignior, whom he thus addreſſed:—"Pleaſe your highneſs, I am worth twelve millions of piaſtres; I have no child; thou ſhalt be my heir; guarantee my fortune to me for my life." The ſultan, pleaſed with the offer, laid his hand on the other's ſhoulder, and ſaid, "Enjoy thy fortune in ſafety." For ſome years he was unmoleſted; but, at laſt, they thought that he lived too long; they accuſed him to the ſultan of intending to eſcape, with his fortune, to Ruſſia; they obtained a decree of death againſt him; and he was inſtantly taken and hung."

The ſtatements of theſe foreign writers are fully confirmed by our own countryman, Mr. Eton, who was many years reſident in Turkey. He remarks that the captain paſha, or grand admiral of the Archipelago, goes annually with a fleet to collect the tribute: it is then that the poor Greeks feel the weight of the iron ſceptre that governs them, and all the inſults and oppreſſion of the vile ſatraps of the tyrant. When a ſhip of the fleet arrives in a port, all the people who can, fly to the mountains or into the country, others ſhut themſelves up in their houſes, without daring to ſtir out. All who are on the roads are plundered by the ſoldiers and ſailors of the ſhips, and if they are not cut or maimed, they eſteem themſelves happy: even in the ſtreets it is the ſame. Thus the poor Greeks pay another contribution to the fleet, which is heavier, to thoſe on whom it unhappily falls, than that to the ſultan.

If a woman, or a girl, or even a boy, is met by them in any place not immediately under the eye of their officers, or where they might be expoſed to reſiſtance, they are inſtantly made victims to their brutality. In ſmall towns and villages, this ſometimes happens in the ſtreets. The officers cannot always, and often will not, reſtrain them, except where the crime is too public, and complaint might be made to the porte. The captains and officers raiſe contributions for themſelves on the principal inhabitants under various pretences. The Greeks are generally prevented from complaining, out of fear that the next ſhip which comes will take revenge. When the Turkiſh ſhips of war are met at ſea, they are little better than pirates to the Greeks and Raguſans.

The inſenſibility of theſe barbarians is at the ſame time aſtoniſhing: living amid the effulgence of genius, they have not caught one ſingle ſpark; they gaze with unfeeling ſtupidity on the wonder and boaſt of art, on their glorious monuments, on their temples, and conclude they were built by genii, and then deſtroy them, to burn the marble for lime to make ſtucco for their houſes, whence the fine arts are baniſhed; where ignorance, tyranny, ſuperſtition, and groſs ſenſuality, dwell; and lay waſte the country round, imbruing their hands in the blood of the helpleſs, by murdering, without remorſe, thoſe they have conquered. Thus the fineſt countries in the world are almoſt become deſerts; part inhabited by ſavage beaſts, and part by more ſavage men; the poor aborigines ſkulking in hiding places like the timid hare, (which epithet the Turks give them in deriſion,) while thoſe beaſts of prey in human ſhape roam abroad. Every object moral and phyſical, the fair face of ancient Greece, and the intellectual energies of the inhabitants, have alike been blaſted and defiled by Mahommedan tyranny. As an inſtance of thoſe changes which the country has undergone, we need only conſider the iſland of Cyprus, now an almoſt uninhabited deſert, which was, not only in ancient times, but when it was taken by the Turks from the Venetians, populous and exceedingly rich. The number and excellency of its productions were wonderful. At preſent only a little cotton, ſome ſilk and wine, and a few drugs, are its produce; but of no great amount. Even the ſalt-works, which were ſo great a branch of revenue and commerce to the Venetians, have produced nothing ſince the Turks have been poſſeſſed of the iſland.—See the article CYPRUS, vol. v. p. 545.

Of the defects of the Grecian character, ſome are doubtleſs owing to their ancient corruptions; but moſt of them take their riſe in the humiliating ſtate of depreſſion in which they are held by the Turks. This degradation and ſervility of their ſituation has operated for centuries, and has conſequently produced an accumulated effect on the mind; but were this weight taken off, the ſuperior vigour of the ſoul would have wide room for expanſion; and though it cannot be expected that they would at once riſe to the proud animation of their former heroes, they would doubtleſs diſplay energies of mind, which the iron hand of deſpotiſm has long kept dormant and inert. It is rather aſtoniſhing that they have retained ſo much energy of character, and are not more abaſed; for like noble courſers they champ the bit, and ſpurn indignantly the yoke; when once freed from theſe, they would doubtleſs re-enter the courſe of glory. When alſo we view the modern Greeks in their more comprehenſive character as a nation, their ſuperiority over the Turks in knowledge is ſurpriſingly great; they poſſeſs an enlarged degree of genius and invention, and are of a lively imagination; both men and women ſpeak much, and with natural volubility and boldneſs; numbers of them ſpeak Italian, but all have an activity and ſprightlineſs which ſtrongly contraſts with the ſenſeleſs gravity of the Turks; an European finds himſelf as it were at home with them, and amongſt creatures of his own ſpecies; whilſt with Mohammedans there is a diſtance, a non-aſſimilation, a total difference of ideas; and the more he knows of their language, the more he perceives it; on the contrary, the more intimately he knows the Greeks, the more ſimilar does he find them in habits and manners to other Europeans: their bad reputation is more owing to the ſlander of their enemies, than to any great degree of demerit. In general, they are an agreeable and a ſerviceable people, but they are much given to levity, are im-

moderately ambitious, and fond of honourable diſtinctions; but this very ambition, now a weakneſs, when they have nobler objects to purſue will lead them to greatneſs.

From the account given by Tott, (vol. i. p. 118,) of the diſturbances excited by the patriarch Kirilo, it would appear that the Greeks have not yet entirely abandoned that ſpirit of ſuperſtition and bigotry, which was, perhaps, the main cauſe of their former downfall. It muſt be obſerved, however, that theſe diſputes are not ſo much foſtered among themſelves, as they are owing to the efforts of the Latin church, which was the caſe in the inſtance alluded to, where the foundation of the conteſt was a bull of the pope, directed againſt the Greek church. See the eccleſiaſtical diſcipline of theſe churches under their reſpective heads. The Greeks bear the Turkiſh yoke with greater impatience than other Chriſtians, and poſſeſs a ſpirit of enterpriſe which, however ridiculed by ſome authors, often prompts them to noble atchievements. Their ancient empire is ſtill freſh in their memory; it is the ſubject of their popular ſongs, and they ſpeak of it in common converſation as a recent event. And that they poſſeſs a firm and manly courage, notwithſtanding the inſinuations of their calumniators, has been too often teſtified to be in the leaſt doubtful; the inſtances which they not long ſince diſplayed in the Ruſſian ſervice, have been truly ſtriking. The moſt obſervable difference in the Grecian character, is between thoſe of Conſtantinople and their countrymen of the iſlands. The merchants and lower orders of the Conſtantinopolitan Greeks have indeed no very marked character; they are much the ſame as the trading Chriſtians in all parts of the empire; that is to ſay, as crafty and fraudulent as the Jews, but leſs ſo than the Armenians, who are the moſt ſubtle of all uſurers.—See the article ARMENIA, vol. ii. p. 194.

But in the ſuburb of Conſtantinople called the *Fenàr* or *Fenàl*, there lives a race of Greeks who call themſelves nobles, being the deſcendants of certain opulent Grecian families, and from among whom are generally appointed the drogomans of the porte, and the waywodes of Wallachia and Moldavia. They have long kept theſe places among them, as they are moſtly allied together, and, for this purpoſe, keep up a conſtant connection with the officers of the porte. They are all people of good education, and are polite; but haughty, vain, and ambitious, conſidering the contempt they are treated with by the Turks. While they are drogomans of the porte, they are obliged to behave with great caution and prudence, but when they become waywodes, they are in nothing different from Turkiſh paſhas in tyranny; nor is it to be wondered at, when men are obliged to look up not only to tyrants, but to the very ſervants of tyrants, for honour and promotion; to flatter their ignorance and ſtupidity, their foibles and their vices, and to tremble for their lives at their frowns, that cunning takes the place of wiſdom, vice of virtue, and treachery of fortitude. In ſuch a ſituation the mind muſt loſe its vigour, the heart its generoſity: the abaſement of man by ſuch cauſes was never more ſtrongly exemplified than in the inſtance of the Greeks of the Fenàl; they do not weep over the ruins which they cannot reſtore, nor glow with emulation to rear others of equal magnificence. For no ſooner is a waywode appointed, than he ſets out in great ſtate for his government, attended by a crowd of relations and dependents, for all of whom, as well as for his own ſplendor, he muſt provide, by oppreſſing the unhappy ſubjects of his government. Meanwhile his countrymen at Conſtantinople are engaged in continual plots for his removal, and it becomes neceſſary for him to accumulate a large ſum to bribe the miniſters and others on his return, and to avert the perſecution which continues for years afterwards to hang over him.

The Greeks of Macedonia, Thrace, &c. are robuſt, courageous, and ſomewhat ferocious; thoſe of Athens and Attica are ſtill remarkably witty and ingenious; all the iſlanders are lively and gay, fond of ſinging and dancing to an exceſs, affable, hoſpitable, and good-natured; in ſhort, they are the beſt; thoſe of the Morea are much given to piracy; but it is not to be wondered at, conſidering the cruel treatment they have met with, and the ſtruggles they are continually making againſt the Turks. Albania, Epirus, and in general the mountaineers, are a very warlike, brave, people, but very ſavage, and make little ſcruple of killing and robbing travellers; a Turk cannot venture into their country alone; there is no one in it but would make a merit of ſhooting him, ſo deeply is their hatred to their oppreſſors rooted. The Greeks of Zante and Cephalonia, ſubject to the Ruſſians, are notorious for ſtabbing with knives. In ſome of the iſlands, the people are not handſome. In Mitylene, the women are remarkable for very large breaſts. In Tinos, the women are almoſt all beauties; and there the true antique Grecian contour is to be found. In general, the people of the iſlands have grand and noble features. From different faces you may put together, in walking through a market-place, the heads of Apollo and of the fineſt ancient ſtatues.

It is impoſſible for any perſon to form a judgment of the conduct of the porte towards theſe provinces, by any analogy from the political operations of other European nations. Amongſt us, the unſucceſsful revolt of a whole province would indeed give birth to ſome additional rigour, and to ſome ſtriking example of puniſhment; but the ferocious Turk propoſes nothing ſhort of extermination, in order to free himſelf from the fear of future defection. It was thus that, when the inhabitants of the Morea, who, inſtigated by the deſire of liberty, had taken up arms in favour of Ruſſia, returned under their yoke, a deliberate propoſal was made in the divan to ſlaughter them all in cold blood, innocent and guilty, of whatever age or ſex. Nor was this the firſt time that the maſſacre of the whole Greek nation had been ſeriouſly debated: it was, however, in the preſent inſtance, ſucceſsfully oppoſed by Gazi-Haſſan, both on motives of humanity and policy. The chief argument which he uſed, and which alone carried conviction to his hearers, was: *if we kill all the Greeks, we ſhall loſe all the capitation they pay.* Even without ſuch a provocation, ſultan Muſtafa, predeceſſor and brother of Abdulhamid, on his acceſſion to the throne, propoſed to cut off *all the Chriſtians in the empire*, and was with difficulty diſſuaded from it. Yet ſuch is the people with whom ſome certain Chriſtian nations, jealous and envious of each other, are emulous to form an alliance of brotherly amity and mutual good faith!

After the Greeks were conquered by the Turks, they were never admitted to the rights of citizens or ſubjects, unleſs they abjured their religion and their country; they became ſlaves, and as, according to their law, the Turks have a right at all times to put to death their priſoners, the conquered and their poſterity for ever are obliged annually to *redeem their heads*, by paying the price ſet on them. It is death for a conquered Greek to marry a Turkiſh woman, or even to cohabit with a common proſtitute of that nation. The teſtimony of a Greek is not valid in a court of judicature, when confronted with that of a Turk. They are diſtinguiſhed by a different dreſs; it is death to wear the ſame apparel as a Turk; even their houſes are painted of a different colour; in fine, they are in the ſame ſituation they were the day they were conquered, totally diſtinct as a nation, and ſtill groaning under the iron tyranny of the barbarous uſurpers of their country.—See Eton's Political State of Greece, p. 346–359.

To theſe remarks we ſhall add the valuable information derived to us from Mr. Dallaway, in his recent Excurſions to the Iſlands of the Archipelago.

"Although

"Although the renowned names of Comneni and Paleologi no longer exiſt, they are yet claimed by conſanguinity; and ſeveral of thoſe families, who are now the principal of the Greeks, can boaſt, with a certain degree of preciſion, a lineal deſcent from, or agnation to, them. The fertile provinces of Moldavia and Wallachia are now, or were lately, held by the chiefs of two powerful Grecian families of the Fenàl, Callimachi and Moroozi. The former was drogoman to the porte, that is, *terdji-man*, which ſignifies interpreter; and appointed in 1795; the latter, having officiated in that capacity at the peace of Seſtovia, concluded in 1792 between the Turks and Imperialiſts, was rewarded for his ſingular ability, in the following year. He diſcovered in his government more patriotiſm than his predeceſſors, many of whom have been ſacrificed to their treachery or avarice; and his people, inured to tyranny, experience unuſual clemency. As uſeful novelties, he has eſtabliſhed a preſs, a manufactory of cloth, and a regular poſt through his territory. His father was hoſpodar of Moldavia, and his education has been in courts, where he acquired that *fineſſe* and political acuteneſs, to which he owed his advancement, and by which he has gained more popularity than almoſt any other of the great families amongſt the Greeks, who occaſionally ſhare theſe emoluments. Conſidering that the whole character and importance of the fallen Greek nation is concentered in a few individuals, and their immediate relatives, the conteſts of implacable jealouſy, conducted by infinite intrigue, continually diſtract them; and the animoſity between the houſes of Montagu and Capulet is renewed in the Fenàl.

"Of the Ipſilandi family, the preſent chief has been twice prince of Moldavia, and once of Wallachia. He was taken priſoner by the Auſtrians, in the war with the Turks; was liberated at the peace, and then baniſhed to the iſland of Rhodes, from whence he has been ſince recalled. His ſon is the moſt accompliſhed and amiable of the modern Greek nobility. Verſed not only in oriental learning, he has acquired a critical knowledge of the claſſics, and European languages. Should he enjoy future advancement, he will probably exhibit a rare character amongſt his degenerate countrymen,—that of a ſcholar, and a promoter of ſcience and literature.

"To ſeveral princes of the houſe of Mavro Kordato, that name is truly appropriate. When hoſpodar of Moldavia, the preſent repreſentative patroniſed ſeveral literati, by whom a dictionary of *Romeïka*, or modern Greek, French, and Italian, was compoſed, in three volumes, 4to. A grammar is prefixed, which is the beſt attempt to reduce that language to ſyſtem, and to analyze its formation. Several of the moſt approved of the Italian and French comedies and novels have been tranſlated under his auſpices, and printed either at Venice or Vienna. Excepting ſmall religious tracts, the modern Greeks poſſeſſed no books in their preſent vernacular language, till this plan was adopted a few years ſince, which has circulated literature, confined as the ſubjects are, throughout the Turkiſh empire, ſo extenſively as to form an article of commerce. As to much original compoſition, it will be ſought for in vain. Amongſt the higher rank of Greeks, ſome of more liberal education or elegant turn of mind apply themſelves to poetry: theſe pieces are in manuſcript, and communicated only to a few; for as yet no collection of them has been publiſhed.

"To each of theſe diſtinguiſhed houſes, many ſubordinate families, who conſtitute the Greek gentry, are attached by intereſt or conſanguinity. During the zenith of power, the firſt object, both of the prince and his dependants, is to amaſs wealth, not always by the moſt juſtifiable meaſures. With that conſolation, they remove from their ſhadow of royalty to luxurious retirement, or more ſplendid habits of domeſtic life in the Fenàl, or on the delightful ſhores of the Boſphorus. Permitted to enjoy no revenue from the cultivation of lands, they place out their money with religious or mercantile communities, at an annual intereſt advancing from ſix to twelve per cent. With ſuch an income, according to the degree of acquired wealth, they maintain the dignity of their ſeveral ranks. When the original fund is exhauſted by gradual waſte, or ſudden calamity, their ſituation is embittered by many conſiderations; and perhaps by none is the ceaſeleſs conflict between poverty and pride more ſeverely felt. Should the ſucceſſion to the principalities be removed, and probably for a long period, from their particular patron, they are induced to accept of employments under the Turkiſh government, allured by the opportunity of growing rich, with a moral certainty that in proportion as they indulge their avarice, their lives are hazarded. Theſe obſervations apply to the Greeks, whoſe family pretenſions or ill-directed pride prevent their entering into commercial engagements. The acuteneſs and induſtry which ſome of that nation ſhew in conducting the traffic of the country (for trade on an ample or liberal ſcale neither their own genius nor other circumſtances will allow) are frequently ſucceſsful. In competition with Armenians or Jews, they exhibit ſuperior addreſs, but owing to many cauſes, which do not neceſſarily reſult from each other, the Turks treat them with leſs confidence in mercantile tranſactions.

"The capitation varies in three degrees, from four to thirteen piaſtres a-year, nor are the nobility liable to any other perſonal tax. From this ſtatement it might be at firſt ſuppoſed, that no conquered ſubjects contribute ſo little to the exigencies of the ſtate as the Greeks; but individuals frequently ſuffer greatly in their property, without redreſs. A Turk will ſometimes prefer an unjuſt demand as a debt, for the payment of which he ſues the Greek before the cadi, adduces the teſtimony of hired witneſſes, and obtains a deciſion in his own favour, excepting that the defendant has ſecured the judge by a bribe, bearing a proportion to the ſum in diſpute. In either caſe the extortion is great; and they call ſuch a tranſaction, which is perpetually happening, an *avanìa*. Yet degraded as the modern Greeks are in the political ſcale of Europe, no people are more apparently anxious with reſpect to pending tranſactions. Credulous in the extreme, or ingenious in inventing circumſtances, the current news engroſſes every converſation, and the gazette, publiſhed in Greek at Vienna, their grand oracle, is read or repeated with the greateſt avidity."

Between the Romeïka, or modern Greek language, and the ancient, a ſimilar analogy may be found as between the Latin and the pure Italian. When Conſtantine eſtabliſhed his new capital, ſo many Roman citizens followed him, that the Greek language adopted many Latiniſms; and, once corrupted, the more readily admitted the idiom and words of the French and Venetian invaders, at the commencement of the thirteenth century. The eſtabliſhment of the Ottoman empire extended the change, by the adoption of ſo many Turkiſh phraſes and words; and the Romeïka, or vernacular dialect, as it now prevails, thus became univerſally eſtabliſhed. Not that one mode of expreſſion only is in uſe. The inhabitants of the Morea and the coaſts of the Adriatic, partake much of the Venetian; the iſlanders of the Archipelago and the Smyrniotes mix Venetian with Turkiſh. The Greeks of the Fenàl ſpeak almoſt claſſically, whilſt thoſe of the oppoſite town of Pera have the moſt vulgar pronunciation. The leading cauſe of this deviation from the ancient Greek, has been the great uſe of contractions, and the blending by that means ſeveral words into one.

At what era the modern Greek pronunciation was adopted, it would be difficult to determine with any degree of preciſion. The more learned of the inhabi-

tants

tants of the Fenàl ſtrongly contend, that however their language has been debaſed by the alloy of others, the pronunciation of the remoteſt times is continued to them, pure and without variation. This queſtion, ſo much agitated at the revival of literature, is ſtill left doubtful. Certain it is, that the modern Greek, pronounced as the ancient in England, would be as unintelligible to them as the Italian at Rome or the French at Paris, if we ſpoke or read them exactly as they are ſpelled, giving to the letters and ſyllables the ſame power as to thoſe in our own language. The Romeïka reſembles in its conſtruction the Italian and French, and rejects the tranſpoſition of the ancient Greek or Latin. It retains the articles and inflection of caſes, but has neither duals nor aoriſts. The tenſes are formed by the verbs ſubſtantive. In this language all their tranſactions are conducted.

The criminal and civil law amongſt the modern Greeks, are directed by the preſcriptions of the Juſtinian code, under the ſuperior authority of that of Iſlamiſm. This exception only can occur, that thoſe who chooſe to aſſent ſolely to the juriſdiction of the eccleſiaſtical law, refer their matters of diſpute to their own parochial prieſts, and in caſes of higher importance to the patriarch of Conſtantinople. If they ſhould be diſſatisfied with theſe awards, they reſort finally to ſome competent court of Turkiſh judicature, the decree of which is deemed final. In ſuch a caſe, if an appeal has been made by perſons without intereſt, or on occaſions without importance, the patriarch has influence ſufficient with the porte to induce them to reverſe in his favour the acts even of their own tribunal. He can then proceed againſt the parties, inflict eccleſiaſtical penalties, or corporal puniſhments, conducting the affair with delicacy as to the matter and perſon, ſo as not to drive any one of his ſubjects in deſpair to become a proſelyte to the Mohammedan faith. The majority of queſtions agitated reſpecting property are ſettled by arbitration, or by the fiat of the patriarch. Thoſe which ariſe between the intemperate or diſreputable part of the Greek nation, are uſually concluded in the Turkiſh courts of judicature. Every deciſion turns upon the authority of the Juſtinian code, the only legal book with which the beſt informed are converſant; and tradition or uſage determines the reſt.

Amongſt the modern Greeks, as there is neither hereditary dignity nor feodal ſucceſſion recogniſed by their conquerors, the right of primogeniture has a partial prevalence. In the iſland of Tinos, one of the moſt conſiderable in the Archipelago, in which no Turk reſides, the following local cuſtoms reſpecting property are religiouſly obſerved. A man may bequeath his lands by will, in default of which the relict and children make an equal partition. An opulent perſon poſſeſſing an eſtate, and wiſhing to buy the next to him, muſt have the conſent of the other neighbour, who is entitled to purchaſe half of it; which right, if the neighbour be poor, is ceded for a certain pecuniary compenſation.

The right of female inheritance in Mitylene, as well as the ſingular cuſtom at a village in that iſland, of furniſhing voluntarily every ſtranger with a temporary wife, choſen from the youngeſt and moſt beautiful women, both aſſerted by M. Guys, have ſcarcely a foundation in fact, and certainly not in modern practice. But adoption, ſo common with the ancients, is not unfrequent in many of the iſlands. It is even ſanctioned by a preſcribed ceremony of the Greek church. The perſon to be adopted is preſented at the altar by his own parents and the adopter, and, after the ſervice appointed for that purpoſe is read, the adopted throws himſelf at the feet of his new father, who, placing his right foot on his neck, declares him to be his ſon in future. Until he has attained to fifteen years, the adopted is obliged to bear the name of the adopter, when, ſhould he prefer it, he is at liberty to reſume his own. If the child be very young, the whole ceremony conſiſts in the adopter's wife throwing her mantle over it, who then makes her avowal. In moſt of the iſlands are fraternities and adoptions of both ſexes, called, "the brotherhood of the holy zone," which, adminiſtering occaſions of familiar intercourſe, have frequently led to circumſtances which the clergy have found neceſſary to prevent.

The veneration with which we ſurvey Greece as the nurſe of ſcience and of every liberal art, increaſes the regret that the ſame region ſhould now be overſpread by barbariſm and ſuperſtition, and that ignorance ſhould have uſurped the favoured abode of philoſophy and elegance. Such a contraſt has been the gradual effect of many revolving ages; and perhaps it would not be diſtant from truth if we placed the firſt ſtriking era of degeneracy at the period of the Roman conqueſt. The eſtabliſhment of the Chriſtian religion under Conſtantine was inauſpicious to the fine arts, few of which were at firſt employed in the decoration of churches, and ſome of them were ſeverely interdicted. Nor was philoſophy advanced, whilſt the reaſoning faculties of the ableſt minds were engroſſed by abſtruſe and myſtical queſtions, and the pride of ſcholaſtic learning ſpurned at the ſimple pretenſions of moral and mild doctrines, the firſt object of which is to meliorate the heart.

The decline and fall of the arts of Greece may be attributed to various cauſes. When removed to Rome, had the dogmas of the catholic religion been as adverſe to them as the Greek, the ſame neglect or ſubverſion would have conſequently happened; and it is from a compariſon of their preſent ſtate, under the influence of religious opinion, that the true cauſe will be found to reſult. The iconoclaſts in the eighth century deſtroyed with indiſcriminating rage not only the remaining ſtatues of claſſic antiquity, but thoſe of ruder workmanſhip, which were then found in eccleſiaſtical ſtructures. Excluded and conſidered as unholy, when the work was thus deſpiſed, no encouragement was given to the artiſt. In the weſtern diviſion of the Chriſtian church, the crowded niches ſufficiently evince in what veneration ſtatuary was held. Even in the rude centuries of Chriſtianity the art of intaglio and ſculpture were partially known and applied, whilſt the coins of the eaſtern emperors are ſcarcely equal in merit to thoſe of our Saxon or Norman kings.

If any exception can be made, it is in favour of the art of moſaic, which was invented and ſervilely imitated by the Greeks in ages diſtant from each other, and which in its ſecond ſtate gained an eventual perfection at Rome. The ſole merit of theſe laſt performances conſiſted in the compoſition of the materials and their extreme durability. To the deſigns, confined chiefly to portraits with diſproportioned outline and diſtorted features, no praiſe can be given; and it is ſcarcely credible, that artiſts who were the ſucceſſors of thoſe who invented all that is exquiſite in elegance and correctneſs, ſhould have ſo groſsly deviated from the firſt principles of taſte. In architecture, ſince the eſtabliſhment of the Turks, the modern Greeks have had few opportunities of ſhewing either their perfection or inability. Prohibited from erecting ſtructures for the celebration of their worſhip, or palaces for the diſplay of their wealth, they have been employed only in building moſques by ſucceſſive ſultans, in a ſtyle, if not peculiar, retaining much more of the Saracenic and grotefque, than any analogy to the rules of the antique.

When the arts of Greece in their progreſs had formed a mutual dependance on each other, and ſculpture lent grace to utility and added ſpirit to ornament, external embelliſhment, ſymmetry of component members, and the general effect of an elevation, reſulting as much from an elementary knowledge of the mechanical as the taſteful diſpoſition of the lighter parts, gave certain proof

proof of the abilities of the architect. We cannot ſuppoſe, from any analogy with other remains of the proficiency in the arts to which the ancients had attained, that the grand idea of durability was ever made ſecondary to a happy deſign or a more beautiful elevation produced independently of a ſolid foundation. Before ornament they conſidered uſe; and thoſe who enjoyed celebrity in their profeſſion, could not obtain it from ſuperior taſte, whilſt their works evinced any ignorance of geometrical elements. With that mixture of regret and ſatisfaction with which we can at preſent ſurvey the Grecian architecture, wonderful it is that any remains ſhould have been preſerved to modern days by the excellence only of their primary conſtruction, nor otherwiſe could the power have been continued to us of inſpecting what from its perfect conformation has ever reſiſted the rage of barbarians, and would have ſcarcely yielded to gradual decay.

Painting may be conſidered as loſt to Greece. In moſt of their churches are portraits of the Panageia of Madonna, and of the equeſtrians St. George and Demetrius, which are neatly pencilled upon a ground of gold in a hard ſtyle, like the ancient illuminated miſſals. Of perſpective, hiſtory, or landſcape, they have not even the remoteſt idea.

When muſic was expelled from public worſhip, and held to be profane in ſociety, it ſoon became ſilent, and conſequently forgotten. The droniſh chaunt, unaſſiſted by inſtrumental muſic, has high antiquity only to recommend it; for the dulleſt ears would be diſguſted by ſuch a grating monotony. What airs are now in popular uſe are borrowed from the Venetian mariners, and, ſimple or rude as they may be, are too complicated for the imitation of the uneducated modern Greeks, who can never learn the ſecond part of any tune. This obſervation refers only to the vulgar; thoſe of education admire and perform Italian muſic. Hence it will be ſeen that upon the ſanction of the religion and munificence of a country, the arts muſt depend. The love of ſcience may prevail in the minds of individuals, even when it is proſcribed by the laws; but the arts live and flouriſh only under the foſtering influence of avowed and munificent patronage. In Italy, with all theſe circumſtances long in their favour, whilſt architecture, painting, ſculpture, and muſic, were hallowed by their appropriation to the popular religion, we can immediately trace their revival and gradual perfection; and in Greece their rapid decline may be attributed to the contrary cauſe, as ſingularly efficient; for debaſed as the modern Greeks are, under the oppreſſive government of the Turks, no one who has been converſant with them can ſuppoſe that, had the political character and fortune of their nation been more propitious in modern days, nature ſhould oppoſe any prevention to their maintaining and improving their original excellence. Paſt and preſent obſervation and experience proclaim the contrary fact.

India and Egypt, for many preceding ages, had cultivated the arts; but theſe countries were only the cradle of knowledge; when tranſmitted to the genial climate of Greece, foſtered by her political freedom, and animated by her vivacity and enterpriſe, it quickly attained the ſublimeſt heights, and inveſted the human character with a dignity before unknown. By what gradations their ancient ſimplicity, temperance, modeſty, and good faith, ſunk away, and how the decay of their virtues involved the ruin of their genius, the preceding hiſtory will ſhew: let the philanthropiſt, peruſing the inſtructive leſſon, weep over the fall of human greatneſs; or rather let him collect from the fatal example, new incitements to energy and perſeverance in the cauſe of private and of public virtue.—See Mitford's and Gillies's Hiſtories of Greece; Stewart and Revett's Athens; Harwood's Antiquities; Dallaway's Conſtantinople, &c. &c.

GREE'DILY, *adv.* Eagerly; ravenouſly; voraciouſly; with keen appetite or deſire.—*Greedily* ſhe engorg'd without reſtraint. *Milton.*

Ev'n deadly plants, and herbs of pois'nous juice
Wild hunger ſeeks; and to prolong our breath,
We *greedily* devour our certain death. *Dryden.*

With avidity of ſpirit.—Unto his reſkew ran, and *greedily* him ſpedd. *Spenſer.*

GREE'DINESS, *ſ.* Ravenouſneſs; voracity; hunger; eagerneſs of appetite or deſire.—Fox in ſtealth, wolf in *greedineſs*. *Shakeſpeare.*

I with the fame *greedineſs* did ſeek,
As water when I thirſt, to ſwallow Greek. *Denham.*

GREE'DY, *adj.* [Ꝿnædiȝ, Sax. *graadig*, Dan. *gretig*, Dutch.] Ravenous; voracious; hungry.—As a lion that is *greedy* of his prey. *Pſ.* xvii. 12.—Be not unſatiable in any dainty thing, nor too *greedy* upon meats. *Eccleſ.* xxxvii. 29.—Eager; vehemently deſirous. *It is now commonly taken in an ill ſenſe.*—The ways of every one that is *greedy* of gain. *Prov.*

Greedy to know, as is the mind of man,
Their cauſe of death, ſwift to the fire ſhe ran. *Fairfax.*

Stern look'd the fiend, as fruſtrate of his will,
Not half ſuffic'd, and *greedy* yet to kill. *Dryden.*

GREEK, *adj.* Belonging to Greece, pertaining to the cuſtom or language of the Grecians.—Technical words mean ſuch particular words as relate to any art or ſcience, from the *Greek* word τεχνη. *Cheſterfield.*

GREEK, *ſ.* [from the *adj.*] A native of Greece; the language of the ancient Grecians.—Did Cicero ſay any thing? Ay, he ſpoke *Greek*. *Shakeſpeare.*—When thou taught'ſt Cambridge, and king Edward, *Greek*. *Milton.*

GREEK BIBLE. See BIBLE, vol. iii. p. 11.

GREEK CHURCH, or EASTERN CHURCH, ſo called in contradiſtinction to the Romiſh or LATIN CHURCH, which ſee. This laſt is likewiſe diſtinguiſhed by the epithet of *Weſtern Church*, as having been under the uncontrolable ſupremacy of the popes, in the weſtern empire. The diſcipline of the Greek church is under the direction of four of their higheſt dignitaries, who are denominated "*Patriarchs*;" and theſe hold a diſtinct juriſdiction, appended to their titles, over Conſtantinople, Alexandria, Antioch, and Jeruſalem, with their reſpective dependencies. The patriarch of Conſtantinople is nominated by the twelve biſhops who reſide the neareſt to that capital; and this patriarch has the privilege of nominating the other three; but the choice or fiat is in the grand ſignior, who in truth barters theſe dignities to the higheſt bidder. The biſhops are always choſen from among the monks, whoſe order, being more wealthy than the ſecular clergy, can better afford to pay for promotion. Theſe monks are under obligations ſimilar to thoſe of the mendicants in the church of Rome: but, by their rules, they are not allowed to ſay maſs: they are however leſs idle and uſeleſs than the Romiſh friars; for they cultivate their own grounds, and work at ſome handicraft buſineſs. The firſt order in the Greek church is that of reader, or anagnoſtis; the next, that of pſaltis or chanter, from which there is an immediate tranſition to thoſe of ſubdeacon and deacon: the candidate for this order muſt marry, and is directed to chuſe *a chaſte and beautiful virgin*; for the Greek canons obſerve that he who, as a miniſter of the altar, muſt hold communion with angels, muſt not profane his perſon by a commerce with vice and uglineſs. With reſpect to theſe qualities, however, he is not allowed to depend ſolely on his own judgment, but is obliged to appear before the biſhop with his miſtreſs, and with great humility to aſk him, whether he thinks her chaſte, beautiful, and a virgin? If the prelate approve his choice, he ſmiles, kiſſes her

cheek, and gives her his bleſſing: but if he be not pleaſed with her, he ſays to the candidate, '*Return to the Holy Ghoſt and pray that he would enlighten thee.*'—See Abbé Mariti's Travels, 1791.

As the ſeeds of enmity and diſcord are but too often and too fatally ſowed between Chriſtians of different countries and perſuaſions, ſo it very early and unfortunately happened between the ſpiritual governors of Rome and Conſtantinople, who appear mutually to have ſet on foot a vindictive and intolerant ſpirit of animoſity and perſecution, which eventually gave to the receſſion of the eaſtern church the denomination of the *Greek ſchiſm*. But the ſeparation of the eaſtern or Greek church from that of Rome, and the animoſities which ſubſiſted between them for ſo many ages, are not to be aſcribed to their early difference in opinion concerning the obſervation of certain feſtivals, nor even to the more important ſubjects of diſpute which gave riſe to the Arian hereſy. They are rather to be referred to that period when Conſtantine removed the ſeat of empire from Rome to Byzantium, and, by augmenting the dignity of the latter ſee, rendered it formidable to the authority of the Roman pontiff. In the ſecond general council, the biſhop of Conſtantinople was allowed to rank next in order to the pope of Rome, and by the twenty-eighth canon of the ſynod of Chalcedon, he was permitted to enjoy an equal rank. No ſmall reſiſtance was made to theſe encroachments on the ſuperior dignity of the ſucceſſor of St. Peter; but the emperors of the eaſt were ſtrenuous to aſſert the privileges of the new city, and by the preponderance of their authority confirmed all its pretenſions. The flame of reſentment, though ſtifled for a time, broke out with increaſed fury in the eighth century. A new cauſe of offence was given by Leo, the Iſaurian, in his zeal againſt images, of which the Roman pontiff did not fail to take advantage. On this occaſion, however, pope Gregory carried his perſecution of the Iconoclaſts too far; for the emperor, as well to reſtrain his power as to puniſh his arrogance, ſeized his poſſeſſions in Calabria, Sicily, Illyricum, and Greece, and transferred them to the juriſdiction of the biſhop of Conſtantinople. From that period we may conſider this unfortunate ſchiſm as fixed and incurable; for notwithſtanding the church of Rome was accuſed of various errors and irregularities, both by Photius and Michael Cerularius, it is certain that theſe were not the principal cauſe of diſſenſion. Hence the two attempts made by Michael Paleologus to allay the fervour of contention were vain, and the union propoſed by the council of Florence was of ſhort duration. The mutual ſacrifices required were unpalatable both to the Roman and the Conſtantinopolitan prelate; ſo that each remains to this day the centre of a different ſyſtem.

Conſidering the ſtate of the Greek clergy, and the want of curioſity which ſeems to have prevailed in moſt parts of Europe reſpecting that church, a genuine account of its doctrine and articles of faith is hardly to be expected. In conſequence, however, of a controverſy between Meſſrs. de Port Royal and John Claude, the celebrated proteſtant miniſter of Charenton, the religious tenets of the Greeks were ſcrupulouſly examined, by which we are enabled to aſſert that the doctrines of the Greek church differ but very little from thoſe of Rome, at leaſt that they are much more reconcileable to the faith of the latter, than that of the Lutheran or reformed churches. That diſcuſſion will authoriſe the aſſertion, rather than the numerous certificates, which were eaſily obtained, by each party, in favour of their own cauſe, from eccleſiaſtics ſcarcely leſs corrupt than indigent and unenlightened.

The doctrine of the trinity, and the articles of the Nicene and Athanaſian creeds, are received by the Greeks, in common with other Chriſtians. In one particular, indeed, they differ; they believe that the Holy Spirit proceeds from the Father only, and not from the Father and the Son; and in defence of this opinion they appeal to the eccleſiaſtical hiſtory, the acts of councils, the writings of the fathers, ancient manuſcripts, and eſpecially to a copy of the creed of Conſtantinople, engraven on two tables of ſilver, and hung up in the church of St. Peter at Rome, by order of Leo III. In the number of its ſacraments, the invocation of ſaints, the belief of the real preſence, the practice of auricular confeſſion, and in admitting maſſes and ſervices for the dead, the Greek church is perfectly conſonant to that of Rome. It is aſſerted that the doctrine of ſupererogation and its conſequent indulgences and diſpenſations are not adopted by the Greeks. But notwithſtanding this and other leſs important peculiarities, it is evident from the moſt authentic documents, that the creeds of Rome and Conſtantinople are not materially different. In vain are we reminded of the congregation de Propagandâ, or told that many of the Greeks have ſtudied in Italian ſeminaries, and of courſe little credit ſhould be given to theſe, being ſuch as were called Latinophrones, or perſons attached to the church of Rome. The fact is, that of thoſe who were not educated in Italy, few are able to give any rational account of their faith. If we diſtruſt ſuch men as Beſſarion, Mogilas, Leo Allatius, &c. we ought not to be leſs ſuſpicious of thoſe ignorant kaloyeri and prieſts who were never abſent from their own country. By the preaching and apoſtolical labours of jeſuit miſſionaries, many Greeks, ſpeaking collectively of all in the Ottoman empire, have been converted to the church of Rome. But theſe proſelytes were originally made by the Genoeſe or Venetians, to whom the Morea and the iſlands of the Archipelago were ſubject, and have continued from hereditary opinion.

It ſeems to be the general notion of writers on this ſubject, that no tenet, excepting the dread of excommunication, operates more powerfully in reſtraining the Greeks within the pale of their own church, and preventing their apoſtacy to the religion of the Romaniſts or Turks, than a rigorous obſervation of rites and ceremonies. By their eccleſiaſtical ordinances they are required to attend the ſervice of the church on the Lord's day, and on all faſts and feſtivals, not only ſuch as are uſual, but ſuch as are particularly appointed. The feſtivals of the Greek church are ſcarcely leſs numerous than thoſe of the Latin. They annually obſerve four principal faſts, viz. for forty days previous to Chriſtmas; for the ſame ſpace of time before Eaſter; from the week after Pentecoſt to the feaſt of St. Peter and Paul; and from the firſt to the fifteenth of Auguſt, this laſt being the day of Koimeſis, or Aſſumption of the bleſſed Virgin.

To give a minute detail of the rites and ceremonies of the Greek church would be a taſk of no ſmall labour and extent. The reader whoſe curioſity is intereſted in ſuch a reſearch, may conſult any of the liturgical authors mentioned by Fabricius, or our own countrymen Covell and King. Yet ſome remarkable peculiarities of their ritual claim more particular attention. They adminiſter the ſacrament of the Lord's ſupper to infants newly born; and in the place of confirmation they ſubſtitute the chriſm, or ſacred unction, being a part or appendage of the baptiſmal ceremony. Marriage is by them called the matrimonial coronation, from the crowns or garlands with which the parties are decorated, and which they ſolemnly diſſolve on the eighth day following. The ſacrament of the holy oil, or euchelaion, is not confined, as the extreme unction in the Romiſh church, to the ſick and dying, but is given to devout perſons upon the ſlighteſt malady, if required. The levipedium obſerved on Holy Thurſday, in imitation of our Saviour's humility, differs little from that ceremony as performed by the pope. On this occaſion Jeſus Chriſt is perſonified by the patriarch, and the twelve apoſtles by as many kaloyeri, when a ludicrous conteſt

ariſes who ſhall be the repreſentative of Judas; becauſe the name attaches for life.

Dr. King, in his "Rites and Ceremonies of the Greek Church," judiciouſly remarks, that by liturgy, the office of the euchariſt only was deſcribed; nor has it at preſent a different meaning in the Greek church, the four liturgies of which are thoſe of St. James, St. Baſil, St. Chryſoſtom, and thoſe of the pre-ſanctified myſteries. The firſt of theſe is aſſerted to be ſpurious by Smith, and therefore obſolete. The liturgies of St. Baſil and St. Chryſoſtom are eſſentially the ſame; but the former being the longer, is uſed only on certain days, while the latter is conſidered as the ordinary communion ſervice. That of the pre-ſanctified is appropriated for Wedneſdays and Fridays in Lent, or the great faſt. By ſome it is aſcribed to Gregory Dialogus, who lived in the ſixth century; but Smith attributes it to Germanus, patriarch of Conſtantinople, two centuries later.

The ſervice of the Greek church, like that of Rome at preſent, and that of all other churches before the reformation, is principally choral. Their canons and antiphones are hymns or portions of ſcripture ſet to muſic, firſt recited by the miniſter, and then chanted by the choir, but without muſical inſtruments, which are not admitted in accompaniment. The ectinèa correſponds with our litany, but is never ſo called by the Greeks. They have ſeveral in every ſervice. In conſequence of a great variety of theſe and other forms, their books of offices are numerous and bulky.

The Menæon contains the hymns and ſervices for every feſtival, as it occurs in the calendar, and is divided into twelve volumes folio, each volume comprifing the ſervice of a month. The Octoechos, is ſo called from eight tones or voices, which are fixed to particular hymns, and which ſerve as a rule for ſinging the reſt. It is divided into two volumes folio.

The Synnaxar, or biographical hiſtory of the ſaints, comprehends four volumes folio, of which an appropriate portion is read on every ſaint's day. To theſe muſt be added the pſalter and hours, the common ſervice, the four goſpels, the two triodes, the book of prayer, the ritual, and the regulation, wherein are contained directions how they are to be uſed.

Of the Menologion, it is ſufficient to remark that it nearly reſembles idolatry; they admit pictures into their churches, not merely as ornamental, but as indiſpenſable in the ceremonials of their religion. They are uſually attached to the ſkreen which ſecretes the chancel, and from thence receives the name of iconoſtas. In the arguments advanced by Greek theologiſts in defence of this preference of painting to ſculpture, there appears to be little ſolidity. They conſider themſelves as ſecure under the authority of St. John Damaſcenus.

The ſacerdotal habits are no leſs various, ſplendid, and coſtly, than thoſe of the Romiſh church. The biſhops and archimandrites wear mitres and other epiſcopal decorations during the performance of divine ſervice. The epitrachelion correſponds in ſome meaſure to the ſcarf worn by our clergy, as the phelonion does to the gown or ſurplice, excepting that the latter is made of rich ſilk or velvet, embroidered with gold or ſilver. In the emblematical and myſtical properties attributed to clerical veſtments, the Greek church rivals the barbariſm of the monkiſh ages.

In regard to diſcipline and government, the reſemblance of the Greek to other epiſcopalian churches, and particularly to that of Rome, may be eaſily conjectured. The ſame diviſion of the clergy into regular and ſecular, the ſame ſpiritual juriſdiction of biſhops and their officials, the ſame diſtinction of ranks and offices, is obſervable in both. Some points there are in which the diſcipline of the Greeks, who eſteem their own church the moſt ancient and orthodox, is particularly deſerving of notice. All orders of the Greek clergy inferior to biſhops, are permitted to marry. The married prieſts wear a fillet of white muſlin round their bonnet of black felt, and long beards univerſally, and are never promoted to a higher dignity than that of proto-papas of the church in which they ſerve. Celibacy, and the aſſumption of monaſtic habits, are indiſpenſably requiſite in thoſe who are candidates for the mitre.

In the Greek church, the regular clergy are generally men of a certain education, whereas the ſeculars are of the meaner ſort, and illiterate in the extreme. In that of Rome the reverſe will be found. The Greek monks, or caloyeri, follow only the rule of St. Baſil; their reſidence is on mount Athos, in Chios, and the Princes' Iſlands. Few convents of females are now exiſting; but in both ſexes the degrees of aſcetic proficiency is marked by peculiar habits. Their ſeminaries of education are eſtabliſhed at Mount Athos, and at the monaſtery of the Apocalypſe in the iſland of Pathmos.

Beſides the power of nominating the patriarchs of Alexandria, Antioch, and Jeruſalem, and all epiſcopal dignitaries, the patriarch of Conſtantinople enjoys a moſt extenſive juriſdiction, compriſing the churches of Anatolia, Greece, Wallachia, Moldavia, and the iſlands of the Archipelago; and for the adminiſtration of eccleſiaſtical affairs, a ſynod, convened monthly, is compoſed of the heads of the church reſident in Conſtantinople. In this aſſembly the patriarch of Conſtantinople preſides, with thoſe of Antioch and Jeruſalem, and twelve archbiſhops. Seniority ought to take the lead in theſe councils, but is too often overborn by ſuperior talents or habits of intrigue, and a majority is commanded by that prelate whoſe influence promiſes moſt to thoſe who ſupport him. But ſo ſlender and uncertain are the revenues of the patriarchs of Jeruſalem and Antioch, that they are obliged to reſide at Conſtantinople, and to depend in a great meaſure on the bounty of their ſuperior, who of courſe commands their ſuffrages.

Throughout the whole eccleſiaſtical ſtate, from the prelate or deſpotes to the parochial papâs, a material defalcation of their original income has occurred. The biſhoprics are univerſally charged with the payment, of the intereſt at leaſt, of large ſums, accumulated for ages, in conſequence of avaniàs levied on the patriarchate, to which each dioceſe is bound to contribute its quota. By ſuch burthens the revenues are ſo diminiſhed as to leave to the moſt opulent biſhop little more than three hundred pounds a year. The ſecurity given in theſe eccleſiaſtical bonds is deemed the moſt ample, and the rich Greeks truſt their money on them, at a lower rate of intereſt, in preference to commercial companies. The biſhops depend entirely upon a certain tax, levied upon each houſe within their diſtricts inhabited by Greeks.

The doctrine of the Eaſtern or Greek church, prevails at this day over a greater extent of country than that of any other church in the Chriſtian world. It is profeſſed through the moſt conſiderable part of Greece, the Grecian iſles, Wallachia, Moldavia, Egypt, Nubia, Lybia, Arabia, Meſopotamia, Syria, Cilicia, and Paleſtine; all which are comprehended within the juriſdiction of the patriarchs of Conſtantinople, Alexandria, Antioch, and Jeruſalem; to theſe, if we add the whole of the Ruſſian empire in Europe, great part of Siberia in Aſia, Aſtracan, Caſan, Georgia, and White Ruſſia in Poland, it will be evident that the Greek church has a greater extent of territory than the Latin, with all the branches that are ſprung from it.

The Armenian church is alſo a branch of the Greek church, profeſſing the ſame faith, and, till near the middle of the ſixth century, acknowledged the ſame ſubjection to the ſee of Conſtantinople. At that time the hereſy of the Monophyſites, ſpreading far and wide through the regions of Africa and Aſia, comprehended the Armenians among its votaries. It ſeems to be generally

nerally allowed that they differed from other communions of the Monophyſite ſect, and particularly from the Jacobites, in many points of doctrine and worſhip. By Gibbon they are called "the pure diſciples of Eutyches;" he affirms that they believe the manhood of Chriſt to have been of a pure incorruptible nature, and he imputes their converſion to Julian biſhop of Halicarnaſſus. But in theſe aſſertions there appears to be ſomewhat of inconſiſtency; for the hypotheſis of Julian and the Phantaſiaſts was not known, at leaſt did not prevail, among the oriental Chriſtians till more than ſixty years after the council of Chalcedon. On what authority then are we to believe that the phantaſian hereſy was the genuine doctrine of Eutyches? Sir Paul Rycaut, whoſe long reſidence both at Conſtantinople and Smyrna enabled him to acquire information in regard to the religious ſyſtem of the Armenians, gives the following ſtatement of the doctrines of their church. "They allow and accept the articles of faith according to the council of Nice, and are alſo acquainted with the Apoſtles' creed, which they have in uſe. As to the Trinity, they accord with the Greeks, acknowledging three perſons in one divine nature, and that the Holy Ghoſt proceeds only from the Father." He denies that the Armenian church is attached to the Eutychian or Monophyſite hereſy, and produces a tranſlation of its *tavananh* or creed in ſupport of that opinion.

Du Pin would inſinuate that the Armenians were reconciled to the Latin church at the council of Florence; but if we attend to the learned and judicious Moſheim, the ſcheme of comprehenſion projected in that council was completely fruſtrated, not only in regard to the Greek, but all the oriental churches. In the rites and ceremonies of the Armenian church there is ſo great a reſemblance to thoſe of the Greeks, that a particular detail would be ſuperfluous. Their liturgies alſo are either eſſentially the ſame, or are at leaſt aſcribed to the ſame authors.

The faſts obſerved annually in the Armenian church are not only more numerous, but kept with greater rigour and mortification than is uſual in any Chriſtian community. In addition to theſe, they faſt on Wedneſday and Friday throughout the year, except in the weeks before Eaſter and Aſcenſion day, and in that which follows the feaſt of the Epiphany. Their ſeaſons of feſtivity correſpond, in general, with thoſe of other churches, but they commemorate our Lord's nativity on the 6th of January, not on the 25th of December, celebrating in one feſtival his birth, epiphany, and baptiſm.

When the Armenians receded from the Greeks, they made no change in their epiſcopal form of church government: they only claimed the privilege of chooſing their own ſpiritual rulers, but continued to follow the ſame doctrines. The name and office of patriarch was continued; but three, or, according to Rycaut, four, prelates ſhared that dignity. Of theſe, the principal reſides at the monaſtery of Ekmiazin, near Ecrivan, in Perſia; his juriſdiction extends over Armenia Major, and he is ſaid to number among his ſuffragans no leſs than forty-two archbiſhops. His opulent revenues are conſidered only as a fund for his numerous charities; for though elevated to the higheſt rank of eccleſiaſtical preferment, he rejects all the ſplendid inſignia of authority, and in his ordinary dreſs and mode of living he is perfectly on a level with the pooreſt monaſtic.

Next in dignity to the patriarch of Ekmiazin is the catholic, who reſides at Cis, in Cilicia. The abode of the laſt is at Aghtainan, an iſland in the lake of Van. In the Armenian church, as in the Greek, a monaſtery is conſidered as the only proper ſeminary for dignified eccleſiaſtics; for they are required to practiſe abſtemiouſneſs in proportion as they are advanced. Hence, though their prieſts are permitted to marry once only, and uſually provide themſelves with wives whoſe health and youth promiſe long life, their patriarchs and maſtabets (biſhops), like thoſe of the Greek church, muſt remain in a ſtate of ſtrict celibacy.

The monaſtic diſcipline of the Armenians is extremely ſevere. They neither eat fleſh nor drink wine; they frequently continue in prayer from midnight till three o'clock in the afternoon, during which time they are required to read the Pſalter through, beſides many ſpiritual exerciſes. The orders or regulations by which they are governed, are thoſe of St. Gregory, St. Baſil, and St. Dominic. The laſt was evidently introduced by the Romiſh miſſionaries, who firſt gained a footing in Armenia about the commencement of the fourteenth century. But the abſtinence and mortification of conventual eccleſiaſtics is ſurpaſſed by the *gickniahorê*, or hermits, who devote their lives entirely to contemplation, dwelling on the ſummits of rocks. At the beginning of the eighteenth century, the preaching of the Jeſuit miſſionaries at Pera was ſo ſucceſsful in the converſion of the Armenian citizens of conſequence, that their biſhops applied to the Porte to procure their ſuppreſſion, or at leaſt to reſtrain them. When Ephraim the Armenian was telling the viſier of theſe encroachments of the catholics; "And what (ſaid he) are catholics but infidels? if the hog be white, red, or black, it is nevertheleſs a hog; we will not interfere."

Since the cloſe of the ſixteenth century, the Ruſſian church, ſomewhat ſimilar to the Armenian, has claimed a juriſdiction independent of the ſee of Conſtantinople. Nevertheleſs, appeals have been ſince made to that ſee in caſes of extraordinary importance. From the ſucceſs of the Ruſſian arms in their two former wars with the Turks, ſhould the Ottoman power be eventually ſubdued, it ſeems not improbable that the religion of the Greeks may once more be triumphantly eſtabliſhed on the ſhores of the Boſporus, that the creſcent may no longer profane the domes of Chriſtian churches, and that the patriarch of Conſtantinople may be reſtored to the dignity, though not to the power and influence, which he enjoyed at the moſt flouriſhing periods of the lower empire.—See Dallaway's Conſtantinople, 4to. p. 371–386.

GREEK FIRE, a ſingularly deſtructive combuſtible matter, frequently uſed in the ancient artillery, and ſaid to have been the invention of the architect Callinicus, in the reign of the emperor Conſtantine Pogonatus. For inſtances of its deſtructive operation, and method of firing, ſee the article ARTILLERY, vol. ii. p. 232.

GREEK ORDERS, in architecture, are the Doric, Ionic, and Corinthian; in contradiſtinction to the two Latin orders, the Tuſcan and Compoſite. See the article ARCHITECTURE, vol. ii. p. 68.

GREEK ROSE, *ſ.* in botany; the flower campion. See LYCHNIS:

Thy beauty, campion, very much may claim;
But of *Greek roſe* how didſt thou gain thy name? *Tate.*

GREEK VALE'RIAN, *ſ.* In botany. See POLEMONIUM.

GREEK'ISH, *adj.* Belonging to the Greeks, pertaining to the cuſtom or language of the Greeks. 2 *Mac.*

GREEK'LING, *ſ.* [A ſarcaſtical diminutive of *Greek.*] An inferior Greek writer.—Which of the *Greeklings* durſt ever give precepts to Demoſthenes? *B. Jonſon.*

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The ADDITIONAL ENGRAVINGS now given, for the purpoſe of more fully elucidating various important Subjects in the earlier part of the Work, are to be placed by themſelves, until the NINTH VOLUME is completed; when full and ample DIRECTIONS will be given, together with the TITLE-PAGES, FRONTISPIECES, DEDICATIONS, &c. &c. for binding up the whole of the firſt Nine Volumes in an uniform and finiſhed State. This was intended to have been done at the preſent Time; but the labour in deſigning and executing the FRONTISPIECES, and the Claim of the ARTIST to place them in the ROYAL EXHIBITION, rendered it impoſſible for the EDITORS to fulfil the Promiſe made at the Completion of the SEVENTH VOLUME.

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